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About ACTA

Assam College Teachers' Association, an organisation of college teachers of Assam, is the second largest college teachers' organisation in India, with a member strength of approximately 7000 [seven thousand] college teachers working in 300 [three hundred] provincialised colleges of Assam. The Association was founded in 1949 at its inaugural Nowgong College Conference with 40 college teachers serving in 14 non-government colleges, keeping in view the main objective of contributing to improving the condition of higher education in Assam. Prof. R. R. Thomas was the founder President and Prof. Mahesh Ch. Deva Goswami was the founder General Secretary of the Association. It was initially named All Assam Non-government College Teachers' Association at the Nowgong College Conference. But, the very next year it was renamed as "Assam College Teachers' Association", in short, ACTA.

The Constitution of ACTA, which was adopted in 1961 at the Jorhat Conference, sets a number of aims and objectives for the Association. Contributing to the all round development of education in the state, in general, and collegiate education, in particular, and safeguarding the interests of the college teachers and improving the service condition and status of the college teachers are some of the main objectives of the Association.

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JOURNAL ASSAM COLLEGE TEACHERS' ASSOCIATION

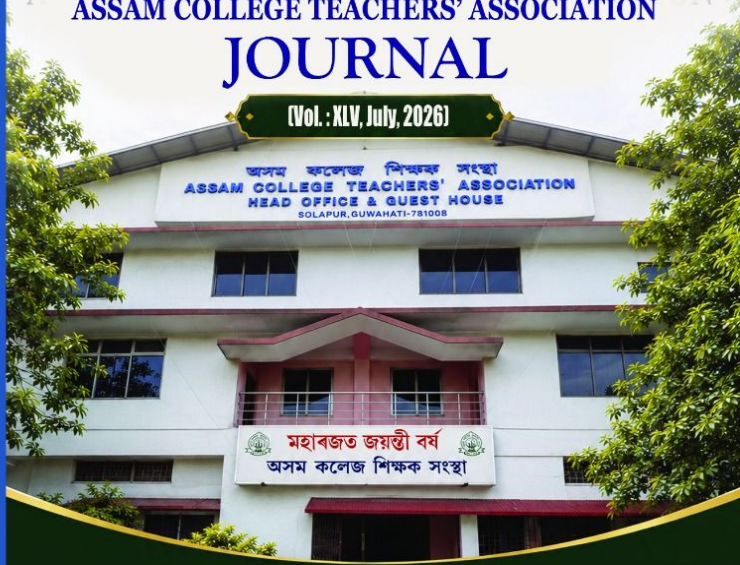
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A Biannual Peer Reviewed Multidisciplinary Journal

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The aim of this bilingual biannual multidisciplinary journal of Assam College Teachers' Association (ACTA) is to publish original research based papers on the areas of Science, Arts and Commerce, including, but not limited to, Literature and Criticism, Comparative Literature, Language Studies, Folklore, Cultural Studies, Media Studies, Political Science, History, Economics, Geography, Philosophy, Fine Arts, Physics, Chemistry, Mathematics, Biology and Commerce (written either in English or Assamese).

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EDITORIAL

ज्ञानं परमं बलम्

Knowledge as the Foundation of a Developed and Enlightened Bharat

न हि ज्ञानेन सदृशं पवित्रमिह विद्यते।

"There is nothing in this world as purifying as knowledge."

Education has never been merely the transmission of information from one generation to another. At its deepest level, education is a process of awakening the intellect, cultivating character, developing skills, nurturing curiosity and preparing individuals to participate meaningfully in society. Knowledge enables human beings to understand the world, question established assumptions, discover new possibilities and assume responsibility for the communities in which they live.

This timeless understanding of education acquires renewed significance at a moment when India is undergoing profound social, economic, technological and educational transformation. As the country looks towards **Viksit Bharat @2047**, higher education occupies a particularly important place in shaping the human capabilities, intellectual resources and ethical foundations required for the journey ahead.

It is in this context that we present the **XLV Issue of the ACTA Journal, July 2026**, marking the beginning of the Journal's **biannual publication**. This issue is not merely a collection of research papers. It is an expression of the academic concerns, experiences, aspirations and intellectual engagement of the college teachers of Assam. It seeks to bring together scholarship and reflection on higher education, educational reform, research, Indian Knowledge Systems, technology, social change and the wider purpose of education.

As Editors, we regard this responsibility as both an honour and a privilege. A journal associated with a teachers' organisation carries a distinctive responsibility. It provides a space where teachers can document institutional experiences, interpret educational policies, engage critically with emerging developments, share research and participate in discussions about the future of education. The ACTA Journal therefore represents not only scholarship but also the collective intellectual voice of a teaching community deeply connected with the educational and social realities of Assam.

We sincerely acknowledge the **Central Committee of the Assam College Teachers' Association** for entrusting us with the responsibility of editing this issue. We are grateful for the confidence placed in us and for the support extended throughout the editorial process. We also express our heartfelt appreciation to the **authors and contributors**, whose scholarship gives substance to this volume, and to the **peer reviewers, Advisors and members of the Journal Committee**, whose critical observations and guidance have contributed to its academic quality. We also thank **Ganesh Printers** for their technical and professional assistance in bringing the issue to its final form.

Education in a Changing World

The educational landscape is changing rapidly. Technological advancement, artificial intelligence, digitalisation, changing labour-market requirements, demographic transformation, environmental challenges, globalisation and evolving expectations of learners are reshaping higher education.

The traditional boundaries between disciplines are becoming increasingly fluid. Economics increasingly interacts with data science and environmental studies; humanities engage with technology; social sciences draw upon computational methods; and traditional knowledge is being revisited through contemporary research.

Yet, amidst these changes, the fundamental purpose of education remains constant. Employability and technological competence are important, but they cannot be separated from ethical responsibility, social sensitivity, constitutional values, cultural awareness, intellectual freedom and human dignity.

A developed nation therefore cannot be defined only by the size of its economy, the sophistication of its technology or the scale of its infrastructure. Development must also be reflected in the quality of its people and institutions—in their capacity to think critically, act ethically, innovate responsibly and contribute to society.

This is where the teacher remains central.

Technology may transform classrooms and learning resources, but it cannot by itself replace mentorship, dialogue, empathy, intellectual challenge and human example. The teacher is increasingly becoming a mentor, facilitator, researcher, guide, curriculum participant and lifelong learner. The future of education therefore requires greater investment in teachers' professional development, research opportunities, academic freedom, institutional dignity and working conditions.

The Youth of India and the Vision of Viksit Bharat @2047

The most important dimension of India's educational future is its youth.

India possesses a remarkable demographic opportunity. The country has one of the world's largest youth populations, and the NITI Aayog report referred to in this issue places human capability and skilling at the centre of India's journey towards Viksit Bharat @2047. Demographic strength, however, does not automatically become a demographic dividend. A young population becomes an asset when young people have access to quality education, relevant skills, meaningful employment opportunities, entrepreneurship, social security and an environment in which creativity and aspiration can flourish.

The young people sitting in our classrooms today will occupy the workplaces, institutions, laboratories, enterprises, civil services, universities and communities of India in the decisive years leading towards 2047. They will confront technological change, artificial intelligence, climate change, demographic transition, urbanisation, global competition and social transformation.

The responsibility of education, therefore, is not simply to prepare students for the examinations of today. It is to prepare them for the uncertainties and possibilities of tomorrow.

The **Viksit Bharat @2047: Voice of Youth** initiative has also placed educational institutions and educators within the wider conversation on India's development. Youth should not merely be viewed as beneficiaries of development. They are participants in creating it. Our colleges must therefore become spaces where young people are encouraged to ask questions, propose solutions, conduct experiments, undertake research, develop enterprises, participate in communities and imagine the India they wish to inherit and build.

Teachers as the Foundational Architects

Every major educational reform eventually reaches the student through the teacher. Policies may provide the framework, curricula may define learning outcomes and technology may provide new tools, but it is the teacher who translates these aspirations into meaningful experiences in the classroom.

Curriculum reforms, multidisciplinary education, digital learning, skill development, research initiatives and new approaches to assessment can achieve their intended purpose only when teachers are adequately prepared and meaningfully involved. Teachers need opportunities for continuous professional development, academic dialogue, experimentation and collaboration.

The teacher of the twenty-first century is much more than a classroom instructor. The teacher is simultaneously a **mentor, facilitator, researcher, innovator, counsellor, intellectual guide and nation builder**. Teachers must cultivate critical and creative thinking, encourage innovation and entrepreneurship, prepare students for a changing world of work, facilitate research and inquiry, and develop digital and AI literacy.

At the same time, education must nurture ethical strength, responsible citizenship, social and environmental responsibility and respect for diversity. For Assam and the North-East, teachers can connect classroom learning with local realities such as migration, agriculture, entrepreneurship, flood vulnerability, indigenous knowledge, rural transformation, urbanisation and social change.

Teachers also have an important role in creating inclusive learning environments and in building bridges between India's intellectual heritage and contemporary knowledge. The engagement with **Indian Knowledge Systems** provides opportunities to explore India's contributions to mathematics, astronomy, philosophy, linguistics, agriculture, medicine, environmental thought and other fields through curiosity, academic rigour and critical inquiry.

The teacher's responsibility therefore extends far beyond the completion of a syllabus. A teacher helps a young person develop the ability to think, the confidence to create, the wisdom to question, the discipline to learn continuously and the values to use knowledge responsibly.

The journey towards **Viksit Bharat @2047** will ultimately be a journey of human capability. At the foundation of that capability stands the teacher.

NEP 2020: From Policy to Classroom

The **National Education Policy 2020** has opened a broad conversation about the transformation of Indian education. Its emphasis on multidisciplinary learning, flexibility, holistic education, vocational and skill-oriented learning, research, innovation, Indian languages, technology and Indian Knowledge Systems has important implications for higher education.

For colleges in Assam, however, the central question is not merely what the policy proposes. The more important question is how these aspirations can be translated into meaningful classroom and institutional practices.

Assam's educational realities are diverse. Institutions operate in urban, semi-urban, rural, riverine, hilly and geographically challenging environments. Students come from different linguistic, social and economic backgrounds, while infrastructure, connectivity and access to academic resources vary considerably.

Successful implementation of NEP 2020 therefore cannot be reduced to administrative compliance. It requires meaningful participation by teachers, adequate institutional preparedness, continuous professional development, academic resources, technological infrastructure and opportunities for experimentation. Teachers must be given the opportunity not merely to implement reforms but also to discuss, interpret, evaluate and improve them.

The ACTA Journal can contribute to this process by documenting the experiences of colleges and teachers across Assam. Research on curriculum restructuring, multidisciplinary education, assessment, student mobility, skill development, academic credit systems, digital learning and institutional preparedness can provide an evidence base for future educational conversations.

Indian Knowledge Systems: Heritage, Inquiry and Contemporary Relevance

The renewed attention to **Indian Knowledge Systems (IKS)** represents another important dimension of contemporary higher education.

India possesses a vast intellectual heritage encompassing mathematics, astronomy, philosophy, linguistics, literature, medicine, agriculture, architecture, environmental thought, economics and numerous other fields. Assam and the wider North-East similarly possess rich indigenous knowledge traditions, oral histories, ecological practices, languages, crafts, performing arts and community-based systems of knowledge.

The academic engagement with these traditions should be **scholarly, critical and evidence-based**. Tradition need not be placed in opposition to modernity, nor should the past be romanticised without examination. A productive approach is to create a dialogue between inherited knowledge and contemporary scientific and social inquiry.

For Assam, indigenous ecological knowledge, traditional agricultural practices, local environmental practices, oral traditions, folk literature, indigenous languages, community institutions, crafts and cultural practices offer important possibilities for systematic documentation and interdisciplinary study.

In this sense, Indian Knowledge System (**Bharatiya Jnana Parampara**) can become not merely a subject of preservation but a field of scholarship, inquiry and knowledge creation.

Assam: The Local as a Source of Knowledge

For the ACTA Journal, Assam itself is an important intellectual landscape. It is not simply the geographical location in which our colleges operate; it is a rich field of knowledge, inquiry and experience.

Our institutions can encourage research on flood and climate vulnerability, agriculture, migration, urbanisation, informal employment, demographic change, entrepreneurship, indigenous knowledge, language, education, social mobility, digital inclusion and sustainable development.

Research rooted in local realities need not remain local in significance. When investigated through sound methodology and connected with wider academic debates, local questions can contribute to national and international knowledge. A study of migration in Assam can contribute to broader discussions on labour mobility and urbanisation; research on floods can enrich debates on climate adaptation; and studies of indigenous knowledge can contribute to wider conversations on sustainability and community-based resource management.

The college teacher is particularly well placed to undertake such research because of the teacher's close relationship with students and communities. The classroom can become a starting point for identifying questions emerging from society, while field experience can bring greater relevance and depth to academic inquiry.

Research, Technology and the Future of Learning

Teaching and research should not be treated as separate worlds. Research enables teachers to renew their knowledge, question established assumptions and understand emerging developments. Students, in turn, learn that knowledge is not a finished product but something continually questioned, refined and expanded.

Developing a culture of inquiry requires access to scholarly literature, research infrastructure, funding opportunities, collaboration, ethical guidance and adequate academic time. Research should also remain connected with the needs of society.

No discussion of contemporary education can ignore **Artificial Intelligence**. AI can assist with research, translation, data analysis, educational content development, accessibility and personalised learning. At the same time, it raises important questions about academic integrity, originality, authorship, privacy, misinformation and intellectual dependence.

The answer is neither unquestioning acceptance nor blanket resistance. What is required is informed and responsible engagement with technology. Students and teachers must develop digital and AI literacy—the ability to use technology effectively while understanding its limitations, biases and ethical implications.

The future classroom should therefore combine technological capability with human judgement. AI may assist learning, but curiosity, critical reasoning, empathy, ethical reflection and intellectual responsibility must remain human-centred.

Education, Inclusion and Sustainability

The transition from education to employment is becoming increasingly complex. Young people require more than academic qualifications. They need adaptable skills, communication abilities, digital competence, problem-solving capacity, teamwork, entrepreneurial orientation and the ability to continue learning throughout life.

At the same time, employability must not become the sole purpose of higher education. Universities and colleges must produce people who can work, but also people who can think; people who can innovate, but also people who can empathise; people who can compete, but also people who can cooperate.

The transformative potential of education can be realised only when access to quality learning is broad-based and inclusive. For Assam and the North-East, questions of connectivity, geographical accessibility, affordability, language diversity and institutional capacity remain important. Inclusion must extend beyond admission to meaningful participation in classroom activities, research, academic discussions, cultural programmes and institutional life.

Language is also a carrier of knowledge and culture. Assam's multilingual character requires sensitivity towards Assamese, Bodo, Bengali, indigenous languages and other linguistic communities. Translation, multilingual scholarship and quality academic resources in Indian languages can broaden participation while enabling students to engage with national and international scholarship.

Education must also remain connected with the future of the planet. Climate change, biodiversity loss, environmental degradation and resource pressures increasingly influence communities and economies. Assam's ecological landscape and vulnerability to floods make environmental education particularly relevant. Traditional ecological knowledge and modern scientific research can meaningfully interact when both are examined respectfully and critically through appropriate academic methods.

Academic Freedom, Professional Dignity and the ACTA Journal

A vibrant academic institution must be a space where questions can be asked, evidence can be examined, ideas can be debated and disagreement can take place with mutual respect.

Academic freedom and professional responsibility are complementary. Teachers require intellectual freedom to research and teach, while scholarship must remain evidence-based, reasoned and open to critical scrutiny. The expanding responsibilities of college teachers—teaching, mentoring, research, examination duties, administration, technological adaptation and community engagement—require appropriate institutional support.

The teaching profession should therefore be recognised not merely as employment within an administrative structure but as an **academic profession whose intellectual contribution is central to the quality of higher education**.

The ACTA Journal seeks to serve as more than a periodic publication. We envision it as a continuing **academic forum for the college teachers of Assam**—a space for original research, educational experiences, interdisciplinary scholarship, discussion on NEP 2020, Indian Knowledge Systems, Assam's intellectual heritage and evidence-based academic dialogue.

The Journal can become a bridge between classroom and research, policy and practice, local experience and wider scholarship, tradition and modernity, teachers and learners, and Assam and the larger academic world.

Towards 2047: From Demographic Strength to Human Capability

The journey towards **Viksit Bharat @2047** ultimately depends upon people. Infrastructure, technology, capital and institutions are essential foundations of development, but their effectiveness depends upon the quality of human capability that a society is able to develop.

India's demographic strength offers an extraordinary opportunity. Yet demographic numbers alone do not create development. A young population becomes a demographic dividend when young people have access to quality education, relevant skills, productive employment, entrepreneurship, social security and opportunities to participate in the development process.

The real question, therefore, is not simply how many young people India has, but **what capabilities we are able to develop among them**.

Education must move beyond the transmission of information towards the development of capabilities. Our youth need classrooms that encourage questions rather than silence; laboratories that encourage experimentation; libraries that encourage reading; institutions that encourage research; mentors who encourage confidence; and communities that provide opportunities to transform ideas into action.

They need opportunities to learn not only *what* to think but also *how* to think—to examine evidence, understand different perspectives, solve unfamiliar problems and respond creatively to new situations.

The India of 2047 will be shaped by the young people who are currently passing through our schools, colleges and universities. Their contribution will depend upon the opportunities available to them and upon the education, values and confidence with which they enter the future.

We must prepare young people not merely to **enter the future but to shape it**—to become technologically capable without becoming technologically dependent; globally connected without losing their cultural rootedness; economically productive without losing social responsibility; and innovative without losing ethical direction.

The journey towards 2047 is therefore not simply a journey measured in years. It is a journey of **human capability**—of transforming potential into knowledge, knowledge into skill, skill into productive action, and productive action into social progress.

And behind many of those transformations will stand a teacher: teaching, mentoring, questioning, encouraging and guiding another generation towards what it is capable of becoming.

The Road Ahead

The future of higher education should neither be approached with uncritical optimism nor with resistance to change. Transformation requires reflection, evidence, dialogue and continuous institutional learning.

Policies must be thoughtfully implemented. Innovations must be critically evaluated. Technology must be responsibly adopted. Traditional knowledge must be rigorously studied. Research must be strengthened. Teachers must be supported. Students must be heard.

Above all, education must retain its human purpose.

The India of 2047 will be built not only in government offices, industries, laboratories and markets, but also in classrooms, libraries, colleges and universities. Every lecture, every research project, every student discussion, every experiment, every mentoring conversation and every act of academic integrity contributes in some measure to the society we are creating.

As the ancient wisdom reminds us:

आचार्यात् पादमादत्ते पादं शिष्यः स्वमेधया।
पादं सब्रह्मचारिभ्यः पादं कालक्रमेण च॥

"A learner acquires one part of knowledge from the teacher, another through one's own intellect, another from fellow learners, and another through experience over time."

Education is therefore a shared journey. The teacher guides, the learner questions, peers contribute, experience teaches, and society provides the context in which knowledge acquires meaning.

May our colleges remain spaces of inquiry, inclusion and imagination.

May our teachers continue to inspire minds and strengthen institutions.

May our youth transform demographic strength into knowledge, skills, creativity and responsible action.

And may education continue to illuminate the path towards a more knowledgeable, inclusive, innovative, ethical, sustainable and developed Bharat.

विद्या ददाति विनयं विनयाद् याति पात्रताम्।
पात्रत्वाद्धनमाप्नोति धनाद्धर्मं ततः सुखम्॥

"Knowledge gives humility; from humility comes worthiness; from worthiness comes prosperity; and through righteous conduct comes happiness."

May knowledge continue to give direction to our youth, dignity to our teachers, strength to our institutions and meaning to our national journey.

Dr. Saurabh Pran Sharma
Dr. Rumi Khalen
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Journal

Assam College Teachers' Association

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অসমীয়া শিতান

সাম্প্রতিক অসমীয়া সংস্কৃতিত গণমাধ্যমৰ প্ৰভাৱ-এক বিশ্লেষণাত্মক অধ্যয়ন

বিনি শইকীয়া
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সংক্ষিপ্ত সাৰঃ

একবিংশ শতিকাৰ সাম্প্রতিক সমাজ জীৱনৰ এক গুৰুত্বপূৰ্ণ অংগত পৰিগনিত হৈছে 'গণমাধ্যম'। আধুনিক বিজ্ঞান প্রযুক্তিবিদ্যাৰ দ্রুত উন্নয়নে গণমাধ্যমৰ ক্ষেত্রখনক পুৰ্বৰ তুলনাত অধিক বিস্তৃত আৰু প্রভাৱশালী কৰি তুলিছে। বিশেষকৈ বৈদ্যুতিক গণমাধ্যমৰ ক্ষেত্রখনক। বৈদ্যুতিক গণমাধ্যম আন গণমাধ্যমবোৰতকৈ অধিক দ্রুত গতিত কৰিব পাৰে। যিকোনো তথ্য বা সংবাদ, শিক্ষা, মনোৰঞ্জনক জনসাধাৰণৰ মাজত প্রচাৰ আৰু প্রভাৱ বিস্তাৰ কৰিব পাৰে। বৈদ্যুতিক গণমাধ্যম যেনে- ৰেডিঅ', টেলিভিচন, চলচ্চিত্র, ইন্টাৰনেট , বিভিন্ন সামাজিক প্লেটফর্ম ফেচবুক, ইউটিউব ,ইনষ্টাগ্রাম আদিয়ে ভিন্ন সংস্কৃতিৰ ওপৰত সহজতে পাৰস্পৰিক প্রভাৱ পেলোৱা দেখা যায়। পৃথিৱীৰ অন্যান্য সংস্কৃতিৰ দৰে গণমাধ্যমৰ বহুল প্রচলনে অসমীয়া সমাজ সংস্কৃতিৰ ওপৰত সততে প্রভাৱ বিস্তাৰ কৰা দেখা যায়। যিকোনো বস্তুৰে ভাল আৰু বেয়া দুটা দিশ থাকে। গণমাধ্যমো ইয়াৰ ব্যতিক্রম নহয় । অসমীয়া সংস্কৃতিৰ ওপৰত ইতিবাচক আৰু নেতিবাচক দুয়োটা দিশতে গণমাধ্যমে প্রভাৱ পৰিলক্ষিত হোৱা দেখা যায়। এহাতে , অসমীয়া ভাষা,সাহিত্য, সংস্কৃতিৰ ঐতিহ্যক প্রচাৰ আৰু সংৰক্ষণ কৰাত বৈদ্যুতিক গণমাধ্যমসমূহে গুৰুত্বপূৰ্ণ ভূমিকা পালন কৰাৰ বিপৰীতে ইন্টাৰনেট, টেলিভিছন আদি গণমাধ্যমৰ আহিলা সমূহে গোটেই বিশ্বৰ ভাষা সংস্কৃতিক ওচৰ চপাই অনাৰ ফলত বহিঃ সংস্কৃতিৰ অনুকৰণে অসমীয়া সংস্কৃতিৰ পৰম্পৰাগত নিজস্ব বৈশিষ্ট্যলৈ বহু সময়ত ভাবুকিও নমাই আনিছে। 'সাম্প্রতিক অসমীয়া সংস্কৃতিত গণমাধ্যমৰ প্রভাৱ- এক বিশ্লেষণাত্মক অধ্যয়ন।' শীৰ্ষক গৱেষণা পত্রখনৰ জৰিয়তে অসমীয়া সংস্কৃতিৰ ওপৰত গণমাধ্যমৰ প্রভাৱ বিশ্লেষণাত্মক দৃষ্টিভংগীৰে অধ্যয়নৰ প্রয়াস কৰা হব।

বীজ শব্দ ঃ অসমীয়া সংস্কৃতি, গণমাধ্যম, সামাজিক মাধ্যম, প্রভাৱ, জনপ্রিয়তা, বানিজ্যিকীকৰণ

০.০০ প্রস্তাৱনা ঃ

০.০১ বিষয় পৰিচয় ঃ

অসম হৈছে বাৰে ৰহনীয়া সংস্কৃতিৰ মিলনভূমি। নানা জাতি-উপজাতিৰ ভাষা-সাহিত্য-সংস্কৃতিৰে অসমৰ সংস্কৃতিৰ বৰ পেৰা গঢ় লৈ উঠিছে। সামগ্রিকভাৱে অসমৰ সংস্কৃতিয়ে হৈছে অসমীয়া সংস্কৃতি। এটা জতিৰ দাপোন স্বৰূপ সংস্কৃতি হৈছে এখন বোৱতী নৈৰ দৰে। নৈৰ দৰে সংস্কৃতিয়ে সময়ৰ গতিত পৰিৱর্তন লাভ কৰে, পুৰণিৰ ভেটিত নিজা ৰূপ সলায়। ড. লীলা গগৈয়ে তেঁওৰ 'অসমৰ সংস্কৃতি' শীৰ্ষক গ্রন্থত সংস্কৃতিক নৈৰ লগত তুলনা কৰি এনেদৰে কৈছে— ' নৈৰ গতিয়ে সংস্কৃতিৰ গতি। নৈয়ে যেনেকৈ নিৰৱছিন্ন গতিৰে চিৰদিন বৈ থাকে, সংস্কৃতিও তেনেকৈয়ে ধাৰাবাহিক গতিৰে চলি থাকে। নৈয়ে গৰা খহায়, বলুকা পাতে। সেইদৰে সময়ৰ সোঁতত লাগি সংস্কৃতিৰ সম্পদ এৰা পৰে, নতুনৰ যোগ হয়। কেতিয়াবা কিবা কাৰণত নতুন আৰু পুৰণি সংস্কৃতিৰ দোমোজাত পৰে। তেতিয়া যদি নতুন সোঁত কোবাল হয়, পুৰণি সোঁতো তৰাং পৰিবলৈ আৰম্ভ কৰে। কিন্তু সংস্কৃতিৰ গতি বৈ থাকে— নিৰৱিচ্ছিন্নভাৱে।'১ নৈৰ দৰে চিৰ বহ্মিান সংস্কৃতিৰ মাজত সংৰক্ষিত হয়, এটা জাতিয়ে সমাজৰ পৰা আহৰণ কৰা বহুশ বছৰীয়া অভিজ্ঞতাৰ কর্ষিত আচৰণ। সমাজ পাতি বসবাস কৰা মনুহৰ চিন্তাৰ শিল্পীত অভিব্যক্তিকে আমি চমুকৈ সংস্কৃতি বুলি ক'ব পাৰো। সময়ৰ অগ্রগতিত সংস্কৃতিয়ে পৰিৱর্তন লাভ কৰাটো

স্বাভাৱিক। অসমীয়া সংস্কৃতিও ইয়াৰ ব্যতিক্রম নহয়। সময়ৰ গতিত পৰিৱৰ্তিত আৰু পৰিবৰ্দ্ধি অসমীয়া সংস্কৃতিৰো আছে সুকীয়া নিজা এক স্বকীয় পৰিচয়।

একবিংশ শতিকাৰ সাম্প্রতিক সময়ৰ সমাজ জীৱনত এক গুৰুত্বপূর্ণ অংগ হিচাপে পৰিগণিত হৈছে 'গণমাধ্যম'। গণসংযোগৰ এক প্রভাৱশালী মাধ্যম হিচাপে গণমাধ্যমৰ গুৰুত্ব যথেষ্ট বেছি। গণমাধ্যমৰ ব্যৱহাৰ তথা গুৰুত্ব বর্তমান সময়তহে বৃদ্ধি পাইছে তেনে নহয়। অতীতৰে পৰা গণসংযোগৰ বাবে গণমাধ্যমৰ ব্যৱহাৰ হৈ আহিছে। অৱশ্যে বর্তমানৰ আধুনিক তথ্য-প্রযুক্তিবিদ্যাৰ উন্নয়নৰ লগে লগে গণমাধ্যমৰ পৰিসৰ পূর্বৰ তুলনাত যথেষ্ট বৃদ্ধি পাইছে। বিশেষকৈ বৈদ্যুতিক গণমাধ্যমৰ উন্নতিয়ে জনসাধাৰণৰ মাজত গণমাধ্যমৰ পৰিসৰ বৃদ্ধি কৰাত সহায় কৰিছে। মানুহে গণমাধ্যমৰ বিভিন্ন আহিলা সমূহৰ সহায়ত বর্তমান সময়ত ঘৰতে বহি বিশ্বৰ ভিন্ন প্রান্তৰ ভাষা-সংস্কৃতিৰ সৈতে পৰিচয় লাভ কৰিব সক্ষম হৈছে। গনমাধ্যমে বিবিধ ভাষা সংস্কৃতিক এনেদৰে ওচৰ চপাই অনাৰ ফলস্বৰূপে বহিঃ সংস্কৃতিৰ প্রভাৱেৰে প্রভাৱান্বিত হৈ কেতিয়াবা থলুৱা সংস্কৃতিয়ে পৰম্পৰাগত স্বকীয় বৈশিষ্ট্য হেৰুৱাই অস্তিত্বৰ সংকতত ভোগাৰ আশংকা দেখা যায়। অসমীয়া সমাজত গণমাধ্যমে সাংস্কৃতিৰ বিভি ন্ন উপাদান সমূহক জনপ্রিয় কৰি তোলাৰ লগতে বিশ্বৰ সংস্কৃতিৰ সৈতে পৰিচয় তথা সংযোগ স্থাপন কৰিছে।

০.০২ **উদ্দেশ্যঃ**

'সাম্প্রতিক অসমীয়া সংস্কৃতিত গণমাধ্যমৰ প্রভাৱ- এক বিশ্লেষণাত্মক অধ্যয়ন।' শীর্ষক বিষয়টিৰ অধ্যয়নৰ মূল উদ্দেশ্যসমূহ হল ঃ—

(ক) সাম্প্রতিক অসমীয়া সংস্কৃতিৰ ওপৰত গনমাধ্যমৰ প্রভাৱ বিশ্লেষণ কৰা।

(খ) অসমীয়া সংস্কৃতি প্রচাৰ আৰু সংৰক্ষণত গণমাধ্যমৰ ভূমিকা বিচাৰ কৰা।

(গ) গণমাধ্যমৰ ইতিবাচক আৰু নেতিবাচক প্রভাৱসমূহ বিচাৰ কৰা ।

০.০ ৩ **গুৰুত্ব ঃ**

গণমাধ্যমৰ ব্যাপক প্রসাৰে গোটেই বিশ্বখনকে এখন গাঁৱলৈ পৰিৱর্তন কৰিছে। ফলত বিশ্বৰ যিকোনো সমাজ- জীৱন তথা সংস্কৃতিৰ সৈতেপৰিচয় লাভ কৰা তেনেই সহজ হৈ পৰিছে। গণমাধ্যমৰ এনে ব্যাপক প্রভাৱে সমসাময়িক অসমীয়া সংস্কৃতিকো প্রভাৱিত নকৰাকৈ থকা নাই। এই অধ্যয়নে সাম্প্রতিক সময়ৰ প্রেক্ষাপটত অসমীয়া সংস্কৃতিত গণমাধ্যমৰ প্রভাৱ নির্ণয় কৰাৰ লগতে অসমীয়া সংস্কৃতি সংৰক্ষণ আৰু বিকাশত ভূমিকা নির্ণয় কৰাত সহায়ক হ'ব।

০.০৪ **অধ্যয়নৰ পদ্ধতি ঃ**

'সাম্প্রতিক অসমীয়া সংস্কৃতিত গণমাধ্যমৰ প্রভাৱ- এক বিশ্লেষণাত্মক অধ্যয়ন।' শীর্ষক বিষয়টি আলোচনা কৰোতে বর্ণনাত্মক আৰু বিশ্লেষনাত্মক পদ্ধতিৰ সহায় লোৱা হ'ব। গৌণ উৎসৰ সহায়ত বিষয়ৰ লগত সংগতি থকা বিভিন্ন গ্রন্থ, আলোচনীৰ পৰা তথ্য সংগ্রহ কৰা হ'ব। তথ্যসমূহ বিশ্লেষণ কৰোতে বিশ্লেষণাত্মক পদ্ধতিৰ সহায় লোৱা হ'ব।

০.০৫ **অধ্যয়নৰ পৰিসৰ ঃ**

'সাম্প্রতিক অসমীয়া সংস্কৃতিত গণমাধ্যমৰ প্রভাৱঃ এক বিশ্লেষণাত্মক অধ্যয়ন।' শীর্ষক গৱেষণা পত্রখনিত বিষয়ৰ বিস্তৃতিলৈ লক্ষ্য ৰাখি গণমাধ্যমৰ অন্যতম বিভাগ বৈদ্যুতিক মাধ্যমৰ অসমীয়া সংস্কৃতিৰ ভাষা-সাহিত্য, উৎসৱ-পার্ৱন আৰু সাজ-পাৰত পেলোৱা প্রভাৱ সম্পর্কে আলোচনা কৰাৰ প্রয়াস কৰা হ'ব।

১.০০ **বিষয় বিশ্লেষণ ঃ**

গনমাধ্যম হৈছে গনসংযোগৰ এনে এক মাধ্যম যাৰ জৰিয়তে একে সময়তে অ সমগোত্রীয় বহুমানুহৰ মাজলৈ যিকোনো বার্তা, তথ্য, জ্ঞান, শিক্ষা, বিনোদন,মতামত আদি প্রেৰণ কৰিব পৰা যায়। অর্থাৎ যি মাধ্যমৰ জৰিয়তে 'গণ' বা সাধাৰণ জনসাধাৰণৰ সৈতে সংযোগ বা যোগাযোগ স্থাপন কৰিব পৰা যায় সেয়াই হ'ল গণমাধ্যম। বাতৰি কাকত, ৰেডিঅ, টেলিভিচন, চলচ্চিত্র, ইন্টাৰনেট আদিবোৰ হৈছে আধুনিক একো একোটা গনমাধ্যমৰ আহিলা। গণসংযোগ আৰু গণমাধ্যম দুয়োটা ধাৰণাই এটা আনটোৰ ওপৰত নির্ভৰশীল। উপযুক্ত গণমাধ্যমৰ ব্যৱহাৰৰ অবিহনে সফল গনসংযোগ সম্ভৱ নহয়। গণমাধ্যম ব্যৱহাৰৰ প্রধান উদ্দেশ্যসমূহ হৈছে— তথ্য সৰবৰাহ, শিক্ষা প্রদান, মনোৰঞ্জন প্রদান কৰা। গণমাধ্যমক প্রধানকৈ তিনিটা ভাগত ভাগ কৰা হৈছে।

(ক) লোক আৰু পৰম্পৰাগত গণমাধ্যম (খ) মুদ্রণ মাধ্যম (গ) বৈদ্যুতিক মাধ্যম।

লোক আৰু পৰম্পৰাগত গণমাধ্যম হ'ল সেইবোৰ পৰম্পৰাগত ব্যৱস্থা যাৰ সহায়ত সমাজৰ সাধাৰণ মানুহে নিজা জ্ঞান,বিশ্বাস, ৰীতি-নীতি, মনোৰঞ্জন এজনৰ পৰা আন এজনলৈ প্রেৰণ কৰি আহিছে। বিশাল জনসমষ্টিৰ বিপৰীতে লোক আৰু পৰম্পৰাগত গণমাধ্যসমূহে থলুৱা তথ্য সৰবৰহকাৰী মাধ্যম হিচাপে কাম কৰে। ইয়াৰ ভিতৰত পৰিৱেশ্য কলা,

মৌখিক সাহিত্য আদিক অন্তর্ভুক্ত কৰিব পাৰি। মুদ্রণ মাধ্যম অর্থাৎ ছপা মাধ্যমসমূহ হ'ল বিশাল জনসমষ্টিৰ মাজত কোনো তথ্য প্রেৰণৰ কাৰণে কৰা যি কোনো প্রকাশন। মুদ্রণ গণমাধ্যমৰ ভিতৰত কিতাপ,আলোচনী, বাতৰি কাকত আদিয়ে প্রধান। বৈদ্যুতিক গণমাধ্যম বুলিলে দৃশ্য, শ্রব্য আৰু দৃশ্য-শ্রব্য মাধ্যমক বুজোৱা হয়। ফটোগ্রাফি, ৰেডিঅ', টেলিভিচন, কম্পিউটাৰ, চলচ্চিত্র,সামাজিক মাধ্যম আদিক বৈদ্যুতিক মাধ্যমৰ অন্তর্ভূক্ত কৰা হয়। বৈদ্যুতিক মাধ্যমৰ জৰিয়তে অতি দ্রুত প্রচাৰ আৰু প্রসাৰ সম্ভৱ হয়।

সংস্কৃতি হৈছে এটা জাতিৰ দাপোন স্বৰূপ। কোনো এটা জাতিৰ উন্নয়নৰ প্রকৃত পৰিচয় প্রতিফলিত হয়, সেই নিদিষ্ট জাতিটোৰ সংস্কৃতিৰ মাজেৰে। কিয়নো সংস্কৃতি হৈছে কোনো এখন সমাজৰ, এটা জাতিৰ বা জনগোষ্ঠীৰ জীৱনধাৰণ, চিন্তাধাৰা, বিশ্বাস-অবিশ্বাস, মূল্যবোধ, আচাৰ-ব্যৱহাৰ, ভাষা ,সাহিত্য, শিল্প, সংগীত,ধর্ম, ৰীতি-নীতি সমষ্টিৰ সামগ্রিক প্রকাশ। বহুশ বছৰীয়া অভিজ্ঞতাৰ কর্ষণৰ ফলশ্রুতিত গঢ় লয় সংস্কৃতিয়ে । স্থান , কাল অনুসৰি প্রত্যক সংস্কৃতিয়ে নিজস্ব বৈশিষ্ট্যৰে গঢ় লয়। সেয়েহে সমাজ ভেদে, অঞ্চল ভেদে সংস্কৃতিৰ মাজত পার্থক্য পৰিলক্ষিত হোৱা দেখা যায়। পৰম্পৰাগত ভাৱে সংস্কৃতিয়ে এটা প্রজন্মৰ পৰা আন এটা প্রজন্মলৈ গতি কৰে । সময়ৰ লগে লগে সংস্কৃতিৰো পৰিৱর্তন ঘটে। কাৰণ ই গতিশীল। সময়ে কঢ়িয়াই অনা পৰিৱর্তনৰ চাপ সংস্কৃতিয়ে বহন কৰি নিজা ৰূপ সল নি কৰে। অসম হৈছে বিভিন্ন জাতি-জনজাতিৰ মিলনস্থলী। অসমৰ এই ভিন্ন জাতি-জনজাতিৰ বৈচিত্রময় সংস্কৃতিৰে গঢ় লৈছে বৃহৎ অসমীয়া সংস্কৃতিৰ । অসমীয়া সংস্কৃতি বুলিলে সাধাৰণতে অসমৰ মানুহৰ জীৱন ধাৰা, পৰম্পৰা, ধর্ম, ভাষা, নৃত্য, সংগীত, খাদ্য, সাজ-পাৰ, উৎসৱ অনুষ্ঠান আদিকে বুজা যায়।

সংস্কৃতি প্রচাৰ আৰু সংৰক্ষণৰ এক শক্তিশালী মাধ্যম হৈছে গণমাধ্যম। যি কোনো এখন সমাজৰ বা এটা জাতিৰ সাংস্কৃতিক পৰম্পৰা তথা ঐতিহ্যৰ মূল্যবোধক অধিক সংখ্যক মানুহৰ মাজলৈ কঢ়িয়াই নিয়াত গণমাধ্যমে গুৰুত্বপূর্ণ ভূমিকা গ্রহণ কৰে। সাম্প্রতিক সময়ৰ তথ্য আৰু প্রযুক্তি বিদ্যাৰ দ্রুত উন্নয়নে গনমাধ্যমৰ ক্ষেত্রখনক অধিক উন্নত কৰি তুলিছে। ফলত পূর্বৰ তুলনাত বর্তমানৰ গণমাধ্যমৰ যোগাযোগৰ ব্যৱস্থা অধিক সহজ আৰু গতিশীল হৈ পৰিছে। বৈদ্যুতিক গণমাধ্যম যেনে - ৰেডিঅ',দূৰদর্শন, চলচ্চিত্র, ইন্টাৰনেটৰ ,বিভিন্ন সামাজিক মাধ্যম আদি সমাজৰ সৰু ডাঙৰ সকলো স্তৰৰ লোককে সহজতে প্রভাৱিত কৰিব পৰা প্রভাৱশালী গণমাধ্যম হিচাপে পৰিগণিত হৈছে। বৈদ্যুতিক গণমাধ্যমে যিকোনো তথ্য অতি দ্রুতগতিত প্রচাৰ কৰিব পৰাৰ বাবে ইয়াৰ প্রভাৱ তুলনামূলক ভাৱে আন আন গণমাধ্যমতকৈ বেছি।

১ .০১ ভাষা ঃ

ভাষা হৈছে সংস্কৃতিৰ মূল আধাৰ। অসমীয়া ভাষা-সাহিত্যই বহুশ বছৰীয়া পৰিক্রমাৰ ফল স্বৰূপে বর্তমানৰ ৰূপ লাভ কৰিছে। সাম্প্রতিক সময়ত ইউনিকোডত অসমীয়া লিপিৰ টাইপিঙৰ সুবিধাই বিশ্বৰ ডিজিটেল মাধ্যমত অসমীয়া ভাষাক স্বাধীন তথা সৱল মর্যাদা লাভ কৰাত সহায় কৰিছে। ফলত ভাষাৰ প্রযুক্তিগত বিকাশ আৰু সংৰক্ষণ সম্ভৱ হৈছে । বিভিন্ন চার্চ ইঞ্জিন, ডিজিটেল মাধ্যমত অসমীয়া ভাষাত টাইপিং কৰিব পৰা হোৱাৰ বাবে অসমীয়া ভাষাত ৱেবছাইট নির্মান ,অনলাইন বাতৰি কাকত, ই-আলোচনী প্রকাশ কৰা সহজ হৈ পৰিছে। ইয়াৰ ফলত অসমীয়া ভাষা বিশ্বব্যাপি সম্প্রসাৰিত হৈছে। অসমীয়া ভাষা অসমীয়া লিপিত ডিজিটেল মাধ্যমত লিখিব পৰা হ'ল যদিও সামাজিক মাধ্যম ব্যৱহাৰকাৰী সকলৰ মাজত অসমীয়া ভাষা শুদ্ধকৈ লিখাৰ প্রৱণতা কমকৈ দেখা যায়। প্রায়ে শব্দ আৰু বানানৰ বিভ্রান্তিকৰ প্রয়োগেৰে ইংৰাজী, হিন্দী আদি ভাষাৰ শব্দৰ সংমিশ্রণত গঠিত এক বিকৃত ভাষাৰ ব্যৱহাৰ ক্রমাত সামাজিক মাধ্যমত বৃদ্ধি পাইছে। অসমীয়া লিপিৰ সলনি ৰোমান লিপিত অসমীয়া ভাষা লিখাৰ প্রয়াস দেখিবলৈ পোৱা যায়।

বৈদ্যুতিক মাধ্যম যেনে ৰেডিঅ', চেটেলাইট চেনেলসমূহত সততে সম্প্রচাৰ হৈ থকা বিভিন্ন কথিকা,সাক্ষাৎকাৰ, ৰাজনৈতিক, সামাজিক, সাহিত্য আদিৰ লগত জড়িত আলোচনা তথা টকশ্ব' বোৰত ভিন্ন প্রান্তৰ বিশেষজ্ঞ আলোচকসকলে অংশগ্রহণ কৰে। ভিন্ন প্রান্তৰ এই আলোচক সকলে আলোচনাবোৰত অংশগ্রহণ কৰোতে তেঁওলোকৰ অঞ্চল বিশেষে প্রচলিত আঞ্চলিক ভাষাক ব্যৱহাৰ নকৰি অসমীয়া মান্য ভাষাৰ ব্যৱহাৰৰ ওপৰত গুৰুত্ব আৰোপ কৰে । যি অসমীয়া ভাষাৰ সমৰূপতা বজাই ৰখাত সহায় কৰে আৰু ভাষা শিকাৰ পৰিৱেশো সৃষ্টি কৰে। এই অনুষ্ঠানবোৰত হোৱা আলোচনাবোৰে জনসাধাৰণক বহুতো নতুন তথ্য প্রদান কৰাৰ লগতে নতুন দৃষ্টিভংগীয়ে বিষয়সমূহ বিশ্লেষণ কৰি চাবলৈ অনুপ্রাণিত কৰে। সংবাদ মাধ্যম সমূহত সততে ব্যৱহাৰ হোৱা ব্রেকিং নিউজ, ভাই�ৰেল আদি শব্দবোৰে অসমীয়া ভাষাত নতুন শব্দৰ সংযোজন কৰিছে। ইয়াৰোপৰি সামাজিক মাধ্যমত ব্যৱহৃত বিভিন্ন ভাষাৰ শব্দ বিশেষকৈ হিন্দী ,ইংৰাজী ভাষাৰ শব্দ আহি অসমীয়া ভাষাত প্রৱেশ কৰিছেহি যিবোৰ শব্দৰ ব্যৱহাৰ নৱপ্রজন্মৰ মাজত বিশেষভাৱে জনপ্রিয়। অসমীয়া ভাষালৈ

এই বিভিন্ন মাধ্যমবোৰ জৰিয়তে অহা শব্দবোৰে অসমীয়া দেশী,বিদেশী ভাষাৰ শব্দৰ ভঁৰাল বৃদ্ধি কৰাত সহায় কৰিছে। কিন্তু বহু সময়ত দেখা যায়, এই চেটেলাইত চেনেলসমূহৰ বাতৰি পৰিবেশক, সাংবাদিক, ঘোষক অথবা অনুষ্ঠানৰ আঁতধৰোতাসকলে খৰকৈ কোৱাৰ প্ৰৱণতাত নাইবা একেখিনি কথা বাৰে পতি ক'বলৈ বিচৰাৰ ফলত অসমীয়া ভাষা উচ্চাৰণগত , ব্যাকৰণগত অশুদ্ধ বাক্যৰ প্ৰয়োগ কৰা দেখিবলৈ পোৱা যায়।

১ .০২ সাহিত্য ঃ

ভাষাৰ দৰে সাহিত্যও হৈছে সংস্কৃতিৰে অপৰিহাৰ্য্য অংগ। অসমীয়া সাহিত্যৰ অমূল্য সম্পদ মৌখিক শিশুসাহিত্য যেনে, সাধুকথা বা লোককথা আদিবোৰৰ শিশুৱে শুনাৰ যি পূৰ্বৰ পৰিৱেশ বৰ্তমানৰ যান্ত্ৰিকতাৰে পূৰ্ণ আধুনিক জীৱন শৈলীৰ মাজত ক্ৰমে হেৰাই যাবলৈ ধৰিছে। ইয়াৰ লগে লগে এই শিশু সাহিত্যসমূহো হেৰাই যাব ধৰিছে। এনে শিশু সাহিত্যসমূহক শিশুক আকৰ্ষিত কৰা কাৰ্টুনছবিৰ ৰূপত বিভিন্ন বৈদ্যুতিক মাধ্যমত উপলব্ধ হোৱাকৈ নিৰ্মাণ কৰা হৈছে। এনে শিশুসকলৰ মাজত যথেষ্ট জনপ্ৰিয় এই কাৰ্টুনবোৰ জৰিয়তে শিশুসকলক সাধুকথাৰ নীতিশিক্ষাৰ লগতে সাধুৰ অলৌকিক জগতখনৰ সোৱাদ দিব পৰা গৈছে। কাৰ্টুনবোৰে কেৱল শিশুসকলক মনো�ৰঞ্জন প্ৰদান কৰিছে এনে নহয় ই মৌখিক সাহিত্যক সংৰক্ষণ কৰাত সহায় কৰিছে। কিন্তু বাস্তৱ ক্ষেত্ৰত দেখা যায় শিশুবোৰ অধিকতৰ সময় টেলিভিচনৰ পৰ্দাৰ সন্মুখত সময় কটোৱা ফলত শাৰীৰিক আৰু মানসিক স্বাস্থ্য ক্ষতি হোৱাৰ সম্ভাৱনা দেখা যায়। কাৰ্টুনৰ দৰেই জনপ্ৰিয় বহু সাধুকথা, গল্প, উপন্যাস আদিক চলচ্চিত্ৰৰ ৰূপ দিয়া হৈছে। চলচ্চিত্ৰ হৈছে এনে এক জনপ্ৰিয় দৃশ্য-শ্ৰব্য গণমাধ্যম যি শিক্ষিত অশিক্ষিত সকলো শ্ৰেণীলোককে প্ৰভাৱিত কৰিব পাৰে। সাহিত্যৰ এনে চলচ্চিত্ৰকৰনে সাহিত্যৰ পাঠক নোহোৱা অসংখ্য মানুহক অসমীয়া সাহিত্যৰ সোৱাদ ল'বলৈ সুযোগ প্ৰদান কৰিছে। ফেচবুক, আদি দৰে সামাজিক মাধ্যমত বিভিন্ন জনে নিজা চিন্তাধাৰাৰ প্ৰকাশেৰে গল্প, কবিতা, উপন্যাস আদি লিখি জনপ্ৰিয়তা লাভ কৰিছে। অৱশ্যে সামাজিক মাধ্যমত লাভ কৰা এনে জনপ্ৰিয়তা বহু সময়ত ক্ষণ স্থায়ী। কিয়নো , সামাজিক মাধ্যমত সকলোৰে লিখাৰ বাট মুক্ত হোৱাৰ বাবে বিষয়বস্তুৰ অধ্যয়নৰ গভীৰতাৰ অবিহনে লিখাৰ প্ৰয়াস কৰা প্ৰায়ভাগ লিখনিৰ গুণগত মানদণ্ড উচ্চ পয্যায়ৰ নহয়, নিম্নগামী হোৱা দেখা যায়। সামাজিক মাধ্যমত অভ্যস্ত হৈ পৰা মানুহে বৰ্তমান সময়ত কিতাপ আকাৰে প্ৰকাশ পোৱা গল্প, উপন্যাস ,প্ৰৱন্ধ আদি পঢ়াৰ বিপৰীতে ফেচবুকৰ চুটি চুটি লেখাসমূহ পঢ়াৰ প্ৰতি বেছি আগ্ৰহী ফলত কিতাপ অধ্যয়নৰ প্ৰতি আগ্ৰহ কমি আহিছে। অৱশ্যে ভাষা-সাহিত্য চৰ্চাৰ বাবে আগ্ৰহী সকলে এই সামাজিক মাধ্যমবোৰৰ জৰিয়তে এখন সুকীয়া মঞ্চ লাভ কৰিছে। যিখন মঞ্চৰ জৰিয়তে সাহিত্যকঅধিক পাঠকৰ কাষলৈ লৈ যাবলৈ সক্ষম হোৱাৰ লগতে এই মাধ্যম সমূহে এদল নতুন সাহিত্যিকৰো জন্ম দিয়াত সহায় কৰিছে।

১ .০৩ উৎসৱ- পাৰ্ৱণ ঃ

গণমাধ্যমৰ সহায়ত মানুহে বিশ্বৰ ভিন্ন সংস্কৃতিৰ বিষয়ে সহজতে জানিব বুজিব পৰা হৈছে। বিভিন্ন চেটেলাইট চেনেল, সামাজিক মাধ্যম সমূহৰ জৰিয়তে অসমীয়া সংস্কৃতিৰ বিভিন্ন উৎসৱ- পাৰ্ৱণ, পৰম্পৰাগত নৃত্য-গীত বিশ্বৰ মঞ্চত আত্মপ্ৰকাশ কৰিবলৈ সক্ষম হৈছে। সামাজিক বা ডিজিটেল মাধ্যমৰ জৰিয়তে এই পৰম্পৰাগত উৎসৱ-পাৰ্ৱন সমূহ কেৱল প্ৰচাৰেই হোৱা নাই ভৱিষ্যত প্ৰজন্মৰ বাবে সংৰক্ষণো হৈছে। দেখা যায় যে ,গণমাধ্যমে বিবিধ উৎসৱ-পাৰ্ৱন, অনুষ্ঠান, সাংস্কৃতিক ঐতিহ্য আদিৰ বিষয়ে জনসাধাৰণক অৱগত কৰে। যাৰ দ্বাৰা জনসাধাৰণৰ মাজত সাংস্কৃতিক সচেতনতাৰ লগতে সাংস্কৃতিক মূল্যবোধ বৃদ্ধি পায়। সামাজিক মাধ্যম ফেচবুক, ইনষ্টাগ্ৰাম, ইউটিউব আদিত বনোৱা মিনি ব্লগ, ৱিলছ, চুটি ভিডিঅ' আদিবোৰে ব'হাগ বিহু, কাতি বিহু, মাঘ বিহু, আদি উৎসৱ-পাৰ্ৱণ, খেতি-পথাৰ, অসমীয়া সামাজিক অনুষ্ঠান আদিৰ সৈতে জড়িত বিবিধ পৰম্পৰাগত, ৰীতি-নীতিৰ সৈতে অপৰিচিত হৈ পৰা নগৰমুখী নতুন প্ৰজন্মক পৰিচয় কৰি দি নিজা পৰম্পৰাগত ঐতিহ্যৰ প্ৰতি সচেতন কৰি তোলাত অৰিহণা যোগাইছে। গণমাধ্যমে অসমৰ নগৰমূখী নতুন প্ৰজন্মক অসমীয়া সংস্কৃতিৰ পৰম্পৰা সৈতে যিদৰে চিনাকী কৰাই দিছে সেইদৰে বহিঃসংস্কৃতিৰ জাক-জমকতাৰ প্ৰতিও নতুন প্ৰজন্মৰ আকৰ্ষণ বৃদ্ধি কৰাত অৰিহনা যোগাইছে। ফলত অসমীয়া সংস্কৃতিলৈ অপসংস্কৃতি আগমন হৈছে। উদাহৰণ স্বৰূপে অসমীয়া বিবাহ অনুষ্ঠানৰ কথাকে ক'ব পাৰি। অসমীয়া বিবাহ অনুষ্ঠানত বেচেলৰ পার্টি, মেহেন্দি, হালধি আদিৰ দৰে অনুষ্ঠানৰ আগমন হৈছে এনে বহিঃসংস্কৃতিৰ অন্ধ অনুকৰণৰ বাবে। যিয়ে বিবাহৰ লগত জড়িত পুৰণি পৰম্পৰাগত ৰীতি নীতিক ম্লান পেলাইছে। তেনেদৰে থলুৱা বিভিন্ন চেটেলাইট চেনেলবোৰত অসমীয়া সংস্কৃতিৰ উৎসৱ অনুষ্ঠানবোৰৰ অত্যাধিক বাণিজ্যিক প্ৰচাৰ আৰু আধুনিক মঞ্চ প্ৰদৰ্শনীৰ বাবে পৰম্পৰা ৰূপটোৰ ঠাইত অপসংস্কৃতিয়ে গা কৰি উঠিছে। উৎসৱ অনুষ্ঠান সমূহ গণমাধ্যমৰ মজিয়াত উদ্‌যাপন হ'বলৈ লোৱাৰে পৰা অত্যাধিক জাকজমকতাই ঠাই পাইছে। উদাহৰণ স্বৰূপে মাঘৰ বিহুৰ ভেলা

ঘৰৰ কথা ক'ব পাৰি। সাম্প্ৰতিক সময়ত অধিক প্ৰচাৰ লাভ কৰাৰ বাবে পৰম্পৰাগত পুৰণি ভেলা ঘৰৰ আৰ্হিৰ সলনি বিভিন্ন হেলিকপ্টাৰ, জাহাজ, অট্টালিকাৰ আৰ্হিত ভেলা ঘৰ নিৰ্মাণ কৰিব লৈছে। যিয়ে মাঘ বিহুৰ ভেলাঘৰৰ মূল ঐতিহ্য নোহোৱা কৰিছে। বৰ্তমানৰ সময়ত বিশ্বায়নৰ পৰিপ্ৰেক্ষিতত বিভিন্ন সংস্কৃতিৰ মাজত আদান-প্ৰদান হোৱাটো স্বাভাৱিক কথা। কিন্তু স্বকীয় বৈশিষ্ট্য অক্ষুন্ন ৰাখি আগবঢ়াটো অতি গুৰুত্বপূৰ্ণ।

১ .০৪ সাজ-পাৰৰ ঃ

উৎসৱ-পাৰ্ৱন,ভাষা-সাহিত্যৰ দৰে প্ৰত্যেক টো জাতি-জনগোষ্ঠীৰে নিজস্ব বৈশিষ্ট্যসম্পন্ন সাজ-পাৰৰ থকা দেখা যায়। যি সেই নিৰ্দিষ্ট জাতিটোৰ সুকীয়া পৰিচয় বহন কৰে। অসমীয়া সমাজত পুৰুষ-মহিলা ভেদে পৰম্পৰাগত সাজ পাৰ আছে। যি সাজ-পাৰে অসমীয়া জাতিটোক প্ৰতিনিধিত্ব কৰে। অসমীয়া এই পৰম্পৰাগত সাজ পাৰ সমূহে বৰ্তমান গনমাধ্যমৰ জৰিয়তে বিশ্বৰ পটভূমিত নিজা সুকীয়া শৈলীৰ পৰিচয় দাঙি ধৰিবলৈ সক্ষম হৈছে। অসমীয়া শিপিনিৰ তাঁতশালত বোৱা এড়ি, মুগা,পাতৰ কাপোৰ, মেখেলা-চাদৰ, গামোচা সামাজিক মাধ্যমৰ জৰিয়তে বিশ্বৰ ভিন্ন প্ৰান্তলৈকে পৰম্পৰাগত সাজ-পাৰৰ বজাৰখন সম্প্ৰসাৰিত হৈছে। সংযুক্তা দত্তৰ দৰে অসমীয়া ফেচন ডিজাইনাৰে অসমীয়া মেখেলা চাদৰক বিশ্বৰ প্ৰেক্ষাপটত গণমাধ্যমৰ জৰিয়তে জিলিকাই তুলিছে।আধুনিক ডিজাইনাৰ সকলে অসমীয়া পৰম্পৰাগত সাজ-পাৰসমূহক নৱপত সজাই নতুন প্ৰজন্মৰ মাজত জনপ্ৰিয় কৰি তুলিছে। অসমীয়াৰ স্বাভিমান আৰু সংস্কৃতিৰ পৰিচয় গামোচাখনে গণমাধ্যমৰ বাবে আন্তঃৰাষ্ট্ৰীয় প্ৰেক্ষাপটত গুৰুত্ব তথা সমাদৰ লাভ কৰিছে । মুগা এড়ীৰসুতাৰ লগতে শেহতীয়াকৈ ২০২২ চনৰ ডিচেম্ব্ৰৰ মাহৰ ১৩ তাৰিখে অসমীয়া গামোচাইও জি.আই. টেগ লাভ কৰিছে। অসমীয়া সাজ-পোচাকে গণমাধ্যমৰ জৰিয়তে বিশ্বদৰবাৰত জিলিকি উঠি বাণিজ্যিক ক্ষেত্ৰখন সম্প্ৰসাৰণ কৰাৰ সুজোগ পাইছে যদিও অধিক বাণিজ্যিকীকৰণৰ চাহিদাত অসমীয়া পৰম্পৰাগত সাজ-পোচাকসমূহৰ ফেচন ডিজাইনাৰৰ পৰীক্ষা নিৰীক্ষাৰ ফলত নিজা মৌলিকগুণগত মানদণ্ড লগতে পৰম্পৰাগত সৌন্দৰ্য্য ম্লান পৰিছে। গণমাধ্যমৰ জনপ্ৰিয়তাই আনি দিয়া বাণিজ্যিকী কৰণে বিভিন্ন বহিঃৰাজ্যত অসমীয়া শৈলীৰ নকল চানেকি ব্যৱহাৰ কৰি মেচিনত তৈয়াৰী নিম্ন মানৰ মেখেলা-চাদৰ , গামোচাৰে অসমৰ বজাৰ ভ ৰি পৰিছে। যি থলুৱা বস্ত্ৰশিল্পৰ ক্ষেত্ৰখনলৈ ভাবুকি নমাই আনিছে।

২.০০ প্ৰাপ্ত সিদ্ধান্ত ঃ

(ক) অসমীয়া সংস্কৃতিৰ প্ৰচাৰ আৰু প্ৰসাৰত গণমাধ্যমে উল্লেখযোগ্য ভূমিকা পালন কৰিছে।

(খ) অসমীয়া সংস্কৃতি সংৰক্ষণত গণমাধ্যমে সহায় কৰিছে।

(গ) গণমাধ্যমৰ ইতিবাচক আৰু নেতিবাচক দুয়োটা দিশৰ প্ৰভাৱ অসমীয়া সংস্কৃতিৰ ওপৰত পৰিছে।

৩.০০ সামৰণি ঃ

অধ্যয়নৰ পৰা দেখা যায় যে, সাম্প্ৰতিক সময়ত গণমাধ্যমৰ প্ৰভাৱ যথেষ্ট বেছি। অসমীয়া সংস্কৃতিক সংৰক্ষণ, বিকাশ তথা বিশ্বৰ সন্মুখত পৰিচয় কৰি দিয়াত গণমাধ্যমে গুৰুত্বপূৰ্ণ ভূমিকা পালন কৰিছে। ভাষা, সাহিত্য,সংস্কৃতিক গণমাধ্যমৰ জৰিয়তে নৱ প্ৰজন্মৰ মাজত অধিক জনপ্ৰিয় কৰি তুলিছে। কিন্তু গণমাধ্যমৰ বহুল প্ৰচাৰ আৰু প্ৰসাৰে অসমীয়া সাংস্কৃতিৰ বাণিজ্যিকীকৰণৰ,অপসংস্কৃতিৰ আগমনৰ পথ মুকলি কৰিছে।ফলস্বৰূপে সংস্কৃতিৰ পৰম্পৰাগত ঐতিহ্যৰ প্ৰতি ভাবুকিৰ সৃষ্টি হৈছে। সংস্কৃতি যিহেতু স্থিৰ নহয় সেয়ে ইয়াৰ পৰিৱৰ্তন স্বাভাৱিক। সেয়েহে গণমাধ্যমৰ ইতিবাচক দিশসমূহৰ ওপৰত অধিক গুৰুত্ব প্ৰদান কৰি অসমীয়া সংস্কৃতিৰ মূল ঐতিহ্য আৰু পৰম্পৰা ৰক্ষা কৰি বিশ্ববাসীৰ সন্মুখত অধিক শক্তিশালী ৰূপত দাঙি ধৰাৰ লগতে সংৰক্ষণৰ এক শক্তিশালী মাধ্যম হিচাপে ব্যৱহাৰ কৰাৰ প্ৰয়োজন।

পাদ টীকা ঃ

(১) লীলা গগৈ ঃ অসমৰ সংস্কৃতি,অসমীয়া সংস্কৃতি, পৃষ্ঠা-৬

সহায়ক গ্ৰন্থপঞ্জী ঃ

কাগ্‌য়ং ৰঘূনাথ , দত্ত ৰীতা (সম্পাঃ) ঃ উত্তৰ-পূব ভাৰতৰ লোক-সংস্কৃতি, সোনাৰি মহাবিদ্যালয়, সোনাৰি, প্ৰথম প্ৰকাশ ৫ আগষ্ট ২০১৩

গগৈ, লীলা ঃ অসমৰ সংস্কৃতি, বনলতা, ডিব্ৰুগড়-৭৮৬০০১ সপ্তম সংস্কৰণ ২০০৯-১০

চট্টোপাধ্যায়, পার্থ ঃ তত্ব আৰু প্ৰয়োগেৰে গণসংযোগ, চন্দন দে,বীনা লাইব্ৰেৰী, কলেজ হোষ্টেল ৰড,গুৱাহাটী-৭৮১০০১,অসম, দ্বিতীয় সংস্কৰণ ঃ চেপ্তেম্বৰ, ২০১০

দত্ত, অংকুৰণ ঃ গণ-মাধ্যম আৰু সম্প্ৰচাৰ সাংবাদিকতা, ৰাজেন্দ্ৰ প্ৰসাদ মজুমদাৰ, সচিব, অসম প্ৰকাশন পৰিষদ

গুৱাহাটী-৭৮১০২১ প্রথম প্রকাশঃ মার্চ,২০১০

দাস, অংশুমান (সম্পাঃ) ঃ অসমৰ বাৰেবৰণীয়া সংস্কৃতি, আঁক-বাক, ৩ উপ - পথ নং-৫ নতুন শৰণীয়া,গান্ধীবস্তি, গুৱাহাটী-৭৮১০০৩ প্রথম প্রকাশ ঃ ডিচেম্বৰ ২০১৩

পাটগিৰী, জগদীশ ঃ পূর্বাঞ্চলৰ ভাষা-সাহিত্য আৰু সংস্কৃতি, চন্দ্র প্রকাশ, পাণবজাৰ, গুৱাহাটী-৭৮১০০১ দ্বিতীয় সংস্কৰণ ঃ ২০১৩

মিলি,ৰত্নেশ্বৰ, শর্মা মমী (সম্পাঃ) ঃ অসমীয়া ভাষা সাহিত্য সংস্কৃতি, অলিম্পিয়া প্রকাশন, ৰাজগড়, গুৱাহাটী-৩ প্রথম প্রকাশ ঃ ২০১৬

নাথ, জ্যোতি স্বপন (সম্পাঃ) ঃ লোক-সংস্কৃতি আৰু বিশ্বায়ন, খাগৰিজান মহাবিদ্যালয়, নগাঁও ৭৮২০০২, অসম, প্রথম প্রকাশ ২০১২

শর্মা নবীন চন্দ্র, চহৰীয়া কনক চন্দ্র (সম্পা)ঃ অসমৰ সংস্কৃতি-সমীক্ষা, চন্দ্র প্রকাশ, পাণবজাৰ, গুৱাহাটী-১ দ্বিতীয় প্রকাশঃ চেপ্তেম্বৰ, ২০১৬

শর্মা, নবীন চন্দ্র ঃ অসমীয়া লোক সংস্কৃতিৰ আভাস, বাণী প্রকাশ পাইভেট লিমিটেড, পাণ বজাৰ, গুৱাহাটী-৭৮১০০১ পঞ্চম প্রকাশ ঃ ২০১১

সহায়ক আলোচনী ঃ

বৰকটকী, অৰিন্দম (সম্পা) ঃ প্রকাশ, ফেব্রুৱাৰী২০১৫, অসম প্রকাশন পৰিষদ গুৱাহাটী ৭৮১০২১

বৰা, লক্ষ্মীনন্দন (সম্পা) ঃ গৰীয়সী, পঞ্চবিংশ বছৰ, দশম সংখ্যা, জুলাই ২০১৮, সাহিত্য-প্রকাশ, ট্রিবিউন ভৱন, গুৱাহাটী-৩

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ভাষাবিষয়ক গ্ৰন্থৰ অসমীয়া অনুবাদ ঃ এক সমীক্ষা

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সংক্ষিপ্তসাৰ

আলোচ্য গৱেষণা পত্ৰত ভাষাবিষয়ক গ্ৰন্থৰ অসমীয়া অনুবাদ সম্পৰ্কে এক সমীক্ষা আগবঢ়োৱা হৈছে। এই অধ্যয়নত অসমীয়া ভাষালৈ ভালেমান গ্ৰন্থৰ অনুবাদ হোৱাৰ তথ্য পোৱা গৈছে। এই গ্ৰন্থসমূহৰ অনুবাদলৈ মন কৰিলে লক্ষ্য কৰা যায় যে, সংস্কৃত বা পালি ব্যাকৰণৰ অসমীয়া অনুবাদ, বিশ্ববিখ্যাত গ্ৰন্থৰ অনুবাদ, ঐতিহাসিক দিশৰ পৰা গুৰুত্বপূৰ্ণ অন্য ভাষাৰ গ্ৰন্থৰ অসমীয়া অনুবাদ কিছু পৰিমাণে হৈছে। ভাষাবিজ্ঞানৰ পুথিৰ অনুবাদৰ ক্ষেত্ৰত দেখা দিয়া প্ৰধান সমস্যাটোৱেই হ'ল পৰিভাষাৰ সমস্যা। ভাষাবিজ্ঞানৰ যথাৰ্থ পৰিভাষাৰ অভাৱ তথা নকৈ সাজি লোৱা পৰিভাষাকো ব্যৱহাৰৰ ক্ষেত্ৰত দেখা দিয়া সমস্যাই ভাষাবিজ্ঞানৰ গ্ৰন্থৰ অনুবাদ কষ্টকৰ কৰি তোলে। তদুপৰি এনে অনুবাদ সম্পূৰ্ণ আবেগ বৰ্জিত আক্ষৰিক বা শব্দানুবাদ হোৱাই বেছি বাঞ্ছনীয়। এই ক্ষেত্ৰত অসমীয়ালৈ হোৱা অনুবাদমূলক গ্ৰন্থৰ মূল্যায়নৰ এটি প্ৰয়াসো আলোচ্য গৱেষণা পত্ৰত দাঙি ধৰা হৈছে।

বীজ শব্দ ঃ অনুবাদ, অনুবাদক, ভাষাবিজ্ঞান, পৰিভাষা, অসমীয়া ভাষা

১.০ অৱতৰণিকা ঃ

উৎস ভাষাৰ পাঠ এটা লক্ষ্য ভাষাত প্ৰকাশ কৰাকে সাধাৰণভাৱে অনুবাদ বুলি কোৱা হয়। অনুবাদ যি কোনো ভাষাৰ বাবে এক মহৎ কৰ্ম ৰূপে পৰিচিত। জ্ঞানৰ চৰ্চা আৰু বিস্তাৰৰ বাবে অনুবাদ অতিকে জৰুৰী মাধ্যম।অনুবাদৰ উদ্দেশ্য আৰু অনূদিত সামগ্ৰীৰ প্ৰকৃতিৰ ওপৰত নিৰ্ভৰ কৰি শব্দানুবাদ, ভাৱানুবাদ, ছায়ানুবাদ আদি অনুবাদ বিভিন্ন প্ৰকাৰ গঢ় লয়। অসমীয়া সাহিত্য অনুবাদৰ ক্ষেত্ৰত চহকী। বহু পুৰণি কালৰপৰাই অনূদিত গ্ৰন্থই অসমীয়া ভাষাক সমৃদ্ধ কৰি আহিছে।

অসমত ভাষাৰ চৰ্চা বৰ পুৰণি নহয়। যোৱা প্ৰায় দুশবছৰমানৰ পৰাহে অসমত এই সম্পৰ্কীয় চিন্তা-চৰ্চাৰ পাতনি মেলিছে। আধুনিক ভাষাবিজ্ঞানৰ চৰ্চা আৰু নতুন। বিংশ শতিকাৰ মাজভাগৰ পৰাহে ই গতি লাভ কৰিছে। অসমীয়া ভাষাত ভাষাবিজ্ঞানৰ মৌলিক গ্ৰন্থ আঙুলিৰ মূৰত লেখিব পৰা। মহাবিদ্যালয়, বিশ্ববিদ্যালয় পৰ্যায়ত প্ৰচলিত ভাষাবিজ্ঞানৰ তাত্ত্বিক গ্ৰন্থসমূহ ইংৰাজীকে ধৰি বিভিন্ন ভাষাৰ অধ্যয়নৰ জৰিয়তে ৰচনা কৰা হৈছে। পোনপটীয়াকৈ সেইবোৰক অনুবাদ বুলি কোৱা হোৱা নাই যদিও বহু ক্ষেত্ৰত এইবোৰ অনুবাদৰে এক প্ৰকাৰভেদ মাত্ৰ। এই আলোচনাত অসমীয়া ভাষালৈ হোৱা ভাষা বিষয়ক কিছুসংখ্যক গ্ৰন্থৰ পোনপটীয়া অনুবাদৰ এক সমীক্ষা দাঙি ধৰিবলৈ চেষ্টা কৰা হৈছে। এই গ্ৰন্থসমূহৰ অনুবাদলৈ মন কৰিলে লক্ষ্য কৰা হয় যে, সংস্কৃত বা পালি ব্যাকৰণৰ অসমীয়া অনুবাদ, বিশ্ববিখ্যাত গ্ৰন্থৰ অনুবাদ, ঐতিহাসিক দিশৰ পৰা গুৰুত্বপূৰ্ণ গ্ৰন্থৰ অসমীয়া অনুবাদ, অসমীয়া ভাষা সম্পৰ্কে ইংৰাজীত লিখাৰ লগতে অসমীয়াতো তাৰ প্ৰকাশ ইত্যাদি দিশৰপৰা অসমীয়া ভাষালৈ কেতবোৰ ভাষাবিষয়ক গ্ৰন্থৰ অনুবাদ হোৱা দেখা যায়। একেজন লেখকেই নিজৰ গ্ৰন্থ এবাৰ ইংৰাজীত প্ৰকাশ কৰাৰ পাছত আকৌ অসমীয়া ভাষাতো প্ৰকাশ কৰিছে। মূল সমল একে ৰাখি বা পৰিমাৰ্জন পৰিৱৰ্দ্ধন কৰিলেও এইসমূহৰ মূল হৈছে পূৰ্বৰ ইংৰাজী গ্ৰন্থখনেই। সেয়েহে ইয়াকো অনুবাদ বুলি ধৰিব পাৰি।

২.০ গৱেষণা পত্ৰৰ উদ্দেশ্য, পদ্ধতি আৰু পৰিসৰ ঃ

অনূদিত সাহিত্য কৰ্মৰ দিশত অসমীয়া সাহিত্য চহকী, কিন্তু ভাষাবিষয়ক গ্ৰন্থৰ অনুবাদ কি পৰ্যায়ত হৈছে তাৰ এটি সমীক্ষা দাঙি ধৰাই এই অধ্যয়নৰ প্ৰধান উদ্দেশ্য। গৱেষণা পত্ৰখনত সমীক্ষামূলক পদ্ধতিৰ লগতে সমালোচনামূলক বিশ্লেষণাত্মক পদ্ধতিৰ প্ৰয়োগ কৰা হৈছে। কেৱল ভাষাৰ লগত পোনপটীয়াভাৱে সম্পৰ্কীত আৰু মূলৰ বিষয়ে উল্লেখ থকা গ্ৰন্থকহে আলোচনাটিত সামৰি লোৱা হৈছে।

৩.০ ভাষা বিষয়ক গ্ৰন্থৰ অসমীয়া অনুবাদ ঃ

অসমীয়া ভাষা বিষয়ক গ্ৰন্থৰ অনুবাদ বুলিলে প্ৰথমে মনলৈ আহে অসমীয়া ভাষাবিজ্ঞানৰ মহৎ কৃতি বাণীকান্ত কাকতিৰ Assamese, Its Formation and Development (১৯৪১) গ্ৰন্থৰ অসমীয়া অনুৱাদ। ১৯৯৪ চনত অসম সাহিত্য সভাই প্ৰথিতযশা ভাষাতত্ত্ববিদ, পণ্ডিত, সমালোচক আৰু শিক্ষাবিদ ড° বাণীকান্ত কাকতিৰ জন্ম শতবাৰ্ষিকী কেন্দ্ৰীয়ভাৱে বৰপেটা সাহিত্য সভাৰ উদ্যোগত বিভিন্ন কাৰ্য-সূচীৰ লগতে কাকতিৰ এই গ্ৰন্থখনৰ অসমীয়া অনুবাদো আছিল অন্যতম। ১৯৯৬ চনত গ্ৰন্থখনৰ প্ৰথম সংস্কৰণ প্ৰকাশ হৈ ওলায়। "আমাৰ যথেষ্ট সীমাবদ্ধতা থকা সত্ত্বেও গ্ৰন্থখন নিখুঁতভাবে প্ৰকাশ কৰাৰ চেষ্টা কৰা হৈছে। ইয়াৰ অনুবাদ এখন বিজ্ঞান অথবা আইনৰ কিতাপ বা দলিলৰ দৰেই যথাসম্ভৱ আক্ষৰিক, সঠিক আৰু সৰল কৰিব বিচৰা হৈছে। ইয়াত ছায়ানুবাদ, ভাবানুবাদ, মুকলি অনুৱাদ, ব্যাখ্যাত্মক অনুবাদ আদিক প্ৰশ্ৰয় দিয়া হোৱা নাই।"[১]

বিশ্বেশ্বৰ হাজৰিকাই অনুবাদ কৰা গ্ৰন্থখনৰ অনুবাদ পৰীক্ষণ কৰিছিল প্ৰমোদ চন্দ্ৰ ভট্টাচাৰ্যই। তেখেতে পাণ্ডুলিপিৰ প্ৰতিটো শব্দ মূলৰ সৈতে মিলাই প্ৰয়োজনীয় শুধৰণি কৰিছে বুলি প্ৰকাশকৰ একলমত উল্লেখ কৰা হৈছে। 'অনুৱাদকৰ কথা'ত গ্ৰন্থখনৰ অনুবাদ সম্পৰ্কত বিশ্বেশ্বৰ হাজৰিকাই লিখিছে- "অসমীয়া ভাষাত ঐতিহাসিক ভাষাবিজ্ঞানৰ উল্লেখযোগ্য কোনো পুথি ৰচিত বা অনূদিত হোৱা নাই। .....ডঃ কাকতিয়ে ব্যৱহাৰ কৰা পৰিভাষাবোৰ প্ৰায়ে ইয়াত পাবলৈ নাই আৰু পুথিখনত পৰিভাষাৰ তালিকা সন্নিৱিষ্ট নকৰা কাৰণে প্ৰয়োজন মতে পৰিভাষা বিচাৰি উলিওৱাত অসুবিধাৰ সন্মুখীন হোৱা যায়। ডঃ কাকতিয়ে ব্যৱহাৰ কৰা পৰিভাষা এটাৰ অসমীয়া ৰূপ দিবলৈ যাওঁতে কেনে ধৰণৰ অসুবিধা পাব লগীয়া হয়, এটা উদাহৰণ দিলে বোধ হয় বেছি পৰিষ্কাৰ ধাৰণা এটা পোৱা যাব। ডঃ কাকতিয়ে ব্যৱহাৰ কৰা এটা পৰিভাষা enclitic definitive। এই পৰিভাষাটো ব্যৱহাৰ কৰা হৈছে অসমীয়া ভাষাৰ -কণ, -খন, -জন, -টো আদি প্ৰত্যয় বুজাবলৈ। হেমচন্দ্ৰ বৰুৱাই এই প্ৰত্যয়বোৰক 'উপশব্দ' বুলিছে। সত্যনাথ বৰাই এইবোৰক 'তদ্ধিত প্ৰত্যয়ৰ ভিতৰত ধৰিছে। কালিৰাম মেধিয়ে এইবোৰক 'শব্দাংশ' বুলিছে। ডঃ গোলোক চন্দ্ৰ গোস্বামীৰ 'অসমীয়া ভাষাৰ মৌলিক বিচাৰ' (১৯৯০)-ত এই প্ৰত্যয়ৰ আলোচনা নাই। ডঃ উপেন্দ্ৰ নাথ গোস্বামীৰ 'অসমীয়া ভাষাৰ ৰূপকথা'ত ইহঁতক নিৰ্দিষ্টতাবাচক প্ৰত্যয় বোলা হৈছে (পৃঃ ১৫)। উপশব্দ, তদ্ধিৎ, শব্দাংশ আৰু নিৰ্দিষ্টতাবাচক প্ৰত্যয় কোনোটো পৰিভাষা enclitic definitive -ৰ অনুবাদ হিচাপে লব নোৱাৰি। নিৰ্দিষ্টতাবাচক নামটো definitive -ৰ অনুবাদ, enclitic শব্দটো অনুবাদ কৰা হোৱা নাই। কেৱল definitive অংশটো অনুবাদ কৰি enclitic অংশটো বাদ দিয়া পৰিভাষা এটা গ্ৰহণ কৰিব নোৱাৰি। enclitic শব্দটো অনুবাদ কৰিবলৈ গৈ দেখা গ'ল যে ইয়াৰ অৰ্থ এফালৰে ঢাল লোৱা। সংস্কৃতত প্ৰৱণতা শব্দেৰে এই অৰ্থ বুজোৱা হয়। সেই কাৰণে enclitic definitive-ৰ পৰিভাষা কৰা হ'ল 'প্ৰৱণাৰ্থী নিশ্চয়াৰ্থক'। কেতিয়াবা কেতিয়াবা ডঃ কাকতিয়ে একে অৰ্থ বজোৱা একাধিক প্ৰত্যয়ৰ নাম গ্ৰন্থখনত ব্যৱহাৰ কৰিছে। উদাহৰণ স্বৰূপে- pleonastic affix আৰু privative affix দেখাত দুটা বেলেগ প্ৰত্যয় যেন লাগিলেও দুয়োটাৰে অৰ্থ একে। সেই কাৰণে 'স্বাৰ্থিক প্ৰত্যয়' শব্দেৰে দুয়োটাকে অনুবাদ কৰা হৈছে বুলি অনুবাদকে উল্লেখ কৰিছে।

একেদৰে অসমীয়া ভাষাত অতীত কালৰ যিটো পক্ষক (aspect) সম্ভাব্য ভূত বোলা হয়, ইংৰাজীত তাক past conditional বোলা হয়। past conditional-ৰ অনুবাদ সাপেক্ষ অতীত কৰা হৈছে। কিন্তু ডঃ কাকতিয়ে অতীত কালৰ এই পক্ষটো বুজাবলৈ past conditional-ৰ উপৰিও habitual past আৰু habituated past এই দুটা পৰিভাষা ব্যৱহাৰ কৰিছে। সাপেক্ষ অতীত শব্দেৰে এই তিনিওটা পৰিভাষা অনুৱাদ কৰা হৈছে। সেইদৰে simple present আৰু simple future-ৰ অনুবাদ 'সামান্য বৰ্তমান' আৰু 'সামান্য ভৱিষ্যত' কৰা হৈছে, যদিও অসমীয়াত নিত্য বৰ্তমান আৰু ভৱিষ্যত বুলিহে কোৱা হয়। অনুবাদকে এনে সমস্যাৰ আন কেতবোৰ দিশ দেখুৱাইছে এনেদৰে-

genitive case-ৰ অনুবাদ সম্বন্ধ কাৰক নকৰি 'সম্বন্ধ পদ' কৰা হৈছে। indicative mood-ৰ অনুবাদ কৰোঁতে নিশ্চয়াৰ্থক ক্ৰিয়াভাৱ আৰু সূচনাৰ্থক ক্ৰিয়াভাৱ এই দুয়োটা পৰিভাষা ব্যৱহাৰ কৰা হ'ল। adverb of place, adverb of time আদি অনুবাদ কৰোঁতে স্থানবাচক সৰ্বনাম, কালবাচক সৰ্বনাম নকৰি স্থানবাচক ক্ৰিয়াবিশেষণ, কালবাচক ক্ৰিয়াবিশেষণ কৰি ৰখা হৈছে।

২ সংখ্যক ছেদত further India শব্দই এচিয়াৰ দক্ষিণ-পূবত থকা ব্ৰহ্মদেশ (ম্যানমাৰ), থাইলেণ্ড, কাম্বোডিয়া, ভিয়েট্ৰাম, শ্যাম, মালয়, সুমাত্ৰা, যাভা, বোৰ্নিও, ইণ্ডোনেচিয়া আদি এসময়ত ভাৰতৰ সাংস্কৃতিক উপনিৱেশ ৰূপে থকা দেশবোৰক বুজাইছে। সেই ফালৰ পৰা further শব্দৰটো বৰফলা

আখৰ হ'ব লাগিছিল। মুদ্রণ ভ্রান্তি হোৱা বুলি ধৰি লৈ 'দূৰৱতী ভাবত' বুলি অনুবাদ কৰা বুলি স্পষ্টীকৰণ দিছে।

"যিমান দূৰ পাৰি অনুৱাদ মূলানুগ কৰিবলৈ চেষ্টা কৰা হৈছে। কোনো বাক্যকে খণ্ড খণ্ড কৰি অনুবাদ কৰা নাই অথবা দুটা চুটি বাক্য একেলগ কৰি অনুবাদ কৰা নাই। ডঃ কাকতিৰ গ্ৰন্থত যিমানটা বাক্য আছিল অনুদিত পুথিতো সিমানটাহে বাক্য আছে। অনুবাদ কৰোঁতে মাজত ব্যাখ্যামূলক বাক্যাংশ সুমোৱাবলৈও চেষ্টা কৰা নাই। ফলত দুটা-এটা বাক্য বুজিবলৈ টান যেন লগা হৈছে। অতি দুৰ্বোধ্য যেন লাগিলে বন্ধনীৰ ভিতৰত এটা বা দুটা শব্দ সুমোৱাই দি সহজবোধ্য কৰাৰ চেষ্টা কৰা হৈছে।"[২] এখন ভাষাবৈজ্ঞানিক গ্ৰন্থৰ অনুবাদ হিচাপে এই গ্ৰন্থখন মাইলৰ খুঁটি আৰু আন অনুবাদকৰ বাবেও ই এক আদৰ্শ বুলিব পাৰি।

ইয়াণ্ডাবু সন্ধি মৰ্মে ১৮২৬ চনত ব্ৰিটিছে ভাৰতৰ শাসনভাৰ নিজৰ দখললৈ নিয়াৰ পাছত ভাৰতীয় লোকৰ বাবে শিক্ষাৰ বিষয়টোতো মনোনিৱেশ কৰে। যি কাৰণতেই নহওক ১৮৩৬ চনত অসমৰ স্কুল-আদালত বাংলা ভাষা প্ৰৱৰ্তন কৰা হয়। ফলস্বৰূপে অসমীয়া ভাষালৈ গভীৰ সংকট নামি আহে। এই সংকট মোচনৰ বাবে অসমীয়াৰ পক্ষত থিয় দিয়ে আমেৰিকান মিছনেৰীসকল আৰু কেইজনমান দেশহিতৈষী অসমীয়া মানুহ। মুষ্টিমেয় থলুৱা লোকসকলৰ মাজত সবাটোকৈ কৃতজ্ঞতাৰে নাম ল'ব লগীয়া ব্যক্তিজন হ'ল আনন্দৰাম ঢেকিয়াল ফুকন (১৮২৯--১৮৫৯)। ফুকনে ব্ৰিটিছ প্ৰশাসনৰ বিষয়বাবত থাকিও অসমীয়া ভাষাৰ স্বতন্ত্ৰতাৰ হকে আৰু অসমত অসমীয়া ভাষাৰ পুনৰ প্ৰতিষ্ঠাৰ বাবে সৰ্বতো প্ৰকাৰে চেষ্টা কৰিছিল। আনন্দৰাম ঢেকিয়াল ফুকনে A Few Remarks on the Assamese Language and Vernacular Education in Assam কিতাপ লেখি By A Native বুলি ৪০ টকা দি ১০০খন শিৰসাগৰৰ বেপ্তিষ্ট মিছন প্ৰেছত ছপা কৰি বঙ্গ গৱৰ্ণমেণ্টক দিয়ে আৰু দেশৰ প্ৰধান লোক সকলক দিয়ে। মহেশ্বৰ নেওগে এই গ্ৰন্থখন *Plea for Assam and Assamese* নামেৰে ১৯৭৭ চনত অসম সাহিত্য সভাৰ দ্বাৰা প্ৰকাশ কৰিছিল। মহেশ্বৰ নেওগে এই গ্ৰন্থখনৰ অসমীয়া অনুবাদ এটি 'অসমীয়া ভাষা আৰু অসমৰ শিক্ষা সম্পৰ্কে কেইটিমান কথা' নামেৰে প্ৰকাশ কৰিছে। আকাৰত ই ক্ষুদ্ৰাকৃতিৰ (৫৪ পৃষ্ঠাৰ) হ'লেও গ্ৰন্থখনৰ ঐতিহাসিক গুৰুত্ব অসীম। বাংলা ভাষাৰ লগত থকা বৈশাদৃশ্য দেখুৱাই অসমীয়া ভাষাৰ স্বতন্ত্ৰতা প্ৰতিপন্ন কৰি অসমত শিক্ষাৰ মাধ্যম অসমীয়া কৰাৰ যুক্তি প্ৰদৰ্শনেই হ'ল গ্ৰন্থখনৰ মূল উদ্দেশ্য। গ্ৰন্থখনৰ অসমীয়া অনুবাদত লেখকৰ গদ্যশৈলী ৰক্ষা হোৱা নাই। কিন্তু ইয়াত মূল বক্তব্য যথাযথ ৰক্ষিত হৈছে। তদুপৰি ব্যাখ্যাসহ ভূমিকাখন অসমীয়া ভাষাৰ আত্ম-প্ৰতিষ্ঠাৰ ইতিহাস জানিবলৈ এখন অমূল্য ৰচনা।

আধুনিক ভাষাবিজ্ঞানৰ পিতৃ হিচাপে খ্যাত ফাৰ্ডিনাণ্ড দ্য চ্যুৰৰ ফৰাচী ভাষাত লিখিত Cours De Linguistique Générale নামৰ গ্ৰন্থখনৰ পোণা মহন্তই কৰা অসমীয়া অনুবাদ আলোচ্য শিতানৰ এখন লেখত ল'বলগীয়া গ্ৰন্থ। অনুবাদকৰ ভাষাত- "কুৰি শতিকাত পাশ্চাত্য জগতত মূৰ দাঙি উঠা ভাষাবিজ্ঞান চৰ্চাৰ ক্ষেত্ৰৰ এখন মৌলিকতাপূৰ্ণ বা 'চেমিনেল' ৰচনা বুলি সৰ্বজনীনভাবে স্বীকৃত।"[৩] তেখেতৰ মতে অসমীয়া বিদ্যায়তনিক সমাজত ভাষা-চৰ্চা তেনেই চালুকীয়া অৱস্থাত আছে, ই বিজ্ঞান ৰূপে এতিয়াও স্বীকৃত হোৱা যেন নালাগে। এইবিলাক কথা মনত ৰাখিয়ে চ্যুৰৰ যুগান্তকাৰী গ্ৰন্থখন অসমীয়ালৈ অনুবাদ কৰা বুলি উল্লেখ কৰিছে। ফৰাচী ভাষাত লিখিত চ্যুৰৰ গ্ৰন্থখনৰ একাধিক ইংৰাজী অনুবাদ আছে। তেখেতে ৱেইড বেস্কিনৰ (Wade Baskin) Course in General Linguistics-ৰ ওপৰত আধাৰ কৰি অসমীয়া ভাঙনি কৰিছে। 'সাধাৰণ ভাষাবিজ্ঞানৰ পাঠ' ছোৱা ছোৱাকৈ ২০১৩ চনৰ প্ৰকাশিত আলোচনাখিনি ২০১৪ চনৰ ডিচেম্বৰ মাহত গ্ৰন্থাকাৰে প্ৰকাশ পায়।

১৮৫৭ চনত জেনেভাত জন্মগ্ৰহণ কৰা চুইচ ভাষাবিজ্ঞানী ফাৰ্ডিনাণ্ড দ্য চচ্যুৰে মাত্ৰ ৫৬ বছৰ বয়সতে (১৯১৩) মৃত্যু বৰণ কৰে। কিন্তু এই চুটি জীৱন কালত তেওঁ ভাষা অধ্যয়ন, চৰ্চা আৰু গৱেষণাৰ ক্ষেত্ৰত যিখিনি কৰি থৈ গ'ল তাৰ গুৰুত্ব অপৰিসীম আৰু প্ৰভাৱ সুদূৰপ্ৰসাৰী। মাত্ৰ একুৰি এবছৰ বয়সতে তেওঁ Memoire sur le systéme primitif desvoyelles dans les langues Indo-européenes (Memoir on the Original System of Vowels in the Indo-European Languages) প্ৰকাশ কৰি অসাধাৰণ প্ৰতিভাৰ পৰিচয় দিছিল। ইয়াৰ বাহিৰে জীৱন কালত চ্যুৰে কোনো গ্ৰন্থ প্ৰকাশ কৰা নাছিল যদিও ভাষা বিজ্ঞানৰ অধ্যাপক হিচাপে ছাত্ৰ-ছাত্ৰী আৰু অনুৰাগীসকলৰ মাজত তেওঁৰ যি প্ৰভাৱ আছিল সেয়া তুলনাহীন। তেওঁ পেৰিচৰ প্ৰখ্যাত Ecole des Hautes Etudes (School of Advanced Studies) -ৰ ইণ্ডো-ইউৰোপিয়ান ভাষাবিজ্ঞান আৰু সংস্কৃতৰ অধ্যাপক আছিল। জেনেভা বিশ্ববিদ্যালয়ত সাধাৰণ ভাষাবিজ্ঞানৰ অধ্যাপক হৈ থকা সময়ত (১৯০৭-১৯১১) তেওঁ প্ৰদান কৰা বক্তৃতাসমূহৰ যি

টোকা তেওঁৰ ছাত্ৰ-ছাত্ৰীসকলে লিখি ৰাখিছিল সেইবোৰ গোটাই মেলি তেওঁৰ দুগৰাকী প্ৰাক্তন ছাত্ৰ আৰু কনিষ্ঠ সহকৰ্মীয়ে Course de linguistique générale (১৯১৬) নাম দি গ্ৰন্থৰূপত প্ৰকাশ কৰে। সংকলক দুগৰাকী হ'ল Charles Bally আৰু Albert Sechehaye। এই গ্ৰন্থ প্ৰকাশে কুৰি শতিকাৰ সাধাৰণ আৰু গঠনমূলক ভাষাবিজ্ঞান (Structural Linguistics) চৰ্চাৰ দুৱাৰ মুকলি কৰে। অসমীয়া ভাষাত ভাষাবিজ্ঞানৰ এনে বিশ্ববিখ্যাত গ্ৰন্থৰ অনুবাদ এয়ে প্ৰথম। চচ্যুৰৰ আলোচনাৰ প্ৰসংগ অসমীয়া ভাষাৰ আলোচনাৰ বেলিকা প্ৰায়ে উচ্চাৰিত হ'লেও সাধাৰণ পাঠক তথা ছাত্ৰ-ছাত্ৰীয়ে গ্ৰন্থখন অধ্যয়ন কৰাতো দূৰৰ কথা দেখাও হয়তো নোপোৱাৰ সংখ্যাই সৱহ হ'ব। গ্ৰন্থখনৰ অনুবাদে এই দুয়োটা অভাৱেই দূৰ কৰিলে।

সুনীতি কুমাৰ চেটাৰ্জীৰ 'কিৰাত জনকৃতি' নামৰ গ্ৰন্থখন ভাষাতাত্ত্বিক আৰু নৃতাত্ত্বিক দিশৰপৰা এখন উল্লেখযোগ্য গ্ৰন্থ। উত্তৰ-পূৰ্ব ভাৰতকে ধৰি সমগ্ৰ দক্ষিণ-পূৱ এচিয়াৰ ইণ্ডো-মঙ্গোলীয় লোকসকলৰ ইতিহাস, ভাষা-সংস্কৃতি আদিৰ বিস্তৃত আলোচনাৰ অধ্যয়ন আছে। গ্ৰন্থখন পোনপটীয়াভাৱে ভাষাবিজ্ঞানৰ নহয় যদিও ভাষাতত্ত্বৰ অধ্যয়নকাৰীৰ বাবেও গ্ৰন্থখনৰ বিশেষ গুৰুত্ব আছে। ২০১৭ চনত প্ৰথমবাৰৰ বাবে গ্ৰন্থখনৰ অজিত কুমাৰ গোস্বামীয়ে অসমীয়া অনুবাদ প্ৰকাশ কৰে। ইও অসমীয়া অনুবাদ সাহিত্যলৈ বিশেষ অৱদান।

১৯৬৪ চনত প্ৰকাশিত সত্যেন্দ্ৰ নাৰায়ণ গোস্বামীৰ 'প্ৰাকৃত সাহিত্য' গ্ৰন্থখন অসমীয়া ভাষাৰ প্ৰথম পুথি য'ত পালি-প্ৰাকৃত-অপভ্ৰংশ ভাষা-সাহিত্যৰ আলোচনা সন্নিবিষ্ট হৈছে। 'প্ৰাকৃত সাহিত্য' গ্ৰন্থখন তিনিটা খণ্ডত বিভক্ত। প্ৰথম খণ্ডত মধ্য ভাৰতীয় আৰ্যভাষা আৰু সাহিত্যৰ ইতিবৃত্ত সম্পৰ্কে আলোচনা কৰা হৈছে। ইয়াৰ প্ৰথম অধ্যায়ত মধ্য ভাৰতীয় আৰ্যভাষা তথা প্ৰাকৃত ভাষা সাহিত্যৰ চমু ইতিবৃত্ত, দ্বিতীয় অধ্যায়ত প্ৰাকৃত সাহিত্যৰ আলোচনা, তৃতীয় অধ্যায়ত প্ৰাকৃত ভাষা তথা পালি-প্ৰাকৃত-অপভ্ৰংশৰ প্ৰতিটো স্তৰৰ ভাষাগত বৈশিষ্ট্য, চতুৰ্থ অধ্যায়ত প্ৰাকৃতৰ শব্দভাণ্ডাৰ সম্পৰ্কে আলোচনা কৰা হৈছে। প্ৰাকৃত সাহিত্যৰ দ্বিতীয় খণ্ডটো এ. চি. উলনাৰ (A.C. Woolner) Introduction to Prakrit নামৰ গ্ৰন্থৰ ব্যাকৰণ খণ্ডৰ মুকলি অনুবাদ। সেই অনুসৰি, প্ৰাকৃত, প্ৰাকৃতৰ সাধাৰণ লক্ষণ, ধ্বনিবিজ্ঞান, যুক্ত ব্যঞ্জন, স্বৰধ্বনি, সন্ধি, শব্দৰূপ, ধাতুৰূপ, প্ৰাকৃতৰ শ্ৰেণীবিভাগ আৰু প্ৰাকৃত সাহিত্য আদি শিতানত মুঠ এঘাৰটা অধ্যায়ত আলোচনা কৰা হৈছে।

মধ্যযুগত কোঁচ ৰজা নৰনাৰায়ণৰ আমোলত পুৰোষোত্তম বিদ্যাবাগীশে ৰচনা কৰা *প্ৰয়োগ ৰত্নমালা ব্যাকৰণ* (১৫৬৮ খ্ৰীষ্টাব্দ) অসমত সংস্কৃত ব্যাকৰণ চৰ্চাৰ উৎকৃষ্ট নিৰ্দশন। এই সংস্কৃত ৰত্নমালা গ্ৰন্থখনকেই 'অসমীয়া প্ৰয়োগ ৰত্নমালা ব্যাকৰণ' নাম দি নতুনকৈ লিখি উলিয়ায় জিতেন্দ্ৰ নাথ ভট্টাচাৰ্য্যই। গ্ৰন্থখন ১৯৮৮ চনত প্ৰথম প্ৰকাশ হয়। এই গ্ৰন্থখনত মূল সংস্কৃত সূত্ৰবোৰৰ সৰল সংস্কৃত ব্যাখ্যাসহ সৰলাৰ্থ হিচাপে অসমীয়া ভাষাত লিখি প্ৰকাশ কৰা হৈছে আৰু সূত্ৰবোৰৰ যথাসম্ভৱ এটাকৈ সংস্কৃত উদাহৰণো ইয়াত সন্নিবিষ্ট কৰা হৈছে। কিতাপখন পাণ্ডুলিপি অৱস্থাতে এজন সংস্কৃত অধ্যাপক হৰেশ্বৰ ভাগৱতী (কামৰূপ)-ৰ দ্বাৰা শুদ্ধাশুদ্ধি পৰীক্ষা কৰোৱা হয় বুলি পাতনিত উল্লেখ কৰিছে। একেদৰে গুৱাহাটী বিশ্ববিদ্যালয়ৰ সংস্কৃত বিভাগৰ মুৰব্বী অধ্যাপক মুকুন্দ মাধৱ শৰ্মা আৰু জগন্নাথ বৰুৱা মহাবিদ্যালয়ৰ সংস্কৃত বিভাগৰ মুৰব্বী আৰু প্ৰাক্তন অধ্যক্ষ পণ্ডিত ভৱকৃষ্ণ মিশ্ৰদেৱেও কিতাপখনৰ অনুবাদ ভাল হোৱা বুলি মন্তব্য কৰিছে।

অসমীয়া অনুবাদ সাহিত্যৰ জগতলৈ মহৰ্ষি পাণিনিৰ বিশ্ববিখ্যাত গ্ৰন্থ অষ্টাধ্যায়ৰীৰ অসমীয়া অনুবাদ এক গুৰুত্বপূৰ্ণ বিষয়। মহেশ্বৰ হাজৰিকাই কৰা এই অনুবাদটি 'আনন্দৰাম বৰুৱা ভাষা-কলা-সংস্কৃতি সস্থা'ৰপৰা ২০১৮ চনত প্ৰথম প্ৰকাশ হয়। সংস্কৃত ব্যাকৰণ-শাস্ত্ৰবোৰৰ ভিতৰত পাণিনিৰ অষ্টাধ্যায়ীক সৰ্বাগ্ৰ মান্যতা প্ৰদান কৰা হয়। পাণিনিৰ ব্যাকৰণখন সূত্ৰাকাৰে ৰচিত। এনে বিষয়ৰ অনুবাদ এক দুৰূহ কাম। এই সম্পৰ্কত অনুবাদকৰ মন্তব্য হ'ল- 'গুৰুৰ পদপ্ৰান্তত বহি শিক্ষা নল'লে ইয়াৰ ভিতৰলৈ সোমাব নোৱাৰি। তাক আন ভাষালৈ আক্ষৰিক অনুৱাদ কৰিলেতো কোনো অৰ্থই উলিয়াব পৰা নাযায়। প্ৰাচীন সংস্কৃত পণ্ডিতে আগবঢ়োৱা ব্যাখ্যাৰ সহায় ল'লেহে তাক বুজিব পাৰি, আৰু তেতিয়াহে তাক ব্যাখ্যা কৰিবলৈ আগ বাঢ়িব পাৰি।'

হাজৰিকাৰ অনুবাদৰ ক্ষেত্ৰত শ্ৰীশ চন্দ্ৰ ৱসুৱে ইংৰাজীত লিখা অষ্টাধ্যায়ী (The Ashtadhyayi of Panini) গ্ৰন্থখনকে আলম কৰি আগবঢ়া বুলি উল্লেখ কৰিছে। তেওঁৰ মতে বসুৰ গ্ৰন্থখন অসমীয়ালৈ অনুবাদ কৰিব পৰা হ'লে আৰু ভাল হ'লহেঁতেন; কিন্তু সেই বৃহৎ কলেৱৰৰ গ্ৰন্থখনৰ পোনপটীয়া অনুবাদ নকৰি তাৰ সহায়ত মূল পাণিনিৰ চমু ব্যাখ্যামাত্ৰ আগবঢ়াবলৈ চেষ্টা কৰিছে। তদুপৰি পণ্ডিত দেবেন্দ্ৰ কুমাৰ বিদ্যাৰত্নৰ পাণিনিৰ অষ্টাধ্যায়ী গ্ৰন্থখন সকলো সময়তে সমুখত ৰখা বুলি উল্লেখ কৰিছে। মাজে সময়ে পণ্ডিত সত্যনাৰায়ণ চক্ৰৱৰ্তীৰ পাণিনীয় শব্দশাস্ত্ৰৰ সহায়ো লোৱা হৈছে। ভট্টোজী দীক্ষিতৰ বৈয়াকৰণসিদ্ধান্তকৌমুদী, শ্ৰীমদ্ভবদৰাজপ্ৰণীত

লঘুসিদ্ধান্তকৌমুদী আৰু ঈশ্বৰচন্দ্ৰ বিদ্যাসাগৰৰ সমগ্ৰ ব্যাকৰণ কৌমুদীৰ পৰাও বহু সহায় লোৱা হৈছে। অসমীয়া ভাষাৰ বহু জটিল সমস্যাৰ সমাধান বিচাৰিবলৈ ইয়াৰ পৰা সুবিধা পাব বুলি অনুবাদকে আশা প্ৰকাশ কৰিছে। গ্ৰন্থখনত মূল সূত্ৰবোৰৰ উপৰিও অসমীয়া ব্যাখ্যাত্মক অৰ্থ উদাহৰণেৰে সৈতে দিয়া হৈছে। ঠায়ে ঠায়ে জটিল অংশবোৰ কিছু বিস্তৃত কৰিও বুজাবলৈ চেষ্টা কৰা হৈছে। পাণিনিৰ সূত্ৰই সামৰি নোলোৱা কিছুমান কথা বার্তিকত পোৱা যায়। সেয়েহে ঠায়ে ঠায়ে সূত্ৰবোৰৰ ব্যাখ্যাৰ পিছতে বার্তিকবোৰৰো ব্যাখ্যা আৰু উদাহৰণ দিয়া হৈছে। উদাহৰণবোৰ যিহেতু উল্লিখিত সহায়ক গ্ৰন্থবোৰৰ পৰা দিয়া হৈছে, আৰু অধিকসংখ্যক উদাহৰণেই অসমীয়া ভাষাভাষীসকলৰ কাৰণে দুৰ্বোধ্য, সেইকাৰণে তাৰ এখন শব্দাৰ্থ-পঞ্জী দিয়াৰ প্ৰয়োজন আছে যদিও সদ্যহতে দিব পৰা নগ'ল বুলি অনুবাদকে 'আগকথা'ত উল্লেখ কৰিছে। সূত্ৰবোৰ বিচাৰি উলিৱাৰ সুবিধা হোৱাকৈ অকাৰাদিক্ৰমে পাণিনীয় সূত্ৰৰ এখনি সূত্ৰসূচী প্ৰস্তুত কৰি দিয়া হৈছে।[৪] ভূমিকাখনো যথেষ্ট গুৰুত্বপূৰ্ণ। ৪০ পৃষ্ঠাজোৰা 'ভূমিকা'খনত অষ্টাধ্যায়ীৰ পৰিচিতি, অষ্টাধ্যায়ীৰ প্ৰত্যয় পৰিচিতি, সংখ্যাবাচক আৰু পূৰণবাচক শব্দৰ গঠন আৰু ব্যৱহাৰ, অব্যয় আৰু অসমীয়াত তাৰ ব্যৱহাৰ, অসমীয়া লিপিৰ সমস্যা সম্পৰ্কে আলোচনা কৰিছে। অৱশ্যে শেষৰ দুটা বিষয় অষ্টাধ্যায়ীৰ ব্যাকৰণৰ লগত সম্পৰ্কীত নহয়।

ব্যাকৰণ মহাভাষ্য ঃ পস্পশাহ্নিক মহৰ্ষি পতঞ্জলিৰ ব্যাকৰণ মহাভাষাৰ পস্পশা আহ্নিকৰ অসমীয়ালৈ অনুবাদ কৰা প্ৰথম গ্ৰন্থ। মহিশূৰস্থ Central Institute of Indian Languages (CIIL) নামৰ প্ৰতিষ্ঠানটিয়ে কুৰি হাজাৰ টকাৰ অৰ্থ সাহায্য আগ বঢ়োৱাত অসম ভাষাবিজ্ঞান সমিতিয়ে ব্যাকৰণ মহাভাষ্যৰ প্ৰথম অধ্যায়ৰ ১৮টা আহ্নিকৰ ভিতৰত প্ৰথম আহ্নিক 'পস্পশা' (বাৰে বাৰে বা সঘনাই চাব লগা) গুৰুত্বপূৰ্ণ আহ্নিকটো গুৱাহাটী বিশ্ববিদ্যালয়ৰ সংস্কৃত বিভাগৰ অধ্যাপক থানেশ্বৰ শর্মাৰ সহযোগত গোলোক চন্দ্ৰ গোস্বামীয়ে অনুবাদ আৰু সম্পাদনা কৰি ১৯৯৬ চনত প্ৰকাশ পায়। মহৰ্ষি পতঞ্জলিৰ মহাভাষ্যৰ পস্পশাহ্নিকৰ ভাষ্যবোৰ অসমীয়া লিপিৰে উল্লেখ কৰি অসমীয়া অনুবাদ আৰু টোকাসহ দাঙি ধৰা হৈছে। লগতে প্ৰাসঙ্গিক গ্ৰন্থপঞ্জীৰো উল্লেখ কৰা হৈছে। অনুবাদক গোস্বামীয়ে স্বগতঃ শিতানত অনুবাদ সম্পৰ্কে পাঠকক অৱগত কৰাৰ উপৰি 'পাণিনীয় ব্যাকৰণৰ পৰম্পৰা ঃ ভূমিকা' শিতানত থানেশ্বৰ শর্মাই ভাৰতত প্ৰাচীন কালত কিদৰে ব্যাকৰণৰ চর্চা হৈছিল আৰু ব্যাকৰণ চর্চা পৰম্পৰাত মহাভাষ্যখনিৰ স্থান সম্পৰ্কে বিস্তৃত আলোচনা কৰিছে। মহৰ্ষি পতঞ্জলি প্ৰাচীন ভাৰতৰ উজ্জ্বল নক্ষত্ৰ স্বৰূপ মুনিত্ৰয় বা ত্ৰিমূৰ্তিৰ অন্যতম। তেখেতে মহা-ভাষ্যৰ বিষয়বস্তু সহজ সৰল সংস্কৃত গদ্যত ৰচনা কৰিছে। বেদাঙ্গৰ উপনিষদবোৰৰ প্ৰণয়নত ব্যৱহাৰ কৰা প্ৰশ্নোত্তৰ তথা সংবাদ পদ্ধতিত মহাভাষ্যখনো লিখা হোৱা কাৰণে নিচেই সৰু সৰু কথাবোৰো যুক্তি প্ৰতিযুক্তিৰে স্পষ্ট ৰূপত প্ৰকাশ কৰিবলৈ সমর্থ হৈছে। সেই বাবে মহাভাষ্যখনি সুখপাঠ্য, আকর্ষণীয় আৰু সহজবোধ্য হৈ পৰিছে।[৫] মহৰ্ষি পতঞ্জলিৰ মহাভাষ্যৰ ৮৭ টা আহ্নিকৰ (এদিনৰ সমাপ্য পাঠ) ভিতৰত প্ৰথম অধ্যায়ৰ প্ৰথম পাদৰ প্ৰথম পস্পশাহ্নিক (সঘনাই চাব লগীয়া বা বাৰে বাৰে অনুশীলন কৰিবলগা) অসমীয়া অনুবাদ এক প্ৰশংসনীয় কাম।

১৯৮৫ চনত বিশ্বেশ্বৰ হাজৰিকাই *Assamese Language ঃ Origin and Development* আৰু ১৯৮৮ চনত *অসমীয়া ভাষাৰ উৎপত্তি আৰু ক্ৰমবিকাশ* নামৰ দুখন সৰু পুথি ৰচনা কৰে। 'ইণ্ডিয়ান ফেডাৰেশন অব্ ৰৰ্কিং জার্নেলিষ্ট'ৰ ১৯৮৫-ত গুৱাহাটীত হোৱা 'নেশ্যনেল কাউঞ্চিল চেচন'ৰ স্মৰণিকাত প্ৰকাশৰ বাবে Origin and Development of Assamese Language শিতানৰ এটা প্ৰবন্ধ লিখিবলৈ অনুৰোধ কৰিছিল। এই প্ৰবন্ধটোকে পাছত Assamese Language ঃ Origin and Development নামেৰে প্ৰকাশ কৰে গুৱাহাটীৰ জয়া প্ৰকাশনে। উক্ত পুথিখনকে সংযোজন আৰু সংশোধন কৰি অসমীয়া ৰূপ দি নাম দিয়া হ'ল 'অসমীয়া ভাষাৰ উৎপত্তি আৰু ক্ৰমবিকাশ'। ইংৰাজী পুথিখন পঢ়ি মধ্য প্ৰদেশৰ সাগৰ বিশ্ববিদ্যালয়ৰ বুৰঞ্জী বিভাগৰ অধ্যাপক হীৰালাল গুপ্ত; পুণেৰ ডেকান কলেজৰ ভাৰতীয় ভাষাবিজ্ঞান বিভাগৰ অধ্যাপক ডঃ সুমিত্ৰামঙ্গল কাত্ৰে; আমেৰিকা যুক্তৰাজ্যৰ কালিফর্নিয়া বিশ্ববিদ্যালয়ৰ ভাষাবিজ্ঞানৰ অধ্যাপক ডঃ এম-বি-এমেনো আদিয়ে অভিমত আগবঢ়াইছিল।

গোলোকচন্দ্ৰ গোস্বামীৰ বর্ণতাত্ত্বিক বিশ্লেষণৰ আন এখন গ্ৰন্থ হ'ল *অসমীয়া বর্ণ প্ৰকাশ*। ১৯৬৯ চনত প্ৰথম প্ৰকাশিত এই গ্ৰন্থখন তেওঁৰ ১৯৬৬ চনত প্ৰকাশিত *An Introduction to Assamese Phonology*-ৰ বর্ধিত আৰু ব্যাখ্যা সম্বলিত অসমীয়া সংস্কৰণ বুলিব পাৰি। গতিকে ইয়াত আলোচনা কৰা কথাবিলাকৰ প্ৰায়খিনিয়েই পূর্বৰ আলোচনাৰ লগত মিলে। অৱশ্যে *An Introduction to Assamese Phonology*-ৰ অৱতৰণিকা অংশটো *অসমীয়া বর্ণ-প্ৰকাশত* সন্নিবিষ্ট কৰা নাই। অতিৰিক্তভাবে গ্ৰন্থখনত বর্ণমালা আৰু লিপিমালাৰ সম্পর্ক আৰু পার্থক্যও দাঙি ধৰা হৈছে যাতে বানান বিভ্ৰাট দূৰ হয় [অসমীয়া বর্ণ প্ৰকাশ, দফা ১.৩০-১.৪৫]। তদুপৰি সন্ধি-পৰিবর্তন শীর্ষক

এটি বিস্তৃত আলোচনা ইয়াত নতুনকৈ সংযোজিত হৈছে [দফা ৬.১০-৬.৩২.১৬]। সেইদৰে অসমীয়া-ইংৰাজী পৰিভাষা আৰু বিস্তাৰিত শব্দসূচীখন নতুন সংযোগ।

১৯৭৬ চনৰ পৰা নাগামিজ ভাষাৰ অধ্যয়নত নিৰলসভাবে জড়িত ভীমকান্ত বৰুৱাই কেইবাটাও গৱেষণামূলক কৰ্মৰে নাগামিজ ভাষাৰ অধ্যয়নক বিজ্ঞানসন্মত ৰূপ দিয়া দিয়ে। ১৯৭৫ চনৰপৰা ১৯৮৯ চনলৈকে নাগালেণ্ডৰ বিভিন্ন স্থানত ক্ষেত্ৰ অধ্যয়নৰ জৰিয়তে তথ্য সংগ্ৰহ কৰি বিজ্ঞানসন্মত গৱেষণাৰে প্ৰস্তুত কৰা The Nagamese ঃ A Descriptive Analysis নামৰ গৱেষণা গ্ৰন্থৰ বাবে ডিব্ৰুগড় বিশ্ববিদ্যালয়ৰ অসমীয়া বিভাগৰপৰা ১৯৮২ চনত ডক্টৰেট উপাধি লাভ কৰে। ইয়াৰ পূৰ্বেও ১৯৭৬ চনত বৰুৱাই একে বিষয়ৰ এখনি গৱেষণা গ্ৰন্থ কণিকা (এম. ফিল উপাধিৰ বাবে) প্ৰস্তুত কৰি উক্ত বিভাগত দাখিল কৰিছিল। এইখিনি সমলৰ ভিত্তিতে বিস্তৃত আৰু পৰিমাৰ্জিত ৰূপত বৰুৱাই ১৯৯১ চনত Nagamese ঃ The Language of Nagaland নামৰ উচ্চ মানৰ এখন গ্ৰন্থ প্ৰণয়ন কৰে। এই পুথিখনৰ আধাৰত আৰু ২০০৭ চনৰ ক্ষেত্ৰ অধ্যয়নৰ জৰিয়তে পুনৰ তথ্য আহৰণ কৰি ২০০৮ চনত অসমীয়া ভাষাত 'নাগামিজ ভাষাৰ গঠন আৰু বিকাশ' নামৰ আন এখন গ্ৰন্থ প্ৰণয়ন কৰি উলিয়ায়। গ্ৰন্থখনক পূৰ্বৰ গ্ৰন্থখনৰ অনুবাদ বা অসমীয়া সংস্কৰণ বুলিব পাৰি।

৪.০ উপসংহাৰ ঃ

এনেদৰে অসমীয়া ভাষাতো কিছুসংখ্যক ভাষাবিষয়ক গ্ৰন্থৰ অনুবাদ হোৱা চকুত পৰে। অৱশ্যে এই ক্ষেত্ৰত কৰিবলগীয়া বহুত আছে। সকলো ভাষাবিজ্ঞানৰ পুথিৰ অনুবাদৰ ক্ষেত্ৰত দেখা দিয়া প্ৰধান সমস্যাটোৱেই হ'ল পৰিভাষাৰ সমস্যা। ভাষাবিজ্ঞানৰ যথাৰ্থ পৰিভাষাৰ অভাৱ তথা নকৈ সাজি লোৱা পৰিভাষাকো ব্যৱহাৰৰ ক্ষেত্ৰত দেখা দিয়া সমস্যাই ভাষাবিজ্ঞানৰ গ্ৰন্থৰ অনুবাদ কষ্টকৰ কৰি তোলে। তদুপৰি এনে অনুবাদ সম্পূৰ্ণ আবেগ বৰ্জিত আক্ষৰিক বা শব্দানুবাদ হোৱাই বেছি বাঞ্ছনীয়। দক্ষ অনুবাদকে ভাষা বিজ্ঞানৰ অনুবাদো যে সঠিক আৰু সাৱলীল ৰূপত প্ৰকাশ কৰিব পাৰে তাত সন্দেহ নাই।

প্ৰসংগ টোকা ঃ

[১] কাকতিৰ জন্ম শতবাৰ্ষিকী উদ্‌যাপন সমিতিৰ সাধাৰণ সম্পাদক গোৱৰ্ধন দাসে 'অসমীয়া সংস্কৰণৰ কথা' শীৰ্ষক টোকাটোত এনেদৰে উল্লেখ কৰিছে।

[২] 'অনুৱাদকৰ কথা' বিশ্বেশ্বৰ হাজৰিকা, 'অসমীয়া ভাষাৰ গঠন আৰু বিকাশ', পৃ. ১৭-১৮

[৩] 'অনুৱাদকৰ কথা' পোণা মহন্ত, ফার্ডিনাণ্ড দ্য চচ্যুৰৰ সাধাৰণ ভাষাবিজ্ঞানৰ পাঠ, পৃ. vii

[৪] মহেশ্বৰ হাজৰিকা, 'আগকথা' পাণিনীয় অষ্টাধ্যায়ী, পৃ. ১-২।

[৫] ব্যাকৰণ মহাভাষ্য ঃ পস্পশাহ্নিক (পুথি পৰিচয়), ভগবান মৰল, প্ৰভাষিকা চতুৰ্থ সংখ্যা, পৃ. ৪৫

গ্ৰন্থপঞ্জী ঃ

কাকতি, বাণীকান্ত, (অনু. হাজৰিকা, বিশ্বেশ্বৰ), ১৯৯৬ ঃ *অসমীয়া ভাষাৰ গঠন আৰু বিকাশ*, বৰপেটা সাহিত্য সভাৰ হৈ বীণা লাইব্ৰেৰী, গুৱাহাটী।

গোস্বামী, সত্যেন্দ্ৰ নাৰায়ণ, ১৯৯৩ ঃ *প্ৰাকৃত সাহিত্য*, বাণী প্ৰকাশ প্ৰাইভেট লি., গুৱাহাটী, তৃতীয় প্ৰকাশ।

চলিহা, ভৰপ্ৰসাদ (সম্পা.), ১৯৯৬ ঃ অসম ভাষাবিজ্ঞান সমিতিৰ মুখপত্ৰ, 'প্ৰভাষিকা' চতুৰ্থ সংখ্যা, অসম ভাষাবিজ্ঞান সমিতি, গুৱাহাটী।

নেওগ, মহেশ্বৰ, ২০১১ ঃ *অসমীয়া ভাষা আৰু ভাষাৰ অধ্যয়ন*, মহেশ্বৰ-নিৰ্মলা নেওগ প্ৰকাশন, অধ্যাপক মহেশ্বৰ নেওগ স্মাৰক ন্যাস পৰিষদৰ হৈ চন্দ্ৰ প্ৰকাশ, পানবজাৰ, গুৱাহাটী, প্ৰথম সংস্কৰণ।

বৰুৱা, ভীমকান্ত, ২০১২ ঃ *নাগামিজ ভাষাৰ গঠন আৰু বিকাশ*, কৌস্তুভ প্ৰকাশন, ডিব্ৰুগড়, দ্বিতীয় মুদ্ৰণ।

ভট্টাচাৰ্য্য, জীতেন্দ্ৰ নাথ, ২০০৯ ঃ *অসমীয়া প্ৰয়োগ ৰত্নমালা ব্যাকৰণ*, হেমকোষ প্ৰকাশন, গুৱাহাটী, তৃতীয় সংস্কৰণ।

মহন্ত, পোণা (অনুবাদ), ২০১৪ ঃ *ফার্ডিনাণ্ড দ্য চচ্যুৰৰ সাধাৰণ ভাষাবিজ্ঞানৰ পাঠ*, বান্ধৱ, গুৱাহাটী, প্ৰথম প্ৰকাশ।

মহন্ত, দীপকজ্যোতি, ২০২২ ঃ *অসমত ভাষা সম্পৰ্কীয় অধ্যয়নৰ গতি প্ৰকৃতি*, বনলতা, ডিব্ৰুগড়, দ্বিতীয় সংস্কৰণ।

হাজৰিকা, মহেশ্বৰ (অনুবাদ), ২০১৮ ঃ *পাণিনীয় অষ্টাধ্যায়ী*, আনন্দৰাম বৰুৱা ভাষা কলা সংস্কৃতি সংস্থা, উত্তৰ গুৱাহাটী, প্ৰথম সংস্কৰণ।

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‘শ্রীমদ্ভগৱদ্‌গীতা’ত পৰিৱেশৰ বহনক্ষম উন্নয়নৰ জ্ঞান ঃ এটি অধ্যয়ন

ড° কণিমা পাঠক
সহকাৰী অধ্যাপক, অসমীয়া বিভাগ
জাগীৰোড মহাবিদ্যালয় (স্বতন্ত্র)

সংক্ষিপ্তসাৰ

‘শ্রীমদ্ভগৱদ্‌গীতা’ ‘মহাভাৰত’ৰ এটা অংশ য’ত কুৰুক্ষেত্র যুদ্ধত অর্জুনে নিজধর্ম পালন নকৰাত স্বয়ং ভগৱানে কৃষ্ণই অর্জুনক জ্ঞান দিছিল। সেই জ্ঞানেই হৈছে গীতাজ্ঞান। ১৮ টা অধ্যায়ত সর্বমুঠ ৭০০ টা শ্লোকত প্রকাশিত সম্পূর্ণ ‘গীতা’খন মানৱ জীৱনৰ এখন মহত্ত্বপূর্ণ গ্রন্থ। মানৱ জীৱনৰ প্রত্যেকটো প্রশ্নৰ উত্তৰ ‘গীতা’ত সন্নিবিষ্ট হৈ আছে। ইয়াত শ্রীকৃষ্ণ অর্থাৎ পৰমব্রহ্ম হৈছে গুৰু আৰু অর্জুন শিষ্য অথবা সমগ্র মানৱ জাতিৰূপে প্রতিপন্ন হৈছে বুলি ক’ব পাৰি। অর্জুনৰ প্রতিটো প্রশ্নই সমগ্র মানৱ জাতিৰ প্রতিনিধিত্ব কৰা প্রশ্ন আৰু কৃষ্ণই দিয়া প্রতিটো উত্তৰ পৰমব্রহ্মই মানৱ জাতিলৈ দিয়া জীৱনৰ সকলো সমস্যা আৰু অনুসন্ধিৎসু প্রশ্নৰ উত্তৰ বুলি গণ্য কৰিব পাৰি। ‘ভগৱদ্‌গীতা’ত জ্ঞান-বিজ্ঞান, বিশ্বাস সকলো দিশৰ পৰাই গুৰুত্বপূর্ণ গ্রন্থ। গতিকে সকলো মানুহৰ বাবে ইয়াৰ জ্ঞান অতিকৈ গুৰুত্বপূর্ণ। পৃথিৱীৰ সৃষ্টি সম্পর্কীয় বিভিন্ন তত্ত্ব আৰু পৰিবৱৰশ সংৰক্ষণ, পৰিৱেশৰ বহনক্ষম উন্নয়ন ইত্যাদি সম্পর্কীয় বিভিন্ন চিন্তা হাজাৰ হাজাৰ বছৰৰ আগতে ‘শ্রীমদ্ভগৱদ্‌গীতা’ত উল্লেখ আছে।

আমাৰ আলোচনাত ‘শ্রীমদ্ভগৱদ্‌গীতা’ত প্রকাশিত পৰিৱেশৰ সংৰক্ষণ, বহনক্ষম উন্নয়ন সম্পর্কীয় বিভিন্ন চিন্তা সম্পর্কে আলোচনা কৰা হ’ব। বিষয়টো অধ্যয়নৰ বাবে ‘শ্রীমদ্ভগৱদ্‌গীতা’ৰ হিন্দী আৰু অসমীয়া অনুবাদৰ কিছুমান গ্রন্থ লোৱা হৈছে।

আলোচনাত বর্ণনাত্মক আৰু বিশ্লেষণাত্মক পদ্ধতিৰ সহায়ত কৰা হ’ব।

সূচক শব্দ ঃ পৰম্পৰাগত জ্ঞান, শ্রীমদ্ভভগৱদ্‌গীতা, ভাৰতীয় দর্শন, আধ্যাত্মিকতা, বেদান্ত দর্শন. ভক্তিধর্ম, একশৰণ, পৰিৱেশ, বহনক্ষম উন্নয়ন।

০.০০ **অৱতৰণিকা ঃ**

‘শ্রীমদ্ভগৱদ্‌গীতা’ পৃথিৱীৰ শ্রেষ্ঠতম গ্রন্থৰ ভিতৰত অন্যতম। বিশ্বৰ এখন মহান মহাকাব্য ‘মহাভাৰত’ৰ এটা অংশ য’ত শ্রীকৃষ্ণই অর্জুনক নিজৰ কর্ম পালন কৰিবলৈ উপদেশ দিছিল। ‘শ্রীমদ্ভগৱদ্‌গীতা’ শব্দটোৰ অর্থ হৈছে স্বয়ং ভগৱানৰ দ্বাৰা প্রদত্ত জ্ঞান। এই উপদেশ শ্রীকৃষ্ণই অর্জুনৰ জড়িয়তে সমগ্র মানৱ জাতিৰ বাবে উপদেশ দিছিল। মহাভাৰতৰ যুদ্ধত অর্জুনে যুদ্ধ কৰিবলৈ অমান্তি হোৱাত কৃষ্ণই, নিজ ধর্ম তথা স্ব-ধর্ম পালন কৰিবলৈ উপদেশ দিছে। ‘মহাভাৰত’ৰ ভীস্মপর্বৰ অন্তর্গত ‘গীতা’ ১৮ টা অধ্যায়ত ৭০০ টা শ্লোক আছে। ইয়াৰে ১ টা ধৃতৰাষ্ট্রৰ, অর্জুনৰ ৮৫ টা, সঞ্জয়ৰ ৪০ টা আৰু কৃষ্ণৰ ৫৭৪ টা শ্লোক আছে। এই গীতা জ্ঞান আধ্যাত্মিক দার্শনিক হ’লেও সাম্প্রতিক সময়ত ইয়াৰ বিভিন্ন আধুনিক দৃষ্টিকোণেৰে প্রাসংগিক আলোচনা কৰিব পাৰি। ‘শ্রীমদ্ভগৱদ্‌গীতা’ৰ জ্ঞানক মনোবিজ্ঞান, সমাজবিজ্ঞান, পৰিবেশ বিজ্ঞান, প্রাণীবিজ্ঞান, ভূ-বিজ্ঞান ইত্যাদি সমস্ত জ্ঞানৰ চাবিকাঠি বুলি ক’ব পাৰি। কোনো বিষয়, প্রাণী বা বস্তুৰ বিশিষ্ট বা সুসংগঠিত জ্ঞানেই হৈছে বিজ্ঞান। ভাৰতীয় পৰম্পৰা অনুসৰি প্রাকৃতিক ঘটনাৰ অধ্যয়ন তথা ইয়াৰ পাৰস্পৰিক সম্বন্ধে জ্ঞাত হোৱাই হৈছে বিজ্ঞান। ‘শ্রীমদ্ভগৱদ্‌গীতা’ৰ অধ্যয়নে বিজ্ঞান আৰু আধ্যাত্মিকতাক এক বিন্দু জড়িত কৰি মানৱৰ সর্বতো প্রকাৰৰ মংগল সাধন কৰিব পাৰে।

বিজ্ঞানৰ বিভিন্ন শাখাৰ যেনে, ভৌতিক বিজ্ঞান, ৰসায়ন বিজ্ঞান, ভূগোল বিজ্ঞান, অন্তৰীক্ষ বিজ্ঞান, মনোবিজ্ঞান, অনুবিজ্ঞান, জীৱবিজ্ঞান, নীতিশাস্ত্ৰ ইত্যাদি যিকোনো বিষয়ৰ অধ্যয়নার্থীয়ে 'শ্ৰীমদ্ভগৱদ্ গীতা'ত সেই বিষয়সমূহৰ দৃষ্টিকোণেৰে আলোচনা, গৱেষণা কৰিব পাৰে। ইয়াত প্ৰকাশিত শ্ৰীকৃষ্ণৰ উপদেশ সম্পূৰ্ণ স্বয়ংসিদ্ধ আৰু বিজ্ঞানৰো বহুত ওপৰত। বিজ্ঞানৰ যি উচ্চ স্তৰ সম্পৰ্কে ইয়াত পোৱা যায়, সেই স্তৰ সাম্প্ৰতিক আধুনিক বিজ্ঞানৰ বহুত উচ্চস্তৰৰ বুলি ক'ব পাৰি। গতিকে শ্ৰীকৃষ্ণক বিশ্বৰ সৰ্বশ্ৰেষ্ঠ বিজ্ঞানী বুলিও ক'ব পাৰি।

০.০১ **অধ্যয়নৰ পৰিসৰ** ঃ

'শ্ৰীমদ্ভগৱদ্গীতা'ৰ অধ্যয়ন বিভিন্ন দৃষ্টিৰে কৰিব পাৰি। আমাৰ আলোচনাত কেৱল ইয়াত প্ৰকাশিত পৰিৱেশৰ বিভিন্ন তত্ত্বৰ জ্ঞান, পৰিৱেশ সংৰক্ষণ সম্পৰ্কীয় চিন্তা শ্লোকসমূহৰ মাজেৰে কিদৰে প্ৰকাশ পাইছে; তাকে আলোচনা কৰা হৈছে।

০.০২ **অধ্যয়নৰ লক্ষ্য আৰু উদ্দেশ্য** ঃ

১) 'শ্ৰীমদ্ভগৱদ্গীতা'ৰ জ্ঞান অন্বেষণৰ জড়িয়তে ভাৰতীয় পৰম্পৰাগত জ্ঞান সম্পৰ্কে অৱগত হোৱা।

২) 'শ্ৰীমদ্ভগৱদ্গীতা'ত প্ৰকাশিত আধ্যাত্মিক জ্ঞানৰ লগতে বাস্তৱিক তথা বিজ্ঞানিৰ বিভিন্ন তত্ত্ব জ্ঞান সম্পৰ্কে অন্বেষণ কৰা।

৩) 'শ্ৰীমদ্ভগৱদ্গীতা'ত প্ৰকাশিত পৰিৱেশ বিজ্ঞানৰ বিভিন্ন তত্ত্ব সম্পৰ্কে অন্বেষণ কৰা।

৪) 'শ্ৰীমদ্ভগৱদ্ গীতা'ত অতি পুৰাতন জ্ঞান অন্বেষণৰ লগতে পৰিৱেশ বিজ্ঞানৰ জ্ঞান সম্পৰ্কে অৱগত কৰা।

৫) ইয়াত পৰিৱেশ সংৰক্ষণ সম্পৰ্কীয় বিভিন্ন চিন্তা চৰ্চাৰ সাম্প্ৰতিক ভিত্তি আৰু প্ৰাসংগিকতাৰ বিষয়ে আলোচনা কৰা।

৬) 'শ্ৰীমদ্ভগৱদ্ গীতা'ত প্ৰকাশিত শ্ৰীকৃষ্ণই পৰিৱেশ সংৰক্ষণ আৰু বহনক্ষম উন্নয়নৰ জ্ঞানক কিদৰে আধ্যাত্মিক, দাৰ্শনিক দিশলৈ উত্তৰণ কৰি মানৰ জীৱনৰ বিকাশ সাধন কৰিছে, সেই সম্পৰ্কে আলোচনা কৰা।

০.০৩ **অধ্যয়নৰ গুৰুত্ব** ঃ

সাম্প্ৰতিক পৰিৱেশ সংৰক্ষণ এটা অতি গুৰুত্বপূৰ্ণ বিষয়। হাজাৰ হাজাৰ বছৰৰ আগতে ৰচনা হোৱা 'ভগৱদ্গীতা'ত শ্ৰীকৃষ্ণই অৰ্জুনৰ জড়িয়তে মানৱ জাতিক জ্ঞান দিছিল। ইয়াত পৰিৱেশ সংৰক্ষণ তথা পৰিৱেশ, প্ৰকৃতিক আধ্যাত্মিক দৃষ্টিৰে উত্তৰণ ঘটাই মানৱ জীৱনৰ কল্যাণ সাধন কৰিছে। সাম্প্ৰতিক মানৱ জাতিৰ বাবে লাভদায়ক এনে বিষয়ৰ অধ্যয়ন অত্যন্ত গুৰুত্বপূৰ্ণ বুলি ক'ব পাৰি।

০.০৪ **অধ্যয়নৰ উৎস আৰু পদ্ধতি** ঃ

বিষয়টো অধ্যয়নৰ বাবে 'শ্ৰীমদ্ভগৱদ্গীতা'ৰ হিন্দী আৰু অসমীয়া অনুবাদৰ কিছুমান গ্ৰন্থ লোৱা হৈছে।

আলোচনা পত্ৰখন বৰ্ণনাত্মক আৰু বিশ্লেষণাত্মক পদ্ধতিৰ সহায়ত কৰা হ'ব।

১,০০ 'শ্ৰীমদ্ভগৱদ্গীতা'ত বিজ্ঞান চিন্তাৰ বিভিন্ন দিশৰ অকলোকন ঃ

ভাৰতীয় সংস্কৃতিক পৰম্পৰা আৰু জ্ঞান অমূল্য সম্পদ। 'গীতা' ভাৰতীয় সংস্কৃতিৰ এনে এখন গ্ৰন্থ য'ত ইহলোকৰপৰা পৰলোকলৈকে বিদ্যা আৰু জ্ঞানৰ ভাণ্ডাৰ সঞ্চিত হৈ আছে। এই জ্ঞান ভাণ্ডাৰৰ মৰ্ম কেৱল ভাৰতীয়সকলেই নহয়, সমগ্ৰ বিশ্বৰ মহান মনিষীসকলেও এই জ্ঞানৰ স্বীকাৰ কৰিছে।

'বিজ্ঞান' শব্দটো 'বি' উপসৰ্গৰ লগত 'জ্ঞান' শব্দটো সংযোগৰ ফলত সৃষ্টি হৈছে। 'বি' উপসৰ্গৰ অৰ্থ হৈছে 'বিশেষ' বা 'বিশিষ্ট'। অৰ্থাৎ কোনো বিষয়, বস্তু, প্ৰাণী আদিৰ বিষয়ে বিশিষ্ট বা সুসংগঠিত, সুপৰিকল্পিত জ্ঞানকেই বিজ্ঞান বুলিব পাৰি। ভাৰতীয় পৰম্পৰা অনুসৰি প্ৰাকৃতিক ঘটনাৰ অধ্যয়ন তথা ইয়াৰ সৃষ্টি আৰু পাৰস্পৰিক সম্বন্ধৰ বিষয়ে জ্ঞাত হোৱাকে বিজ্ঞান বুলি কৈছে। বিজ্ঞান অধ্যয়ন বা বিজ্ঞানসম্মত অধ্যয়নত সুনিশ্চিত আৰু ক্ৰমবদ্ধ অধ্যয়ন হৈছে প্ৰমুখ অংশ। এই দৃষ্টিৰে 'গীতা'ত বিজ্ঞানৰ বিভিন্ন তত্ত্ব, যেনে- পৰিৱেশ বিজ্ঞান, প্ৰাণী বিজ্ঞান আদিৰ যথাযথ অধ্যয়ন নহ'লেও, ইয়াৰ সংকেত আৰু উল্লেখ স্পষ্টভাৱে পোৱা যায়। ভাৰতীয় পৰম্পৰা মতে বিজ্ঞান বা কলা অধ্যয়ন আৰু অভ্যাসৰ জড়িয়তে জ্ঞানৰ শীৰ্ষ বা সিদ্ধি লাভ কৰিব পাৰি। পশ্চিমীয়া বৈজ্ঞানিক সিদ্ধান্ত অনুসৰি অনু-পৰমাণু, পৃথিৱীৰ গতি প্ৰকৃতিৰ বিভিন্ন যন্ত্ৰ- পাতিৰ পৰীক্ষা কৰা আনহাতে, অধ্যয়ন পদ্ধতি বেলেগ হ'লেও ভাৰতীয় পৰম্পৰাৰ বেদান্ত অধ্যয়নো সত্যৰ অন্বেষণেই হয়।

১.০১ 'শ্ৰীমদ্ভগৱদ্গীতা'ত পৰিৱেশ বিজ্ঞানৰ তত্ত্ব আৰু পৰিৱেশ বহনক্ষম উন্নয়ন ঃ

'পৰিৱেশ' শব্দটোৱে চাৰিওফালে আৱৰি থকা অৰ্থাৎ চৌপাশকে বুজায়। যুদ্ধ বিগ্ৰহে সমাজ তথা চৌপাশত প্ৰভাৱ পেলায়; গতিকে মহাভাৰতৰ যুদ্ধখন ৰখাবলৈ শ্ৰীকৃষ্ণই বহুত যত্নও কৰি ছিল। প্ৰকৃতি বা পৰিৱেশৰ ভাৰসাম্যতা বজাই ৰাখিবলৈ শ্ৰীকৃষ্ণই অৰ্জুনক গীতা জ্ঞানৰ জড়িয়তে পৰিৱেশ

সংৰক্ষণ তথা পৰিৱেশ বিজ্ঞানৰো জ্ঞান প্ৰদান কৰিছিল। 'শ্ৰীমদ্ভগৱদ্‌গীতা' কেৱল আধ্যাত্মিক আৰু দাৰ্শনিক জ্ঞানৰ উৎস নহয়; ইয়াত পৰিৱেশ বিজ্ঞানৰ বিভিন্ন তত্ত্বৰ কথা অতি সুক্ষমভাৱে সন্নিবিষ্ট হৈ আছে। ইয়াত কৃষ্ণৰ দ্বাৰা অৰ্জুনক দিয়া জ্ঞানত প্ৰকৃতি, পৰিৱেশৰ আৰু মানৱ জীৱনৰ পাৰস্পৰিক সম্পৰ্ক, পৰিৱেশৰ ভাৰসাম্যতা গভীৰভাৱে বুজাইছে। প্ৰকৃতিৰ লগত মানৱৰ সামঞ্জস্যতা, পৰৱেশ সংৰক্ষণ, প্ৰকৃতিৰ সম্পদবোৰৰ সদ ব্যৱহাৰ, সন্মান প্ৰদৰ্শন, প্ৰকৃতিৰ ভাৰসাম্যতা ইত্যাদি আধুনিক পৰিৱেশ বিজ্ঞান তথা পৰিৱেশ সংৰক্ষ ণৰ জ্ঞান সাম্প্ৰতিক সময়ত অত্যন্ত গুৰুত্বপূৰ্ণ আৰু প্ৰাসংগিক।

'ভগৱদ্‌গীতা'ৰ জ্ঞানক বিজ্ঞান সহিত জ্ঞান বুলি ইয়াৰ বক্তা স্বয়ং শ্ৰীকৃষ্ণই কৈছে।

জ্ঞানং তেঽহং সৱিজ্ঞানমিদং ৱক্ষ্যাম্যশেষতঃ।

য়জজ্ঞাত্বা নেহ ভূয়োঽন্যজ্‌জ্ঞাতব্যৱশিষ্যতে।। (৭/২)

(অৰ্থাৎ তোমাৰ বাবে মই এই বিজ্ঞান সহ জ্ঞানৰ বিষয়ে সম্পূৰ্ণৰূপে ক'ম, যিটো জানিলে অন্য জানিবৰ অৱশিষ্ট নাথাকিব)

ইয়াত শ্ৰীকৃষ্ণই জ্ঞান আৰু বিজ্ঞানৰ বিষয়ে বিস্তৃত বৰ্ণনা কৰা কথা কৈছে। অৰ্থাৎ জ্ঞান হৈছে শাস্ত্ৰৰপৰা প্ৰাপ্ত আত্মা আৰু পৰমাত্মা বোধ। বিজ্ঞান হৈছে সেই জ্ঞানৰ প্ৰত্যক্ষ অনুভৱ বা আত্মসাক্ষাৎকাৰ।

'শ্ৰীমদ্ভগৱদ্‌গীতা'ত পৰিৱেশ শব্দটোৰ অৰ্থ প্ৰকৃতি (পৃথিৱী, জল, বায়ু, আকাশ) আৰু সমগ্ৰ জীৱন চক্ৰ যাৰ উৎপত্তি স্বয়ং ভগৱানৰ দিব্য শক্তি ৰূপে সকলো প্ৰাণী বা জীৱ অন্তৰ্নিহিত হৈ আছে বুলি কৈছে। ভগৱানৰ সমগ্ৰ ৰচনাক 'অপৰা' আৰু 'পৰা' মূল দুটা ভাগত ভাগ কৰিছে। 'শ্ৰীমদ্ভগৱদ্‌গীতা'ৰ ৭/৪ শ্লোকত আঠ প্ৰকাৰৰ 'অপৰা' প্ৰকৃতিৰ নাম পোৱা গৈছে। যেনে — ভূমি, জল, অগ্নি, বায়ু, আকাশ, মন, বুদ্ধি আৰু অহংকাৰ ইত্যাদি।

ভূমিৰাপোঽনলো ৱায়ুঃ খং মনো বুদ্ধিৰেৱ চ।

অহংকাৰ ইতীয়ং মে ভিন্না প্ৰকৃতিৰষ্টধা।।

(অৰ্থাৎ পৃথিৱী, জল, অগ্নি, বায়ু. আকাশ, মন, বুদ্ধি, অহংকাৰ এই আঠ প্ৰকাৰ মোৰ অপৰা প্ৰকৃতি)

এনেদৰে ভগৱানৰ ভৌতিক প্ৰকৃতি বা পৰিৱেশ (অপৰা)ৰ সম্পৰ্কে বৰ্ণনা পোৱা যায়। ভগৱানৰ সৃষ্টিৰাজিৰ আনটো ভাগ হৈছে 'পৰা প্ৰকৃতি', যিটো চেতন তথা জীৱাত্মা প্ৰকৃতি; যিয়ে জড় বা 'অপৰা প্ৰকৃতি'ক চলায়। 'ভগৱদ্‌গীতা'ৰ ৭/৫ নং শ্লোকত 'পৰা প্ৰকৃতি'ৰ কথা উল্লেখ পোৱা যায়। ৭/৬ শ্লোকত কৈছে 'অপৰা', 'পৰা' প্ৰকৃতিৰ সংযোগেই সকলো প্ৰাণীৰ উৎপত্তিৰ কাৰণ আৰু সমগ্ৰ সৃষ্টি, স্থিতি, প্ৰভৱ, প্ৰলয়ৰ কাৰণ শ্ৰীকৃষ্ণ স্বয়ং বুলি কৈছে।

এতদ্যোনীনি ভূতানি সর্ৱাণীত্যুপধাৱয়।

অহং কৃৎস্নস্য জগতঃ প্ৰভৱ প্ৰলয়স্তথা।। ৭/৬

[অৰ্থাৎ এই (অপৰা, পৰা) দুয়ো প্ৰকৃতিৰ সংযোগেই সকলো প্ৰাণীৰ উৎপত্তিৰ কাৰণ, এই বুলি জানিবা: মই সমস্ত জগতৰ প্ৰভৱ (উৎপত্তি) আৰু প্ৰলয়ৰ কাৰণ]

ভগৱানৰ সৃষ্টিৰ এই 'অপৰা', 'পৰা' প্ৰকৃতিৰ সমগ্ৰ ৰচনা ভগৱানৰপৰাই উৎপত্তি আৰু ভগৱানতে সমাপ্তি হৈ সকলোবোৰ ভগৱানতে এডাল মালাত মণিৰ দৰে একাকাৰ হৈ আছে বুলি প্ৰকাশ কৰিছে।

মত্তঃ পৰতৰং নান্যৎকিঞ্চিদস্তি ধনঞ্জয়।

ময়ি সর্ৱমিদং প্ৰোতং সূত্ৰে মণিগণা ইৱ।। ৭/৭

অৰ্থাৎ হে ধনঞ্জয় মোতকৈ সত্য আৰু একো নাই। সকলো সূতাৰে মণি গঁথাৰ দৰে এডাল মালাত লগ লাগি আছে বুলি ক'ব প্ৰকাশ কৰিছে।

সেইদৰে ১৩ নং অধ্যায় (ক্ষেত্ৰক্ষেত্ৰজ্ঞ যোগ)ৰ ১ আৰু ২ নং শ্লোকত প্ৰকাশিত 'ক্ষেত্ৰ' (শৰীৰ) আৰু 'ক্ষেত্ৰজ্ঞ' (আত্মা) শব্দ দুটাইও ক্ৰমে 'অপৰা' (শৰীৰ বা জড়) আৰু 'পৰা' (আত্মা বা জীৱাত্মা) প্ৰকৃতিকে বুজাইছে। প্ৰকৃতি বা পৰিৱেশক জড়, 'ক্ষেত্ৰ' বা 'অপৰা' আৰু আত্মা. জীৱাত্মাক 'ক্ষেত্ৰজ্ঞ' বা 'পৰা প্ৰকৃতি' বুলি ইয়াক বৈজ্ঞানিক দৃষ্টিৰে সুন্দৰকৈ বুজাই দিছে।

ক্ষেত্ৰজ্ঞং চাপি মাং ৱিদ্ধি সর্ৱক্ষেতেষু ভাৰত।

ক্ষেত্ৰক্ষেত্ৰজ্ঞয়োৰ্জ্ঞানং য়ত্তজ্‌জ্ঞানং মতং মম।। ১৩/২

অৰ্থাৎ হে ভাৰতবংশী (অৰ্জুন)! তুমি সমস্ত ক্ষেত্ৰ (জড়)ত ক্ষেত্ৰজ্ঞ (জীৱাত্মা) বুলি মোকেই ভাৱিবা আৰু এই 'ক্ষেত্ৰ-ক্ষেত্ৰজ্ঞ'ৰ যি জ্ঞান, সেয়া মোৰ মতে যথার্থ জ্ঞান।

গতিকে ক'ব পাৰি যে সমগ্ৰ ব্ৰহ্মাণ্ড বা সমগ্ৰ সৃষ্টি ভগৱানৰ ৰচনা। সমগ্ৰ সৃষ্টিৰ দুটা ভাগ 'ক্ষেত্ৰ বা অপৰা' আৰু 'ক্ষেত্ৰজ্ঞ বা পৰা' ই হৈছে স্বয়ং ব্ৰহ্ম। সেয়ে ইয়াক শ্ৰদ্ধা, সন্মান জনালে ভগৱানকে শ্ৰদ্ধা ভক্তি কৰাটো বুজাব। 'শ্ৰীমদ্ভগৱদ্‌গীতা'ত পঞ্চমহাভূত (পৃথিৱী, জল, বায়ু, অগ্নি, আকাশ)ক ভৌতিক পৰিৱেশৰ মূল আধাৰ অৰ্থাৎ পৰিৱেশ, প্ৰকৃতিৰ মূল তত্ত্ব হিচাপে ধৰা হৈছে। ইশ্বৰৰ এই (অপৰা বা ক্ষেত্ৰ) অজ্ঞান শক্তিৰপৰা উদ্ভূত তত্ত্বসমূহৰ ভাৰসাম্যহীনভাৱে অপব্যৱহাৰ হ'লে পৰিৱেশলৈ সংকট নামি আহিব। গতিকে

ইয়াক সদ্ব্যৱহাৰ কৰাটো নিতান্তই প্ৰয়োজন। 'শ্ৰীমদ্ভগৱদ্গীতা'ত পৰিৱেশ সংৰক্ষণৰ বিভিন্ন দিশসমূহ তলত দিয়া ধৰণেৰে আলোচনা কৰিব পাৰি।

১.০১.০১ যজ্ঞ আৰু পৰিৱেশ বহনক্ষম উন্নয়ন ঃ

'শ্ৰীমদ্ভগৱদ্গীতা'ত যজ্ঞ ব্যৱস্থাৰ মাধ্যমেৰে পৰিৱেশ আৰু মানৱৰ সহাৱস্থানৰ বা সহ অস্তিত্বৰ বিষয়ে ভগৱানে জ্ঞান দিছে। ৩/১৪ শ্লোকত কৈছে যে সমস্ত প্ৰাণী জগত অন্নৰপৰা উৎপন্ন হৈছে, অন্ন বৃষ্টিৰপৰা উৎপন্ন হৈছে, বৃষ্টি যজ্ঞৰপৰা উৎপন্ন হৈছে, যজ্ঞ বিহিত কৰ্মৰ দ্বাৰা সম্পন্ন হৈছে। ইয়াত বিহিত কৰ্ম বুলি প্ৰকৃতিক তথা পৰিৱেশৰ বহনক্ষম উন্নয়ন তথা সদ্ব্যৱহাৰ কৰা কথাকে ইংগিত দিছে বুলি ক'ব পাৰি।

অন্নাদ্ভৱন্তি ভূতানি পৰ্জন্যাদন্নসম্ভৱঃ।
য়জ্ঞাদ্ভৱতি প্ৰজন্যো য়জ্ঞঃ কৰ্মসমুদ্ভৱঃ।। ৩/১৪

(অৰ্থ—সমস্ত প্ৰাণী জগত অন্নৰপৰা উৎপন্ন হৈছে, অন্ন বৃষ্টিৰপৰা উৎপন্ন হৈছে, বৃষ্টি যজ্ঞৰপৰা উৎপন্ন হৈছে, যজ্ঞ বিহিত কৰ্মৰ দ্বাৰা সম্পন্ন হয়)

দেৱান্ ভাৱয়তানেন তে দেৱা ভাৱয়ন্তু ৱঃ।
পৰস্পৰং ভাৱয়ন্তঃ শ্ৰেয়ঃ পৰমৱাপ্স্যথ।। ৩/১১

অৰ্থাৎ যজ্ঞৰ দ্বাৰা দেৱতাক পোষণ কৰা, তেওঁলোকে তোমাক পোষণ কৰিব। এনেদৰে দেৱতা আৰু মানৱৰ পৰস্পৰৰ পোষণে জগতৰ কল্যাণ সাধন হ'ব।

-ইয়াত দেৱতা বুলি প্ৰকৃতিৰ তত্ত্ব (আকাশ, সূৰ্য, বৰ্ষা, বায়ু, জল, পৃথিৱী, ইত্যাদি)ৰ পূজা তথা সন্মান, সদ্ব্যৱহাৰ কৰা কথাকে বুজোৱা হৈছে। যজ্ঞ বা বিহিত কৰ্মৰ মাধ্যমেৰে অৰ্থাৎ বৃক্ষৰোপন, জল সংৰক্ষণ, প্ৰদূষণ নিয়ন্ত্ৰণ আদিবোৰ হৈছে পৰিৱেশৰ প্ৰতি আধুনিক যজ্ঞ স্বৰূপ। এই যজ্ঞৰ দ্বাৰা পৰিৱেশৰ ভাৱসাম্য ৰক্ষা কৰাৰ কথাকে ভগৱানে উপদেশ দিছে।

১.০১.০২ প্ৰকৃতি আৰু ঈশ্বৰৰ একাত্মকতা ঃ

'শ্ৰীমদ্ভগৱদ্গীতা'ৰ সপ্তম অধ্যায়ত (জ্ঞানবিজ্ঞানযোগ) 'অপৰা প্ৰকৃতি' আৰু ত্ৰয়োদশ অধ্যায়ত (ক্ষেত্ৰক্ষেত্ৰজ্ঞযোগ) 'ক্ষেত্ৰ' বুলি প্ৰকৃতি, জড় বা পৰিষেহকে বুজোৱা হৈছে। তদুপৰি দশম অধ্যায়ত (বিভূতিযোগ) পৰিৱেশ বা প্ৰকৃতিৰ তত্ত্ব বা আহিলাসমূহক ভগৱানৰ বিভূতিৰূপে দেখুওৱাইছে। ভগৱানে নিজকে সূৰ্য, চন্দ্ৰ, বায়ু, জল, পৰ্বত আদিৰ মূল উৎস বুলি কৈছে। ইয়াৰ জড়িয়তে পৰিৱেশ, প্ৰকৃতিৰ প্ৰতি আদৰ জনোৱা কথাকে ইংগিত প্ৰদান কৰিছে।

আদিত্যনামহং বিষ্ণু জ্যোতিষাং ৱৰিৱংশুমান্।
মৰীচিৰ্মৰুতামস্মি নক্ষত্ৰাণামহং শশী।। ১০/২১

অৰ্থাৎ অদিতিৰ পুত্ৰৰ ভিতৰত মই বিষ্ণু (বামণ), জ্যোতিময় বস্তুৰ ভিতৰত মই ৰশ্মিযুক্ত সূৰ্য, মৰুতৰ ভিতৰত মই তেজ (মৰীচি), নক্ষত্ৰবোৰৰ ভিতৰত মই অধিপতি চন্দ্ৰ।

-এই শ্লোকৰ জড়িয়তে প্ৰকৃতিৰ বিভিন্ন তত্ত্বক ভগৱানৰ অভিব্যক্তি ৰূপে দেখুওৱা হৈছে। সূৰ্য, চন্দ্ৰ, বায়ু আদি প্ৰকৃতিৰ তত্ত্ববোৰ কেৱল জীৱৰ বাবে আৱশ্যকেই নহয়; ৰৰঞ্চ এইবোৰ ঈশ্বৰৰ দিব্যশক্তিৰ প্ৰতীক। এইসমূহক শ্ৰদ্ধা জনোৱাৰ বাবে শ্ৰীকৃষ্ণই মানৱ জাতিক উৎসাহিত কৰিছে।

১.০১.০৩ প্ৰকৃতি বা পৰিৱেশৰ তত্ত্বসমূহৰ মহত্ব ঃ

শ্ৰীকৃষ্ণই প্ৰকৃতিৰ বিভিন্ন তত্ত্বসমূহক ইয়াৰ বিভূতিৰূপে দেখুওৱাৰ বাবে এইসমূহৰ মহত্ব গুৰুত্বপূৰ্ণ।

পৱনঃ পৱতামস্মি ৰামঃ শস্ত্ৰভৃতামহম্।
ঝষাণাং মকৰাশ্চাস্মি শ্ৰোতসামস্মি জাহ্নৱী।। ১০/৩১

অৰ্থাৎ "পবিত্ৰকাৰীসকলৰ ভিতৰত মই বায়ু, শস্ত্ৰধাৰীসকলৰ ভিতৰত মই ৰাম, জলজ প্ৰাণীৰ ভিতৰত মই ঘৰিয়াল (মকৰ) আৰু নদীৰ ভিতৰত পবিত্ৰ গংগা।" এই শ্লোকৰ জড়িয়তে পৰিৱেশৰ তত্ত্বৰ (বায়ু আৰু জল) মহত্ব দেখুওৱা হৈছে। গংগা নদীক পবিত্ৰ আৰু জীৱন দায়িনীৰূপে গণ্য কৰা হৈছে; ইয়াত জল সংৰক্ষণ আৰু নদীবোৰৰ স্বচ্ছতাৰ প্ৰতি সজাগতা আৰু জাগৰুকতা প্ৰদান কৰিছে। বায়ুক পবিত্ৰকাৰী বুলি কোৱা কথাটোৱে বায়ু প্ৰদূষণ ৰোধ কৰাৰ বাবে ইংগিত দিছে বুলি ক'ব পাৰি।

জৈৱ বিবিধতা আৰু প্ৰাণী সংৰক্ষণ ঃ

প্ৰকৃতিৰ বিভিন্ন প্ৰাণী আৰু বনস্পতিবোৰকো শ্ৰীকৃষ্ণই স্বয়ং বিভূতি হিচাপে দেখুৱাইছে।

অশ্বত্থঃ সৰ্ৱৱৃক্ষাণাং দেৱৰ্ষিণাং চ নাৱদঃ।
গন্ধৰ্ৱাণাং চিত্ৰৰথঃ সিদ্ধনাং কপিলো মুনিঃ ।। (১০/২৬)

(সমস্ত বৃক্ষৰ ভিততৰ মই আহঁত/বট গছ (ডাঙৰ গছ), দেৱৰ্ষিসকলৰ ভিতৰত নাৱদ, গন্ধ্ৰবসকলৰ ভিতৰত চিত্ৰৰথ আৰু ষিদ্ধসকলৰ ভিতৰত কপিল মুনি মই)

ইয়াত আহঁত/বট গছক বা গছ-গছনিবোৰক গুৰুত্ব দিয়া হৈছে, কিয়নো গছে অক্সিজেন প্ৰদান কৰি পৰিৱেশক বিশুদ্ধ কৰি ৰাখে। গছ-গছনি, বন, সকলো জীৱ-জন্তুক ভগৱানে নিজৰ বিভূতিৰূপে দেখুওৱাৰ উদ্দেশ্য হৈছে, সেইবোৰৰ প্ৰতি সন্মান জনোৱা; অৰ্থাৎ এইবোৰৰ (বন সংৰক্ষণ, বৃক্ষ ৰোপন, প্ৰাণী সংৰক্ষণ কৰা) সংৰক্ষণ কৰাৰ ইংগিত পোৱা যায়।

১.০১.০৪ প্ৰকৃতিৰ সম্পদৰ সদ্ব্যৱহাৰৰ প্ৰতি গুৰুত্ব ঃ

য়দ্যদ্বিভূতিমৎসত্ত্বং শ্ৰীমদূৰ্জিত্মেৱ ৱা।

তত্তদেৱাৱগচ্ছ ত্বং মম তেজোংহশসম্ভৱম্।।(১০/৪১)

(অর্থাৎ সকলে ঐশ্বর্যযুক্ত, শোভাযুক্ত আৰু বলযুক্ত প্রাণী তথা পদার্থ আছে, সেই সকলোবোৰ মোৰেই তেজ (যোগ, সামর্থ)ৰ অংশৰ পৰা উৎপন্ন হোৱা বুলি ভাবা)

এই শ্লোকটোৰ জড়িয়তে ভগৱানে প্রকৃতিৰ সকলো বস্তুক সদ্ব্যৱহাৰ আৰু প্রাকৃতিক অমূল্য সম্পদবোৰৰ ভাৰসাম্যভাৱে ব্যৱহাৰ কৰাৰ বাবে উপদেশ পোৱা যায়। সেয়ে ইয়াক সাম্প্রতিক বহনক্ষম বিকাশ (Sustainable Development) তত্ত্বৰ সৈতে সামঞ্জস্য কৰি প্রাকৃতিক সম্পদৰ ভাৰসাম্যভাৱে ব্যৱহাৰ আৰু ভৱিষ্যতৰ বাবে সংৰক্ষণ দিশত উপদেশ দিয়াৰ ইংগিত প্রদান কৰিছে।

১.০১.০৫ কর্মযোগৰ দৃষ্টিৰে পৰিৱেশৰ ভাৰসাম্য ৰক্ষা ঃ

'শ্রীমদ্ভগৱদ্ গীতা'ত কর্মযোগৰ মাধ্যমেৰে পৃথিৱী ভাৰসাম্য, নীতিৰ পালন তথা সকলো নৈতিকতাৰ সম্পর্কে কর্মযোগক সামৰিব পাৰি। সেইদৰে পৰিৱেশ সংৰক্ষণৰ দিশতো কর্মযোগক সংযোগ কৰি পৰিৱেশৰ প্রতি নৈতিকতা প্রদর্শনৰ জ্ঞান মনুষ্যই পাব পাৰে।

কর্মণ্যেৱাধিকাৰস্তে মা ফলেষু কদাচন।

মাকর্মফলহেতুর্ভূর্মাতে সংগোহস্ত্ব কর্মণি।।(২/৪৭)

(অর্থাৎ কর্তব্য কর্ম কৰি যোৱাতহে তোমাৰ অধিকাৰ আছে, কর্মফলত নহয়; সেয়ে কর্মফলৰ কথা নেভাৱি কেৱল কর্ম কৰাৰ প্রতিহে আসক্ত হ'ব লাগে)

এই শ্লোকটোৰ পৰা পৰিৱেশ সংৰক্ষণ সম্পর্কত এনে জ্ঞান পাব পাৰি যে, মানুহে পৰিৱেশৰ লগত নিঃস্বার্থ আৰু সমভাৱ ৰাখিব লাগে। প্রকৃতিৰ প্রতি নৈতিকতা ভাৱ ৰাখি প্রকৃতিৰ সম্পদসমূহৰ ভাৰসাম্যভাৱে ব্যৱহাৰ কৰিব লাগে। সম্পদৰ ব্যৱহাৰ কেৱল নিজৰ বাবে নহয়; বৰঞ্চ সমস্ত প্রাণীৰ কল্যাণৰ বাবে কৰিব লাগে। যেনে—অযথা বন ধ্বংস কৰা, পানীৰ দুস্প্রয়োগ ইত্যাদি কৰিব নেলাগে। 'ভগৱদ্গীতা'ৰ কর্মযোগে পৰিৱেশৰ প্রতিও নৈতিকতা প্রকাশৰ বাবে এনেদৰে উপদেশ প্রদান কৰে। দশম অধ্যায়ৰ ১০ নং. (১০/১০) শ্লোকত ভগৱানে কৈছে যে, যি ভক্তই মোকেই প্রাপ্ত কৰিছে, তেওঁক মই বুদ্ধিযোগ প্রদান কৰোঁ। গতিকে এই বুদ্ধিযোগ পৰিৱেশৰ বাবে নৈতিকতাৰ ক্ষেত্রত ৰিজাই চাব পাৰি। যেনে—অহিংসা কেৱল মানুহৰ বাবে নহয়, বৰঞ্চ সমস্ত প্রাণী আৰু প্রকৃতিৰ ক্ষেত্রতো প্রযোজ্য। প্রদূষণ, বন ধ্বংস, জলবায়ু পৰিৱর্তনৰ দৰে কর্ম, প্রকৃতিৰ প্রতি হিংসা আদিৰ সকলো উপায় 'শ্রীমদ্ভগৱদ্গীতা'ত নিহিত হৈ আছে।

০.০০ উপসংহাৰ ঃ

আধুনিক পৰিৱেশ বিজ্ঞানৰ সন্দর্ভত জলবায়ু পৰিৱর্ত, জৈৱ বিবিধতা হ্রাস, প্রাকৃতিক সম্পদৰ সংকটৰ দৰে মহত্বপূর্ণ দিশত 'শ্রীমদ্ভগৱদ্গীতা'ই গুৰুত্ব আৰোপ কৰিছে। এই জ্ঞান তথা উপদেশসমূহে পৰিৱেশৰ সমস্যাৰ সমাধানৰ মার্গদর্শিকা হিচাপে কাম কৰিব। 'ভগৱদ্গীতা'ৰ যজ্ঞ উপদেশে আধুনিক পুনঃনৱীকৰণ (Recycling) আৰু নৱীকৰণীয় দিশটোৰ প্রতি দৃষ্টিগোচৰ কৰে বুলি ক'ব পাৰি। সেইদৰে কর্মযোগৰ সিদ্ধান্তই (উপদেশ) পৰিৱেশৰ ভাৰসাম্য ৰক্ষা বা পৰিৱেশ সংৰক্ষণ প্রতি সক্রিয়তা, জাগৰুকতাৰ প্রতি উৎসাহিত কৰে।

শেষত ক'ব পাৰি যে 'শ্রীমদ্ভগৱদ্গীতা'ত পৰিৱেসগ বিজ্ঞানৰ তত্ত্বসমূহক আধ্যাত্মিক আৰু দার্শনিক ক্ষেত্রত জড়িত কৰিছে। পৰিৱেশ বা প্রকৃতিক ঈশ্বৰৰ বিভূতি হিচাপে দেখুৱাই গীতা জ্ঞানৰ জড়িয়তে মানুহক পৰিৱেশৰ প্রতি আদৰ. সন্মান, সংৰক্ষণ, সম্পদৰ সদ্প্রয়োগ ইত্যাদিৰ প্রতি উৎসাহিত কৰিছে। সাম্প্রতিক পৰিৱেশ সংৰক্ষণৰ বাবে 'শ্রীমদ্ভগৱদ্গীতা'ত পোৱা যজ্ঞ, কর্মযোগ, অহিংসা আদি উপদেশ বা জ্ঞান অতি প্রাসংগিক। আধ্যাত্মিক, দার্শনিক দৃষ্টিৰে পৰিৱেশ সংৰক্ষণৰ চিন্তাত উৎসাহ যোগোৱাৰ ওপৰিও এই জ্ঞানে মানুহক প্রকৃতিৰ গভীৰ সম্বন্ধ বা সামঞ্জস্য স্থাপন কৰাতো সহায় কৰে।

প্রসংগ গ্রন্থ ঃ

অসমীয়া গ্রন্থ ঃ

স্বামী ৰামসুখদাস ঃ **গীতা-প্রবোধনী**। দ্বিতীয় প্রকাশ। ঃ গৌৰখপুৰ ঃ গীতা প্রেছ, ২০১৬। প্রকাশিত।

হিন্দী গ্রন্থ ঃ

অগ্রৱাল, মদনমোহন ঃ **শ্রীমদ্ভাগৱদ্গীতা** । হিন্দী ভাষ্যানুবাদ। পুনঃ মুদ্রণ। ঃ দিল্লী ঃ চৌখম্বা সংস্কৃত প্রতিষ্ঠান, ভাৰতীয় সংস্কৃতি আৰু সাহিত্য পৰিষদ, ২০২১। প্রকাশিত।

গৌয়ন্দকা, শ্রীহৰিকৃষ্ণদাস ঃ **শ্রীমদ্ভাগৱদ্গীতা** । শংকৰাচার্যৰ হিন্দী ভাষ্যানুবাদ। ৪৪তম সংস্কৰণ। গৌৰখপুৰ ঃ গীতা প্রেছ, ২০১৮। প্রকাশিত।

স্বামী ৰামসুখদাস ঃ **শ্রীমদ্ভাগৱদ্গীতা সাধক সঞ্জীৱনী**। ভাষ্যানুবাদ। নৱম সংস্কৰণ। ঃ গৌৰখপুৰ ঃ গীতা প্রেছ, ২০১৮। প্রকাশিত।

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অসমৰ বিহুগীতত লিংগচেতনা আৰু সমাজ বাস্তৱতাঃ এক বিশ্লেষণাত্মক অধ্যয়ন

ড° প্রীতিৰেখা দত্ত
সহকাৰী অধ্যাপক, অসমীয়া বিভাগ
বি এইচ বি মহাবিদ্যালয়, সৰুপেটা

সাৰাংশ ঃ

অসমৰ সংস্কৃতি আৰু সামাজিক জীৱনৰ এক গুৰুত্বপূর্ণ অংশ অধিকাৰ কৰি আছে। এই পৰম্পৰাগত গীতসমূহৰ মাজেৰে মানুহৰ অনুভূতি, প্রকৃতিৰ প্রতি থকা ভালপোৱা, গ্রাম্য জীৱনৰ বিভিন্ন দিশ,সামাজিক সম্পর্ক আৰু দৈনন্দিন অভিজ্ঞতাসমূহ সুন্দৰভাৱে প্রকাশিত হয়। বিহুগীতত নাৰী আৰু পুৰুষৰ ভূমিকা, পাৰস্পৰিক সন্মান, লিংগভিত্তিক দর্শন, সহযোগিতা আৰু সমাজত সমতাৰ গুৰুত্বৰ কথাও প্রতিফলিত হয়। বহুতো বিহুগীতত নাৰীৰ অনুভূতি, সপোন, আশা-আকাংক্ষা আৰু সামাজিক জীৱনত তেওঁলোকৰ স্থানৰ বিষয়ে প্রকাশ পোৱা পৰিলক্ষিত হয়। বিহুগীতৰ জৰিয়তে আমি অসমীয়া সমাজৰ পৰম্পৰা, মূল্যবোধ, পৰিৱর্তনশীল চিন্তাধাৰা আৰু বাস্তৱ জীৱনৰ ছবিখন বুজিব পাৰোঁ। সেয়েহে বিহুগীত কেৱল মনোৰঞ্জনৰ মাধ্যম নহয়, ই সামাজিক সচেতনতা, লিংগ সমতা আৰু মানুহৰ বাস্তৱ অভিজ্ঞতাৰো এক অনন্য প্রতিফলনৰ মাধ্যম। মূল আলোচনাত বিহুগীতৰ সাংস্কৃতিক পৰিসৰ, প্রেম আৰু লিংগ সম্পর্ক, লিংগভূমিকা আৰু সামাজিক ধাৰণা, যৌনতা, ব্যংগ আৰু সামাজিক নিয়ন্ত্রণ ইত্যাদি বিভিন্ন দিশ অধ্যয়ন আৰু আলোচনাৰে দাঙি ধৰিবলৈ প্রয়াস কৰা হ'ব।

বীজ শব্দ ঃ বিহুগীত, লিংগসমতা,সংস্কৃতি

অৱতৰণিকা ঃ

অসমৰ লোকসংস্কৃতিৰ এটি অন্যতম অংশ হৈছে অসমৰ জাতীয় উৎসৱ বিহু আৰু বিহুগীতসমূহ। বিহুগীতসমূহ বিশেষকৈ ব'হাগ বা ৰঙালী বিহুৰ সময়ত গোৱা হয়। এই গীতসমূহ কেৱল বিনোদনৰ লগতে জড়িত নহয় বৰং ইয়াৰ মাজেৰে প্রতিফলিত অসমৰ কৃষিভিত্তিক সমাজ জীৱন, সামাজিক মূল্যবোধ, ঐতিহ্য আৰু লিংগ সম্পর্কীয় কিছু প্রাসংগিক ধাৰণা। বিহুগীতৰ ঐতিহ্য, বিহুগীতত প্রেমৰ প্রকাশ কিম্বা বিহুগীতসমূহত প্রকৃতিৰ প্রতিফলন আদি বিভিন্ন বিষয়ৰ যথেষ্ট সংখ্যক আলোচনা আমি সততে পঢ়িবলৈ পাওঁ। কিন্তু এই গীতসমূহৰ মাজেৰে প্রকাশিত হোৱা সমাজৰ লিংগ সম্পর্কীয় কাঠামো পিতৃতান্ত্রিক মানসিকতা আৰু নাৰীৰ স্বকীয় কণ্ঠৰ প্রতিফলন সম্পর্কীয় আলোচনা আঙুলি মূৰত লিখিব পৰাকৈ কম।

গতিকে এই ধৰণৰ অধ্যয়নে সাম্প্রতিক প্রেক্ষাপটত আমাৰ জাতীয় উৎসৱত ব্যৱহৃত গীত সম্পর্কে কিছু সমাজ আৰু লিংগ সম্পর্কীয় বাস্তৱিক দিশৰ অধ্যয়নৰ দুৱাৰ মুকলি হ'ব যেন বোধ হয়। বিহুগীতসমূহত সৃষ্টিৰ বাসনা, যৌৱনৰ উচ্ছাস বসন্তত প্রকৃতিৰ ৰমণীয় সৌন্দর্য আৰু সামাজিক যোগাযোগৰ এক বিশেষ ৰূপ দেখা যায়। অসমৰ বিহুগীতত লিংগ সম্পর্কীয় ধাৰণাৰ বিশ্লেষণ, পুৰুষ প্রকৃতিৰ সৃষ্টিৰ বাসনা আৰু ভূমিকা সমাজজীৱনৰ প্রতিফলনৰ লগতে গছৰ তলৰ পৰা মঞ্চলৈকে বিহুগীতত লিংগচেতনাৰ পৰিৱর্তিত ৰূপ সম্পর্কে বিশদভাৱে দাঙি ধৰিবলৈ আমাৰ আলোচনাত প্রয়াস কৰা হ'ব।

অধ্যয়নৰ উদ্দেশ্যঃ

ক) বিহুগীতৰ সাংস্কৃতিক পৰিসৰ সম্পর্কে অধ্যয়ন।

খ) বিহুগীতবোৰত প্রকাশ পোৱা লিংগভূমিকা আৰু সামাজিক ধাৰণা সম্পর্কে অনুসন্ধান।

গ) বিহুগীতত ব্যংগ ভাবধাৰাৰ প্রকাশ আৰু সামাজিক

নিয়ন্ত্রণ সম্পর্কে অধ্যয়ন।

বিহুগীতৰ সাংস্কৃতিক পৰিসৰঃ

বিহুগীত অসমৰ কৃষিভিত্তিক সমাজখনৰ লগতে অংগাগীভাৱে জড়িত। কৃষিকেন্দ্রিক সভ্যতাৰ বিকাশ, বসন্ত ঋতুৰ আগমন নতুন জীৱনৰ আৱন্তণি আৰু কৃষিজীৱী সমাজৰ আনন্দৰ দিশসমূহ বিহুগীতসমূহত প্রকাশিত হয়।

লোকসংস্কৃতিৰ গৱেষক ড° বিৰিঞ্চি কুমাৰ বৰুৱাই উল্লেখ কৰিছে যে, 'বিহুগীত অসমীয়া সমাজৰ জীৱন্ত লোকঐতিহ্য।' এই গীতসমূহৰ জৰিয়তে গ্রাম্য সমাজৰ অকৃত্রিম জীৱনধাৰা, সামাজিক সম্পর্ক, প্রেম আৰু যৌৱনৰ লগতে সংস্কৃতি আৰু পৰম্পৰাৰ ভালেখিনি দিশ প্রতিফলিত হয়।

বিহুগীতৰ সাংস্কৃতিক পৰিসৰৰ প্রধান দিশসমূহ আমি তলত দিয়া ধৰণেৰে আলোচনা কৰিব পাৰোঁ -

ক) কৃষিভিত্তিক লোকজীৱনৰ প্রকাশ ঃ বিহু মূলত কৃষিৰ লগত জড়িত। সেয়েহে বিহুগীতত ধাননি পথাৰ আৰু উৎপাদনৰ আনন্দ নিভাজভাৱে প্রকাশিত হয়।

খ) প্রেম প্রণয়ঃ বিহুগীতৰ মূল বিষয়বস্তু হ'ল ডেকা-গাভৰুৰ মুক্ত আৰু সৰল প্রেম, যি সমাজৰ কোনো বাধা নামানে।

গ) প্রকৃতিৰ আকর্ষণীয় চিত্রণ ঃ বসন্তকালীন উৎসৱ বিহুৰ সময়ছোৱাত ন-ৰূপেৰে চিৰসেউজ হৈ উঠা অসমৰ গছ-লতা, চৰাই চিৰিকতিৰ লগতে অসমৰ জলবায়ুৰ নিপুণ বর্ণনা বিহুগীতসমূহত ফুটি উঠা দেখা যায়।

ঘ) ঐতিহাসিক আৰু সামাজিক প্রতিফলনঃ আহোম ৰাজত্বৰ বিভিন্ন ঐতিহাসিক ঘটনা, মানৱ আক্রমণ আৰু অসমৰ সমাজ জীৱনৰ পৰিৱর্তনৰ বিভিন্ন ছবি বিহুগীতসমূহত দেখা যায়।

ঙ) সাংস্কৃতিক পৰিচয়ঃ বিহু কেৱল জাতীয় উৎসৱ এটাৰ আনন্দত কৰা নৃত্য-গীতৰ অনুষ্ঠান নহয়, ৰৱং বিহু উৎসৱৰ লগত পৰিৱেশন কৰা গীতসমূহত প্রতিফলিত হয় অসমৰ জাতীয় ঐক্য, সামাজিক ৰীতি-নাতি, পৰম্পৰা আৰু লোকসংস্কৃতিৰ এক অনন্য দিশ। বিহু উৎসৱ হ'ল অসমীয়াৰ জাতি-ধর্ম-বর্ণ নির্বিশেষে সকলোৰে একত্রিত হোৱাৰ মাধ্যম।

চ) আধুনিক প্রসাৰঃ এসময়ৰ মুকলি পথাৰৰ ৰৱগছৰ তলত গোৱা এই বিহু আহোম স্বর্গদেউসকলৰ সময়ত ৰংঘৰৰ বাকৰিলৈ আহি বর্তমান দূৰদর্শন আৰু ইণ্টাৰনেটৰ মাধ্যমেৰে বিভিন্ন সামাজিক মাধ্যমযোগে বিশ্বজুৰি প্রসাৰিত হৈছে। লোকগীত হিচাপে বিহুগীতবোৰ মুখে মুখে প্রজন্মৰ পাছত প্রজন্মলৈ চলি আহিছে। অসমৰ কৃষিকেন্দ্রিক সমাজখনত বসন্ত ঋতুৰ আগমন, নতুন জীৱনৰ সূচনা আৰু প্রকৃতিৰ বিনন্দীয়া ৰূপ প্রকাশ পায়। এই গীতসমূহে কেৱল ব্যক্তিগত অনুভূতি নহয়, সমাজৰ অর্থনৈতিক, সামাজিক আৰু সাংস্কৃতিক বাস্তৱতাও প্রতিফলিত কৰে। বিহুগীতক অসমৰ লোকজীৱনৰ এক সামাজিক দলিল বুলি ক'ব পাৰি।

বিহুগীতত প্রেম আৰু লিংগ সম্পর্ক ঃ

বিহুগীতসমূহৰ কেন্দ্রীয় উপজীব্যই হৈছে প্রেম। পুৰুষ-প্রকৃতিৰ মিলনতহে যে সৃষ্টি সম্ভৱ, সেই চিৰন্তন সত্যৰ বহিঃপ্রকাশেই হ'ল অসমৰ বিহুগীতসমূহ। ডেকা-গাভৰু মাজত হোৱা প্রণয়সূচক কথোপকথন, আকর্ষণ আৰু ৰোমাণ্টিক অনুভূতি এই গীতসমূহত প্রকাশিত হয়। গীতসমূহত পৰিস্ফুট হোৱা মানৱীয় প্রেম প্রকৃতি প্রদত্ত প্রতিটো বস্তুৰ চিৰন্তন উপমাৰ সৈতে জড়িত। যেনে- ফুল, চন্দ্র, বসন্ত ঋতু, নৈ, নিজৰা, জান-জুৰি, ধাননি পথাৰ আদি উপাদানবোৰে মানৱীয় অনুভূতিৰ ৰূপক হিচাপে কাম কৰে।

বিহুগীতসমূহত এই লিংগ সম্পর্ক সাধাৰণতে দুই ধৰণেৰে প্রকাশিত হয়-

১) ডেকা-গাভৰুৰ মাজত প্রেমমূলক সংলাপ বা কথোপকথন।

২) গোপন সাক্ষাৎ বা মিলনৰ আভাস।

কেতিয়াবা গীতসমূহত প্রেমিকাই প্রেমিকৰ ওচৰত অভিমান কৰে, আশা প্রকাশ কৰে, যাৰ জৰিয়তে সমাজৰ ভিতৰত বিদ্যমান পুৰুষতান্ত্রিক সমাজ ব্যৱস্থাৰ আভাস পোৱা যায়। বহু গীতত প্রেমিকাই প্রেমিকৰ পৰা সহায় বা সুৰক্ষা বিচাৰে, যিটো সমাজত নাৰীৰ অসহায় অৱস্থাৰ সূচক বুলি ধৰা হয়। নাৰীৰ অসহায়তাৰ কথা চেনাইয়ে নাচনীক উদ্দেশ্য কৰি গোৱা বিহুগীতবোৰতে দেখা যায়-

"এ আলিয়ে নাযাবি বান্ধে ঐ
বালিয়ে কাটিব ঐ বালিয়ে কাটিব ঐ
পথাৰেদি নাযাবি বোকা
এ দলনিয়ে গ'লে বান্ধে অ'
আছেনো ম'হৰ গুৱাল অ'
ছোৱালী অ' জোকোৱাত ভাল"

লিংগভূমিকা আৰু সামাজিক ধাৰণা ঃ

বিহুগীতসমূহত সমাজত প্রচলিত লিংগভূমিকাৰ

প্রতিফলন স্পষ্টকৈ দেখা যায়। পৰম্পৰাগত অসমীয়া সমাজত পুৰুষ আৰু নাৰীৰ কাম-কাজবোৰৰ বিভাজন আছিল, যিটো বৰ্তমান সময়ত একেবাৰে ভবাৰ থল নাই। কামত লিংগ আৰোপিত হোৱাতো আধুনিক মন আৰু মানসিকতাৰ এক বিৰোধী অনুশীলন, যাক আমি সকলোৱে নস্যাৎ কৰা উচিত। কিন্তু পুৰণি অসমীয়া সমাজখনত এই পুৰুষ প্ৰকৃতি ভেদে থকা কামৰ স্পষ্ট বিভাজন বিহুগীতবোৰতেই প্ৰতিফলিত হৈ আছে -

"কচুটেঙা ঢেঁকীয়া বিলাহী বেঙেনা
জুতি লগাই লগাই খাবা
ৰাতিৰে ৰাতিটো দুৱাৰৰ দাং খুলি থ'ম
বিৰালী যোৱাদি যাবা"

বিহুৱা ঃ "লোকে মাছে মাৰে আন্ধুলি কুন্দুলি
আমি মাছ মাৰো কুঢ়ি
লোকে বিয়া কৰায় গাভৰু ছোৱালী
আমি বিয়া কৰাও বুঢ়ী"

নাচনী ঃ "লোকে মাছে মাৰে আন্ধুলি কুন্দুলি
আমি মাছ মাৰো কুঢ়ি ....
লোকে বিয়া কৰায় চেঙেলীয়া ডেকা অ'
আমি বিয়া কৰাও বুঢ়া"
ঠিক তেনেকৈ নাচনীয়ে গায় -
"চিৰিপ চিৰিপ কৰি কাপোৰ ধুই আছিলোঁ
চিৰি লুইতলৈ চাই
চিৰি লুইততে কিৰিলি পাৰি
চেনায়ে নাও মেলি যায়।"

পুৰুষ আৰু প্ৰকৃতিৰ মিলনবাসনাৰ স্পষ্ট ইংগিতো বিহুগীতসমূহত দেখিবলৈ পোৱা যায়-

"হাঁহ হৈ পাৰিমগৈ তোমাৰে পুখুৰীত
পাৰ হৈ পাৰিমগৈ চালত
ঘাম হৈ সোমমগৈ তোমাৰে শৰীৰত
মাখি হৈ চুমা দিম গালত"

ইয়াৰ উপৰিও বিহুগীতসমূহত বহু সময়ত পুৰুষক শক্তি, সাহস আৰু উপাৰ্জনৰ প্ৰতীক হিচাপে দেখুওৱা হয়। ঠিক তেনেকৈ নাৰীক সৌন্দৰ্য্য, কোমলতা আৰু গৃহস্থালীৰ সৈতে সম্পৰ্কিত কৰা হয়। পুৰুষে হাল বাবলৈ যোৱা, বাৰীত পাচলি কৰা, মাছ ধৰা ইত্যাদি আৰু নাৰীয়ে গৃহস্থালীৰ কাম চম্ভলা, তাঁত বোৱা, ৰন্ধা-বঢ়া, পিঠা-পনা তৈয়াৰ কৰা ইত্যাদি কামৰ উল্লেখ বিহুগীতত দেখা যায়-

"পাছফালৰ চোতালত দুপৰীয়া নিজানত
ফুল গামোছা বৈছিলোঁ বহিনো তাঁতৰ পাতত
সেইখনি ঐ গামোছা নিলিখিলে কঁপালত
অ' চেনাইমুৱা ঐ পেঁপাৰ
মাতে বলিয়া কৰে।"

অৱশ্যে এইটোও প্ৰাসংগিক যে, আমাৰ বিহুগীতসমূহত নাৰী বা মহিলাসকল নিষ্ক্ৰিয় হৈ নাথাকে। বহু গীতত গাভৰুৱে নিজৰ আৱেগ, অনুভূতি, ইচ্ছা আৰু প্ৰেম মুক্তভাৱে প্ৰকাশ কৰে। এই দিশটো ভাৰতীয় বহু ঠাইৰ পৰম্পৰাগত লিংগ বিভাজনৰ উৰ্ধত, লিংগ সমতাৰ সাম্প্ৰতিক পৃথিৱীখনত যি এক অতি গুৰুত্বপূৰ্ণ দিশ।

যৌনতা, ব্যংগ আৰু সামাজিক নিয়ন্ত্ৰণ ঃ

বিহুগীতসমূহৰ এটা উল্লেখযোগ্য বৈশিষ্ট্য হৈছে - যৌন ইংগিত বা দ্ব্যৰ্থক ভাষাৰ প্ৰয়োগ। বিহুগীতত ব্যংগৰ মাধ্যমেৰে যৌন ৰূপকৰ ব্যৱহাৰ দেখিবলৈ পোৱা যায়। ডেকা-গাভৰুৰ প্ৰেম প্ৰকাশ বা নিবেদনৰ ক্ষেত্ৰত বা জৈৱিক বাসনাৰ অবিকল প্ৰকাশৰ ক্ষেত্ৰত বিহুগীতসমূহ অসমীয়া সমাজৰ এক গ্ৰহণযোগ্য মাধ্যম হিচাপে গণ্য কৰা হৈছিল। কিন্তু বৰ্তমান সময়ত কিছু কিছু বিহুগীতত সামজিক মাধ্যমত বিৰ্তকৰ জৰিয়তে জনপ্ৰিয়তা লাভ কৰাৰ উদ্দেশ্যে নাৰী দেহক পণ্য সামগ্ৰীৰ দৰে বা নাৰীক বস্তুৰূপে উপস্থাপন কৰাৰ এটা নেতিবাচক অনুশীলন আৰম্ভ হোৱাটো আমাৰ বিহুৰ সাতাম পুৰুষীয়া ঐতিহ্য তথা পৰম্পৰাৰ বিৰোধী। এই দৃষ্টিভংগীক 'Male Gare' বা পুৰুষকেন্দ্ৰিক দৃষ্টিভংগী বুলি ব্যাখ্যা কৰিব পাৰি। এইধৰণৰ নেতিবাচক অনুশীলন বা বিতৰ্কই প্ৰমাণ কৰে যে, বৰ্তমান একবিংশ শতিকাৰ শেষ দশকৰ সমাজখনতো বিহুগীতত লিংগ সম্পৰ্কীয় আলোচনা এক প্ৰাসংগিক বিষয়।

ইয়াৰোপৰি আধুনিক সময়ছোৱাত শিক্ষিত সমাজ আৰু সামাজিক মাধ্যমৰ অঘোষিত প্ৰতিযোগিতাৰ প্ৰভাৱতো অথবা মঞ্চ বিহুৰ ক্ষেত্ৰতো বিহুগীতসমূহত নতুন দৃষ্টিভংগী সংযোজিত হৈছে। তাৰ ভিতৰত বিহু অনুষ্ঠানত পুৰুষৰ সমানে নাৰী শিল্পীৰ যোগদান, নাৰীৰ নিজস্ব অভিজ্ঞতাৰ বহিঃপ্ৰকাশ, পুৰণি লিংগধাৰাৰ সমালোচনা ইত্যাদি অন্যতম। তথাপি আমাৰ সাতামপুৰুষীয়া নজহা-নপমা বিহুগীতসমূহে বৰ্তমানো আমাৰ সংস্কৃতিক সমৃদ্ধ কৰি থকাৰ লগতে একক আৰু অনন্য হৈয়ে আছে। শেষত আমি ক'ব পাৰো যে, অসমৰ বিহুগীতসমূহ কেৱল

বিহু উৎসৱত ৰঙ-ৰহইচৰ কাৰণে গোৱা গীত নহয়, ৰৰং এই গীতসমূহ অসমীয়া সমাজৰ ঐতিহ্য, পৰম্পৰা, খাদ্যাভাস, সমাজৰ লিংগসম্পর্ক, প্রেম, সামাজিক ৰীতি-নীতি আৰু সাংস্কৃতিক মূল্যবোধৰ এক জীৱন্ত প্রতিফলন।

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ইণ্টাৰনেট উৎস

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সাৰাংশ (Abstract)

অসমৰ সামাজিক, অর্থনৈতিক আৰু ৰাজনৈতিক ইতিহাসত অত্যন্ত গুৰুত্বপূর্ণ তথা সংবেদনশীল স্থানত থকা পূর্ব বংগীয় মূলৰ অভিবাসী মুছলমানসকল সাম্প্রতিক সময়ত 'মিয়া জনগোষ্ঠী' নামেৰে পৰিচিত। ঊনবিংশ শতিকাৰ শেষৰ ফালৰ পৰা ব্রিটিছ ঔপনিৰেশিক ভূমি আৰু ৰাজহ নীতিৰ ফলস্বৰূপে ব্রহ্মপুত্র উপত্যকাৰ চৰ-চাপৰিসমূহত এই শ্রমিক আৰু কৃষক শ্রেণীটোৰ সংস্থাপন হৈছিল। এই গৱেষণা পত্রখনত এক সমাজতাত্ত্বিক আৰু ঐতিহাসিক পদ্ধতিৰে মিয়া জনগোষ্ঠীৰ প্রব্রজনৰ গতিপথ, ব্রহ্মপুত্রৰ পাৰত যাযাবৰী জীৱন, চৰ-অঞ্চলৰ অর্থনীতি, ১৯৫১ চনৰ পৰা আৰম্ভ হোৱা ভাষিক অসমীয়াকৰণ প্রক্রিয়া, তেওঁলোকৰ লোক-সংস্কৃতিৰ সমন্বয়বাদী ৰূপ আৰু সাম্প্রতিক সময়ত নাগৰিকত্ব তথা পৰিচয়ক লৈ সৃষ্টি হোৱা মনস্তাত্ত্বিক সংকটসমূহ পুংখানুপুংখভাৱে বিশ্লেষণ কৰাৰ প্রয়াস কৰা হৈছে। গৱেষণাত দেখা গৈছে যে এই জনগোষ্ঠীটোৰ পৰিচয় বর্তমান এক জটিল সন্ধিক্ষণত থিয় হৈছে, য'ত তেওঁলোকে নিজৰ কৃষিভিত্তিক ঐতিহ্যক ধৰি ৰাখিও বৃহত্তৰ অসমীয়া জাতীয় জীৱনৰ অংগ হ'বলৈ ধাৰাবাহিক প্রয়াস চলাই আহিছে।

১. পৰিচয় (Introduction)

অসম হ'ল দক্ষিণ এছিয়াৰ এক অতিশয় বৈচিত্র্যপূর্ণ ভূখণ্ড, য'ত শতিকা শতিকা ধৰি বিভিন্ন প্রব্রজনকাৰীৰ ঢলে ইয়াৰ সমাজ ব্যৱস্থাক পুনর্নির্মাণ কৰি আহিছে। এই বহু-সাংস্কৃতিক আৰু বহু-ভাষিক পটভূমিত 'মিয়া' (Miya/Miyah) জনগোষ্ঠীৰ অৱস্থিতি আৰু তেওঁলোকৰ পৰিচয়ক লৈ চলি থকা বিতর্কই অসমৰ সমাজ আৰু ৰাজনীতিক দীর্ঘদিন ধৰি উত্তাল কৰি ৰাখিছে। সাধাৰণ অর্থত, "ব্রিটিছ ঔপনিৰেশিক কালত বর্তমানৰ বাংলাদেশ বা তদানীন্তন অবিভক্ত বংগৰ মৈমনসিং, পাবনা, ঢাকা, ৰংপুৰ আৰু ত্রিপুৰা আদি জিলাৰ পৰা ব্রহ্মপুত্র উপত্যকালৈ প্রব্রজন কৰা আৰু চৰ-চাপৰি অঞ্চলত বসতি স্থাপন কৰা ইছলামধর্মী কৃষকসকলৰ বংশধৰসকলকেই "মিয়া জনগোষ্ঠী" বুলি চিহ্নিত কৰা হয়" (Baruah, 1999, p. 85)। ঐতিহাসিকভাৱে, এই জনগোষ্ঠীটোক বিভিন্ন সময়ত 'ন-অসমীয়া', 'চৰুৱা মুছলমান', 'প্রব্রজনকাৰী মুছলমান' বা 'পূর্ব বংগীয় মূলৰ অসমীয়া মুছলমান' আদি বিভিন্ন অভিধাৰে বিভূষিত কৰা হৈছে। 'মিয়া' শব্দটো মূলত ঃ এটা উর্দু বা ফার্চী শব্দ, যাৰ আভিধানিক অর্থ হ'ল 'ভদ্রলোক' বা 'প্রভু'। কিন্তু অসমৰ সামাজিক-ৰাজনৈতিক প্রেক্ষাপটত এই শব্দটোৱে এক সুকীয়া মাত্রা লাভ কৰিলে। প্রথম অৱস্থাত ইয়াক এটা তুচ্ছতার্থক বা ব্যংগাত্মক শব্দ হিচাপে ব্যৱহাৰ কৰা হৈছিল যদিও, "একবিংশ শতিকাৰ দ্বিতীয় দশকত এই জনগোষ্ঠীৰ শিক্ষিত যুৱ প্রজন্মই ইয়াক এক সুকীয়া উপ-জাতীয় পৰিচয় আৰু প্রতিবাদৰ প্রতীক হিচাপে গ্রহণ কৰিবলৈ আৰম্ভ কৰে" (Weiner, 1978, p. 112)।

অসমৰ অর্থনীতি, বিশেষকৈ কৃষি খণ্ডৰ সামগ্রিক ৰূপান্তৰ আৰু বিকাশ এই শ্রমিক শ্রেণীটোৰ হাত ধৰিয়েই হৈছিল। ব্রহ্মপুত্রৰ বুকুত থকা দুর্গম, বানপ্রৱণ আৰু জংঘলেৰে আবৃত চৰ-চাপৰিসমূহক সোণালী কৃষিপথাৰলৈ ৰূপান্তৰ কৰাত তেওঁলোকৰ ভূমিকা অনস্বীকার্য। কিন্তু এই অৱদানৰ

সমান্তৰালভাৱে, থলুৱা খিলঞ্জীয়া সমাজৰ মাজত ভূমিৰ অধিকাৰ হেৰুওৱাৰ শংকা, ভাষিক সন্তুলন নষ্ট হোৱাৰ ভয় আৰু জনগাঁথনিৰ পৰিৱৰ্তনে এক চিৰস্থায়ী মনস্তাত্ত্বিক সংঘাতৰ জন্ম দিলে। এই গৱেষণা পত্ৰখনে কোনো ধৰণৰ আৱেগিক বা ৰাজনৈতিক পক্ষপাতিত্ব নোহোৱাকৈ, এক বিশুদ্ধ বিদ্যায়তনিক দৃষ্টিৰে মিয়া জনগোষ্ঠীৰ ইতিহাসৰ গভীৰতালৈ গৈ তেওঁলোকৰ সংস্কৃতি আৰু সাম্প্ৰতিক সমাজ জীৱনৰ এক নিৰপেক্ষ দাপোণ দাঙি ধৰিবলৈ প্ৰয়াস কৰিছে।

২. গৱেষণাৰ লক্ষ্য আৰু উদ্দেশ্য

২.১ গৱেষণাৰ মূল লক্ষ্যঃ

এই গৱেষণা পত্ৰখনৰ মূল লক্ষ্য হৈছে ব্ৰহ্মপুত্ৰ উপত্যকাৰ চৰ-চাপৰি অঞ্চলত বসবাস কৰা পূব বংগীয় মূলৰ মুছলমান বা সাম্প্ৰতিক সময়ৰ 'মিয়া জনগোষ্ঠী'ৰ ঐতিহাসিক প্ৰব্ৰজনৰ গতিপথ, তেওঁলোকৰ ভাষিক পৰিৱৰ্তনৰ প্ৰক্ৰিয়া, অৰ্থনৈতিক অৱদান আৰু বৰ্তমান সময়ত উদ্ভৱ হোৱা পৰিচয়ৰ সংকটক এক সমাজতাত্ত্বিক আৰু নিৰপেক্ষ দৃষ্টিৰে মূল্যায়ন কৰা। গৱেষণা পত্ৰখনত জনগোষ্ঠীটোৰ উপান্ত জীৱন-সংগ্ৰাম আৰু বৃহত্তৰ অসমীয়া জাতীয় জীৱনৰ সৈতে তেওঁলোকৰ সাংস্কৃতিক সমন্বয়ৰ এক সামগ্ৰিক দাপোণ দাঙি ধৰিবলৈ প্ৰয়াস কৰা হৈছে।

২.২ গৱেষণাৰ নিৰ্দিষ্ট উদ্দেশ্যসমূহঃ

মূল লক্ষ্যটোক প্ৰণালীবদ্ধভাৱে লাভ কৰিবলৈ গৱেষণাখনত তলত উল্লেখ কৰা ৪টা নিৰ্দিষ্ট উদ্দেশ্যক আগত ৰাখি কাম কৰা হৈছে-

ক) ঐতিহাসিক প্ৰব্ৰজনৰ কাৰক আৰু ঔপনিৱেশিক ভূমি নীতিৰ বিশ্লেষণ কৰা।

খ) ভাষিক পৰিৱৰ্তন আৰু অসমীয়াকৰণ প্ৰক্ৰিয়াৰ মূল্যায়ন কৰা।

গ) অসমৰ অৰ্থনীতি আৰু চৰ-অঞ্চলৰ সামাজিক-অৰ্থনৈতিক স্থিতি নিৰ্ধাৰণ কৰা।

ঘ) সাম্প্ৰতিক পৰিচয়ৰ সংকট আৰু 'মিয়া সাহিত্য' আন্দোলনৰ সমাজতাত্ত্বিক অধ্যয়ন কৰা।

৩. গৱেষণা পদ্ধতিঃ

এই গৱেষণাত এক মিশ্ৰিত পদ্ধতি (Mixed-Methods) প্ৰয়োগ কৰা হৈছে, য'ত ঐতিহাসিক-সমাজতাত্ত্বিক (Historical-Sociological) আৰু গুণগত (Qualitative) বিশ্লেষণক অগ্ৰাধিকাৰ দিয়া হৈছে। যিহেতু মিয়া জনগোষ্ঠীৰ প্ৰব্ৰজন আৰু পৰিচয়ৰ সংকটটো এক দীৰ্ঘদিনীয়া প্ৰক্ৰিয়া, সেয়েহে ইয়াক কেৱল বৰ্তমানৰ পৰিসংখ্যাৰে জুখিব নোৱাৰি। এই উদ্দেশ্য গৱেষণা কাৰ্য্যত সময়ানুক্ৰমিক ঐতিহাসিক সোঁত আৰু সাম্প্ৰতিক সামাজিক বাস্তৱতা- দুয়োটাকে একেলগে অধ্যয়ন কৰা হৈছে।

৪. সাহিত্যিক পৰ্যালোচনা

মিয়া জনগোষ্ঠীৰ ওপৰত বিভিন্ন গৱেষক আৰু সমাজবিজ্ঞানীয়ে আলোচনা কৰিছে। ড° অমলেন্দু গুহ, ড° হাফিজ ৰছিদ আহমেদ চৌধুৰী, ড° মনিৰুল হুছেইন আদিৰ ৰচনাত অসমৰ মুছলমান সমাজ আৰু মিয়া জনগোষ্ঠীৰ ইতিহাসৰ বিষয়ে উল্লেখ পোৱা যায়।

মনিৰুল হুছেইনে অসমৰ জনসংখ্যাগত পৰিবৰ্তন আৰু মুছলমান সমাজৰ বিকাশৰ বিষয়ে বিস্তৃত আলোচনা কৰিছে। আনহাতে, সাম্প্ৰতিক গৱেষণাসমূহত মিয়া কবিতা, ভাষাগত পৰিচয় আৰু ৰাজনৈতিক প্ৰতিনিধিত্বৰ ওপৰত অধিক গুৰুত্ব আৰোপ কৰা হৈছে।

৫. বিষয়ৰ আলোচনাঃ

৫.০ ঐতিহাসিক পটভূমি আৰু প্ৰব্ৰজনৰ গতিপথ ঃ

মিয়া জনগোষ্ঠীৰ অসমলৈ আগমন কোনো আকস্মিক বা অবৈধ অনুপ্ৰৱেশৰ ঘটনা নাছিল; ই আছিল ব্ৰিটিছ সাম্ৰাজ্যবাদী অৰ্থনীতি, ভূমি ৰাজহ নীতি আৰু তদানীন্তন অসমৰ জনগাঁথনিগত প্ৰয়োজনৰ এক প্ৰত্যক্ষ পৰিণতি। ১৮২৬ চনত ইয়াণ্ডাবু সন্ধিৰ জৰিয়তে আহোম শাসনৰ অন্ত পৰে আৰু অসম ব্ৰিটিছ সাম্ৰাজ্যৰ অন্তৰ্ভুক্ত হয়। ব্ৰিটিছ প্ৰশাসনে দায়িত্ব লৈয়েই অনুভৱ কৰিলে যে "দীৰ্ঘকালীন মোৱামৰীয়া বিদ্ৰোহ, মানৰ আক্ৰমণ আৰু মহামাৰীৰ ফলত অসমৰ জনসংখ্যা তীব্ৰভাৱে হ্ৰাস পাইছিল। বিশাল উৰ্বৰ ভূখণ্ড এক প্ৰকাৰ জনশূন্য হৈ হাবি-জংঘলত পৰিণত হৈছিল" (Guha, 1977, p. 39.)।

৫.১ ব্ৰিটিছৰ 'ৱেষ্ট লেণ্ড' নীতি আৰু ৰাজহ কৌশল ঃ

ঔপনিৱেশিক চৰকাৰৰ একমাত্ৰ লক্ষ্য আছিল সৰ্বাধিক ভূমি ৰাজহ সংগ্ৰহ কৰা। ব্ৰিটিছ প্ৰশাসকসকলে অসমৰ চৰ-চাপৰি আৰু জংঘলেৰে আবৃত বিশাল অঞ্চলসমূহক "Waste Land" বা অনুৎপাদক আৰু পতিত ভূমি বুলি ঘোষণা কৰিলে। ব্ৰিটিছ অৰ্থনীতিবিদসকলে হিচাপ কৰিলে যে "চুবুৰীয়া পূৰ্ব বংগৰ পৰা যদি কষ্টসহিষ্ণু খেতিয়কসকলক ইয়ালৈ আনি সংস্থাপিত কৰিব পৰা যায়, তেন্তে দুটা লাভ হ'ব

ঃ প্রথমতে, পতিত ভূমিৰ পৰা চৰকাৰে বৃহৎ পৰিমাণৰ খাজনা লাভ কৰিব আৰু দ্বিতীয়তে, ব্রিটিছ কটন আৰু মৰাপাট কলসমূহৰ বাবে কেঁচা সামগ্রী সুলভ মূল্যত উৎপাদন হ'ব" (Sharma, 2011, p. 144.)।

এই উদ্দেশ্যে ব্রিটিছ চৰকাৰে পূর্ব বংগৰ জিলাসমূহত ব্যাপক প্রচাৰ চলালে। যিসকল কৃষকে অসমলৈ আহি জংঘল চাফা কৰি খেতি কৰিব, তেওঁলোকক অতি কম মূল্যত বা বিনামূলীয়াকৈ ভূমিৰ পত্তন দিয়া হ'ব বুলি ঘোষণা কৰা হ'ল। এই নীতিৰ ফলস্বৰূপে ১৮৯০ চনৰ পৰা দলে দলে কৃষক পৰিয়ালে ৰেল আৰু নাৰেৰে ব্রহ্মপুত্র উপত্যকাত প্রৱেশ কৰিলে।

৫.২ প্রব্রজনৰ সমাজতাত্ত্বিক কাৰক: পুচ-পুল তত্ত্বঃ

মিয়া জনগোষ্ঠীৰ এই বিশাল প্রব্রজনক সমাজতত্ত্বৰ 'Push-Pull' 'ঠেলি পঠিওৱা আৰু টানি অনা) তত্ত্বৰ দ্বাৰা নিখুঁতভাৱে ব্যাখ্যা কৰিব পাৰি:

ঠেলি পঠিওৱা কাৰক (Push Factors) ঃ তদানীন্তন পূব বংগত ব্রিটিছৰ স্থায়ী বন্দোৱস্ত (Permanent Settlement) প্রথাৰ বাবে জমিদাৰসকলৰ অত্যাচাৰ চৰম পর্যায় পাইছিল। তাত "জনসংখ্যাৰ ঘনত্ব ইমান বেছি আছিল যে সাধাৰণ কৃষকৰ হাতত নিজাকৈ কোনো ভূমি নাছিল। ইয়াৰ উপৰিও পদ্মা, মেঘনা আদি নদীৰ গৰাখহনীয়াৰ ফলত প্রতি বছৰে লাখ লাখ মানুহ গৃহহীন হৈ পৰিছিল। এই চৰম অর্থনৈতিক আৰু সামাজিক নিষ্পেষণে তেওঁলোকক নিজ ভেটি এৰিবলৈ বাধ্য কৰিছিল" (Baruah, 1999, p. 92.)।

টানি অনা কাৰক (Pull Factors) ঃ ইয়াৰ বিপৰীতে অসম আছিল এখন সপোনৰ দেশ। ইয়াত ব্রহ্মপুত্রৰ বুকুত মাইলৰ পিছত মাইল জুৰি উর্বৰ পলসুৱা মাটি পৰি আছিল, য'ত সাৰ নোহোৱাকৈয়ে প্রচুৰ ফচল উৎপাদন কৰিব পৰা গৈছিল। "ব্রিটিছৰ উদাৰ ভূমি নীতি আৰু এক স্বাধীন কৃষক জীৱনৰ আশাই তেওঁলোকক অসমলৈ তীব্রভাৱে আকর্ষিত কৰিছিল"(Weiner, ১৯৭৮, p. ১১৮)।

৫.৩ লাইন প্রণালীৰ উদ্ভৱ আৰু সামাজিক বিভাজনঃ

প্রথম অৱস্থাত অসমীয়া সমাজে এই প্রব্রজনক আদৰণি জনাইছিল, কাৰণ ইয়াৰ ফলত ভূমিৰ মূল্য বৃদ্ধি পাইছিল আৰু শ্রমিকৰ অভাৱ দূৰ হৈছিল। কিন্তু ১৯১১ চনৰ পৰা ১৯২১ চনৰ ভিতৰত যেতিয়া প্রব্রজনকাৰীৰ সংখ্যা অস্বাভাৱিকভাৱে বৃদ্ধি পাবলৈ ধৰিলে, তেতিয়া থলুৱা খিলঞ্জীয়া সমাজ-বিশেষকৈ জনজাতীয় লোকসকলৰ মাজত তীব্র শংকাৰ সৃষ্টি হ'ল। প্রব্রজনকাৰীসকলে চৰ-চাপৰি এৰি লাহে লাহে মূল ভূখণ্ডৰ খিলঞ্জীয়া গাঁৱৰ কাষত মাটি কিনিবলৈ আৰম্ভ কৰিলে।

এই সামাজিক সংঘাত ৰোধ কৰিবলৈ ১৯২০ চনত ব্রিটিছ প্রশাসনে 'লাইন প্রণালী' (Line System) নামৰ এক প্রশাসনিক দেৱাল গঢ়ি তুলিলে। এই প্রণালী অনুসৰি জিলাসমূহৰ মানচিত্রত কিছুমান কাল্পনিক ৰেখা বা 'লাইন' টানি দিয়া হৈছিল। নির্দেশ দিয়া হৈছিল যে প্রব্রজনকাৰীসকলে কেৱল লাইনৰ এটা দিশতহে 'প্রধানকৈ চৰ অঞ্চলত' বসতি কৰিব পাৰিব, খিলঞ্জীয়া লোক থকা লাইনৰ সিপাৰে তেওঁলোকে মাটি কিনিব নোৱাৰিব। এই 'লাইন প্রণালীয়ে অসমৰ ইতিহাসত প্রথমবাৰৰ বাবে খিলঞ্জীয়া আৰু প্রব্রজনকাৰী সমাজৰ মাজত এক স্থায়ী ভৌগোলিক, মানসিক আৰু সামাজিক বিভাজনৰ সৃষ্টি কৰিলে, যাৰ প্রভাৱ আজিও অসমৰ সমাজ জীৱনত অনুভৱ হয়' (Guha, 1977, p. 204)।

৫.৪ ছাদুল্লা চৰকাৰ আৰু ক্সঅধিক খাদ্য উৎপাদনক্স আন্দোলনঃ

১৯৩৬ চনৰ ভাৰত চৰকাৰ আইনৰ অধীনত অসমত প্রথমবাৰৰ বাবে স্বায়ত্বশাসিত প্রাদেশিক চৰকাৰ গঠিত হয়। মুছলিম লীগৰ নেতা চাৰ ছৈয়দ মহম্মদ চাদুল্লা অসমৰ প্রধানমন্ত্রী হয়। দ্বিতীয় বিশ্বযুদ্ধৰ সময়ত (1939-1945) সমগ্র ভাৰতত তীব্র খাদ্য সংকট আৰু দুর্ভিক্ষই দেখা দিছিল। এই সংকটৰ মোকাবিলা কৰিবলৈ চাদুল্লা চৰকাৰে 'Grow More Food' (অধিক খাদ্য উৎপাদন কৰা) আন্দোলন আৰম্ভ কৰে।

এই আন্দোলনৰ চলেৰে চাদুল্লা চৰকাৰে পূব বংগৰ পৰা অধিক সংখ্যক মুছলমান কৃষকক অসমলৈ অনাৰ আৰু তেওঁলোকক সংৰক্ষিত বনাঞ্চল, চৰণীয়া পথাৰ (Professional Grazing Reserves) আদিত সংস্থাপিত কৰাৰ নীতি গ্রহণ কৰে। অসমীয়া জাতীয়তাবাদী নেতাসকলে ইয়াৰ তীব্র বিৰোধিতা কৰে। ব্রিটিছ ভাইচৰয় লর্ড ৰাভেলে তেওঁৰ ডায়েৰীত লিখিছিল যে "চাদুল্লাৰ এই আন্দোলন আচলতে 'Grow More Food' নাছিল, ই আছিল আচলতে 'Grow More Muslims'- অর্থাৎ অসমৰ জনগাঁথনি সলনি কৰি ইয়াক পাকিস্তানৰ অন্তর্ভুক্ত কৰাৰ এক ৰাজনৈতিক কৌশল" (Misra, 2011, p. 67.)। এই ঐতিহাসিক ঘটনাই মিয়া জনগোষ্ঠীৰ প্রব্রজনক চিৰদিনৰ বাবে এক ৰাজনৈতিক আৰু

ধর্মীয় মেৰুকৰণৰ মেৰপাকত সুমুৱাই পেলালে।

৬. ভৌগোলিক বিতৰণ আৰু চৰ-চাপৰিৰ জীৱন-সংগ্ৰামঃ

মিয়া জনগোষ্ঠীৰ সমাজ জীৱনক বুজিবলৈ হ'লে ব্ৰহ্মপুত্ৰ নদীৰ অনন্য ভৌগোলিক চৰিত্ৰ আৰু 'চৰ-চাপৰি'ৰ পৰিৱেশ তন্ত্ৰক (Ecosystem) বুজাটো আটাইতকৈ গুৰুত্বপূৰ্ণ। ব্ৰহ্মপুত্ৰ হ'ল এটা ব্ৰেইডেড (Braided) নদী, যাৰ বুকুত হাজাৰ হাজাৰ বালিচৰ বা নদীদ্বীপ গঢ়ি উঠে।

৬.১ ভৌগোলিক কেন্দ্ৰীকৰণঃ

অসমৰ মিয়া জনসংখ্যা মূলতঃ নামনি আৰু মধ্য অসমৰ ব্ৰহ্মপুত্ৰৰ অৱবাহিকাত কেন্দ্ৰীভূত। জিলা ভিত্তিত তেওঁলোকৰ বিস্তাৰ তলত দিয়া ধৰণৰ—

নামনি অসম ঃ ধুবুৰী, দক্ষিণ শালমাৰা-মানকাচৰ, গোৱালপাৰা, বৰপেটা, বৰঙাইগাঁও, চিৰাং আৰু কামৰূপ (গ্ৰাম্য)।

মধ্য অসম ঃ নগাঁও, মৰিগাঁও, দৰং, আৰু শোণিতপুৰ।

উত্তৰ অসম ঃ লখিমপুৰ আৰু ধেমাজী জিলাৰ কিছু কিছু চৰ অঞ্চল।

৬.২ চৰ-অঞ্চলৰ পৰিৱেশিক অনিশ্চয়তাঃ

অসম চৰকাৰৰ চৰ অঞ্চল উন্নয়ন সঞ্চালকালয়ৰ তথ্য অনুসাৰে, "অসমত ২৫০০ তকৈও অধিক চৰ আছে, যাৰ ৰাজ্যখনৰ মুঠ জনসংখ্যাৰ প্ৰায় ১০ শতাংশতকৈও অধিক লোকে বসবাস কৰে। এই লোকসকলৰ সিংহভাগেই মিয়া জনগোষ্ঠীৰ। চৰৰ জীৱন হ'ল চৰম অনিশ্চয়তাৰ আন এটা নাম। চৰসমূহ স্থায়ী নহয়; ব্ৰহ্মপুত্ৰৰ এটা সোঁতে আজি য'ত এক বিশাল চৰ সৃষ্টি কৰিছে, অহাবাৰ বাৰিষাৰ কালৰূপী বানপানীয়ে তাক সম্পূৰ্ণৰূপে উটুৱাই লৈ যাব পাৰে" (Government of Assam,, 2003, p. 14)।

এই পৰিৱেশিক অনিশ্চয়তাই মিয়া সমাজক এক 'যাজাবৰী' চৰিত্ৰ প্ৰদান কৰিছে। প্ৰতি ৫-১০ বছৰৰ মূৰে মূৰে গৰাখহনীয়াৰ ফলত তেওঁলোকে নিজৰ ঘৰ-দুৱাৰ, খেতিপথাৰ হেৰুৱাই নতুন চৰৰ সন্ধানত ঢাপলি মেলিবলৈ বাধ্য হয়। এই ভৌগোলিক কাৰকৰ বাবে চৰ অঞ্চলসমূহত কোনো স্থায়ী পকী আন্তঃগাঁথনি, যেনে- পকী ৰাস্তা, দলং, ডাঙৰ চিকিৎসালয় বা মহাবিদ্যালয় গঢ়ি তোলাটো অত্যন্ত কঠিন হৈ পৰে।

৭. ভাষিক পৰিৱৰ্তন আৰু অসমীয়াকৰণ প্ৰক্ৰিয়াঃ

সমাজতত্ত্ব আৰু ভাষা বিজ্ঞানৰ দৃষ্টিকোণৰ পৰা মিয়া জনগোষ্ঠীৰ আটাইতকৈ বিস্ময়কৰ আৰু অনন্য অধ্যায়টো হ'ল তেওঁলোকৰ স্বেচ্ছামূলক ভাষিক পৰিৱৰ্তন, যাক ইতিহাসত ক্ষঅসমীয়াকৰণক্ষ বা ক্ষন-অসমীয়া প্ৰক্ৰিয়াক্ষ বুলি কোৱা হয়।

৭.১ ১৯৫১ চনৰ লোকপিয়লঃ এক ঐতিহাসিক সন্ধিক্ষণ

১৯৪৭ চনত ভাৰত বিভাজন আৰু স্বাধীনতাৰ পিছত অসমৰ প্ৰব্ৰজনকাৰী মুছলমান সমাজ এখন গভীৰ অস্তিত্বৰ সংকটত পৰিছিল। পাকিস্তানৰ সৃষ্টি আৰু তাৰ পিছত হোৱা সাম্প্ৰদায়িক উত্তেজনাই তেওঁলোকৰ সুৰক্ষাক লৈ প্ৰশ্নবোধক চিহ্ন আঁকি দিছিল। এই সময়তে জনগোষ্ঠীটোৰ দূৰদৰশী নেতৃবৃন্দই এক ঐতিহাসিক সিদ্ধান্তত উপনীত হৈছিল। "তেওঁলোকে বুজি পাইছিল যে যদি তেওঁলোকে অসমৰ মাটিত স্থায়ী নাগৰিক হিচাপে জীয়াই থাকিব বিচাৰে, তেন্তে তেওঁলোকে অসমৰ ভাষা আৰু সংস্কৃতিক নিজৰ কৰি ল'ব লাগিব" (Misra, p. 74.)।

১৯৫১ চনৰ স্বাধীন ভাৰতৰ প্ৰথমটো লোকপিয়লত চৰ-চাপৰিৰ লাখ লাখ মুছলমান কৃষকে নিজৰ মাতৃভাষা বাংলা বা ইয়াৰ উপভাষাসমূহৰ পৰিৱৰ্তে একমুখে 'অসমীয়া' বুলি পঞ্জীয়ন কৰালে। ই আছিল "বিশ্ব ইতিহাসৰ এক বিৰল ঘটনা, য'ত এটা বৃহৎ জনগোষ্ঠীয়ে নিজৰ মূল ভাষিক পৰিচয় এৰি নতুন এক আঞ্চলিক ভাষাক আঁকোৱালি লৈছিল" (Baruah, 2011, p. 105.)।

৭.২ অসমীয়া ভাষা ৰক্ষণত অৱদান ঃ

চৰ-চাপৰিৰ লাখ লাখ মুছলমান কৃষকে নিজৰ মাতৃভাষা বাংলা বা ইয়াৰ উপভাষাসমূহৰ পৰিৱৰ্তে একমুখে 'অসমীয়া' বুলি যি ঐতিহাসিক সিদ্ধান্ত লৈছিল তাৰ পৰিণতি আছিল সুদূৰপ্ৰসাৰী:

১) ভাষিক সংখ্যাধিক্য ঃ ১৯৫১ চনৰ লোকপিয়লত অসমত অসমীয়াভাষী লোকৰ সংখ্যা এক জাপতে ৫৬.৭ শতাংশলৈ বৃদ্ধি পালে। ইয়াৰ পূৰ্বে ব্ৰিটিছে অসমত বাংলা ভাষাক প্ৰতিষ্ঠা কৰাৰ যি ষড়যন্ত্ৰ কৰিছিল, তাৰ বিপৰীতে অসমীয়া ভাষা যে ৰাজ্যৰ সংখ্যাগুৰু লোকৰ ভাষা, সেই কথা প্ৰমাণিত হ'ল।

২) ৰাজ্যভাষা আন্দোলন (১৯৬০) ঃ ১৯৬০ চনৰ ৰাজ্যভাষা আন্দোলনৰ সময়ত মিয়া জনগোষ্ঠীৰ লোকে অসমীয়া ভাষাক চৰকাৰী ভাষা হিচাপে স্বীকৃতি দিয়াৰ দাবীত পূৰ্ণ সমৰ্থন আগবঢ়াইছিল।

৩) মাধ্যম আন্দোলন ঃ ১৯৭২ চনৰ ৰাজ্যভাষা আন্দোলনৰ সময়ত মিয়া জনগোষ্ঠীৰ লোকে পূৰ্ণ সমৰ্থন আগবঢ়াইছিল। মোজাম্মিল হকক ১৯৭২ চনৰ মাধ্যম আন্দোলনৰ প্ৰথমগৰাকী শ্বহীদ হিচাপে গণ্য কৰা হয়। তেওঁৰ এই আত্মত্যাগে প্ৰমাণ কৰিছিল যে অসমীয়া ভাষাৰ সুৰক্ষা আৰু অধিকাৰৰ বাবে অসমৰ মুছলমান সমাজেও সমানেই তেজ দিছে।

যদি বৃহত্তৰ অসমীয়া সমাজে মিয়া জনগোষ্ঠীৰ ভাষিক ত্যাগক স্বীকাৰ কৰি তেওঁলোকক মৰ্যাদা দিয়ে, তেন্তে ভৱিষ্যতেও তেওঁলোকে অসমীয়া ভাষাক মাতৃভাষা ৰূপে সমৰ্থন দি যাব। কিন্তু যদি তেওঁলোকক সদায় সন্দেহৰ চকুৰে চাই থকা হয়, তেন্তে ভৱিষ্যতে এক গভীৰ মনঃস্তাত্ত্বিক দূৰত্বৰ সৃষ্টি হোৱাৰ সম্ভাৱনা নুই কৰিব নোৱাৰি।

৭.৩ শিক্ষাৰ মাধ্যম আৰু সাহিত্যিক বিকাশ ঃ

বৰ্তমান চৰ অঞ্চলৰ চৰকাৰী প্ৰাথমিক আৰু মাধ্যমিক বিদ্যালয়সমূহৰ একমাত্ৰ মাধ্যম হ'ল অসমীয়া। মিয়া জনগোষ্ঠীৰ নতুন প্ৰজন্মই অসমীয়া মাধ্যমতে শিক্ষা গ্ৰহণ কৰি বৰ্তমান অসমীয়া সংবাদ মাধ্যম, সাহিত্য, আৰু বিদ্যায়তনিক ক্ষেত্ৰত সক্ৰিয়ভাৱে অংশগ্ৰহণ কৰিছে। তেওঁলোকে ঘৰুৱাভাৱে এক বিশেষ মিশ্ৰিত উপভাষা শ্চযাক স্থানীয়ভাৱে চৰুৱা ভাষা বা মিয়া ভাষা বোলা হয়গ্ন ব্যৱহাৰ কৰে যদিও, তেওঁলোকৰ আনুষ্ঠানিক, লিখিত আৰু শৈক্ষিক ভাষা হ'ল বিশুদ্ধ অসমীয়া।

৮. সংস্কৃতি, ধৰ্ম আৰু সমন্বয়বাদী ঐতিহ্য ঃ

মিয়া জনগোষ্ঠীৰ সংস্কৃতি কোনো একমাত্ৰিক বা সৰল ৰেখীয় সংস্কৃতি নহয়; ই হ'ল এক গভীৰ সমন্বয়বাদী সংস্কৃতি । ইয়াত বংগৰ সেউজীয়া পথাৰৰ পৰা কঢ়িয়াই অনা লোক-ঐতিহ্য আৰু ব্ৰহ্মপুত্ৰৰ পাৰৰ শংকৰ-আজান ফকীৰৰ দেশৰ উদাৰ আধ্যাত্মিকতাৰ এক অপূৰ্ব সংমিশ্ৰণ ঘটিছে। পূব (বিহু, অসমীয়া মাধ্যম)

৮.১ লোকসংগীতৰ সমৃদ্ধিঃ

চৰ-চাপৰিৰ নিসংগতা, ব্ৰহ্মপুত্ৰৰ বিশালতা আৰু প্ৰকৃতিৰ সংহাৰী ৰূপে তেওঁলোকৰ লোকসংগীতক এক সুকীয়া দৰ্শন প্ৰদান কৰিছে।

- **ভাটিয়ালী (Bhatiali)** ঃ নাওঁ বাই যাওঁতে বা নদীৰ বুকুত মাছ ধৰোঁতে গোৱা এই গীতবোৰত জীৱনৰ ক্ষণভংগুৰতা আৰু প্ৰকৃতিৰ প্ৰতি থকা এক গভীৰ সমৰ্পণ ভাৱ প্ৰকাশ পায়।
- **ভাওঁৰায়া (Bhawayia)** ঃ মূলত: গোৱালপাৰা আৰু কোচবিহাৰ অঞ্চলৰ সৈতে সাদৃশ্য থকা এই গীতসমূহে মিয়া সমাজৰ লোকসকলৰ মাজতেও সমানেই জনপ্ৰিয়তা লাভ কৰিছে, যিয়ে থলুৱা সংস্কৃতিৰ সৈতে তেওঁলোকৰ মিলক সূচায়।
- **জাৰী আৰু শাৰী গান (Zari and Sari Geet)** ঃ জাৰী গানসমূহ মূলত: ধৰ্মীয় কৰুণ ৰসৰ গীত, য'ত মহৰমৰ কাৰবালাৰ যুদ্ধৰ কাহিনী গাঁও অঞ্চলৰ সুৰত পৰিৱেশন কৰা হয়। আনহাতে, শাৰী গানসমূহ হ'ল কায়িক শ্ৰমৰ গীত- যেনে সমূহীয়াভাৱে নাওঁ খেল খেলা বা ঘৰৰ চালি নিৰ্মাণ কৰাৰ সময়ত শ্ৰমিকসকলৰ মাজত একতা আৰু শক্তি বৃদ্ধি কৰিবলৈ এই গীতসমূহ গোৱা হয়।
- **মাৰফতি আৰু মূৰ্ছিদী গীত** (Marfati and Murshidi) ঃ এই গীতসমূহ মিয়া সংস্কৃতিৰ মেৰুদণ্ড স্বৰূপ। এইবোৰ হ'ল মূলত: চুফীবাদ (Sufism) প্ৰভাৱিত আধ্যাত্মিক গীত। ইয়াত "ধৰ্মৰ কোনো বাহ্যিক কট্টৰতা বা সংকীৰ্ণতা নাথাকে; বৰঞ্চ মানৱাত্মাৰ সৈতে পৰমাত্মাৰ মিলনৰ কথা অতি সৰল গ্ৰাম্য উপমাৰে বুজাই দিয়া হয়। এই গীতসমূহে আজান ফকীৰৰ জিকিৰৰ দৰেই হিন্দু-মুছলমানৰ মাজত এক সাংস্কৃতিক সেতুৰ কাম কৰে" (Sharma, 2011, p. 158)।

৮.২ বিবাহ পৰম্পৰা ঃ গায়ন গাঁথনি

মিয়া সমাজৰ বিবাহ পদ্ধতি অত্যন্ত ৰঙীন। বিবাহৰ কেইবাদিনো আগৰ পৰা গাঁৱৰ মহিলাসকলে একত্ৰিত হৈ 'গায়ন গাঁথনি' বা 'মেহেন্দী গীত' গায়। এই গীতসমূহৰ সুৰ আৰু শব্দ চয়ন বিশ্লেষণ কৰিলে দেখা যায় যে ইয়াৰ সৈতে নামনি অসমৰ কোচ-ৰাজবংশী বা কামৰূপী খিলঞ্জীয়া সমাজৰ ক্ষবিয়া নামক্সসমূহৰ অদ্ভুত মিল আছে। ইয়াত কোনো আৰৰীয় বা পাৰ্চী প্ৰভাৱ নাই, বৰঞ্চ ই সম্পূৰ্ণৰূপে এই উপত্যকাৰ মাটিৰ সুৱাসেৰে সমৃদ্ধ।

৮.৩ খাদ্য আৰু উৎসৱ ঃ

মিয়া সমাজৰ খাদ্যভাস মূলত ঃ চৰ অঞ্চলৰ কৃষি উৎপাদনৰ ওপৰত প্ৰতিষ্ঠিত। তেওঁলোকৰ প্ৰিয় খাদ্যৰ ভিতৰত আছে শুকান মৰাপাটৰ পাতৰ আঞ্জা (যাক শুকুতা বা পাটশাক বোলা হয়), সৰিয়হ শাক, আৰু ব্ৰহ্মপুত্ৰৰ বিভিন্ন

সৰু-বৰ মাছ। ধৰ্মীয়ভাৱে তেওঁলোকে ইছলাম ধৰ্মৰ নীতি-নিয়ম মানি চলে যদিও, সামাজিকভাৱে চৰ অঞ্চলসমূহত বৰ্তমান 'বিহু' উৎসৱৰ প্ৰভাৱ স্পষ্ট। বহু চৰত বহাগ বিহু বা মাঘ বিহুৰ সময়ত স্থানীয়ভাৱে খেল-ধেমালি আৰু সাংস্কৃতিক অনুষ্ঠানৰ আয়োজন কৰা দেখা যায়।

৯. অৰ্থনৈতিক সমাজতত্ত্ব ঃ কৃষি বিপ্লৱ আৰু অসংগঠিত শ্ৰম ঃ

অসমৰ অৰ্থনৈতিক ইতিহাসত মিয়া জনগোষ্ঠীৰ অৱদানক বাদ দি কোনো আলোচনা সম্পূৰ্ণ হ'ব নোৱাৰে। তেওঁলোকে মূলত: অসমৰ অৰ্থনীতিৰ প্ৰাথমিক অৰ্থাৎ কৃষি খণ্ডৰ চালিকা শক্তি হিচাপে কাম কৰি আহিছে।

৯.১ অসমত মৰাপাট আৰু বাণিজ্যিক কৃষিৰ সূচনা ঃ

প্ৰব্ৰজনৰ পূৰ্বে অসমৰ কৃষি ব্যৱস্থা আছিল মূলত ঃ আত্মনিৰ্ভৰশীল বা পৰম্পৰাগত জীৱন-নিৰ্বাহী কৃষি। থলুৱা কৃষকে কেৱল নিজৰ পৰিয়ালৰ বাবে প্ৰয়োজনীয় ধান আৰু অলপ-অচৰপ শাক-পাচলিৰ খেতি কৰিছিল। "মিয়া কৃষকসকলে অসমলৈ অহাৰ পিছত প্ৰথমবাৰৰ বাবে কৃষিক এক বৃহৎ বাণিজ্যিক ৰূপ দিলে" (Guha, p. 1977,215.)।

- **মৰাপাট খেতি ঃ** মিয়া কৃষকসকলে ব্ৰহ্মপুত্ৰৰ পলসুৱা মাটিক ব্যৱহাৰ কৰি ব্যাপক হাৰত মৰাপাট খেতি আৰম্ভ কৰিলে। ইয়াৰ ফলত অসম ব্ৰিটিছ ভাৰতৰ ভিতৰতে এক অন্যতম মৰাপাট ৰপ্তানি কৰা কেন্দ্ৰ হৈ পৰিল আৰু ৰাজ্যৰ অৰ্থনীতিলৈ বুজন পৰিমাণৰ নগদ ধনৰ আগমন ঘটিল।
- **শীতকালীন শস্য বা ৰবি শস্য ঃ** বৰ্তমান সময়ত অসমৰ গুৱাহাটীৰে পৰা ডিব্ৰুগড়লৈ থকা চহৰসমূহত দৈনন্দিন ব্যৱহৃত বিলাহী, ফুলকবি, বন্ধাকবি, বেঙেনা, মূলা, জলকীয়া আদি শাক-পাচলিৰ প্ৰায় ৮০ শতাংশই উৎপাদন কৰে চৰ-চাপৰিৰ মিয়া কৃষকসকলে। তেওঁলোকে "অতি উন্নত মানৰ মি'ড ফাৰ্মিং (Mixed farming) পদ্ধতি ব্যৱহাৰ কৰি বছৰত ৩-৪ টা কৈ শস্য উৎপাদন কৰে" (Government of Assam, 2003, p. 22.)।

৯.২ অসংগঠিত খণ্ডৰ শ্ৰমিক আৰু নগৰীকৰণ ঃ

সাম্প্ৰতিক সময়ত জলবায়ু পৰিৱৰ্তন, সঘন বানপানী আৰু মাৰাত্মক গৰাখহনীয়াৰ ফলত চৰ অঞ্চলৰ কৃষিভূমি অতি দ্ৰুতগতিত হ্ৰাস পাইছে। ইয়াৰ ফলত সৃষ্টি হৈছে এক বিশাল ভূমিহীন শ্ৰমিক শ্ৰেণী। এই অৰ্থনৈতিক সংকটে তেওঁলোকক চৰ অঞ্চল এৰি অসমৰ নগৰীয়া এলেকালৈ ঢাপলি মেলিবলৈ বাধ্য কৰিছে।

বৰ্তমান অসমৰ যিকোনো নিৰ্মাণ কাৰ্যৰ ৰাজমিস্ত্ৰী আৰু যোগালী, চহৰৰ ৰিক্সাচালক, ঠেলাচালক, পানী যোগানকাৰী, ঘৰুৱা শ্ৰমিক আৰু আৱৰ্জনা সংগ্ৰহকাৰী আদিৰ দৰে আটাইতকৈ কঠিন আৰু কায়িক শ্ৰমৰ কামসমূহত মিয়া জনগোষ্ঠীৰ লোকসকল নিয়োজিত হৈ আছে। এক প্ৰকাৰে ক'বলৈ গ'লে, অসমৰ চহৰীয়া জীৱন যাত্ৰাৰ দৈনন্দিন নিম্ন-আন্তঃগাঁথনি এই শ্ৰমিক শ্ৰেণীটোৰ ওপৰতে নিৰ্ভৰ কৰি টিকি আছে।

৯.৩ সামাজিক সূচকসমূহৰ শোচনীয় বাস্তৱ ঃ

অসমৰ অৰ্থনীতিলৈ ইমান অৱদান থকাৰ পিছতো, সমাজতাত্ত্বিক সূচকসমূহৰ দিশৰ পৰা মিয়া জনগোষ্ঠী আজিও অসমৰ আটাইতকৈ পিছপৰা আৰু উপান্ত (Marginalized) শ্ৰেণীসমূহৰ ভিতৰত অন্যতম। তলৰ তালিকাত চৰ অঞ্চলৰ সাম্প্ৰতিক সামাজিক স্থিতি দাঙি ধৰা হ'ল ঃ

"চৰ অঞ্চলত সাক্ষৰতাৰ হাৰ ৰাজ্যিক গড় (৭২.১৯%) তকৈ বহু কম (প্ৰায় ৪০-৪৫%)। মহিলাৰ মাজত এই হাৰ আৰু তাতকৈও শোচনীয়। চৰসমূহত কোনো স্থায়ী হস্পিতেল বা চিকিৎসক নাই। খোৱাপানীৰ বাবে টিউৱৱেলৰ ওপৰত নিৰ্ভৰ কৰিবলগীয়া হয়, য'ত প্ৰায়েই আৰ্চেনিকৰ বিষক্ৰিয়া দেখা যায়। তীব্ৰ দৰিদ্ৰতা, সামাজিক সুৰক্ষাহীনতা আৰু ধৰ্মীয় কুসংস্কাৰৰ বাবে চৰ অঞ্চলত বাল্য বিবাহৰ হাৰ অতি বেছি। ইয়াৰ ফলস্বৰূপে জনসংখ্যা বৃদ্ধিৰ হাৰো উচ্চ। ৯০% পৰিয়াল অস্থায়ী কেঁচা ঘৰ বা টিনৰ চালিৰ ঘৰত বাস কৰে, যিবোৰ যিকোনো মুহূৰ্ততে বানপানীত উটি যাব পাৰে" (Government of Assam, 2003, p. 28)।

১০. পৰিচয়ৰ সংকট, ৰাজনীতি আৰু 'মিয়া সাহিত্য' আন্দোলন ঃ

অসমৰ ৰাজনৈতিক ইতিহাসৰ আটাইতকৈ জটিল আৰু সংবেদনশীল সংঘাতটো হ'ল 'খিলঞ্জীয়া বনাম বিদেশী' সংঘাত। এই সংঘাতৰ কেন্দ্ৰবিন্দুতে স্থান পাইছে মিয়া জনগোষ্ঠীয়ে। ১৯৭৯ চনৰ পৰা ১৯৮৫ চনলৈ চলা ঐতিহাসিক অসম আন্দোলনৰ মূল লক্ষ্য আছিল অবৈধ বাংলাদেশী অনুপ্ৰৱেশকাৰী চিনাক্তকৰণ আৰু বহিষ্কাৰ কৰা। এই আন্দোলনে অসমৰ সমাজত এক গভীৰ বিভাজনৰ সৃষ্টি কৰিলে। (দশক : মিয়া কবিতা ও সাহিত্য আন্দোলন)

১০.১ 'বাংলাদেশী' তকমা আৰু মনস্তাত্ত্বিক যন্ত্ৰণা ঃ

বিগত কেইবাদশকো ধৰি নিজকে অসমীয়া বুলি পৰিচয় দিয়া, অসমীয়া মাধ্যমত পঢ়া আৰু অসমৰ অৰ্থনীতি গঢ়া এই জনগোষ্ঠীটোৰ বাবে আটাইতকৈ ডাঙৰ মানসিক আঘাত হ'ল যে তেওঁলোকক সমাজৰ এটা বৃহৎ অংশই আজিও কোনো ধৰণৰ বিচাৰ-বিবেচনা নকৰাকৈ, বাচ-বিচাৰ নোহোৱাকৈ, সকলোকে একেলগে বা একে শাৰীতে ধৰি 'বাংলাদেশী', 'মিঞা', বা 'অবৈধ নাগৰিক' বুলি সন্দেহৰ চকুৰে চায়। "ৰাষ্ট্ৰীয় নাগৰিকপঞ্জী উন্নীতকৰণৰ সময়ত চৰ অঞ্চলৰ লাখ লাখ দৰিদ্ৰ আৰু অশিক্ষিত মানুহে নিজৰ নথিপত্ৰ প্ৰমাণ কৰিবলৈ চৰম হাৰাশাস্তি আৰু মানসিক যন্ত্ৰণা ভোগ কৰিবলগীয়া হৈছিল। এই চিৰস্থায়ী সন্দেহে জনগোষ্ঠীটোৰ নতুন, শিক্ষিত প্ৰজন্মৰ মনত এক তীব্ৰ ক্ষোভ আৰু অস্তিত্বৰ সংকটৰ জন্ম দিলে" (Misra, 2011,p. 89.)।

১০.২ 'মিয়া কবিতা' (Miya Poetry) আন্দোলনৰ উত্থান ঃ

এই অস্তিত্বৰ সংকট আৰু সামাজিক অৱহেলাৰ পৰিণতি স্বৰূপেই ২০১০ চনৰ পিছৰ পৰা, বিশেষকৈ ফেচবুক, এক্স (টুইটাৰ) আদি ছচিয়েল মিডিয়াৰ জৰিয়তে এক অভিনৱ সাহিত্যিক আন্দোলনৰ সূচনা হয়, যাক বিশ্বই 'মিয়া কবিতা' বুলি চিনি পালে। ২০১৬ চনত সমাজকৰ্মী তথা কবি হাফিজ আহমেদে লিখা এটা কবিতাই এই আন্দোলনক এক গোলকীয় মাত্ৰা প্ৰদান কৰিলে। এই 'মিয়া কবিতা'সমূহৰ মূল বৈশিষ্ট্য আছিল যে এইবোৰ কোনো "মান্য অসমীয়া বা বাংলা ভাষাত লিখা হোৱা নাছিল; বৰঞ্চ চৰ অঞ্চলৰ মানুহে ঘৰত কথা পতা তেওঁলোকৰ নিজস্ব উপভাষাত (যেনে মৈমনসিংহীয়া বা চৰুৱা উপভাষা) লিখা হৈছিল। এই আন্দোলনৰ জৰিয়তে ডেকা কবিসকলে নিজৰ ওপৰত জাপি দিয়া 'মিয়া' শব্দটোক এক অপমানৰ সলনি এক গৌৰৱ আৰু প্ৰতিবাদৰ প্ৰতীক হিচাপে ব্যৱহাৰ কৰিবলৈ আৰম্ভ কৰিলে। তেওঁলোকৰ কবিতাত প্ৰকাশ পালে চৰ অঞ্চলৰ বানপানীৰ দুখ, এনআৰচিৰ নামত হোৱা হাৰাশাস্তি, উচ্ছেদৰ যন্ত্ৰণা আৰু সমাজত অলিখিতভাৱে চলি থকা বৰ্ণবৈষম্যৰ বিৰুদ্ধে তীব্ৰ ক্ষোভ" (Ahmed, 2016, p. 5.)।

১০.৩ মিয়া কবিতাৰ ওপৰত বিতৰ্ক আৰু সামাজিক প্ৰতিক্ৰিয়া ঃ

মিয়া কবিতা আন্দোলনে ৰাষ্ট্ৰীয় আৰু আন্তঃৰাষ্ট্ৰীয় পৰ্যায়ত (যেনে- আল জাজীৰা, বিবিচি আদি সংবাদ মাধ্যমত) প্ৰচুৰ চৰ্চা লাভ কৰিলে যদিও, অসমৰ মূলসুঁতিৰ অসমীয়া বুদ্ধিজীৱী আৰু জাতীয়তাবাদী সংগঠনসমূহৰ মাজত ইয়াৰ তীব্ৰ প্ৰতিক্ৰিয়া হ'ল। অসমীয়া সমাজৰ মতে:

অসমীকৰণ প্ৰক্ৰিয়াৰ প্ৰতি ভাবুকি ঃ ১৯৫১ চনত যিটো জনগোষ্ঠীয়ে নিজৰ ভাষা অসমীয়া বুলি গ্ৰহণ কৰিছিল, তেওঁলোকে এতিয়া আকৌ এক সুকীয়া ভাষা বা উপভাষাত সাহিত্য চৰ্চা কৰিলে অসমীয়া ভাষাৰ অস্তিত্ব বিপন্ন হ'ব পাৰে।

সমান্তৰাল পৰিচয় গঠনৰ শংকা ঃ সমালোচকসকলৰ মতে, মিয়া কবিতাৰ জৰিয়তে অসমৰ বুকুত এক সমান্তৰাল উপ-জাতীয়তাবাদী পৰিচয় গঢ়িবলৈ চেষ্টা কৰা হৈছে, যাৰ ভৱিষ্যতে অসমৰ অখণ্ডতা আৰু সামাজিক সম্প্ৰীতি বিনষ্ট কৰিব পাৰে। এই বিতৰ্কৰ বাবে পৰৱৰ্তী সময়ত কেইবাজনো মিয়া কবিৰ বিৰুদ্ধে আৰক্ষীৰ ওচৰত গোচৰো তৰা হৈছিল। এই ঘটনাই দেখুৱায় যে "মিয়া জনগোষ্ঠীৰ পৰিচয়ৰ যুঁজখন আজিও কিমান জটিল আৰু স্পৰ্শকাতৰ" (Bhuyan, 2019, p. 43.)।

১১. সাম্প্ৰতিক প্ৰত্যাহ্বান আৰু উত্তৰণৰ পথঃ

মিয়া জনগোষ্ঠী বৰ্তমান সময়ত পৰিৱেশিক, অৰ্থনৈতিক আৰু ৰাজনৈতিক। এই ত্ৰিমুখী প্ৰত্যাহ্বানৰ মাজত আবদ্ধ হৈ পৰিছে । এই প্ৰত্যাহ্বানসমূহৰ পৰা পৰিত্ৰাণ পাই তেওঁলোকক সমাজৰ প্ৰকৃত মূলসুঁতিলৈ আনিবলৈ হ'লে কিছুমান বিজ্ঞানসন্মত আৰু দীৰ্ঘম্যাদী পদক্ষেপৰ প্ৰয়োজন।

১১.১ শিক্ষাৰ সৰ্বাত্মক বিস্তাৰ আৰু মাদ্ৰাছা আধুনিকীকৰণ ঃ

চৰ অঞ্চলৰ অনগ্ৰসৰতাৰ মূল কাৰণ হ'ল শিক্ষাৰ অভাৱ। চৰকাৰে চৰ অঞ্চলসমূহৰ ধৰ্মীয় শিক্ষা প্ৰতিষ্ঠান বা মাদ্ৰাছাসমূহক আধুনিকীকৰণ কৰি তাত বিজ্ঞান, গণিত, কম্পিউটাৰ আৰু কাৰিকৰী শিক্ষা বাধ্যতামূলক কৰিব লাগিব। ইয়াৰ উপৰিও ছোৱালীৰ শিক্ষা সুনিশ্চিত কৰিবলৈ চৰ অঞ্চলত কেৱল ছাত্ৰীসকলৰ বাবে আৱাসিক বিদ্যালয় স্থাপন কৰাটো অত্যন্ত জৰুৰী।

১১.২ বাল্য বিবাহ ৰোধ আৰু মহিলা সবলীকৰণ ঃ

মিয়া সমাজত চলি থকা উচ্চ জনসংখ্যা বৃদ্ধিৰ হাৰ নিয়ন্ত্ৰণ কৰাৰ একমাত্ৰ উপায় হ'ল বাল্য বিবাহ সম্পূৰ্ণৰূপে বন্ধ কৰা। চৰকাৰী আইন প্ৰয়োগ কৰাৰ লগতে মিয়া সমাজৰ ভিতৰৰ পৰাই শিক্ষিত যুৱক-যুৱতীসকলে গাঁৱে গাঁৱে গৈ সজাগতা সভা পাতিব লাগিব। মহিলাসকল যেতিয়া শিক্ষিত আৰু অৰ্থনৈতিকভাৱে স্বাৱলম্বী হ'ব, তেতিয়া সমাজৰ আধা

সমস্যা স্বয়ংক্রিয়ভাৱে সমাধান হ'ব।

১১.৩ জলবায়ু শৰণার্থীসকলৰ স্থায়ী সংস্থাপন ঃ

ব্রহ্মপুত্রৰ গৰাখহনীয়াৰ বাবে যিসকল মিয়া খেতিয়ক ভূমিহীন হৈ চহৰলৈ গুচি আহিছে, তেওঁলোকক কেৱল 'অবৈধ বিদেশী' বুলি উচ্ছেদ কৰাৰ সলনি 'জলবায়ু শৰণার্থী' (Climate Refugees) হিচাপে স্বীকৃতি দি এক সুপৰিকল্পিত চৰকাৰী আঁচনিৰ অধীনত সংস্থাপন কৰিব লাগিব। তেওঁলোকৰ কায়িক শ্রম আৰু কৃষিকার্যৰ দক্ষতাক ব্যৱহাৰ কৰিবলৈ চৰকাৰে সমবায় বা বিশেষ অর্থনৈতিক কৃষি মণ্ডল গঢ়ি তুলিব পাৰে।

১১.৪ ৰাজনৈতিক মেৰুকৰণ আৰু ভোটবেংক ৰাজনীতিৰ অন্ত ঃ

স্বাধীনোত্তৰ কালৰে পৰা বিভিন্ন ৰাজনৈতিক দলে মিয়া জনগোষ্ঠীগক কেৱল এক 'ভোটবেংক' হিচাপে ব্যৱহাৰ কৰি আহিছে। নির্বাচনৰ সময়ত তেওঁলোকক সুৰক্ষাৰ প্রতিশ্রুতি দিয়া হয়, কিন্তু নির্বাচন শেষ হ'লেই তেওঁলোকৰ শিক্ষা, স্বাস্থ্য বা ভূমিৰ সমস্যাসমূহ পাহৰি যোৱা হয়। জনগোষ্ঠীটোৰ মাজৰ পৰা এতিয়া উগ্র ধর্মীয় বা আবেগিক নেতৃত্বৰ পৰিৱর্তনে যুক্তিবাদী, ধর্মনিৰপেক্ষ, আৰু আধুনিক মনোভাৱাপন্ন শিক্ষিত নেতৃত্বৰ উত্থান ঘটিব লাগিব, যিয়ে খিলঞ্জীয়া সমাজৰ সৈতে সংঘাতৰ সলনি সৌহার্দ্যপূর্ণ মিত্রতা গঢ়ি তুলিব পাৰিব।

১২. সামৰণিঃ

সামৰণিতে ক'ব পাৰি যে অসমৰ মিয়া জনগোষ্ঠীৰ সামগ্রিক ইতিহাস, সংস্কৃতি আৰু সমাজ জীৱন পর্যালোচনা কৰিলে স্পষ্ট হৈ পৰে যে তেওঁলোক কেৱল এচাম অভিবাসী লোকৰ সমষ্টি নহয়; বৰঞ্চ তেওঁলোক হ'ল এই উপত্যকাৰ এক অপৰিহার্য অংগ। ব্রহ্মপুত্রৰ সংহাৰী ৰূপৰ সৈতে সহবাস কৰি, বুকুত হাজাৰটা সন্দেহ আৰু লাঞ্ছনাৰ বোজা লৈও তেওঁলোকে অসমৰ মাটিকে নিজৰ মাতৃভূমি বুলি জ্ঞান কৰিছে আৰু অসমীয়া ভাষাক নিজৰ বুকুৰ ভাষা হিচাপে গ্রহণ কৰিছে।

অসমৰ সর্বাগীণ প্রগতি, অর্থনৈতিক স্বাৱলম্বীতা আৰু সাংস্কৃতিক বৈচিত্র্য ধৰি ৰাখিবলৈ হ'লে এই বিশাল শ্রমিক আৰু কৃষক সমাজক চিৰদিনৰ বাবে উপান্ত বা বহিষ্কাৰ কৰি ৰখাটো সম্ভৱো নহয় আৰু যুক্তিসংগতো নহয়। খিলঞ্জীয়া অসমীয়া সমাজেও বুজিব লাগিব যে ১৯৫১ চনত মিয়া সমাজে যি ভাষিক ত্যাগ কৰিছিল, তাৰ বাবেই আজি অসমত অসমীয়া ভাষা জীয়াই আছে। ঠিক একেদৰে, মিয়া সমাজেও খিলঞ্জীয়া লোকসকলৰ ভূমি আৰু সংস্কৃতিৰ প্রতি থকা ঐতিহাসিক ভয়টোক সন্মান কৰিব লাগিব। এই পাৰস্পৰিক বিশ্বাস, শিক্ষাৰ পোহৰ আৰু উদাৰ মানৱতাবাদী দর্শনেই পাৰে অসমৰ এই আটাইতকৈ দীর্ঘদিনীয়া সামাজিক জটিলতাৰ এক স্থায়ী আৰু শান্তিপূর্ণ সমাধান সূত্র উলিয়াব।

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শংকৰদেৱৰ ‘ৰুক্মিণীহৰণ’ নাটত লোক সাংস্কৃতিক উপাদান ঃ এটি অধ্যয়ন

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সংক্ষিপ্তসাৰঃ

অসমৰ জাতীয় জীৱনত মহাপুৰুষ শ্রীমন্ত শংকৰদেৱৰ স্থান আটাইতকৈ উচ্চ। তেখেত আছিল একাধাৰে শাস্ত্রজ্ঞ পণ্ডিত, দার্শনিক, কবি, সাহিত্যিক, সংগীতজ্ঞ, নাট্যকাৰ, অভিনেতা আৰু শিল্পী। অসমৰ জাতীয় জীৱনৰ প্রাণ প্রতিষ্ঠাতা শংকৰদেৱে অসমীয়াৰ আধ্যাত্মিক, সামাজিক-সাংস্কৃতিক উৎকর্ষ সাধনত প্রভূত অৰিহণা আগবঢ়াইছিল।

সংস্কৃতি সমাজৰ দাপোন স্বৰূপ। সমাজ আৰু সংস্কৃতি এটা মুদ্রাৰ ইপিঠি-সিপিঠি। লোক মানে এই সমাজৰে অন্তর্গত সাধাৰণ জন বা ব্যক্তিক সূচায়। সেইপিনৰ পৰা লোক-সংস্কৃতি মানে জনসাধাৰণৰ সংস্কৃতি। শংকৰদেৱৰ ৰুক্মিণীহৰণ নাটত অসমীয়া লোকসংস্কৃতিক উপাদান যেনে- উৎসৱ, অনুষ্ঠান, জনবিশ্বাস, লোকপ্রথা, সাজসজ্জা, আ-অলংকাৰ, লোকজীৱনত সদায় প্রচলিত যোজনা পটন্তৰ আদিৰ প্রয়োগ দেখা যায়। দ্বাৰকাত অনুষ্ঠিত কৃষ্ণ আৰু ৰুক্মিণীৰ বিবাহ অনুষ্ঠানত অসমীয়া লোক সাংস্কৃতিক উপাদান সুন্দৰ ৰূপত ফুটি উঠিছে। বিষয়টো অধ্যয়নৰ ক্ষেত্রত বিশ্লেষণাত্মক পদ্ধতি অৱলম্বন কৰা হ’ব। আমাৰ গৱেষণা পত্রখনিত শংকৰদেৱৰ ৰুক্মিণীহৰণ নাটত লোক-সাংস্কৃতিক উপাদান সম্পর্কে আলোচনা কৰিবলৈ প্রয়াস কৰা হ’ব।

বীজ শব্দঃ শংকৰদেৱ, ৰুক্মিণী হৰণ, লোক-সাংস্কৃতিক, নাট।

অৱতৰণিকা ঃ

যুগশ্রষ্টা কলাকাৰ আৰু বৈষ্ণৱ গুৰু শংকৰদেৱ অসমীয়া নাট্য সাহিত্যৰ জনক। নৱবৈষ্ণৱ ধর্মৰ প্রচাৰৰ উদ্দেশ্যে গীত, নাট, কাব্য আদি ৰচনা কৰি অসমীয়া ভাষা-সাহিত্য-সংস্কৃতিৰ স্বর্ণসৌধ নির্মাণ কৰিলে। তেখেতে এহাতে যেনেকৈ ভক্তি ধর্মৰ প্রচাৰৰ মাধ্যম হিচাপে গীত-নৃত্য-নাট্যৰ সমাহাৰ ঘটাই অংকীয়া নাটক সৃষ্টি কৰিলে আনহাতে জনসাধাৰণৰ আনন্দ বিনোদনৰ মাধ্যম হিচাপে অসমৰ সাংস্কৃতিক জগতৰ ইতিহাস প্রতিষ্ঠা কৰিলে।

অসমীয়া গদ্য সাহিত্যৰ জনক বুলিলে ভট্টদেৱক বুজো ঠিক তেনেদৰে অসমীয়া নাট্য সাহিত্যৰ জনক বুলিলে শংকৰদেৱক বুজা যায়। তেখেতে নৃত্য গীত আৰু নাটকক ধর্ম প্রচাৰৰ মাধ্যম হিচাপে বাচি লৈছিল। তেখেতে নাট্যভিনয়ৰ যোগেদি সমাজত ভাগৱতৰ তাত্ত্বিক আলোচনাৰ আধ্যাত্মিক চেতনাৰ প্রতি আকর্ষিত কৰাৰ চেষ্টা চলাইছিল। পৰৱর্তী সময়ছোৱাত এই নাটসমূহে একশৰণ নামধর্ম প্রচাৰ কৰা ফলপ্রসু ভূমিকা পালন কৰিবলৈ সক্ষম হৈছিল। তেখেত একাধাৰে নাট্যকাৰ, নাটকৰ প্রযোজক, পৰিচালক, অভিনেতা দার্শনিক সংগীতকাৰ, নৃত্য বিশাৰদ, বাদ্য বাদক কবি, ধর্ম প্রৱর্তক আৰু সমাজ সংস্কাৰক আছিল। তেখেতৰ অমৃত নিধিৰ কাপৰ মাজেৰে নিগৰি ওলোৱা বিভিন্ন সাহিত্যৰাজিৰ ভিতৰত ‘ৰুক্মিণী হৰণ’ এখন উল্লেখযোগ্য নাট। ভাগৱত পুৰাণ আৰু হৰিবংশৰ পৰা মূল সংগ্রহ কৰি নিজস্ব মৌলিকতাৰে কিছু নতুন সংযোজনাৰে ‘ৰুক্মিণী হৰণ’ নাটখনি ৰচনা কৰিছে।

সংস্কৃতি সমাজৰ দাপোন স্বৰূপ। কোনো ৰাজ্য বা অঞ্চলৰ জনসাধাৰণে ,কোনো লোকগোষ্ঠীয়ে লৌকিক আৰু পৰম্পৰাগত ৰীতি-নীতি, আচাৰ-ব্যৱহাৰ, উৎসৱ-পার্বণ, ধর্ম আদি পালন কৰে সেইবোৰেই লোক-সংস্কৃতিৰ স্বৰূপ।
লোক সংস্কৃতিৰ পৰিসৰ ব্যাপক। ৰিচার্ড এম ডাৰচনে লোক সংস্কৃতিক মৌখিক সাহিত্য, ভৌতিক সংস্কৃতি, সামাজিক ৰীতি-

নীতি বা সামাজিক লোকাচাৰ আৰু লোকপৰিৰেশ্য কলা এই চাৰিটা ভাগত ভাগ কৰিছে। ড° নবীন চন্দ্ৰ শৰ্মাদেৱেও লোকবিদ্যাক চাৰিটা ভাগত ভাগ কৰিছে। শৰ্মাই উক্ত ভাগ সমূহক কিছুমান উপশ্ৰেণীত ভাগ কৰিছে এনেদৰে —

ক) মৌখিক লোকবিদ্যা ঃ লোক কাহিনী, লোক কবিতা, লোক মহাকাব্য, লোকোক্তি, সাঁথৰ, লোকভাষা, যোজনা পটন্তৰ, জতুৱা ঠাঁচ অন্তৰ্গত।

খ) সামাজিক লোকাচাৰ ঃ উৎসৱ অনুষ্ঠান, অৱসৰ বিনোদন আৰু খেল-ধেমালি, লোক ঔষধ আৰু লোক ধৰ্ম অন্তৰ্গত।

গ) ভৌতিক সংস্কৃতি ঃ লোকশিল্প, লোককলা, লোক স্থপিত বিদ্যা, লোক আভৰণ, লোক বন্ধন প্ৰণালী অন্তৰ্ভূক্ত।

ঘ) লোক পৰিৰেশ্য কলা ঃ লোক নাট, সংগীত, নৃত্য আদি অন্তৰ্ভূক্ত।

গৱেষণা পত্ৰৰ উদ্দেশ্য ঃ

সাহিত্য, সংস্কৃতি, ৰীতি-নীতি, ৰুচি-অভিৰুচি, সহজ সৰল গ্ৰাম্য জীৱন যাত্ৰাৰ প্ৰণালী 'ৰুক্মিণীহৰণ'নাটত বিদ্যমান। ধৰ্মীয় অনুষ্ঠান, পূজা পাতল, লোকবিশ্বাস, নিয়ম কানুন, সাধু লোকভাষা, পুৰণি আখ্যান উপাখ্যান আদি সকলোৱে সমাহাৰত লোকসংস্কৃতি সম্পূৰ্ণ। লোকসংস্কৃতিৰ এই উপাদান সমূহ শংকৰদেৱৰ 'ৰুক্মিণী হৰণ' নাটত কিদৰে চিত্ৰায়িত হৈছে সেই বিষয়ে আলোচনা কৰাই গৱেষণা পত্ৰৰ মুখ্য উদ্দেশ্য।

গৱেষণাৰ পদ্ধতি আৰু উৎস ঃ

বিষয়টো অধ্যয়নৰ ক্ষেত্ৰত বিশ্লেষণাত্মক পদ্ধতি অৱলম্বন কৰা হৈছে। তথ্য সংগ্ৰহৰ ক্ষেত্ৰত গৌণ উৎস হিচাপে বিষয়ৰ লগত সংগতি থকা বিভিন্ন গ্ৰন্থাদিৰ সহায় লোৱা হৈছে।

বিষয়ৰ আলোচনা ঃ

'ৰুক্মিণীহৰণ' নাটৰ কাহিনীভাগ ভাগৱত পুৰাণ, বিষ্ণুপুৰাণ আৰু হৰিবংশৰ পৰা সমল গ্ৰহণ কৰি শংকৰদেৱে কথাবস্তুক নব্য ৰূপ প্ৰদান কৰি সাৱলীল আৰু ৰমনীয় নাট্য ৰূপ প্ৰদান কৰিছে। অন্য গ্ৰন্থৰ পৰা সংগ্ৰহ কৰি ৰচনা কৰিলেও নাটখনক স্বকীয় ৰূপ প্ৰদান কৰিবলৈ সক্ষম হৈছে। নাটখনত অসমীয়া সমাজ জীৱনত প্ৰতিফলিত হোৱা লোক সাংস্কৃতিক উপাদান সমূহ সুন্দৰ ৰূপত ফুটি উঠা দেখিবলৈ পোৱা যায়। তলত নাটখনত প্ৰতিফলিত হোৱা লোক সাংস্কৃতিক উপাদান সমূহৰ বিষয়ে আলোচনা কৰা হ'ল—

ক) মৌখিক লোকবিদ্যা ঃ সৰ্বসাধাৰণৰ ভাৱ ৰাজিৰ মুকলি প্ৰকাশেই লোক-সাহিত্য বা জন সহিত্য। লোক সমাজত প্ৰচলিত বিভিন্ন ধৰণৰ গীত পদ ফকৰা যোজনা, পটন্তৰ, প্ৰবচন, সাধুকথা, জনশ্ৰুতি, মালিতা, সাঁথৰ আদিয়ে লোক সাহিত্য। অতুল চন্দ্ৰ বৰুৱাই 'অসমীয়া লোক সাহিত্য' গ্ৰন্থত লিখিছে— 'লোক সাহিত্য ৰূপী এই উৰণীয়া পখীটোৰ দুখন পাখি। এখন পদ্যৰ আনখন গদ্যৰ। পদ্যৰ পাখি খনত উঠি বিবিধ গীত, পদ, কবিতা, ফকৰা, যোজনা, শ্লোক আদিয়ে বিভিন্ন ৰূপ লৈ জনমানসক আপ্লুত কৰি ওঁঠ বাগৰি উৰি ফুৰে। আনফালে গদ্যৰ ইখন পাখিত নানা ধৰণৰ আখ্যান উপাখ্যান, উপদেশ, নীতিবচন, শ্লেষোক্তি, ব্যংগোক্তি, ব্যাজোক্তি আদিয়ে বিস্তৃতি লভিবলৈ সুবিধা পায়। এই দুই ফালৰ পৰা চাই লোকসাহিত্যক দুভাগত ভগাব পাৰি। এভাগ সুৰধৰ্মী আৰু আনভাগ জ্ঞানধৰ্মী।" (ডেকা, পৃ. ৪৩৭)

পুৰণি অসমীয়া সমাজত ফকৰা-যোজনা পটন্তৰ, প্ৰবচন, জটুৱা ঠাঁচৰ প্ৰয়োগ প্ৰাক্ শংকৰী, শংকৰী যুগৰ কাব্যৰ উপৰিও মৌখিক সাহিত্যৰ মাজতো দেখিবলৈ পোৱা যায়। কথাই প্ৰতি ব্যক্তি সকলে ফকৰা যোজনা পটন্তৰ, জটুৱা ঠাঁচ প্ৰয়োগ কৰা দেখা যায়। 'ৰুক্মিণীহৰণ' নাটতো এনে ফকৰা, পটন্তৰ, জটুৱা ঠাঁচ বিদ্যমান—

ক) জৈচে কদলিক বাতে উপাড়ল। (মেধি,১৯৯৭,পৃ-১২৩)

খ) হা হা জৈছে সিংহক ভাৰ্য্যাকি ঃ শৃগালে অভিলাস কয় থিক। (মেধি,১৯৯৭,পৃ-১২৬)

গ) তপক মহিমা এ ঃ আকাসক চন্দ্ৰ অনিতে পাৰু ঃ। (মেধি,১৯৯৭,পৃ-১২৮)

ঘ) পাপিক দেখিতে জিউ জাই। (মেধি,১৯৯৭,পৃ-১২৮)

ঙ) এক তিলে কৃষ্ণক আনবু ।(মেধি,১৯৯৭,পৃ-১৩০)

চ) জৈচে সিংহক ভাৰ্য্যা নিতেঃ শৃগাল চুম্পি ৰহয় থিক। (মেধি,১৯৯৭,পৃ-১৩৩)

ছ) হামাৰ বাম অঙ্গ ফান্দে ঃ কুন শুভ বাত কহে। (মেধি,১৯৯৭,পৃ-১৪১)

জ) কাহুক ঠেঙ্গনা দেই ঃ কাহুক গোড়ে মাৰি ভৰ্চয়ঃ। (মেধি,১৯৯৭,পৃ-১৪৭)

ঝ) জৈচে সিংহক আগু ক্ষুদ্ৰ হৰিণ। (মেধি,১৯৯৭,পৃ-১৫২)

ঞ) সিংহক ভয়ে ঃ শৃগাল লৰড়ে। (মেধি,১৯৯৭,পৃ-১৫৪)

ট) জৈচে পতঙ্গ অগনিত জাস কয়ল (মেধি,১৯৯৭,পৃ-১৫৮)

লোক সংস্কৃতিৰ দিশৰ পৰা গালি শপনিৰ এক সুকীয়া তাৎপৰ্য আছে। 'ৰুক্মিণীহৰণ' নাটও এই ক্ষেত্ৰত ব্যতিক্ৰম নহয়।

নাটত সখী লীলাৱতীৰ মুখত ৰুক্মিণীক শিশুপাললৈ বিয়া দিবলৈ ওলোৱা কথাখিনি শুনাৰ পাছত ৰুক্মিণী মূর্চা যায় আৰু লীলাৱতীৰ পৰিচর্যাত সুস্থ হৈ উঠে আৰু কৃষ্ণই তেওঁক ৰক্ষা কৰিব বুলি আশ্বাস দিয়ে। পৰম পুৰুষ ভগৱন্ত কৃষ্ণক পোৱাৰ আশা নেদেখি ৰুক্মিণীয়ে ৰুক্মবীৰক গালি পাৰিছে এনেদৰে—

"হে পাপি সোদৰ ঃ তুহু সাত সত্রুতো অধিক ভেলিঃ প্রাণকৃষ্ণ সহিত কৈচে হামাক বঞ্চিত কয়লি ঃ তুহু জনমি কি নিমিত্তে নাহি মৰলি।" (মেধি,১৯৯৭,পৃ- ১২৫)

অকল ৰুক্মবীৰকেই গালি পৰা নাই বিয়া পাতিবলৈ ঠিক কৰা শিশুপালকো ৰুক্মিণীয়ে কর্কর্থনা কৰিছে এনেদৰে—

"অ এ পাপি সিসুপাল ঃ তুহু হামাক বিবাহ কৰিতে আৱল ঃ হা হা জৈচে সিংহক ভায্যাঁক ঃ শৃগাল অভিলাস কয় থিক।" (মেধি,১৯৯৭,পৃ- ১২৬)

ৰজা ভীষ্মকে ৰুক্মিণীক কৃষ্ণলৈ বিয়া দিবলৈ সিদ্ধান্ত লোৱাত ৰৰপুত্র ৰুক্মবীৰে কৃষ্ণলৈ ভনীয়েকক বিয়া নিদিয়ে আৰু এনেদৰে গালি পাৰিছে —"হে যাদৱ অনাচাৰ ঃ গো বধ ঃ স্ত্রীবধ ঃ মাতুলবধ ঃ কত পাৰা কয় থিক। সে হামাৰ সমন্ধক ঃ জোগ্য হএ নুহি। (মেধি,১৯৯৭,পৃ- ১২১)

'ৰুক্মিণীহৰণ' নাটত ফকৰা, পটন্তৰ, জটুৱাঠাঁচ, গালি শপনি আদি মৌখিক লোকবিদ্যা সুন্দৰকৈ ফুটি উঠা দেখিবলৈ পোৱা যায়।

খ) সামাজিক লোকাচাৰ ঃ লোকাচাৰ মানৱ জীৱনৰ বিবিধ ক্রিয়াৰ সমষ্টিহে, যিবোৰ লোকবিশ্বাসেৰে গাত ভেঁজা দি সমাজত ক্রমবর্ধমান ৰূপত প্রচলিত হৈ আহিছে। কোনো এটা জনগোষ্ঠীৰ মাজত পৰম্পৰাগতভাৱে প্রচলিত হৈ অহা উৎসৱ অনুষ্ঠান, ৰীতি-নীতি, খেল-ধেমালি, লোক-ঔষধ আদিয়েই সামাজিক লোকাচাৰ।

বিবাহ হৈছে এক সামাজিক প্রথা। বিবাহৰ জৰিয়তে যুগ্ম জীৱনৰ পাতনি মেলা হয়। নাটত ৰুক্মিণী বিবাহ উপযুক্ত হোৱাত ভীষ্মক ৰজাইয়ো ৰুক্মিণীক বিয়া দিবৰ কাৰণে সকলোৰে লগত আলোচনা কৰিছে আৰু কৃষ্ণলৈ ৰুক্মিণীক বিয়া দিবলৈ সিদ্ধান্ত লৈছে। ভীষ্মক ৰজাৰ এনে সিদ্ধান্তক নস্যাৎ কৰি ৰুক্মবীৰে তেওঁৰ সখীয়েক শিশুপাললৈ বিয়া দিয়াৰ সিদ্ধান্ত লৈছে। অসমীয়া সমাজৰ ৰৰপুত্রৰ দৰে ৰুক্মবীৰৰ কথাত ভীষ্মক ৰজাই সন্মতি জনাই শিশুপাললৈকে বিয়া দিবলৈ ওলাইছে আৰু পুত্রৰ সিদ্ধান্তত সন্মতি জনাইছে "অ য়ে পুতাঃ বিবাহক নিমিতে ঃ সিসুপালক সত্বৰে আনহ।" (মেধি,১৯৯৭,পৃ- ১২২)

ৰুক্মিণীৰ বিবাহৰ আগদিনা অর্থাৎ অধিবাসৰ দিনা ৰুক্মবীৰে ভগ্নী ৰক্মিণীক সাজি-কাচি ভৱানী মন্দিৰলৈ দেৱী দর্শন কৰি মনৰ কামনা পুৰণৰ নিমিত্তে পঠিয়াই— 'আহে ভগিনি ঃ তুহু অতি সত্বৰে ভূসিত হুয়া ঃ সখি সব সহিতে ঃ ভবানীক মঠে চলহ ঃ আজু অধিবাস ঃ কালি বিবাহক দিৱস ঃ দেৱিক পূজা কৰ গিয়া ঃ আতি সত্বৰে চলহ ঐ চলহ।" (মেধি, ১৯৯৭, পৃ- ১৪২) ইয়াৰ জৰিয়তে পূজা উপাসনা কৰাৰ কথা সূচায়। পূজা উপাসনাও সামাজিক লোকাচাৰৰ অন্তর্গত।

অসমীয়া সমাজৰ বিবাহ-পদ্ধতিত হোম কার্য কৰা, মুখচন্দ্রিকা কৰা, কন্যাৰ পিতৃয়ে কন্যা সম্প্রদান কৰা, দৰা কইনাৰ চুলি লগলগাই পানী ঢালি গোত্র ছেদ কৰা আদি প্রচলিত। শংকৰদেৱেও বিবাহৰ সেই চিত্রসমূহ 'ৰুক্মিণীহৰণ' নাটত সুন্দৰভাৱে সন্নিৱিষ্ট কৰিছে।

"তদন্তৰ ঃ মুখচন্দ্রিকা কৰিতে ঃ ৰুকমিনিক ভূৱন মোহন ৰূপে নিৰেখিএ ঃ ব্রহ্মা মাটি লুটি পৰল ঃ"। (মেধি,১৯৯৭,পৃ- ১৬৩)

বিবাহত পিতৃয়ে কন্যা সম্প্রদান কৰাৰ দৰে, ভীষ্মক ৰজাইয়ো নিজ কন্যা ৰুক্মিণীক সম্প্রদান কৰিছে এনেদৰে— "সোহি সময়ে ৰাজা ভীষ্মকঃ কন্যা সম্প্রদান কৰিও ঃ ৰৰকন্যাক কেস এক ঠাম কয়ে কহোঃ পানি ধালিতে ঃ তথি জৈচে কৌতুক মিলল ঃ। (মেধি,১৯৯৭,পৃ- ১৬৪)

বিয়াৰ পাছত বৰ কন্যাই জেষ্ঠ আৰু আত্মীয়স্বজনক বস্ত্র তামোল পান আদিৰে সেৱা কৰি সন্তুষ্ট কৰা দেখা যায়। 'ৰুক্মিণী হৰণ' নাটতো এই চিত্র সুন্দৰ ৰূপত ফুটি উঠিছে—"তদন্তৰঃ ব্রহ্মাৰুদ্রঃ ইন্দ্র আদি জত দেৱতা ঃ পাতালক বাসুকি প্রভৃতি জত নাগ ঃ পৃথিবিক জত ৰাজা ঃ সবাকো সাদৰে ঃ শ্রীকৃষ্ণ গন্ধ চন্দনে ঃ পুষ্প তাম্বুল ঃ বস্ত্র অলংকাৰে পৰম সন্তুষ্ট কৰাৱল ।" (মেধি,১৯৯৭,পৃ- ১৬৫)

'ৰুক্মিণী হৰণ' নাটখনত ৰুক্মিণীৰ পত্রলৈ বেদনিধিয়ে দ্বাৰকালৈ গৈ কৃষ্ণক সাক্ষাত কৰে। কৃষ্ণক পত্র দিয়াৰ পাছত ভক্তা ৰুক্মিণীক উদ্ধাৰ কৰিবলৈ দ্বাৰকাৰ পৰা কুণ্ডিললৈ তীব্রবেগেৰে ৰথত আহোতে বেদনিধি ৰথত মূর্চা গৈছে আৰু মৃতপ্রায় অৱস্থা হোৱাত কৃষ্ণই বেদনিধিৰ মুৰত পানী ঢালিছে আৰু মুখেৰে ফুৱাই ফুৱাই ধাতু আনিছে। ঠিক তেনেদৰে লীলাবতীৰ মুখেৰে ৰুক্মিণীক শিশুপাললৈ বিয়া দিবলৈ ওলোৱাৰ কথা শুনি ৰুক্মিণী মূর্চা যাওঁতে লীলাৱতীয়ে ৰুক্মিণীৰ মুৰত পানী ঢালিছে। ইয়াৰ জৰিয়তে মানুহ অচেতন হৈ পৰিলে মুৰত পানী ঢালিলে চেতনা পাই বুলি বিশ্বাস কৰাৰ কথাৰ উমান পোৱা যায়।

বাওঁ অংগ লৰিলে ভাল খবৰ পোৱা যায়। নাটতো ৰুক্মিণীৰ বাওঁঅংগ লৰাৰ পাছত বেদনিধিয়ে কৃষ্ণ কুণ্ডিললৈ

অহাৰ খবৰ দিয়ে। ইয়াৰ জৰিয়তে লোকবিশ্বাসৰ সুন্দৰ ছবি এখন ফুটি উঠে।

'ৰুক্মিণীহৰণ' নাটখনত বিবাহ সম্পৰ্কীয়, পূজা উপাসনা আৰু বিশ্বাস আদি সামাজিক লোকাচাৰ সমূহ সুন্দৰ ৰূপত ফুটি উঠিছে।

গ) ভৌতিক সংস্কৃতি ঃ লোক স্থপতি বিদ্যা ভৌতিক সংস্কৃতিৰ অন্তৰ্গত। লোকস্থপতি বিদ্যাত গৃহ নিৰ্মাণ স্থাপত্য ভাস্কৰ্য আদি অন্তৰ্ভুক্ত। 'ৰুক্মিণীহৰণ' নাটত ভীষ্মক ৰজাই ৰুক্মিণীৰ বিবাহ উপলক্ষে আমন্ত্রণ কৰা ৰজাসকলক বাসাঘৰত ৰখাৰ কথা উল্লেখ আছে। কৃষ্ণ ৰুক্মিণীৰ বিবাহৰ হোম কাৰ্যৰ কাৰণে হোমঘৰৰ নিৰ্মাণ। ভবানী মন্দিৰৰ কথাই স্থাপত্যৰ শিল্পৰ কথা সূচায়।

লোক আভৰণ ভৌতিক সংস্কৃতিৰ অন্তৰ্গত। সাজপাৰ, আ-অলংকাৰ প্ৰসাধন, সামগ্ৰী লোক আভৰণৰ অন্তৰ্গত। সৌন্দৰ্য চৰ্চাত নাৰী অতি সচেতন। সুন্দৰ সাজপোছাক, আ-অলংকাৰ পৰিধান কৰি নিজকে সজাই পৰাই নাৰীয়ে ভাল পায়। 'ৰুক্মিণীহৰণ' নাটতো ৰুক্মিণীৰ আ-অলংকাৰ, সাজ-সজ্জাৰ কথাৰ উমান পাওঁ—

"মানিক মুকুট কুণ্ডল গণ্ড ডোল।
কনক পুতলি তনু নিল নিচোল।।
কৰ কঙ্কন কেজুৰ ঝনকাৰ।
মানিক কাঞ্চি ৰচিত হেম হাৰ।" (মেধি,১৯৯৭,পৃ-১১১)

নাটত কৃষ্ণৰ আ-অলংকাৰ, সাজ-সজ্জাৰ বৰ্ণনা দিছে এনেদৰে—

"স্যামল তনু পিত অম্বৰু লামা।
বদন ইন্দু ৰুচি ইমত হাসা।।
নয়ন পঙ্কজ ভূজ লম্বিত জানু।
কণ্ঠে কৌস্তভ নৰ শোভিত ভানু।।
হাৰ মুকুট মনি কুণ্ডল ডোলে।
চৰণ পঙ্কজ মহ মঞ্জিৰ ৰোলে।।" (মেধি,১৯৯৭,পৃ-১১০)

লোক ৰন্ধন প্ৰণালীও ভৌতিক সংস্কৃতিৰ অন্তৰ্গত। 'ৰুক্মিণী হৰণ' নাটত বেদনিধিয়ে ৰুক্মিণীৰ পত্ৰ লৈ দ্বাৰকালৈ যোৱাৰ পাছত কৃষ্ণই বেদনিধিক দেখি প্ৰথমে আলিঙ্গন কৰি ভৰি ধুৱাই পঞ্চামৃত ভোজন কৰাৰ কথাই লোক ৰন্ধন প্ৰণালীৰ ইংগিত বহন কৰে।

"ব্ৰাহ্মণক প্ৰণামি ঃ আলিঙ্গি ধৰিএ ঃ অভ্যন্তৰ প্ৰৱেস কৰাৱল ঃ স্বহস্তে পাৱ পখালিএ পঞ্চামৃত ভুঞ্জাৱলঃ" (মেধি,১৯৯৭,পৃ- ১৩১)

কৃষ্ণৰ মুখপদ্ম চাবৰ কাৰণে ৰুক্মিণীয়ে সখিসকলৰ লগত কৰ্পূৰ তাম্বুল ভোজন কৰাৰ কথা উল্লেখ পাওঁ।

আকৌ বিয়ালৈ অহা সকলোকে কৃষ্ণ ৰুক্মিণীয়ে গন্ধ চন্দন পুষ্প তাম্বুল ভোজন কৰোৱাৰ কথা নাটত উল্লেখ আছে।

মুখশুদ্ধি হিচাপে কৰ্পূৰ তামোল-পান অসমীয়া সমাজত প্ৰচলিত আৰু আলহী অতিথিক কৰ্পূৰ তামোল দি আপ্যায়ন কৰে। 'ৰুক্মিণীহৰণ' নাটো ইয়াৰ ব্যতিক্ৰম নহয়।

'ৰুক্মিণীহৰণ' নাটত লোকস্থপতি বিদ্যা, লোক আভৰণ, লোক বন্ধন প্ৰণালী আদি ভৌতিক সংস্কৃতিৰ সুন্দৰ নিদৰ্শন পাওঁ।

ঘ) লোক-পৰিৱেশ্য কলা ঃ পৰিৱেশন কৰিব পৰা কলাই হ'ল পৰিৱেশ্য কৰা। লোকজীৱনৰ অন্যতম অংগ লোক পৰিৱেশ্য কলাই নিৰ্দিষ্ট ৰূপৰ মাজেদি স্বৰূপাৰ্থত লিখিত বা বাচিক কলাক চাক্ষুস ৰূপ দিয়ে। গীত, নৃত্য, নাট আদি লোক পৰিৱেশ্য কলাৰ প্ৰধান অংগ।

'ৰুক্মিণীহৰণ' নাটত কৃষ্ণৰ প্ৰৱেশৰ সময়ত দেৱ দুন্দুভি বাদ্য বজোৱা কথাই এবিধ মাংগলিক বাদ্য ব্যৱহাৰ কৰা কথা উমান পোৱা যায়।

'ৰুক্মিণীহৰণ' নাটত কৃষ্ণৰ প্ৰৱেশত বিহাৰ নৃত্য, ৰুক্মিণীৰ প্ৰৱেশত নৃত্য কৰা কথা উল্লেখ পাওঁ। 'ৰুক্মিণীহৰণ' নাটত বাদ্য আৰু নৃত্যৰ ব্যৱহাৰৰ জৰিয়তে লোক পৰিৱেশ্য কলা সুন্দৰ ৰূপত ফুটি উঠিছে।

সামৰণিঃ ওপৰৰ আলোচনাৰ পৰা দেখা গ'ল যে শংকৰদেৱৰ 'ৰুক্মিণীহৰণ' নাটত অসমীয়া সমাজৰ জীৱনৰ সকলো দিশৰ লগতে লোক সাংস্কৃতিক উপাদান মৌখিক-লোকবিদ্যা, সামাজিক-লোকাচাৰ, ভৌতিক সংস্কৃতি আৰু লোক পৰিৱেশ্য কলাসমূহ সঠিক আৰু সুন্দৰ ভাৱে ৰূপায়িত হৈছে। গতিকে শংকৰদেৱৰ 'ৰুক্মিণীহৰণ' নাটখন লোক সাংস্কৃতিক সমলেৰে ভৰপূৰ এখন সাৰ্থক নাটক।

গ্ৰন্থপঞ্জী ঃ

১. মেধি কালিৰাম ঃ অঙ্কাৱলী, লয়াৰ্ছ বুক ষ্টল, গুৱাহাটী ১৯৯৭
২. শৰ্মা নবীনচন্দ্ৰ ঃ অসমীয়া লোক সংস্কৃতিৰ আভাস, বাণী প্ৰকাশ, গুৱাহাটী ২০১৬
৩. ডেকা কনক চন্দ্ৰ (সম্পা.) ঃ অতুল চন্দ্ৰ বৰুৱাৰ ৰচনাৱলী।
৪. দাস কৈলাস ঃ অসমীয়া ভক্তি সাহিত্য শ্ৰীমন্ত শংকৰদেৱ সংঘ, কলিতা ৰজিতা মৰল (সম্পা.) নগাঁও জিলা শাখা, নগাঁও ২০০৬।

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জনজাতীয় সমাজৰ নাৰীৰ দৈনন্দিন জীৱনধাৰাত বিশ্বায়নৰ প্ৰভাৱ

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সংক্ষিপ্ত সাৰ

কুৰি শতিকাৰ নব্বৈ দশকৰ পৰা 'বিশ্বায়ন' শব্দটোৰ সঘন উচ্চাৰণ হৈছে। 'বিশ্বায়ন' ইংৰাজী 'Globalization' শব্দৰ অসমীয়া ৰূপান্তৰ। বৰ্তমানে বিশ্বায়নক অতি সহজতে আৰু একেকোবেই দেশ-বিদেশৰ সকলো মানুহকে, সকলো সংস্কৃতিকে পৰস্পৰৰ ওচৰ চপাই অনাৰ এক সহজাত প্ৰক্ৰিয়া বুলি অভিহিত কৰা হয়। সহজ অৰ্থত ক'বলৈ হ'লে বিশ্বায়নে সমগ্ৰ বহল পৃথিৱীখনক এখন সৰু গাঁৱলৈ ৰূপান্তৰিত কৰিলে। বিশ্বায়নৰ প্ৰভাৱত মানৱ সমাজে ঐতিহ্যৰ পৰিৱৰ্তে আধুনিকতাৰ প্ৰতি আকৰ্ষিত হৈছে। কলা-সংস্কৃতিৰ উপৰি মানুহৰ স্বভাৱ, আচাৰ-ব্যৱহাৰ, চাল-চলনতো এক অভূতপূৰ্ব পৰিৱৰ্তনে দেখা দিছে। অসম তথা উত্তৰ-পূৰ্বাঞ্চল জনজাতীয় লোকৰ বাসভূমি। তেওঁলোকৰ সমাজ ব্যৱস্থা মূলতঃ মাতৃপ্ৰধান। মাতৃপ্ৰধান সমাজত নাৰীয়ে সদায়ে এক গুৰুত্বপূৰ্ণ ভূমিকা গ্ৰহণ কৰে। বিশ্বায়নে কিদৰে সমগ্ৰ বিশ্বৰ ওপৰত সুদূৰ প্ৰসাৰী প্ৰভাৱ পেলোৱাৰ লগতে পৰিৱৰ্তন সাধন কৰি সমাজ জীৱনক প্ৰভাৱান্বিত কৰিছে এই বিষয়ে দৃষ্টি আকৰ্ষণ কৰাৰ লগতে জনজাতীয় সমাজৰ নাৰীৰ দৈনন্দিন জীৱনধাৰা কিদৰে বিশ্বায়নৰ দ্বাৰা প্ৰভাৱান্বিত হৈছেতাক এই গৱেষণাপত্ৰৰ মাজেৰে আলোচনা কৰিব বিচৰা হৈছে।

বীজ শব্দ ঃ বিশ্বায়ন, জনজাতি, জীৱনধাৰা, সমাজ

সূচনা ঃ

বিশ্বায়ন এক বহুল প্ৰচাৰিত আৰু বিতৰ্কিত ধাৰণা। বিশ্বায়ন মানেই হ'ল আধুনিকতাৰ পৰশত সৃষ্ট এক পৰিৱৰ্তনমুখী প্ৰক্ৰিয়া। বিশ্বায়ন যি ইংৰাজী 'Globalization' শব্দৰ অসমীয়া প্ৰতিশব্দৰূপে ব্যৱহৃত এক ৰূপ। বিশ্বায়নে একোখন সমাজৰ অৰ্থনৈতিক ক্ষেত্ৰতে নহয় ভাষা, সাহিত্য সংস্কৃতিৰ লগতে সামাজিক জীৱন ধাৰাৰো পৰিৱৰ্তন অনা পৰিলক্ষিত হয়। পুৰুষ আৰু মহিলা উভয়ৰে সুসংৰদ্ধ ৰূপেৰে গঠিত হয় একোখন সমাজ। জনজাতীয় সমাজো ইয়াৰ ব্যতিক্ৰম নহয়। তেওঁলোক বান্ধ খাই থাকে এক সুনিৰ্দিষ্ট সামাজিক জীৱন ধাৰাৰে। সামাজিক জীৱন ধাৰা বুলি ক'লে একোটা অঞ্চলৰ মানুহৰ জীৱনৰ চিন্তাধাৰা, দৈনন্দিন অভিজ্ঞতা, ৰীতি-নীতি, আচাৰ-ব্যৱহাৰ, খাদ্যাভাষ ইত্যাদিকে সামৰি লোৱা হয়।

সামাজিক জীৱনধাৰা যিহেতু মানব সৃষ্ট, সেয়েহে যুগৰ পৰিৱৰ্তনৰ লগে লগে মানুহৰ সামাজিক জীৱন ধাৰণ প্ৰণালীৰো পৰিৱৰ্তন হয়। জনজাতীয় সমাজৰ ক্ষেত্ৰত ই ব্যতিক্ৰম নহয়। প্ৰযুক্তিগত উৎকৰ্ষ তথা যোগাযোগ ব্যৱহাৰ অভূতপূৰ্ব উন্নয়নৰ মাধ্যম স্বৰূপ বিশ্বায়ন প্ৰক্ৰিয়াই জনজাতীয় সমাজকো নানাভাৱে প্ৰভাৱান্বিত কৰিছে।

জনজাতীয় সমাজ হ'ল মাতৃপ্ৰধান সমাজ। পিতৃতান্ত্ৰিক সমাজ ব্যৱস্থাৰ বিপৰীতে তেওঁলোকে মাতৃতান্ত্ৰিক সমাজ ব্যৱস্থাৰ ওপৰত অধিক গুৰুত্ব প্ৰদান কৰে। জনজাতীয় সমাজৰ সকলো ক্ষেত্ৰতে পুৰুষতকৈ নাৰীৰ অধিকাৰ বেছি। তেওঁলোকৰ পৰিয়াল পৰিচালনা, অৰ্থনৈতিক স্বাৱলম্বিতা, সামাজিক-সাংস্কৃতিক ক্ষেত্ৰত গুৰুত্বপূৰ্ণ অংশগ্ৰহণৰ পৰা ক'ব পাৰি যে, জনজাতীয়

সমাজৰ দৈনন্দিন জীৱনধাৰাত নাৰীয়ে এক বিশিষ্ট ভূমিকা গ্ৰহণ কৰি আহিছে।

অধ্যয়নৰ লক্ষ্য আৰু উদ্দেশ্য ঃ

বিশ্বায়নৰ প্ৰভাৱত জনজাতীয় সমাজৰ নাৰীৰ আধুনিক জীৱনযাত্ৰা কোন দিশে ধাৱমান হৈছে নতুবা বিশ্বায়নৰ প্ৰভাৱ আজিৰ আধুনিক জীৱন যাত্ৰাত কিদৰে প্ৰাসঙ্গিক আৰু গুৰুত্বপূৰ্ণ সেই কথা বিচাৰ কৰি চোৱাই আমাৰ আলোচনা পত্ৰৰ অন্যতম এক উদ্দেশ্য। লগতে ইয়াৰ ইতিবাচক আৰু নেতিবাচক দিশসমূহৰ পৰ্যালোচনাও আমাৰ আন এক উদ্দেশ্য।

অধ্যয়নৰ পদ্ধতি ঃ

আলোচনা পত্ৰখন প্ৰস্তুত কৰোঁতে প্ৰধানতঃ বিশ্লেষণাত্মক পদ্ধতি গ্ৰহণ কৰা হৈছে। তাৰোপৰি, জনজাতীয় সমাজৰ ওপৰত ৰচিত বিভিন্ন ধৰণৰ গ্ৰন্থ, আলোচনী; বিশ্বায়নৰ ওপৰত ৰচিত বিভিন্ন প্ৰৱন্ধ, গ্ৰন্থ ইত্যাদিৰ সহায় লোৱা হৈছে। প্ৰাপ্ত তথ্যসমূহক ওপৰোক্ত পদ্ধতিৰ সহায়ত বিশ্লেষণ কৰা হৈছে।

বিষয় সম্বন্ধে আলোচনা ঃ

অসম তথা উত্তৰ-পূৰ্বাঞ্চল অতি প্ৰাচীনকালৰে পৰা বিভিন্ন জাতি-জনজাতিৰ মিলনভূমি। পাহাৰে-ভৈয়ামে বসবাস কৰি আহিছে বিভিন্ন জনজাতিৰ লোকসকল। এই জনজাতীয় সমাজত অগ্ৰণী ভূমিকা পালন কৰা মহিলাসকলে দৈনন্দিন জীৱনৰ কাম-কাজসমূহ নিজেই কৰা পৰিলক্ষিত হয়। অজনজাতীয় মহিলাতকৈ জনজাতীয় মহিলাই আৰ্থিক, সামাজিক, সাংস্কৃতিক ক্ষেত্ৰত অগ্ৰণী ভূমিকা গ্ৰহণ কৰা দেখা যায়। বৰ্তমান যুগ বিশ্বায়নৰ যুগ। এই বিশ্বায়নৰ যুগত জনজাতীয় সমাজৰ মহিলাৰ দৈনন্দিন জীৱনধাৰাত বিশ্বায়নৰ প্ৰভাৱ কিধৰণে পৰিছে তাক তলত বিস্তৃতভাৱে আলোচনা কৰা হওক ঃ

অৰ্থনৈতিক ক্ষেত্ৰত বিশ্বায়নৰ প্ৰভাৱ ঃ

জনজাতীয় সমাজৰ অৰ্থনীতিৰ মূল ভেটি কৃষি ৰূপে প্ৰাচীন কালৰেপৰা চিহ্নিত হৈ আহিছে। পুৰুষ-মহিলা উভয়ে কৃষি কাৰ্যত সমানে অংশগ্ৰহণ কৰা দেখা যায়। পাহাৰত কৰা ঝুম খেতি আৰু ভৈয়ামত কৰা পানী খেতি (wet cultivation) জনজাতীয় লোকৰ মূল খেতি। তেওঁলোকে মূলতঃ ধানখেতি কৰিলেও শিমলু, আলু, কচু, বেঙেনা, জলকীয়া, কোমোৰা, লাউ লগতে গাৰো পাহাৰৰ কোনো কোনো অঞ্চলত কপাহৰ খেতিও কৰা দেখা যায়। তেওঁলোকে খেতিত ৰাসায়নিক সাৰৰ পৰিৱৰ্তে জৈৱিক সাৰৰ প্ৰয়োগৰ ওপৰত গুৰুত্ব দিয়া দেখা যায়। যাৰ বাবে হয়তো দৈনন্দিন বজাৰত জনজাতীয় মহিলাৰ দ্বাৰা উৎপাদিত শাক-পাচলিৰ আদৰ বহু বেছি। শিক্ষাৰ পোহৰ পোৱাৰ লগে লগে বিজ্ঞান সন্মত ভাৱে প্ৰশিক্ষিত হৈ কৰা অনাৰস, কল আৰু কমলা খেতিয়ে সমগ্ৰ ভাৰতবৰ্ষত এক বিশেষ মৰ্যদা লাভ কৰিবলৈ সক্ষম হৈছে।

কৃষি কৰ্মৰ ক্ষেত্ৰত জনজাতীয় সমাজত পুৰুষ-মহিলা উভয়ৰ ওপৰত বিশ্বায়নৰ প্ৰভাৱ লক্ষণীয়। আধুনিক প্ৰযুক্তিবিদ্যাৰ ব্যৱহাৰৰ জৰিয়তে তেওঁলোকৰ কৃষি ক্ষেত্ৰত যথেষ্ট কষ্ট লাঘৱ হৈছে। ঝুম খেতিৰ পৰিৱৰ্তে এধলীয়া মাটিত খেতি কৰাৰ প্ৰতি তেওঁলোক অধিক আগ্ৰহী হোৱা পৰিলক্ষিত হয়। পৰম্পৰাগত খেতিক বাদ দি বৰ্তমানৰ প্ৰজন্মই চাকৰি ব্যৱসায় ইত্যাদি ক্ষেত্ৰত অধিক আত্মনিয়োগ কৰা দেখা যায়। বিশ্বায়নৰ প্ৰভাৱৰ ফলত পৰম্পৰাগত কৃষি-কাৰ্য লোপ পোৱাৰ লগে লগে তাৰ লগত ব্যৱহৃত বাঁহ-বেতেৰে সজোৱা সঁজুলি, নাঙল, কোৰ, মৈ, ডুলি, পাচি ইত্যাদিৰো ব্যৱহাৰ নোহোৱা হৈ পৰিল।

উত্তৰ-পূৰ্ব ভাৰতৰ জনজাতীয় মহিলাসকল মাজত উদ্যোগীকৰণৰ অন্যতম বৈশিষ্ট হ'ল হস্ততাঁত বোৱা আৰু বাঁহ-বেতৰ দৈনন্দিন জীৱনত ব্যৱহৃত সামগ্ৰী প্ৰস্তুত কৰা। অসম, মণিপুৰ, নাগালেণ্ডৰ দৰে ৰাজ্যই নিজৰ পৰম্পৰাগত বস্ত্ৰৰ আৰ্হি আৰু অন্যান্য বয়ন কৌশলৰ বাবে বিখ্যাত। এই খণ্ডত মহিলা নেতৃত্বাধীন উদ্যোগসমূহ কেৱল পৰম্পৰাগত শিল্পৰূপ সংৰক্ষণ কৰাই নহয়, নিজ নিজ অঞ্চলৰ অৰ্থনীতিতো যথেষ্ট অৰিহণা যোগায়। বিভিন্ন জ্যামিতিক আৰ্হি, ফুল-চৰাইৰ আৰ্হিৰে ৰং-বিৰিঙৰ সূতাৰে বৰোসকলৰ দখনা, ৰাভাসকলৰ পাতানি, হাজং কোচসকলৰ নাৰীৰ কাম্বাং, গংগোমাৰি, গাৰো নাৰীয়ে পিন্ধা দাগবন্ধা, মণিপুৰৰ মহিলাই পিন্ধা ফানেক, মিজো পুৰুষ-মহিলা উভয়ে পৰিধান কৰা পুআন, ত্ৰিপুৰাৰ জনজাতীয় মহিলাৰ দ্বাৰা প্ৰস্তুত ৰেয়াং জামাটিয়া অন্যতম। এই বস্ত্ৰ উৎপাদনৰ জৰিয়তে তেওঁলোকে বহুপৰিমাণে অৰ্থনৈতিক ক্ষেত্ৰত স্বাৱলম্বী হোৱা দেখা যায়।

বস্ত্ৰৰ ক্ষেত্ৰতো দেখা যায় যে, আজিৰ নৱপ্ৰজন্মই পৰম্পৰাগত সাজৰ সলনি পাশ্চাত্য সাজৰ প্ৰতি অধিক পৰিমাণে আকৰ্ষিত হৈছে। আজিৰ বিশ্বায়নৰ প্ৰভাৱত পৃথিৱীখন এক ক্ষুদ্ৰ গাঁৱলৈ পৰিণত হোৱাৰ ফলস্বৰূপে পৰম্পৰাগত সাজৰ সলনি সকলোৰে কম খৰছত আধুনিকতাৰ দোহাই দি পাশ্চাত্য সাজ-সজ্জাক আদৰি লৈছে। যাৰ ফলত হস্ত বস্ত্ৰ শিল্পই বিদ্যুৎ চালিত তাঁতশালৰ লগত ফেৰ মাৰিব নোৱাৰাৰ ফলত জনজাতীয় মহিলাৰ পৰম্পৰাগত বয়নশিল্প ক্ষতিগ্ৰস্ত হোৱাই নহয়, মাকৰ পৰা জীয়েকলৈ উত্তৰাধিকাৰী সূত্ৰে গতি কৰা বয়নশিল্প মৃত্যুৰ

গৰাহলৈও গৈ আছে।

বৰ্তমান যুগ প্লাষ্টিকৰ যুগ। বাঁহ-বেতেৰে উৎপাদিত সামগ্ৰীৰ স্থায়িত্ব কম; অধিক খৰচী। বিশ্বায়নৰ প্ৰভাৱত কম খৰছত কম সময়ত পাব পৰা সামগ্ৰী আহি ঘৰৰ মজিয়া পোৱাৰ ফলত পৰম্পৰাগত বাঁহ-বেতৰ শিল্পই অধিক পৰিমাণে ক্ষতিগ্ৰস্ত হোৱা পৰিলক্ষিত হয়। ইয়াৰ পৰা এটা কথা নিশ্চিত যে, বিশ্বায়নে এই লোকশিল্পসকলৰ পানীত হাঁহ নচৰা অৱস্থাৰ সৃষ্টি কৰিছে। বিদেশী ৰং-বিৰঙৰ সামগ্ৰীৰ আমদানিয়ে লোকশিল্পীসকলৰ উৎপাদিত সামগ্ৰীৰ সমাদৰ যথেষ্ট হ্ৰাস কৰিছে।

সামাজিক ক্ষেত্ৰত বিশ্বায়নৰ প্ৰভাৱ ঃ

জনজাতীয় সমাজত নাৰীয়ে গুৰুত্বপূৰ্ণ ভূমিকা গ্ৰহণ কৰাটো সৰ্বজনবিদিত। জন্ম-মৃত্যু বিবাহৰ লগত জড়িত হৈ আছে বিভিন্ন ধৰণৰ সামাজিক ৰীতি-নীতিসমূহ। ইয়াৰ ভিতৰত অতি প্ৰাচীন কালৰে পৰা ৰাভাসমাজত সন্তান জন্ম হ'লে 'চাউনী' (অভিজাত ধাই জাতীয় নাৰী) সন্মান সহকাৰে সহায় লোৱা হয়। জন্মৰ দৰে মৃত্যুৰ ক্ষেত্ৰতো নাৰীসকলে বিভিন্ন ধৰণৰ ৰীতি-নীতি পালন কৰা দেখা যায়। তাৰ ভিতৰত জনজাতীয় সমাজৰ ভিতৰত ৰাভা সমাজেই একমাত্ৰ সমাজ য'ত মানুহৰ মৃত্যু হ'লে পইচাৰ বিনিময়ত 'চিবাজক' নামৰ কান্দিবলৈ নাৰীক আনিব পাৰি। এইসকলে, শোকগীত গাই মৃতকৰ গুণানুকীৰ্তন কৰে। ৰাভাৰ দৰে গাৰো সমাজতো জন্ম-মৃত্যু বিবাহৰ লগত নাৰীজনিত সামাজিক লোকাচাৰ দেখা যায়। অপদেৱতাৰ পৰা ৰক্ষা পাবলৈ গৰ্ভৱতী নাৰী আৰু সন্তানৰ মংগলৰ বাবে এটা জীয়া কুকুৰা বা গাহৰি বলি দিয়া দেখা যায়। সেইদৰে, 'মাঙোনা' নামৰ সমূহীয়া শ্ৰাদ্ধ অনুষ্ঠানতো নাৰীৰ ভূমিকা গুৰুত্বপূৰ্ণ। গাৰোৰ মাজত প্ৰচলিত 'নোখ্ৰম বিয়া'ত ছোৱালীয়ে দৰা বিচাৰি ঘৰজোঁৱাই কৰি ৰাখে। ইয়ে নাৰী স্বাধীনতাৰ কথাকে কয়। 'নিকনি প্ৰথা' (মাতৃতান্ত্ৰিক) হাজংসকলৰ মাজত থকা 'প্ৰসূতি গৃহ'ই মাতৃ আৰু সন্তানক একচেতিয়া কৰি ৰখাৰ মাজেদি পৰিস্কাৰ পৰিচন্নতাকে বুজায়। এইদৰে, দেখা যায় জনজাতীয় সমাজত প্ৰচলিত নাৰীজনিত বিভিন্ন লোকাচাৰ।

বৰ্তমান খৃষ্টান মিছনেৰীসকল আৰু বিশ্বায়নৰ প্ৰভাৱত পৰি পাশ্চাত্য ভাৱধাৰাৰে প্ৰভাৱিত হৈ তাৰ পৰা শিক্ষা লাভ কৰাৰ ফলতে হওক, তেওঁলোকে পুৰণি ৰীতি-নীতি, আচাৰ-ব্যৱহাৰ ইত্যাদিক পাহৰি নতুনক আদৰি লৈছে। তেওঁলোকে বিবাহ আদি অনুষ্ঠান গীৰ্জাঘৰত, সন্তান জন্ম চিকিৎসালয়ত কৰাৰ ফলস্বৰূপে তাৰ লগত প্ৰাচীনকালৰে পৰা চলি অহা ৰীতি-নীতিবোৰো নোহোৱা হ'ল। তাৰোপৰি জনজাতীয় সমাজত বৰ্তমানে পুৰুষ-নাৰী উভয়ে জন্ম-বিবাহ ইত্যাদি সকলো অনুষ্ঠানতে পাশ্চাত্য সংস্কৃতিৰ প্ৰভাৱেৰে প্ৰভাৱন্বিত হৈ কেককটা, হোটেল, ৰেষ্টুৰা ইত্যাদিত নিশালৈ পাটি কৰাতো যেন এক নিয়মত পৰিণত হৈছে।

এখন স্বাস্থ্যকৰ সমাজৰ মূল ভেটি হ'ল তেওঁলোকৰ খাদ্যভাস। জনজাতীয় সমাজ সহজ-সৰল খাদ্যৰ প্ৰতি আগ্ৰহী হোৱা দেখা যায়। তেওঁলোকৰ খাদ্যত তেল মচলাৰ প্ৰভাৱ তেনেই কম। সিজাই নাইবা পুৰি খাদ্য গ্ৰহণ কৰাৰ ক্ষেত্ৰত তেওঁলোক আগ্ৰহী। জনজাতীয় সমাজৰ প্ৰধান খাদ্য ভাত। ভাতৰ লগত বিবিধ ব্যঞ্জন, মাটিমাহ, ঔটেঙা, লাউ, শাকোতা বা তিতা ফুলৰ খাৰ, চাউলৰ গুৰিৰে ৰন্ধা, সিজোৱা, মাংস, মাছ, বিবিধ শাক সিজোৱা ইত্যাদি খাদ্যৰূপে গ্ৰহণ কৰে। ৰান্ধনি ঘৰৰ ক্ষেত্ৰত মহিলা সকলে পবিত্ৰতা বৰ্তাই ৰখা পৰিলক্ষিত হয়। জনজাতীয় মহিলাসকলে প্ৰতিদিনে ৰান্ধনি ঘৰৰ মজিয়া সাৰি-মুচি খাদ্য পৰিৱেশন কৰে। কিন্তু, বৰ্তমানে ৰান্ধনি ঘৰৰ পবিত্ৰতা তথা ৰীতি-নীতি নোহোৱা হ'ল। খাদ্য দ্ৰব্যৰ প্ৰস্তুতি আৰু পৰিৱেশন আনকি খোৱাৰ ধৰণতো পশ্চিমীয়া সংস্কৃতি সোমাই পৰিল। বৰ্তমানে বিশ্বায়নৰ প্ৰভাৱত বিভিন্ন খাদ্য- দ্ৰব্যৰ লোভনীয় বিজ্ঞাপন চাই তেল মচলাৰ প্ৰয়োগ বঢ়ালে। জনজাতীয় সমাজৰ গৃহিনীয়েও সিজোৱা পিঠা, সান্দহ, হুৰুম ইত্যাদিক এলাগী কৰি ফ্ৰাইড ৰাইচ, চাওমিন, কেক ইদ্যাদিক ল'ৰা-ছোৱালীৰ দাবীত আদৰি ল'বলৈ বাধ্য হ'ল।

সাংস্কৃতিক ক্ষেত্ৰত বিশ্বায়নৰ প্ৰভাৱ ঃ

সংস্কৃতিৰ পৰিচয় ঘটে কোনো এক সমাজৰ দৈনন্দিন জীৱনত পালিত হোৱা বিভিন্ন ধৰণৰ উৎসৱ-অনুষ্ঠানৰ লগত সংগতি ৰাখি পৰিৱেশিত গীত-মাত, নৃত্যৰ মাজেৰে। সংস্কৃতি বজাই ৰখাৰ ক্ষেত্ৰত জনজাতীয় সমাজত পুৰুষ-নাৰী উভয়ে গুৰুত্বপূৰ্ণ ভূমিকা গ্ৰহণ কৰে যদিও এনে ক্ষেত্ৰত নাৰীৰ ভূমিকা সৰ্বাধিক। কোনো কোনো ক্ষেত্ৰত আমি দেখিবলৈ পাও পুৰুষতকৈ নাৰীৰ লগত জড়িত অনুষ্ঠানসমূহৰ মাজেৰে নাৰীয়ে সংস্কৃতিৰ সংৰক্ষণ আৰু সংবৰ্দ্ধনত এক গুৰুত্বপূৰ্ণ ভূমিকা গ্ৰহণ কৰে।

জনজাতীয় সমাজৰ অন্যতম বড়ো-ৰাভা সকলৰ লোকগীতসমূহত নাৰীৰ ভূমিকা অন্যতম। বিবাহ-উৎসৱৰ বিভিন্ন উপলক্ষত গোৱা 'হাবামেথায়' (বিয়াগীত) সমূহত বড়ো নাৰীৰ মনৰ প্ৰকাশ পোৱা যায়। বাইসাগু উৎসৱ (বহাগ বিহু)ত গোৱা বাইসাগু মেথায় (বিহুগীত)ৰ মাজেৰে বড়ো নাৰীৰ কল্পনা শক্তি তথা সাংস্কৃতিক মনৰ পৰিচয় পোৱা যায়। ৰাভাসকলৰ মূল আৰাধ্যা

দেৱী 'বায়খো দেবী' বা 'খক্‌চি দেবী'ৰ লগত জড়িত নাৰীকেন্দ্রিক গীতসমূহে ৰাভা সংস্কৃতিৰ পৰিচয় দাঙি ধৰে। শিশু আৰু মাতৃৰ মৰমৰ বান্ধোন নিক্‌পকীয়া কৰি তোলা সুমুধুৰ 'কথা জিক্‌চে' (নিচুকনী গীত) গাৱো নাৰীৰ অনাবিল মাতৃ প্রেমৰ নিদর্শন দাঙি ধৰে। সময়ৰ গৰাহত এই গীতসমূহো হেৰাই যাবলৈ ধৰিছে।

বর্তমান সময় বিশ্বায়নৰ সময়। সেয়েহে, আমি দেখিবলৈ পাওঁ এখন দেশৰ লগত আন এখন দেশৰ পাৰস্পৰিক সাংস্কৃতিক বিনিময়ক। যোগাযোগ আৰু প্রযুক্তিগত ব্যৱস্থাৰ অভূতপূর্ব উন্নয়নৰ মাধ্যমেই জনজাতীয় সমাজৰ সংস্কৃতিকো প্রভাৱান্বিত কৰিছে। শিক্ষাৰ প্রচাৰ আৰু প্রসাৰৰ মাজেৰে জীৱন ধাৰণৰ মান উন্নত হোৱাৰ লগতে জনজাতীয় সমাজৰ পুৰুষ-নাৰী উভয়ৰে বিশ্বৰ সাহিত্য, সংগীত শিল্পৰ অতি সহজতে পৰিচয় হ'ব ধৰিছে। আনফালে, বিশ্বায়নে লোক সংস্কৃতিৰ ক্ষেত্রখনকে একত্রিত কৰি পেলোৱাৰ ফলত মানুহৰ চাল-চলন, খাৱন-শোৱন, পিন্ধন-উৰণ, সাজ-সজ্জা, ৰীতি-নীতি, আচাৰ-ব্যৱহাৰ, ৰুচীবোধ আদি জনজাতীয় সমাজৰ নাৰীজনিত লোক-সংস্কৃতিৰ বৈচিত্রসমূহ লোপ পাবলৈ ধৰিছে।

আধুনিকতাৰ লগে লগে এনেধৰণৰ বিশ্বাসৰ ওপৰত মানুহৰ আস্থা ক্রমাৎ কমি আহিছে। জনজাতীয় সংস্কৃতিৰ বহল পথাৰখন আগুৰি থকা বিভিন্ন নাৰীজনিত অনুষ্ঠানবোৰত এক বৃহৎ পৰিবর্তন লক্ষ্য কৰা যায়। জনজাতীয় সমাজৰ নাৰীয়ে বিভিন্ন উৎসৱ-পার্বনত একগোট হৈ মনৰ আনন্দত প্রকৃতিৰ লগত সংযুক্ত হৈ গোৱা গীত-মাত সমূহ, প্রবাদ, প্রবচন, ফকৰা-যোজনা, সাঁথৰ-লোককথা লোক-কাহিনী আদি মৌখিক কলাসমূহৰ মাজেৰে প্রকাশ পোৱা লোকজীৱনৰ জ্ঞান-অভিজ্ঞতা, আশা-আকাংশা, প্রেম-বিৰহ, বিশ্বাস-ধাৰণা আদি জনজাতীয় সমাজৰ পৰা হেৰাই যাবলৈ ধৰাটো সঁচাকৈ দুর্ভাগ্যজনক।

ইতিবাচক দিশ ঃ

সকলো বস্তুৰে ভাল-বেয়া দুই ধৰণৰ দিশ থাকে। যাক এটা মুদ্রাৰে ইপিঠি-সিপিঠি বুলি ক'লেও ভুল নহ'ব। বিশ্বায়নেও জনজাতীয় সমাজৰ নাৰীৰ সামগ্রীক জীৱনলৈ পৰিৱর্তন কঢ়িয়াই আনিছে। এই পৰিৱর্তনে কিছুমান আশাৰ বতৰা কঢ়িয়াই অনা বুলি ক'লেও ভুল কোৱা নহ'ব। বিশ্বায়নে জনজাতীয় সমাজৰ নাৰীৰ ক্ষেত্রত পেলোৱা কিছুমান ইতিবাচক দিশ হ'ল -

- বিশ্বায়নৰ ফলত জনজাতীয় মহিলাৰ জীৱন যাত্রাৰ মান উন্নত হৈছে।
- জনজাতীয় মহিলাৰ স্ত্রীশিক্ষাৰ প্রসাৰ ঘটিছে।
- বিভিন্ন ধৰণৰ ভাষা আয়ত্ব কৰাৰ ফলত ব্যৱসায়, শিক্ষা ইত্যাদি ক্ষেত্রত সহায় হৈছে।
- জনজাতীয় লোকৰ যি স্থানীয় সংস্কৃতি আছে, তাৰ লগত বিশ্ব সংস্কৃতিৰ পৰিচয় আৰু সমন্বয় ঘটিছে।
- জনজাতীয় সমাজত নতুন সাজ-পোচাক, খাদ্য ইত্যাদিৰ আগমন ঘটিছে।
- উন্নত যোগাযোগ ব্যৱস্থাই সকলো প্রক্রিয়া ত্বৰান্বিত কৰি তুলিছে। ঘৰতে বহি বিভিন্ন বস্তুৰ অর্ডাৰ দিব পৰা হোৱাৰ ফলত জনজাতীয় মহিলাসকলে নিজৰ বাবে সময় উলিয়াব পৰা হৈছে।

নেতিবাচক দিশ ঃ

পৰিৱর্তনকামী সকলো বস্তুৰে ভাল-বেয়া, ভুল-শুদ্ধ, ক্রিয়া-প্রতিক্রিয়া থাকে। বিশ্বায়নৰ যিদৰে কিছুমান সু-প্রভাৱ আছে, তেনেদৰে কু-প্রভাৱো আছে। তেনে কেইটামান নেতিবাচক দিশ হ'ল-

- জনজাতীয় সমাজৰ (পুৰুষ-মহিলা উভয়ে) হাজাৰ বছৰ পুৰণি ঐতিহ্য মণ্ডিত সংস্কৃতি, সামাজিক-পাৰিবাৰিক মূল্যবোধ এৰি পশ্চিমীয়া মূল্যবোধৰ প্রতি আকৃষ্ট হৈছে।
- স্বাস্থ্যকৰ খাদ্যৰ প্রতি আগ্রহী জনজাতীয় সমাজৰ খাদ্যাভাসৰ আমূল পৰিৱর্তন ঘটিছে। চাইনিচ ফাষ্ট ফুড, পিজ্জা, ঠাণ্ডা পনীয় (পেপচি, কোকাকোলা) দৰে সহজতে পোৱা বিদেশী খাদ্যৰ প্রতি আকৃষ্ট হৈছে।
- জনজাতীয় সমাজৰ পুৰুষ-মহিলা উভয়কে পাশ্চাত্য ঢং আৰু ফেশ্চন, খোলা-মেলা সাজ-পাৰে আকর্ষণ কৰি অহা দেখা যায়।
- বিশ্বায়নৰ প্রভাৱত পৰি পশ্চিমীয়া সংগীত, পপ-সংগীতে স্থান লাভ কৰাৰ ফলত জনজাতীয় মহিলাৰ মাজত প্রচলিত লোক-সংগীতৰ চাহিদা কমিছে।
- সাংসাৰিক তথা সামাজিক সম্পর্ক ৰক্ষাৰ ক্ষেত্রত পূর্বতে জনজাতীয় মহিলাসকলে কঠোৰ নিয়ম-নীতিৰ মাজেৰে বান্ধ খাই থকা দেখা গৈছিল যদিও বর্তমানে এইক্ষেত্রত বিশ্বায়নৰ নেতিবাচক প্রভাৱ পৰা পৰিলক্ষিত হয়।
- বিশ্বায়নৰ ফলত বর্তমানৰ যুৱ-প্রজন্মই পূর্বপুৰুষৰ পৰা চলি অহা পৰম্পৰাগত শিল্পকলা সমূহত আগ্রহ হেৰুৱাবলৈ ধৰিছে। যাৰ ফলত এনে শিল্প সমূহৰ সৃষ্টিৰ হাৰ হ্রাস পাইছে।

উপসংহাৰ ঃ

এই আলোচনা পত্ৰ প্ৰস্তুতৰ অন্তত এই সিদ্ধান্ত সমূহত উপনীত হ'ব পাৰো যে, আধুনিক শিক্ষাই গাঁও, চহৰ, নগৰ সকলোতে মানুহৰ জীৱনলৈ পৰিৱৰ্তন আনিছে। খাদ্যৰ মূল চাবি-কাঠি থাকে মহিলাৰ হাতত। জনজাতীয় মহিলাৰ দ্বাৰা প্ৰস্তুত পৰম্পৰাগত খাদ্যসমূহ যথেষ্ট বিজ্ঞানসন্মত। সেয়েহে, বিশ্বায়নৰ ফলত হেৰাই যাবলৈ ধৰা পৰম্পৰাগত খাদ্যসমূহক পুনৰ সংৰক্ষণ আৰু প্ৰচলন কৰাৰ প্ৰয়োজনীতা উপলব্ধ হয়।

এখন দেশৰ পৰিচয় বহন কৰে সাংস্কৃতিক বৈশিষ্ট্যৰ ওপৰত আৰু দেশৰ সাংস্কৃতিক ঐতিহ্য বজাই ৰাখিবলৈ জনজাতীয় মহিলাৰ দ্বাৰা ৰচিত লোকগীতসমূহৰ আদৰ আৰু অধ্যয়ন অপৰিহাৰ্য।

বিশ্বায়নে এক ভোগবাদী সংস্কৃতিৰ সৃষ্টি কৰিছে। বিশ্বায়নে বিশ্বাস কৰে জীৱনটো ভোগ কৰিবলৈ। সহজতে ধনী হোৱাৰ প্ৰক্ৰিয়া চহৰৰ বজাৰ প্ৰক্ৰিয়া আদি কাৰকবোৰে সমগ্ৰ বিশ্বৰ লগতে সহজ সৰল জনজাতীয় নাৰীসকলোকো আকৰ্ষণ কৰিছে। বিশ্বায়নৰ বাণিজ্যিকৰণৰ যি প্ৰক্ৰিয়া সেই প্ৰক্ৰিয়াত জনজাতীয় নাৰী সমাজৰ ওপৰত প্ৰভূত প্ৰভাৱ বিস্তাৰ কৰিছে।

সময়ে আনি দিয়া পৰিৱৰ্তনক জনজাতীয় নাৰী সমাজে সাহসেৰে সহজ আৰু ইতিবাচক চিন্তাৰে গ্ৰহণ কৰি প্ৰগতিৰ পথত আগবাঢ়ি যাবলৈ বদ্ধ পৰিপক্ক হ'ব লাগিব।

জনজাতীয় সমাজৰ নাৰীৰ দ্বাৰা সৃষ্ট পৰম্পৰাগত থলুৱা শিল্প, কলা-কৌশল, সাহিত্য-সম্ভাৰ তথা স্থানীয় জ্ঞান-ভাণ্ডাৰৰ ওপৰত বিশ্বায়নৰ প্ৰভাৱ লক্ষণীয়। সামাজিক সাংস্কৃতিক ক্ষেত্ৰত যি পৰিৱৰ্তন পৰিলক্ষিত হয়, সেয়াই পৰিৱৰ্তনৰ মাপ-কাঠি আৰু পৰিৱৰ্তনৰ গভীৰতা। আধুনিকতাৰ পৰশে জনজাতীয় সংস্কৃতিত ইতিবাচক আৰু নেতিবাচক দুয়োটা ৰূপেই চুই গৈছে। আমি কেৱল পৰম্পৰাক খামুচি ধৰি থাকিলে নহ'ব পৰিৱৰ্তনকো আকোঁৱালি ল'ব লাগিব। কিন্তু চাব লাগিব যাতে সেই পৰিৱৰ্তন ধ্বংসমুখী নহয়।

সহায়ক গ্ৰন্থপঞ্জী ঃ

অধিকাৰী, শুকদেব (সম্পা) ঃ অসমীয়া সংস্কৃতি আৰু বিশ্বায়ন, ধিং মহাবিদ্যালয়, ২০১১ চন।

মজুমদাৰ, ড° বিমল; জনজাতি আৰু গাৰো জনজাতি, প্ৰথম সংস্কৰণ, ২০০৪, বীনা লাইব্ৰেৰী, গুৱাহাটী

ভট্টাচাৰ্য, ড° প্ৰমোদ চন্দ্ৰ, অসমৰ জনজাতি, প্ৰথম প্ৰকাশ, ১৯৬২, অসম সাহিত্য সভা, ধেমাজি।

দাস, অংশুমান; অসমৰ উৎসৱ-পাৰ্বন বুটলি, আক-বাক সংস্কৰণ, ডিচেম্বৰ, ২০১৩ চন।

শৰ্মা, ধ্ৰুজ্যোতি ঃ বিশ্বায়ন, অসমীয়া সাহিত্য সন্মিলনী, ডিচেম্বৰ, ২০২৩ চন।

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সংস্কৃত সাহিত্যত শিৱ চৰিত্রৰ এক বিশ্লেষণাত্মক অধ্যয়ন

ড° লীলা কলিতা
সহকাৰী অধ্যাপিকা
ৰাধা গোৰিন্দ বৰুৱা মহাবিদ্যালয়

সংক্ষিপ্তসাৰ ঃ

ভাৰতীয় জন মানসত শিৱ একক দেবতা। শিৱৰ মহিমা মণ্ডিত বিবিধ আখ্যানে বৈদিক যুগৰে পৰা যুগে যুগে পণ্ডিতৰ পৰা সমাজৰ সকলো স্তৰৰ লোকক সামানে আকৃষ্ট কৰিছে। শিৱ সত্য, শিৱ সুন্দৰ, শিৱ শান্ত। অথচ ৰুদ্রত্বও তেওঁৰেই আছে। তেওঁ মোগী আৰু স্থানু। অথচ চিৰ সঞ্চাৰণ শীল, ধুমুহা-বতাহৰ ৰূপৰ তাণ্ডৱ নৃত্যও তেওঁৰ দ্বাৰাই সম্পন্ন হয়। তেওঁ গৃহী, অথচ গৃহহীন বাটৰ দেবতা। তেওঁ উদাসীন অথচ চিৰ যৌৱনময়, চিৰন্তন প্রেমৰ প্রতিমা। তেওঁ কামক ভস্ম কৰা দেৱতা, আনহাতেদি কামিনীৰ ৰূপত তেওঁৰ চিও আকুল। তেওঁ সন্তান পর্য্যন্ত দান কৰা বাঞ্ছা কল্পতৰু। অথচ প্রলয় তথা সংহাৰৰ অধিকাৰী তেওঁ ভয়ঙ্কৰ দেৱতা। প্রতীকেৰে দৃশ্য-অদৃশ্য হৈ তেওঁ গাৱে গাৱে, থানে থানে মানুহৰ অতি কাষৰত, অথচ ৰহস্যময় তাৰে অতি দুৰত। তেওঁ কালাতীত অথচ ত্রিকাল-ভূত, ভষিষ্যৎ, বর্তমান সকলোতে তেওঁ বিৰাজমান-ভূলোক, দ্যুলোক, অৰণ্য, পর্ব্বত, জীৱন ভূমি, শ্মশান ভূমি সকলোতে। তেওঁৰ নাম গিৰীশ তথা পর্বতৰ ঈশ্বৰ। কৈলাস তেওঁৰ বাসস্থান। গিৰিতনয়া পার্বতী তেওঁৰ পত্নী। পর্বত বাগৰি অহা গঙ্গা তেওঁৰ গোপন প্রেমিকা, শিৱৰ জটাত যাক তেওঁ লুকুৱাই থয়। শিৱত তেওঁৰ চন্দ্রকলা, শৰীৰৰ ৰং ৰজতৰ দৰে হ'লেও ভস্ম সনা দেহা কুৱলীৰ ৰঙৰ দৰেই মামাময়। তেওঁ নীলগ্রীৱ। সর্প সর্বশৰীৰৰ ভূষণ। ব্যাঘ্রচর্ম, হস্তীচর্ম, মৃগচর্ম তেওঁৰ পৰিধানত। সেয়েহে শিৱ জনমানসৰ অত্যন্ত আকর্ষণীয় দেৱতা।

শিৱ চৰিত্র ঃ

সংস্কৃত সাহিত্যত শিৱ চৰিত্রই বৈদিক স্তৰৰ পৰাই বিশিষ্ট ভূমিকা গ্রহণ কৰিছে। 'ঋগ্বেদ'ত শিৱক ৰুদ্র বুলি কোৱা হৈছে। বৈদিক ৰুদ্রই পিছলৈ হৈ পৰিল সর্বসিদ্ধিকাৰী, সকলোৰে হৃদয়ত অধিষ্ঠিত অতি মহান আৰু পৰম প্রশান্ত। তেওঁ স্তুতিপালক, যজ্ঞনাথ, ঔষধিনাথ আৰু দেৱতাসকলৰ মাজত শ্রেষ্ঠ। তেওঁ মনুষ্য, গো, মেষ, অশ্ব প্রভৃতি জীৱকুলকে সুখ প্রদান কৰে। তেওঁ ত্রিলোকৰ অধীশ্বৰ, সকলো ভুৱনৰ অধিপতি, তেওঁ আকাশৰ পৰা জলদান কৰি মঙ্গল সাধন কৰে কাৰণে তেওঁক 'শিৱ' বুলি কোৱা হয়।[১] বৈদিক ৰুদ্রৰ সৈতে পৌৰাণিক শিৱৰ সম্পর্ক পৰিলক্ষণীয়। শিৱ 'the propitious' বৈদিক দেৱতা নহলেও শিৱৰ আৰ্বিভাৱৰ ইতিহাস সহজে অনুধাৱন কৰিব পাৰি। 'ঋগ্বেদত' ৰুদ্র ধ্বংসৰ প্রতিনিধি।[২] তেওঁ অগ্নিৰ সৈতে অভিন্ন, অগ্নি ধ্বংসৰ প্রতীক। এইখন বেদত দ্বিপাদযুক্ত আৰু চতুষ্পাদযুক্ত জীৱগণক ৰক্ষা কৰিবলৈ ৰুদ্রক স্তুতি কৰা হৈছে। ৰুদ্র 'পশুপ' ৰূপে পৰিচিত। তেওঁক বৈদ্যনাথ, ধনন্তৰি শিৱ কোপন-সংহাৰক, জ্ঞানী-দাতা-মহান, সর্ব্বজ্ঞ স্বয়ম্ভু, মৃত্যুমঙ্গল, সুখদ, ধানুকী আৰু জগৎপিতা অক্ষৰ ৰূপে স্তুতি কৰা হৈছে।[৩] আনকি 'ঋগ্বেদ'তেই সর্বশক্তিৰ আধাৰ স্বৰূপে ৰুদ্রই প্রতিষ্ঠা লাভ নকৰাকৈ থকা নাই। ব্রাহ্মণে ঘৃণাকাৰীক বধ কৰোঁতা ৰূপে ৰুদ্রই ঋগ্বেদত আত্মপ্রকাশ কৰিছে।

'ঋগ্বেদ'ৰ ১০ম মণ্ডলৰ ১৩৬ সূক্তত ৰুদ্রৰ উল্লেখ পোৱা যায়।[৪] 'ঋগ্বেদ'ৰ দশম মণ্ডলৰ ১৩৬ সূক্তৰ কথাখিনি কেশীসূক্ত নামে পৰিচিত। কেশী বুলিলে ইয়াত জ্যোতির্ময় সূর্য্য অথবা ভগৱান কৃষ্ণক বুজোৱা যেন লাগে। এই কেশীয়ে অগ্নিক পোষণ কৰে, কেশীয়ে জলক ধাৰণ কৰে, কেশীয়ে দ্যুলোক ভুলোকক ধাৰণ কৰে, কেশীয়ে বিশ্বজগত প্রকাশ কৰে। এই দৃশ্যমান জ্যোতিকেই ইয়াত কেশী বোলে। ইয়াত অগ্নি, বায়ু আৰু সূর্য্য দেৱতাৰ উল্লেখ আছে।[৫] কেশীয়ে ইয়াত পানীৰ পাত্রেৰে যেতিয়া ৰুদ্রৰ লগত পান কৰিছিল তেতিয়া বায়ুৰে ভূগর্ভৰ ৰস মন্থন

কৰি দিছিল আৰু অদম্য বজ্রই মেঘ বিদীর্ণ কৰিছিল।

ৰুদ্র শিৱবাদৰ উদ্‌গম আৰু বিকাশৰ ক্ষেত্রত শুক্ল যর্জুবেদৰ ভূমিকা প্রশংসনীয়। বাজসনেয়ী সংহিতাৰ ১৬শ অধ্যায়টো ৰুদ্রাধ্যায় বা শত ৰুদ্রীয় অধ্যায় নামে চিহ্নিত আৰু যজুর্বেদীয় ব্রাহ্মণৰ নিত্য পাঠ। ৰুদ্র শব্দৰ সামান্যর্থ ভয়ঙ্কৰ ভীষণ বা ভয়ানক।[৬] কোনো ঠাইত ৰুদ্রৰ অর্থ ৰোদন কৰা বুলিও কোৱা হৈছে।

'যজুর্বেদ'ত তেওঁ নীলগ্রীব, শিতিকণ্ঠ আৰু মঙ্গলময়। পিছলৈ তেওঁ মানৱ-সংসাৰৰ মংগলৰ কাৰণে গৃহদেৱতাৰ আসনত অধিষ্ঠিত হৈছে।[৭]

'অথর্ববেদ'ত ৰুদ্র দেৱতাক ভব, সর্ব্ব, পশুপতি, ঈশান, ৰুদ্র, উগ্র আদি নামেৰে জনা যায়।[৮] ইয়াত তেওঁ ধুমুহাৰ প্রাচীন দেৱতা আৰু মৰুৎগণৰ পিতৃৰূপে পূজিত হৈ অৱশেষত পৰিণতি লাভ কৰিছে শিৱত।[৯] 'কৌষিতকী ব্রাহ্মণত' ৰুদ্রৰ অষ্ট নামৰ উল্লেখ আছে।[১০] এই অষ্টনামৰ ভিতৰত— ৰুদ্র, শর্ব, উগ্র আৰু অশনি ভীষণত্ব প্রকাশক আৰু বাকী চাৰিটা নাম— ভৱ, পশুপতি, মহাদেৱ আৰু ঈশান শান্তত্ব প্রকাশক। এইদৰে ভয়ানক আৰু ৰুদ্রই পূজা অর্চনা আৰু স্তুতিৰ জৰিয়তে দয়ালু দেৱতাত পৰিণতি লাভ কৰিলে আৰু 'যজুর্বেদ' তথা 'অথর্ববেদ'ৰ সময়ত তেওঁ দেৱত্বৰ মহৎ আৰু মহিমাময় ৰূপ পৰিগ্রহ কৰিলে। ৰুদ্রৰ এই মহৎ আৰু মহিমাময় ৰূপৰ ওপৰত নির্ভৰ কৰিয়েই শ্বেতাশ্বতৰ উপনিষদত দেৱতাগৰাকীৰ আধ্যাত্মিক ধ্যান-ধাৰণা কল্পনা কৰা হয়।

'শ্বেতাশ্বতৰ উপনিষদ'ত 'শিৱ' পদটো 'ৰুদ্রৰ' নামবাচক পদ ৰূপে ব্যৱহৃত হৈছে। ইয়াত শিৱ ৰুদ্রই অদ্বিতীয় দেৱতাৰূপে স্বীকৃতি লাভ কৰিছে। ইয়াত তেওঁ স্রষ্টা, পালক, সংহাৰক আৰু নিয়ামক ঃ

একেহি ৰুদ্রো নদ্বিতীয়ায় তস্থূর্যইমালোকান্ ঈশত ঈশনীভিঃ।

প্রত্যঙজনাংস্তিষ্ঠতি সঞ্চকোপান্তকালে সংসৃজ্য বিশ্বা ভুৱনানি গোপাঃ।।[১১]

সর্বভূতৰ অন্তৰত শিৱ গূঢ়ভাৱে প্রকাশমান— শিৱং সর্বভূতেষু গূঢ়।[১২] লোকেশ্বৰৰ মাজত শিৱ, মহেশ্বৰ, দেৱতাসৱৰ ভিতৰত পৰম দৈৱত। মায়াই প্রকৃতি তেওঁ মায়িন্; সর্বজগত শিৱৰ অৱয়ভূত। 'শ্বেতাশ্বতৰ উপনিষদ'ত শিৱ পদটো প্রধানতঃ ৰুদ্রৰ বিশেষণৰূপে ব্যৱহাৰ হৈছে। 'শ্বেতাশ্বতৰ উপনিষদ' ভক্তিমার্গৰ প্রকৃষ্ট প্রকাশক। ইয়াত বাসুদেৱ কৃষ্ণৰ ভক্তিৰ পৰিবর্ত্তে ৰুদ্র শিৱৰ উপাসনাৰ গৌৰৱ মহিমা ঘোষিত হোৱা দেখা যায়।

'শতপথ ব্রাহ্মণ'ত ৰুদ্র ভব, সর্ব্ব, পশুপতি, উগ্র, ৰুদ্র, মহাদেৱ, ঈশান বা অশনি এই অষ্ট নামেৰে প্রতিফলিত হৈছে।[১৩] পৰৱর্তী পৌৰাণিক ভক্তিধর্মৰ বীজো এই 'শ্বেতাশ্বতৰ উপনিষদ' পৰাই বিকাশ লাভ কৰিছে। ইয়াত ৰুদ্র ঈশ্বৰৰো পৰম মহেশ্বৰ, দেৱতা সকলৰো পৰম দেৱতা, প্রভুসকলৰো প্রভু, শ্রেষ্ঠৰ উপৰিও শ্রেষ্ঠ, ভুবনেশ্বৰ আৰু সকলো জগতৰে একমাত্র ব্যাপক ঈশ্বৰ। 'ঋগ্বেদ'ত উল্লেখিত এই ৰুদ্রই এনেদৰে সমগ্র বৈদিক সাহিত্য অধিকাৰ কৰি, বিভিন্ন পৰিবর্ত্তনৰ মাজেদি পৌৰাণিক ত্রি মূর্ত্তি ব্রহ্মা, বিষ্ণু, মহেশ্বৰত পৰিণত হৈছে।

'ৰামায়ণ'তো শিৱ লঙ্কেশ্বৰ ৰাৱণৰ পৰম ভক্ত আছিল।[১৪] লঙ্কেশ্বৰে হৰি শঙ্কৰৰ পৰা কোনো ভয় নাই বুলি কৈছিল। ৰাৱণে শঙ্কৰৰ সৈতে কৈলাসক তুলি লৈছিল আৰু তেতিয়া অসুৰদেৱতাই (সুৰাসুৰে) তেওঁক সেৱা কৰে। ব্রহ্মা, বিষ্ণু আৰু মহেশ্বৰৰ বাহিৰে সকলো দেৱতাই তেওঁক সেৱা কৰে।

'মহাভাৰত'ত শিৱৰ মহিমা ৰামায়ণতকৈও অধিক। কংস জৰাসন্ধ প্রভৃতি বিভিন্ন ৰজা-

মহাৰজা সকলো শৈৱ আছিল। মহাভাৰতত শ্রীকৃষ্ণই যুধিষ্ঠিৰক কৈছে যে মহাদেৱৰ দুটা ৰূপ কথিত হয়।[১৫] প্রথমটো হ'ল ঘোৰ অর্থাৎ ভয়ংকৰ আৰু দ্বিতীয়টো হ'ল শিৱ অর্থাৎ কল্যাণকৰ। তেওঁৰ শৰীৰটো দুভাগত ভাগ কৰা হয় আৰু তাৰ এটাক অগ্নি আৰু আনটোক সোম কোৱা হয়। তেওঁৰ শিৱমূর্তিয়ে ব্রহ্মচর্য পালন কৰে আৰু যিটো অত্যন্ত ঘোৰমূর্তি সিয়ে জগতক সংহাৰ কৰে। তেওঁৰ ভিতৰত মহত্ব আৰু ঈশ্বৰত্ব থকাত তেওঁক মহেশ্বৰ কোৱা হয়। তেওঁ যিবিলাক দগ্ধ কৰে, অত্যন্ত তীক্ষ্ণ, উগ্র আৰু প্রতাপশালী প্রলয়শালী প্রলয়াগ্নিৰূপে মাংস, তেজ আৰু মজ্জাকো ভক্ষণ কৰে। সেইবাবে তেওঁক ৰুদ্র বুলি কোৱা হয়। তেওঁ দেৱতাসকলৰ ভিতৰত মহান, তেওঁৰ বিষয়ো মহান আৰু মহান ৰক্ষাকর্তা। সেইবাবে তেওঁ মহাদেৱ নামে অভিহিত হয়। তেওঁৰ জঁটাৰ ৰূপ ধূম্রবর্ণ, সেইবাবে তেওঁক ধূর্জটি বুলি কোৱা হয়। সর্বপ্রকাৰ কার্য্যই সকলো লোকৰ উন্নতি সাধন কৰে আৰু সকলোৰে কল্যাণ কামনা কৰে। এই কাৰণে তেওঁৰ নাম শিৱ। যিজনে ঊর্ধভাগত অৱস্থান কৰি দেহধাৰী জীৱগণৰ প্রাণ নাশ কৰে; সদায় স্থিৰ থাকে সেই হেতুকে সিজন স্থানু নামে অভিহিত হয়। ভূত ভৱিষ্যত আৰু বর্তমানকালত স্থাৱৰ আৰু জংগম আকা�ৰত তেওঁৰ অনেক ৰূপ প্রকটিত হয়। সেইবাবে তেওঁক বহুৰূপ কোৱা হয়। সমস্ত দেৱতাগণ তেওঁৰ ভিতৰত বাস কৰে। সেইবাবে তেওঁক বিশ্বৰূপ কোৱা হয়। তেওঁৰ চকুৰ পৰা তেজ উৎপন্ন হয় আৰু তেওঁৰ চকুৰ অন্ত নাই। সেয়েহে তেওঁ

সহস্রাক্ষ, অযুতাক্ষ আৰু সর্বতো অক্ষিময় বুলি অভিহিত হয়। তেওঁ সর্বপ্রকাৰ পশু (জীৱ) গণক পালন কৰে। সিহঁতৰ লগত বাস কৰাটো সুখ বুলি ভাবে আৰু পশুগণৰ অধিপতি বাবে পশুপতি বোলা হয়। সমস্ত কামনা সমূহৰ অধীশ্বৰ বুলি তেৱেই ঈশ্বৰ বুলি অভিহিত হয় আৰু বিশাল লোকসকলৰ ঈশ্বৰ বুলি তেওঁ মহেশ্বৰ নামে কথিত হয়। শ্ৰীকৃষ্ণই মহাদেৱৰ মহত্ব এনেকৈ প্ৰকাশ কৰিছে আৰু তেওঁৰ পূজা ভক্তি কৰিলে মানৱে সকলো ঐহিক আৰু পা�ৰমার্থিক কামনাসমূহ প্ৰাপ্ত হয় বুলি কৈছে।

'মহাভাৰত'ৰ বনপর্ব্বৰ ৩৮ তম অধ্যায়ত অর্জুনৰ লগত মহাদেৱৰ লোমহর্ষক যুদ্ধৰ কথা আছে।[১৬] কিৰাতৰূপী মহাদেৱে অর্জুনৰ শৰত বিদ্ধ হৈও পর্ব্বতৰ দৰে অচল হৈ থকাত, অর্জুনৰ

মনত কোনো দেৱতা বা যক্ষ বুলি সন্দেহ হোৱা, অর্জুনে মহাদেৱক পূজা কৰা আৰু মহাদেৱ সন্তুষ্ট হৈ অর্জুনক দিব্যজ্ঞান প্ৰদান কৰা, পাশুপাত অস্ত্ৰ লাভ কৰা, আদি কথা পোৱা যায়। মহাভাৰতৰ বন পর্ব্বত শিৱ জঁটাধাৰী, সমস্ত দেৱতাৰে নিয়ন্ত্ৰক। তেওঁ ললাটস্থ নয়নেৰে কামদেৱক দগ্ধ কৰিছিল। তেওঁ নীলকণ্ঠ আৰু দেৱতাসকলৰো দেৱতা। এই শিৱ ব্ৰহ্মাদি সৃষ্টিকর্তাৰ সকলৰ ভিতৰত প্ৰধান, ত্ৰিলোচন, সর্ব্বব্যাপক দেৱতাসকলৰো গতি আৰু জগত স্ৰষ্টা। তেওঁ দেৱ-দানৱ, মনুষ্য, সকলোৰে সৈতে তিনিও লোকৰেই অজেয়, নিজেই বিষ্ণুৰূপী শিৱ আৰু শিৱৰূপী বিষ্ণু। তেৱেই দক্ষযজ্ঞ বিনাশকাৰী, তেওঁৰ ললাটত নেত্ৰ আছে। তেওঁ জগতৰ সংহাৰ কর্তা আৰু সৃষ্টি কর্তা, তেৱেই ত্ৰিশূলধাৰী, হৰিহৰ স্বৰূপ, ভগৱান, পিনাক ধনুর্দ্ধাৰী, জগত প্ৰসৱিত সূর্য্যস্বৰূপ, মঙ্গলদায়ক বিধাতা, সকলো প্ৰাণীৰ অধীশ্বৰ, প্ৰমথগণৰ অধিপতি, জগতৰ মঙ্গলকাৰক, লোক সৃষ্টিকর্তা, ব্ৰহ্মাদিৰো সৃষ্টিকাৰী, প্ৰকৃতি পুৰুষৰ অতীত, সর্ব্বোৎকৃষ্ট, পৰম সূক্ষ্ম তৃতীয় ব্ৰহ্ম, শিৱৰ স্বৰূপ, ভগৱান শংকৰ, দর্শনাকাঙ্খী, তপস্বীসকলৰ উত্তম আশ্ৰয়স্থল, ভগৱান দেবেশ, সমস্ত লোকৰে নমস্য। আনকি অর্জুনেও যুদ্ধত হাৰি মহাদেৱক ক্ষমা খুজিছে অৰু মহাদেৱে অর্জুনক ক্ষমা কৰি দিব্য পাশুপাত অস্ত্ৰ দান কৰিলে। সেইদৰে মহাদেৱে পাশুপাত অস্ত্ৰ চালনাও শিকালে। মহাদেৱে দেৱতাসকলৰ অধীশ্বৰ, ইচ্ছা-বিজয়ী মহাজ্ঞানী, কৈলাসবাসী, উমাপতি, জগতৰ মঙ্গলকাৰী মহাদেৱে দৈত্য আৰু পিশাচ বিলাকৰ দমনকাৰী বিশাল সেই গাণ্ডীৰ ধনু অর্জুনক দান কৰিছিল।

'মহাভাৰত'ৰ দ্ৰোণ পর্ব্বৰ ২০২ অধ্যায়ত দেখিবলৈ পোৱা যায় শিৱৰ মহিমা ব্যাপক।[১৭] ইয়াত তেওঁ সমস্ত ভুৱনৰে স্বামী। তেওঁ মহান দেৱ, তেওঁৰ হৃদয় মহান, সকলোৰে শাসনকাৰী, সর্ব্বব্যাপী আৰু জটাধাৰী। তেওঁ জগতৰ কাৰণ ভূত, অব্যক্ত প্ৰকৃতি। তেওঁ কাৰো দ্বাৰা পৰাজিত নহয়, জগতৰ প্ৰেম আৰু সুখৰ প্ৰাপ্তি তেওঁৰ পৰাই হয়। তেৱেই সকলোৰে অধ্যক্ষ।

শিৱ জগতৰ উৎপত্তিৰ স্থান, জগতৰ বীজ, বিজয় শীল, জগতৰ যশস্বী। তেৱেই বিশ্বেশ্বৰ, বিশ্বনিয়ন্তা, কর্ম্মবোৰৰ ফলদাতা ঈশ্বৰ আৰু প্ৰভাৱশালী। তেওঁ সকলোৰে কল্যাণকামী আৰু স্বয়ম্ভু। গোটেই পৃথিবীৰে ভূত, ভবিষ্যত আৰু বর্তমান। তেওঁ যোগ আৰু যোগেশ্বৰ, সর্বস্বৰূপ সমস্ত লোকৰ ঈশ্বৰ। সমস্ত জগততে শ্ৰেষ্ঠ, বাগীশ্বৰ সকলৰো ঈশ্বৰ। তেওঁ জন্ম, মৃত্যু আৰু জৰ আদিৰ বাহিৰত। তেওঁ জ্ঞানী আৰু উত্তম ফলদাতা। তেওঁ ৰুদ্ৰ, নীলকণ্ঠ, কনিষ্ঠ, উত্তম, তেজ সম্পন্ন, জঁটাধাৰী, বিকাৰালস্বৰূপ, পিঙ্গল নয়ন, কুবেৰক ববদিওঁতা। শিৱ প্ৰহৰৰ প্ৰৱর্ত্তক কাল, অব্যক্ত স্বৰূপ, আকাশে যাৰ কেশ, তেওঁ সদাচাৰ সম্পন্ন, সকলোৰে কল্যাণ কাৰক, সদা স্থিৰ আৰু অন্তর্যামী পুৰুষ, পিঙ্গল বর্ণকেশ, মুৰ মুণ্ডিতক্ষীণ আৰু অত্যন্ত বেগশালী। তেওঁ অনেকৰূপ ধাৰণকাৰী, সর্বস্বৰূপ তথা সকলোৰে প্ৰিয়, বল্কল বস্ত্ৰধাৰী, পাণ্ডৱীমৰা, সুন্দৰ মুখৰ, হাজাৰ চকু আৰু বর্ষাকাৰী। তেওঁ পর্ব্বত শয়নকাৰী পৰম শান্ত, যতিস্বৰূপ, হিৰণ্যবাহু, উগ্ৰ, দিশসমূহৰ অধিপতি, মেষৰ অধিপতি, বৃক্ষবোৰৰ পালক আৰু গৰুৰ অধিপতি। এইজন শিৱৰ শৰীৰ বৃক্ষসমূহৰে আচ্ছাদিত। তেওঁ দিব্যস্বৰূপ ধনুর্দ্ধৰ আৰু ভৃগুবংশীয় পৰশুৰাম স্বৰূপ। শিৱ মহাদেৱ বিশ্বৰ পালক হৈও ভূর্জ্জ কৌপিনধাৰী, যাৰ হাজাৰ মূৰ, সহস্ৰ ভূজ আৰু সহস্ৰ পদ। তেওঁ বৰদায়ক ভুৱনেশ্বৰ, উমা-বল্লভ, ত্ৰিনেতাধাৰী, দক্ষযজ্ঞ বিনাশক, প্ৰজাপতি, ব্ৰগ্নতা ৰহিত, অবিনাশী আৰু ভূতনাথ।

'মহাভাৰত'ৰ 'অনুশাসন-পর্বত' শিৱক লিংগৰূপত উপাসনা কৰা দেখা যায়। শিৱৰ মহিমা বর্ণনা প্ৰসঙ্গত কৃষ্ণৰ আগত উপমন্যুৱে কৈছে যে, মহাদেৱেই একমাত্ৰ দেৱতা, মানৱে তেওঁক লিংগৰূপত পূজা কৰে।[১৮] উপমন্যুৱে আৰু কৈছে যে, ব্ৰহ্মা, বিষ্ণু আৰু কৃষ্ণৰ সৈতে অন্য দেৱতাসকলে অবিৰতভাৱে শিৱক লিংগ ৰূপত উপাসনা কৰে। তেওঁ সর্বদেবতাৰ ভিতৰত শ্ৰেষ্ঠ। অন্য দেৱতাৰ দেহত পদ্মফুল, ত্ৰিশূল আৰু বজ্ৰৰ চিহ্ন নাই; কিন্তু শিৱৰ দেহত এইবোৰৰ বাহিৰেও লিংগ আৰু যোনি চিহ্ন বর্তমান আছে।[১৯]

'মহাভাৰত'ৰ 'সৌপ্তিক পর্বত' উল্লেখ আছে যে শিৱই নিজ হাতেৰে নিজ লিংগ ছেদন কৰাৰ লগে লগে ছিন্ন লিংগখণ্ড পৃথিৱীত বিদ্ধ হৈ পৰে।[২০] দ্বিতীয় ৰূপত অশ্বত্থামাৰ প্ৰার্থনাত সন্তুষ্ট হৈ শিৱদেৱতাই প্ৰজ্বলিত বহ্নি বিশিষ্ট স্বর্ণময়ীবেদীৰূপত

দেখা দিছিল।[২১] তৃতীয়ৰূপত অর্জুনক শিৱই কিৰাত ৰূপত দেখা দিয়াৰ প্ৰসংগতো অর্জুনে শিৱক মাটিৰ বেদীত মাল্যার্পণ কৰি পূজা কৰিছিল। অশ্বত্থামা আৰু অর্জুনে পূজা কৰা বেদী দুটা, শিৱ লিংগৰ প্ৰতীকী অর্থত প্ৰয়োগ হোৱা যেন লাগে।

'মহাভাৰত'ৰ 'শান্তিপর্ব'ত আৰু 'সৌপ্তিকপর্ব'ত দক্ষ-দক্ষৰ কাহিনীভাগ বিস্তৃত ৰূপত বর্ণিত হৈছে। শান্তি পর্বত দধীচি মুনিয়ে ৰুদ্ৰ শিৱৰ শ্ৰেষ্ঠতা প্ৰতিপন্ন কৰি দেৱতা আৰু ঋষিসকলৰ আগত কৈছে যে ৰুদ্ৰ জগৎ আৰু জীৱৰ স্ৰষ্টা আৰু পালক আৰু তেৱেই যজ্ঞৰ একমাত্ৰ অধিষ্ঠাতা দেৱতা। দধীচিৰ উক্তিৰ উত্তৰত দক্ষই কৈছিল যে ৰুদ্ৰ এজন নহয়, এঘাৰজন আৰু তেওঁলোক শূলধাৰী আৰু কপর্দী ঃ

সন্তি নো বহৱো ৰুদ্ৰাঃ শূলহস্তা কপর্দিনঃ।
একাদশ স্থানগতা নাহং ৱেদমি মহেশ্বৰম।।[২২]

দক্ষৰ এনে উক্তিৰ মাজেৰে বৈদিক ৰুদ্ৰ আৰু পৌৰাণিক ৰুদ্ৰ-শিৱৰ মাজত পার্থক্য দেখুৱাবলৈ চেষ্টা কৰা হৈছে।

'ভাগৱত পুৰাণ'ত দক্ষ-যজ্ঞ সম্পর্কীয় কাহিনী ভাগৰ দীঘলীয়া বর্ণনা পোৱা যায়।[২৩] এই কাহিনীভাগৰ বর্ণনা প্ৰসংগত দক্ষই শিৱ-ৰুদ্ৰক মর্কট সদৃশ অক্ষিযুক্ত, ভূত-প্ৰেতৰ সংগী শশ্মানচাৰী, অপৱিত্ৰ আৰু সংস্কাৰ বর্জিত, কপর্দী, বাতুল, ভস্মাধাৰী, নৱমুণ্ড পৰিধানকাৰী, অশিৱ আৰু তমোগুণীৰূপে ভৎর্সনা কৰিছে।

'শিৱ-পুৰাণ'ৰ জ্ঞানসংহিতাত বর্ণিত আন এটা পুৰাণ কথাত পোৱা যায় যে যোগনিদ্ৰাত নিমগ্ন বিষ্ণুৰ নাভি কমলৰ পৰা আৱির্ভূত হৈ ব্ৰহ্মাই নিজৰ জন্ম ৰহস্য উদ্‌ঘাটন কৰিবৰ বাবে বিষ্ণুৰ নাভি পদ্মনলাৰ এশবছৰ আৰু নলাৰ তলফালে এশ বছৰ পৰিভ্ৰমণ কৰিও পদ্মনলাৰ অন্ত নোপোৱা হেতু আকাশবাণী অনুসৰি বাৰ বছৰ তপস্যা কৰাৰ পিছত বিষ্ণুৱে তেওঁক ভৎর্সনা কৰে। ইয়াৰ পৰিণতিত ব্ৰহ্মা আৰু বিষ্ণুৰ মাজত ভয়ংকৰ যুদ্ধ আৰম্ভ হ'ল। দুয়োজন দেৱতাই যুদ্ধ কৰি থাকোঁতেই দুয়োৱে মাজত জ্যোতি লিংগ আবির্ভূত হ'ল ঃ

বিৱাদর্শমনার্থঞ্চ প্ৰবোধার্থং দ্বয়োৱপি।
জ্যোতিলিংগ তদোৎপন্নমাবয়োর্মধ্যে অদ্ভুতম্।।
জ্বালামালা সহস্ৰাঢ্যং কালানলচয়োপমম।।[২৪]

ব্ৰহ্মা বিষ্ণু উভয়ে যুদ্ধৰ পৰা নিবৃত্ত হৈ সেই লিংগৰ উৎস নির্ণয় কৰিবলৈ উদ্যত হ'ল। ব্ৰহ্মা আৰু বিষ্ণুৱে ক্ৰমে হংস আৰু শ্বেতবৰাহ ৰূপে লিংগৰ উর্ধ্ব আৰু অধোভাগ পৰিভ্ৰমণ কৰিও ইয়াৰ অন্ত পাবলৈ অক্ষম হৈ উভয়ে জ্যোতির্লিংগৰ ধ্যান আৰু ভাৱত নিমগ্ন হ'ল। ব্ৰহ্মা-বিষ্ণুৰ স্তুতিত সন্তুষ্ট হৈ পঞ্চাননে উভয়কে তেওঁৰ লিংগত পূজা কৰিবলৈ উপদেশ দিছিল। ৰুদ্ৰসিংহ বিৰচিত শিৱ পুৰাণৰ মতে লিংগৰ পৰা ব্ৰহ্মা-বিষ্ণু আদি দেৱতাৰ সৃষ্টি হৈছে আৰু প্ৰলয়তো ব্ৰহ্মা-বিষ্ণু আদি দেৱতা শিৱ-লিংগত লয় প্ৰাপ্ত হয়।[২৫] ৰুদ্ৰ শিৱৰ অগ্নিময় জ্যোতির্লিংগ সহস্ৰ কিৰণমালাযুক্ত। ইয়াৰ আদিও নাই অন্তও নাই। এই জ্যোতির্লিংগ যে সূর্যাগ্নিৰ তেজোময় অনন্ত কিৰণ তাত মুঠেই সন্দেহ নাই। অগ্নি সদৃশ তেজোময় কিৰণ ত্ৰিলোক পৰিব্যাপ্ত। উর্ধ্বলোক আৰু অধঃ লোকতো এই তেজোময় কিৰণৰ অন্ত পোৱা নাযায়। সূর্য্যাগ্নি ৰুদ্ৰৰ প্ৰতীক, গতিকে এই অগ্নিয়েই ৰুদ্ৰৰ তেজ, যি ৰুদ্ৰ ৰূপে জগত ধ্বংস কৰে। এই জ্যোতিয়েই শিৱৰূপে জগৎ সৃষ্টি কৰে আৰু জগতৰ কল্যাণ বিধান কৰে। তেজোৰূপী জ্যোতির্লিংগ প্ৰস্তৰ প্ৰতীকত উপাসিত হলে লিংগ শব্দৰ ব্যৱহাৰিক অর্থানুসৰি শিৱ-লিংগ, শিৱৰ জননেন্দ্ৰিয়ত পৰিণতি লাভ কৰে আৰু শিৱপত্নী শিৱানী বা ভবানীৰ লগত শিৱৰ অভিন্নতাৰ স্বাক্ষৰ অর্ধনাৰীশ্বৰ ধাৰণাৰ প্ৰতীক হিচাবে শিৱৰ জননেন্দ্ৰিয়ৰ লগত সংযোজিত হ'ল শিৱানী বা পার্বতীৰ যোনি। গতিকে যোনি যুক্ত শিৱ লিংগ, অর্ধনাৰীশ্বৰৰ প্ৰতীকৰূপে গৃহীত হোৱা স্বাভাৱিক।[২৬]

'শিৱ-পুৰাণ'ৰ মতে ঋষিসকলৰ তপোবল পৰীক্ষাৰ বাবে নাঙঠ শিৱই মোহন ৰূপ ধাৰণ কৰি ঋষিপত্নীসকলৰ চিত্ত চঞ্চল কৰি তোলাত ঋষিসকলে শিৱক অভিশাপ দিছিল আৰু সেই অভিশাপৰ পৰিণতিত শিৱৰ লিংগ ভূমিত পতিত হ'ল। এই লিংগও আছিল অগ্নিময়। যেনে—

উচ্ছ্ৰিতং পুৰুষং তে ৱৈ বিৰুদ্ধং ক্ৰিয়তে ত্ৱয়া।
তদ্বীয়ঞ্চৈৱ লিংগঞ্চ পততাং পৃথিৱীতলে।
ইত্যুক্তে তু তদা তৈস্তু লিংঞ্চ পাতিতং ক্ষণাৎ।।
তল্লিংগঞ্চা গ্নিবৎ সর্বং দদাহ যৎ পুৰঃ স্থিতম্।
যত্ৰ যত্ৰ চ তদ্‌যাতি তত্ৰ তত্ৰ দহেৎ পুনঃ।।[২৭]

ভূপতিত লিংগ বর্ধিত হৈ স্বর্গ-মর্ত্য অধিকাৰ কৰিলে। ত্ৰিলোক ভীতি বিহবল হৈ উঠিল। দেৱতা আৰু ঋষিসকলে ব্ৰহ্মাৰ চৰণত শৰণ ল'লে। ব্ৰহ্মাই তেওঁলোকক নির্দেশ দিলে গিৰিজা ভৱানীক স্তুতি কৰিবলৈ। দেৱতা আৰু ঋষিসৱৰ স্তুতিত সন্তুষ্টা গিৰিজাই যোনিৰূপ গ্ৰহণ কৰি শিৱ-লিংগ ধাৰণ কৰিলে। দেৱতা আৰু ঋষিসকলে পোনতে যোনি প্ৰতিষ্ঠিত লিংগক পূজা কৰিছিল।[২৮]

এইবোৰৰ উপৰিও শিৱ-পুৰাণৰ জ্ঞান সংহিতাত ব্ৰহ্মা বিষ্ণু দুয়োকে শিৱই ৱৰদান দিছে। তেনেদৰে শিৱৰ সৃষ্টি নিৰূপণ,

শিৱ পূজাৰ বিধিবিধান, শিৱৰ তপস্যা, মদনভস্ম আৰু পার্বতীৰ প্রত্যাৱর্ত্তন, শিৱক পতিৰূপে পাবলৈ পার্বতীৰ তপস্যা আৰম্ভ আৰু তাৰ ফলস্বৰূপে শিৱক স্বামীৰূপে প্রাপ্তি আদি আখ্যানো ইয়াত আছে। ত্রিপুৰ উপাখ্যানৰ লগতো ত্রিপুৰ বধ আৰু শিৱ পূজাৰ বিধি-বিধান বর্ণাইছে। জানকীৰ শাপত কেতেকীফুল আৰু নাৰদৰ শাপত চঁপা ফুল শিৱ পূজাত নিষেধ, গণেশৰ জন্মবৃত্তান্ত, বিবাহ আদি, ৰুদ্রাক্ষৰ মাহাত্ম্য, নন্দিকেশ তীর্থৰ মাহাত্ম্য, গংগাৰ মাহাত্ম্য, জ্যোতি লিংগৰ নিৰূপণ বিভিন্ন ঠাইত তাৰ উৎপত্তি, মহিমা আদি বর্ণাইছে। তেনেকৈ অর্জুনৰ তপ, শিৱৰ বৰদান, পার্থিব শিৱ পূজাৰ বিধান, বিষ্ণুক সুদর্শন চক্র দান, শিৱৰ সহস্র নাম, শিৱৰাত্রি আৰু প্রভাৱ মুক্তি, ব্রহ্ম নিৰূপণ আৰু জ্ঞান সম্বন্ধে বিস্তৃত বিৱৰণ আছে।

ঋষিসকলৰ প্রয়াগ তীর্থত যজ্ঞ আৰম্ভ কৰোঁতে সূত তাত উপস্থিত হোৱাত যথাবিধি সম্মান কৰি সোধা প্রশ্নসমূহৰ উত্তৰ বিদ্যেশ্বৰ সংহিতাত লিপিবদ্ধ হৈছে। ইয়াৰ উপৰি সাধ্য-সাধন নিৰূপণ, মননাদিৰ স্বৰূপ নিৰূপণ, শ্রৱণাদি অসমর্থ লোকৰ লিংগ পূজনৰূপ সাধন, ব্রহ্মা-বিষ্ণুৰ যুদ্ধ দর্শনৰ বাবে শিৱৰ ওচৰলৈ দেৱগণৰ আগমন, তেজোময় লিংগৰ প্রাদুর্ভাৱ আৰু তাকে দেখি ব্রহ্মা আৰু বিষ্ণুৰ বিবাদৰ অন্ত, ভৈৰৱৰ দ্বাৰা ব্রহ্মাৰ শিৱশ্চেদন আদিৰ উল্লেখ আছে।

ইয়াতেই জ্যোতির্লিংগৰ আগ ভাগ দেখা বুলি ব্রহ্মাই মিছাইও কৈছিল আৰু তাত কেতেকী ফুল সাক্ষী হৈছিল। সেয়েহে শিৱই ব্রহ্মাক শাপ দিলে কোনোৱে তেওঁক পূজা নকৰিব বুলি, কিন্তু যজ্ঞত তেওঁ পৰিচালক হ'ব। শিৱ পূজাৰ বিধি, প্রণৱৰ স্বৰূপ, শিৱ লিংগ নির্মাণ পদ্ধতি, প্রতিষ্ঠা আৰু মূর্ত্তিপূজাৰ বিধি কথন, শিৱ তীর্থৰ সেৱা মাহাত্ম্য সদাচাৰ, নিত্য কর্তব্য, পঞ্চ মহাযজ্ঞ আৰু দিন বিশেষে পূজা, দেশ-কাল বিশেষে পূজা ফল, পার্থিৱ প্রতিমা পূজা বিধি, প্রণৱ মাহাত্ম্য, ষড়লিংগ মাহাত্ম্য, শিৱভস্মৰ পূজা, জীৱৰ-বন্ধন মুক্তিৰ স্বৰূপ, বন্ধনৰ পৰা অব্যাহিত আৰু লিংগক্রমৰ কথা আদিও ইয়াত আছে।[২৯] কৈলাস সংহিতাত কৈলাসত শিৱই শিৱাক প্রণৱৰ অর্থ দানৰ কথা আছে। সনৎকুমাৰ সংহিতাত নৈমিষাৰণ্যত সনৎকুমাৰে ব্যাস আৰু ঋষিগণৰ প্রশ্নৰ উত্তৰত শিৱ পূজা, পৃথিৱী আদিৰ সংস্থান, সাংখ্য দর্শনৰ প্রকৃতি-পুৰুষৰ আলমত মহদাদি ক্রমে জগতৰ সৃষ্ট আৰু সপ্তদীপৰ বিৱৰণ, অধোলোক আৰু বিভিন্ন নৰক বর্ণনা, কর্মানুসাৰে নৰকভোগ, উর্ধলোকলৈ গমন আৰু যোগৰ দ্বাৰা তাৰ সাধন, ৰুদ্র-মাহাত্ম্য আৰু পঞ্চমূর্ত্তি, ৰুদ্র কীর্ত্তনৰ ফল আৰু ৰুদ্র স্তৱ, ব্রহ্মাৰ মানস পুত্র সনৎকুমাৰৰ চৰিত্র আৰু পৰম সিদ্ধি লাভৰ সাধনা, শিৱৰ পৰব্রহ্মত্ব ক্ষেপন, ব্রহ্মলোক, বিষ্ণুলোক আৰু ৰুদ্রলোকৰ বিৱৰণ, ৰুদ্রৰ সাতটা স্থানৰ কথন আৰু সেইবোৰৰ শ্রেষ্ঠতা, বিভীষণ আৰু মহেশ্বৰৰ কথা প্রসংগত স্থানৰ কথন আৰু সেইবোৰৰ শ্রেষ্ঠতা, বিভীষণ আৰু মহেশ্বৰৰ কথা প্রসংগত স্থানৰ মাহাত্ম্য আৰু বিশেষকৈ কাশীৰ শ্রেষ্ঠতা, লিংগ পূজাৰ মাহাত্ম্য আৰু কাশীত নিত্যবাস, লিংগ স্থাপনৰ ফল, শিৱ সন্তোষৰ পূজা বিধি, শিৱ পূজাৰ পুষ্প আদি আৰু উপচাৰৰ নাম আৰু শ্রেষ্ঠতা, অনশন বিধি, শিৱ প্রীতিকৰ ধর্মৰ সংক্ষিপ্ত উপদেশ, বিভিন্ন ব্রতৰ সাধন আৰু তাৰ পৰা ফল প্রাপ্তি, অন্নদানৰ মাহাত্ম্য, অন্নদানেই সর্বশ্রেষ্ঠ দান ৰূপে প্রশংসা আদি উল্লেখ কৰিছে। উপনিষদতো অন্নদানৰ ভূয়সী প্রশংসা দেখা যায়। ধর্মৰ বিভিন্ন আচাৰ, নিয়ম-নীতি, সদাচাৰৰ আলোচনা, শিৱৰ চন্দ্রমণ্ডল ধাৰণ, বিষ ভক্ষণৰ কাৰণ, শ্মশান বাসৰ কাৰণ, তেওঁৰ বিভূতি, প্রণৱৰ উপাসনা প্রণৱৰ ব্যাখ্যা, ধ্যানাদিৰ সাধন আৰু তাৰ প্রভাৱ মাহাত্ম্য, প্রশংসা, ওংকাৰেশ্বৰৰ বর্ণনা, নন্দিৰ তপস্যা, শিৱৰ বৰদান, নন্দিৰ গাণপত্য, নন্দিৰ বিবাহ, শিৱৰ নীলকণ্ঠত্ব কথন, ত্রিপুৰ বর্ণন আৰু তাৰ দাহৰ কথাও আছে।

বায়বীয় সংহিতাত বায়ুৱে নৈমিষাৰণ্যত ঋষিসকলৰ নানা কথা বর্ণনাইছে। ইয়াত শিৱৰ বৰত শ্রীকৃষ্ণৰ পুত্রাদি লাভ, বেদাদি ব্যৱস্থা, পুৰাণৰ সংখ্যা আৰু শ্লোক সংখ্যা ইত্যাদি আছে। ব্রহ্মাৰ পৰা শিৱতত্ত্ব শ্রৱণ আৰু ব্রহ্মাৰ আদেশত যজ্ঞ কৰাৰ বাবে নৈমিষাৰণ্যলৈ গমন, বায়ু তাত উপস্থিত হৈ শিৱতত্ত্ব আৰু মায়াৰ স্বৰূপ বর্ণনা কৰিছে। তাৰোপৰি শিৱৰ কালৰূপত্ব প্রকটন আৰু তাৰ মান বর্ণনা, শক্তি আদিৰ সৃষ্টি, প্রাকৃত সৃষ্টি, বৰাহ ৰূপ ধাৰণ, ব্রহ্মাৰ জগত সৃষ্টি, ব্রহ্মাই ব্রহ্ম, শিৱ ব্রহ্ম, বিষ্ণুৱে ব্রহ্ম বিভিন্ন কল্পত তাৰ বর্ণনা, প্রজা সৃষ্টি কৰিবলৈ ব্রহ্মাৰ তপস্যা, অর্ধনাৰীশ্বৰৰ প্রসাদন, শক্তিৰূপিনী স্ত্রীৰ জন্ম, মৈথুন সৃষ্টি, দক্ষ যজ্ঞত দেৱীৰ দেহত্যাগ, বীৰভদ্র আদিৰে দক্ষ-যজ্ঞ ধ্বংস, শিৱৰ যজ্ঞ ভাগ প্রাপ্তি, শুভ-নিশুভ বধৰ বাবে দেৱীৰ কৌষিকী ৰূপ ধাৰণ, ভক্ত হিংসুক বাঘক সোমনন্দি নামেৰে নামকৰণ আৰু গণপতিত অধিস্থিত। শিৱৰ অগ্নিযোমাত্মক বিশ্ব প্রপ্রঞ্চ কথন, তিনিবিধ পদার্থ কথন স্থুল, সূক্ষ্ম আৰু সূক্ষ্মাসূক্ষ্ম, মহর্ষিগণৰ শিৱ চৰিত্র কথন আৰু তেতিয়া উদ্ভুত আৰু আজিও অৱস্থিত ধ্বংসকাৰী নাস্তিকতাৰ বিনাশ, পাশুপত যোগেদি মুক্তিৰ সাধনা, পাশুপত ব্রত আৰু ভস্ম মাহাত্ম্য, গাখীৰৰ দৰে উপমন্যুৰ তপস্যা আৰু মহাদেৱৰ দান, শ্রীকৃষ্ণক পাশুপত জ্ঞান আৰু শিৱমাহাত্ম্য কথন, স্ত্রী পুৰুষাত্মক উমা আৰু মহেশ্বৰ জগত প্রপ্রঞ্চকত্ব কথন, পৰমব্রহ্ম আৰু অপৰ ব্রহ্মাৰ একত্ব, মহাদেৱৰ অপ্রাকৃত ৰূপ আৰু

প্রণৱাত্মকত্ব কথন, ভক্তি যোগেদি শিৱক প্রাপ্তি, মহাদেৱৰ বেদসাৰ জ্ঞানোপদেশ, শৈৱ ধর্ম কথন, শৈৱ পঞ্চাক্ষৰ মন্ত্রৰ স্বৰূপ আৰু মাহাত্ম্য, ষড়ৱধ শুদ্ধি, শিৱনাম আৰু শিৱমন্ত্রৰ সাধন বিধি, শৈৱৰ কার্যবিধি, হোমকুণ্ডৰ পৰিমাণ আদি, নৈমিত্তিক পূজা, কাম্য পূজা, শিৱ স্তোত্র, লিংগ পূজা, অর্থাৎ ক্রিয়া বিধিৰ বর্ণনা, ব্রহ্মা বিষ্ণুৰ লিংগ দর্শন, শিৱ প্রতিষ্ঠা বিধি, যোগৰ উপদেশ, সম্যকুমাৰৰ শিৱচৰিত বর্ণনাৰ অন্তত বায়ুৰ অন্তর্ধান আৰু যজ্ঞ সমাপ্তি। সুৱেস্থ সনৎকুমাৰৰ ওচৰলৈ মুনিগণৰ গমণ আৰু নন্দিৰ শিৱকথা বর্ণনা আদিয়ে বায়ৱীয় সংহিতাৰ আলোচ্য বিষয়।[৩১] ধর্ম সংহিতাতো শিৱৰ মাহাত্ম্য আছে। উপমন্যুৰ পৰা শ্রীকৃষ্ণৰ শিৱ মন্ত্রৰ দীক্ষা কোৱা হৈছে।

ইয়াতো ত্রিপুৰ দহন আছে। অন্ধক বধ, শিৱৰ শুক্রৰ পৰা অন্ধকৰ জন্ম, ৰুৰু দৈত্যৰ বধ, গৌৰীৰ অপ্সৰা বিলাকৰ সৈতে বিহাৰ, গৌৰীৰ উষাক ৱৰদান, উষা-অনিৰুদ্ধৰ বিবাহ আৰু ভাগৱতত বর্ণোৱাৰ দৰে হৰিহৰ তথা বাণৰ যুদ্ধ, কাম তত্ত্ব-কাম-পৰাক্রম, ইন্দ্র আদিৰ কাম কিংকৰত্ব, মহাত্মাবিলাকৰ কাম ক্ষোভ বিশ্বামিত্রাদিৰ কামবশ্যতা, ৰামৰ কামত্ব, শ্রীকৃষ্ণৰ কামত্ব কালীয় তপস্যা, আড়ী দৈত্য বৃত্তান্ত, বীৰক নন্দিৰূপে জন্মাৰ কাৰণ, শিৱৰ কামাচাৰ আৰু লিংগ ফল, শিৱ-ভক্ত পূজা আৰু তাৰ ফল, বিভিন্ন কর্মৰ বাবে বিভিন্ন পাপৰ জন্ম, তাৰ ফলত নানান নৰকভোগ, অন্নদান, জলদান, সত্য, তপস্যা আৰু পুৱাণ পাঠৰ মাহাত্ম্য, ধর্মশ্রৱণৰ মাহাত্ম্য, মহাদান বিভিন্ন দ্রব্য দান, তুলা পুৰুষ দান, ব্রহ্মাণ্ড দান, দীপাদি দান আৰু সেইবোৰৰ ফল, এদিনৰ আৰাধনাত শংকৰৰ কৃপা, শিৱ সহস্রনাম, ধর্মৰ উপদেশ, নৰকৰ বিৱৰণ আৰু পাপী আৰু পুণ্যৱানৰ নৰক অতিক্রম, যমদূতৰ কথা আদিও ইয়াত আছে। এইবোৰৰ উপৰিও লিংগ পূজাৰ কাৰণ, হৰিৰ শিৱ স্তৱ আৰু লিংগ পূজাৰ ফল, সৃষ্টি কথন, আদি শিৱ সম্পর্কীয় বহুতো বর্ণনা শিৱপূজাৰ ধর্মসংহিতাত আছে।[৩২]

থূলমূলকৈ ক'বলৈ হ'লে ওঠৰখন পুৱাণৰ ভিতৰত 'শিৱপুৱাণ' শিৱ সম্পর্কীয় অন্যতম পুৱাণ। শিৱ পৌৰাণিক ত্রিদেৱ ব্রহ্মা, বিষ্ণু আৰু মহাদেৱৰ ভিতৰত এজন হলেও শিৱই মহাদেৱ, মহেশ বা শম্ভু।[৩৩] তেওঁ আশুতোষ অর্থাৎ তৎক্ষণাৎ সন্তুষ্ট হয়। তেওঁ উদ্ধাৰকর্তা, তেওঁ সকলোকে গ্রহণ কৰে, আনকি আন দেৱতাই বেয়া পোৱা জনকো। তেওঁ সকলো দোষীকে শাস্তি বিধান কৰে, আনকি আন দেৱতাই যাক ভয় কৰে সিজনকো তেওঁ শাস্তি দিয়ে। শিৱই ঋষি মুনিক সহায় কৰে। তেওঁ সন্ন্যাসীৰ একমাত্র সাৰথি। সন্ন্যাসী সকলৰ মহৎ কার্য অনুসৰণকাৰীৰ অনিষ্টকাৰী অপকাৰী শক্তিক বাধা দিয়ে। তেওঁ ঈশ্বৰ আৰু মানৱক সমানে সহায় কৰে। তেওঁ জন্তু-জীৱ আৰু ভূত-প্রেতৰ পৃষ্ঠপোষক। শিৱক দুই ধৰণে পূজা কৰা হয়— এটা মানৱীয় ৰূপত আৰু আনটো হ'ল প্রতীক (লিংগ) ৰূপত। মহাভাৰতৰ অনুশাসন পর্ব আৰু পুৱাণ সমূহত শিৱ লিংগ পূজাৰ উল্লেখ আছে।

থোৱতে ক'বলৈ হ'লে প্রভু শিৱ 'শিৱপুৱাণ'ত স্বার্থ বিহীন, কঠোৰ তপস্যা পৰায়ণ বা ঘোৰ সন্ন্যাসী, লোকহিতৈষী আৰু বিশ্বপ্রেমিক। দেৱতা আৰু অসুৰে সাগৰ মন্থনৰ সময়ত উদ্ভুত বিষ পান কৰি শিৱই মানুহ, জীৱ, জন্তু তথা বিশ্বব্রহ্মাণ্ডক ধ্বংসৰ পৰা ৰক্ষা কৰিছে। শিৱ নৃত্যৰ ৰজা অর্থাৎ নটৰাজ। তেওঁ ১০৮ টা নৃত্যৰ সৃষ্টি কৰিছে আৰু তাৰ কিছুমান শান্ত আৰু নম্র প্রকৃতিৰ আৰু কিছুমান ভয়ঙ্কৰ আৰু ভয়ানক। তাণ্ডৱ নৃত্য অতি প্রখ্যাত নৃত্য। যুগচক্রৰ অন্তত এই তাণ্ডৱ নৃত্যৰ প্রতি তালে তালে বিশ্বব্রহ্মাণ্ডৰ সর্বস্ব ধ্বংস কৰে অর্থাৎ স্থূলতা নাইকিয়া কৰি সূক্ষ্ম অৱস্থালৈ পৰিবর্ত্তন কৰে। মহাদেৱ নৃত্যৰাজেই নহয়, সংগীতৰো সৃষ্টিকর্তা। ব্রহ্মাই মহাদেৱৰ পৰা সংগীত বিদ্যা শিকিছিল। আনকি নাৰদ, ভৰত, হু হু, তম্বৰু আৰু ৰম্ভা এই পাঁচজনেও তেওঁৰ পৰা সংগীতবিদ্যা শিকি সেই সংগীত ত্রিলোকত বিস্তাৰিত কৰিছিল।[৩৪]

'স্কন্দ পুৱাণ'ৰ প্রভাস খণ্ডতো প্রায় একে ধৰণৰ কাহিনী লিংগৰ আৰির্ভাৱৰ প্রসংগত সন্নিবেশিত হৈছে। এই প্রসংগত শিৱই নগ্নৰূপ ধাৰণ কৰি দাৰুক বনৰ ঋষি পত্নীসকলক কাম জর্জৰিত কৰি তুলিছিল। সেইবাবে শিৱৰ দেহৰ পৰা লিংগ পতিত হ'বৰ বাবে ঋষিসকলে অভিশাপ দিয়ে। পৰিণতিত শিৱৰ লিংগ ভূমিত পতিত হয়। যেনে—

যমাস্মাত্বং নগ্নতা যেত্য আশ্রমেহস্মিন সমাগতঃ।।
মোহয়ান স্ত্রিয়ো হস্মাকং লজ্জাং নৈবং কৱোষিচ।
তস্মাত্তে পততা লিঙ্গ সদ্য এব বৃষ ধ্বজ।।
ততস্তৎ পতিতং লিংগ তৎক্ষণাচ্ছস্কৱস্য চ।
তস্মিন প্র পতিতে ভূমৌ প্রাকম্পত বসুন্ধৱা।[৩৫]

এই পুৱাণখনৰ স্থানান্তৰত শিৱ লিংগ পতিত হোৱাৰ প্রসংগত প্রায় একে ধৰণৰ কাহিনীকেই পৰিৱেশন কৰা হৈছে। মদনৰ পঞ্চশৰৰ দ্বাৰা আহত হোৱাৰ পিছত তেওঁ বালখিল্যৰ আশ্রমত উপস্থিত হৈ ঋষি পত্নীসবৰ অন্তৰত কামোত্তেজনা জগাই তুলিছিল। এইবাবে ঋষিসকলে লিংগপতিত হবৰ কাৰণে শিৱক অভিশাপ দিয়ে। পৰিণতিত শিৱৰ লিংগ পতিত হ'ল লগে লগে ত্রিলোকত মহা প্রলয়ে দেখা দিলে। অৱশেষত শিৱৰ নির্দেশমর্মে ব্রহ্মাদি দেৱগণে শিৱলিংগক পূজা কৰাৰ ফলত

আসন্ন ধ্বংসৰ পৰা ত্রিলোক ৰক্ষা পৰে।[৩৬]

'স্কন্দ পুৰাণ'ৰ মাহেশ্বৰ খণ্ডতো দ্বিতীয় অধ্যায়ৰ পৰা পঞ্চম অধ্যায়লৈ দক্ষৰ মহাযজ্ঞৰ কাহিনী বিস্তৃতভাবে পোৱা যায়। ইয়াতো দক্ষৰ যজ্ঞ ধ্বংস কৰিছে শিৱৰ জটাৰ পৰা ওলোৱা বীৰভদ্ৰ নামৰ অসুৰটোৱে। মাহেশ্বৰ খণ্ডত শিৱ ৰুদ্ৰ, মহাতেজা, যজ্ঞৰূপী আৰু শদাদিব। যেনে—

বভাষে বচনং দেৱী প্রস্তাবসদৃশ তদা।
তমাহুত ত্তয়া কন্মাচ্ছন্তঃ পৰম শোভনঃ।।
যেন পুত মিদং সৰ্ব্বং সমগ্রং সচতাচৰম্।
যজ্ঞো যজ্ঞবিদ্যানং শ্রেষ্ঠো যজ্ঞাঙ্গো যজ্ঞদক্ষিণঃ।।[৩৭]

'অগ্নিপুৰাণ'তো শিৱক লিংগৰূপে উপাসনা কৰাৰ কথা পোৱা যায়। ইয়াত শিৱৰ লিঙ্গ লক্ষণ বৰ্ণনা কৰা হৈছে। যেনে—

লিঙ্গাদি লক্ষণং বক্ষে কমলোদ্ভব তচ্ছৃনু।
দৈৰ্ঘ্যার্দ্ধং বসু ভিৰ্ভক্তা ত্যত্বা ভাগত্রয়ং ততঃ।।
বিস্কম্ভং ভুত ভাগৈস্তু চতুৰস্ত্রন্ত কাৰয়েৎ।
আয়ামং মূৰ্ত্তিভিৰ্ভত্বা এক দ্বিত্রি ক্রমান্নঞ্জযেৎ।।
ব্রহ্মা বিষ্ণু শিবাংশেষু বৰ্দ্ধমানো হয় মচ্যতে।
চতুৰস্ত্রোহৰস্য বৰ্ণার্দ্ধং গুহ্য কোণেষু লাঞ্ছয়েৎ।।
অষ্টাগ্রং বৈষ্ণৱং ভাগং সিধতেব ন শংশয়ঃ।
ষোড়শাস্ত্রং ততঃ কুৰ্য্যাদ্ধণত্রিং শাস্ত্রং ততপুন।।[৩৮]

ইয়াৰ উপৰিও শিৱ পূজাৰ বিধি সম্পৰ্কেও বিস্তৃত বৰ্ণনা পোৱা যায়। শিৱৰাত্রি ব্রতৰ কথাও পোৱা যায়। 'বামন পুৰাণ'ত লিংগ পূজাৰ পৰম্পৰা সৃষ্টিৰ প্রসংগত প্রায়ে একে কথাংগ বিশিষ্ট পুৰাণ কথা পোৱা যায়। সতীৰ দেহত্যাগৰ পৰৱৰ্তীকালত কামদেৱৰ পঞ্চবাণৰ আঘাতৰ আশংকাত শিৱ মহাদেৱে দাৰুবনত আশ্রয় ললে। তাতো কামদেৱে তেওঁক নিষ্কৃতি নিদিলে। শিৱৰ দর্শনত ঋষি পত্নীসৱ (অৰুন্ধতী আৰু অনুসূয়াৰ বাহিৰে) অনংগ তাড়নাত অস্থিৰ হৈ উঠিল—

ততঃ সংক্ষোভিতাং সৰ্বা যত্রায়াতি মহেশ্বৱঃ।
তত্র প্রয়ান্তি কার্যাত্তা মদন বিহবলি তেন্দ্রিয়াঃ।।[৩৯]

*ঋষি*সকলে একেমুখে শিৱক অভিশাপ দিলে তেওঁৰ লিংগ পতিত হবলৈ ঃ

'ক্রোধান্বিত ব্রুবন সৰ্বে লিংগমাগত তাংভুবি।[৪০]

নিমিষৰ ভিতৰতে শিৱৰ দেহৰ পৰা লিংগ ছিন্ন হৈ ভূতল বিদীর্ণ কৰি পতিত হ'ল। তেতিয়া শূলপাণি শংকৰো লিংগত অন্তর্হিত হ'ল। সেই ভুপতিত লিংগই বসুধা ভেদ কৰি ৰসাতলত প্রবেশ কৰিলে আৰু ওপৰৰ ফালে ব্রহ্মাণ্ড ভেদ কৰিবলৈ ধৰিলে। ত্রিলোকত প্রলয় আসন্ন হৈ উঠিল। ব্রহ্মাই উপায় নেদেখি বিষ্ণুৰ ওচৰ চাপিল। ব্রহ্মা আৰু বিষ্ণু উভয়ে শিৱ লিংগ দর্শন কৰি ইয়াৰ শেষ সীমা বিচাৰি নিৰাশ হ'ল। অৱশেষত ব্রহ্মা-বিষ্ণু, উভয়ে লিংগৰূপী শিৱক স্তুতি কৰিলে। শিৱই তেওঁলোকক দেখা দিলে। ব্রহ্মা বিষ্ণু উভয়ে লিংগ পুনঃ গ্রহণ কৰিবৰ বাবে শিৱই সন্মতি জ্ঞাপন কৰিলে। শিৱৰ উপদেশ মতে দেৱতা সকলে স্বর্ণ বর্ণ বিশিষ্ট লিংগৰ পূজা-অর্চনা কৰি লিংগৰূপী শিৱৰ উপাসনাৰ বাবে শাস্ত্রাদি নির্মাণ কৰে ঃ

যদ্যর্চ্চয়ন্তি ত্রিদশা মম লিংগং সুৰাত্তমৌ।
তদেতৎ প্রতি গৃহ্নীয়াৎ নান্যথেতি কথঞ্চন।।
ততঃ প্রোবাচ ভগৱানেৱম স্থিতি কেশৱ।
ব্রহ্মা সয়ঞ্চ জগ্রাহ লিংগং কনক পিংগলম্।।
তত শ্চকাৰ ভগৱাং শার্তুবণ্যং হৰাঞ্চনে।
শাস্ত্রানি চৈষাং মুখ্যানি নানোক্ত বিদিতানিচ।।[৪১]

ইয়াৰ পৰা অনুমান কৰিব পাৰি যে পৌৰাণিক যুগত শিৱক লিংগ-পূজা-পৰম্পৰাৰে পূজা-আৰাধনা কৰিছিল। এনেদৰে বিচাৰ কৰিলে দেখা যায় যে পৌৰাণিক শিৱ-দেৱতা জগতৰ পূজ্য দেৱতা।

'কালিকা-পুৰাণ'ত শিৱই দাক্ষায়ণীক (দক্ষনন্দিনী) ৱৰপ্রদান কৰে।[৪২] আহিন মাহৰ শুক্লাষ্টমীত উপবাস থাকি পার্ব্বতীয়ে যেতিয়া দেৱাদিদেৱ মহাদেৱক ভক্তি ভাৱে পূজা কৰিলে তেতিয়া শিৱই সতীৰ ওচৰত প্রত্যক্ষ হৈ সতীৰ তপস্যাত সন্তুষ্ট হৈ ৱৰপ্রদান কৰিব বিচাৰিলে। পার্ব্বতীয়ে তেতিয়া শিৱৰ মন বুজি পায় অতি গোপনে শিৱৰ হৃদয় 'হর্ষণ' বাণেৰে বিদ্ধ কৰিলে। তেতিয়া হর্ষান্বিত পৰমেশ্বৰ শম্ভুৱে ব্রহ্ম চিন্তা পাহৰি বাৰে বাৰে সতীৰ প্রতি আকর্ষিত হ'ল। সতীয়ে লজ্জা সংযত কৰি পুনৰ শিৱক বৰ খুজিলে আৰু শিৱ-সতীক নিজ অভীষ্ট ফল লাভ কৰক বুলি বৰ প্রদান কৰিলে—

এতচ্ছ্রুত্বা বচস্তস্য সাভীষ্ট ফল ভাবনম্।
তুষ্ণীং তস্থৌ প্রমুদিতা ৱৰং প্রাপ্য মনোগতম।।[৪৩]

সতীয়ে মনোমত বৰ লাভ কৰি মৌন ভাবে থাকে। সতীয়ে মহাদেৱক বাৰে বাৰে তেওঁৰ পিতৃক জনাবলৈ কৈছে আৰু মহাদেৱেও সতীয়ে যে তেওঁৰ ভার্য্যা হ'ব সেই কথা কৈছে।

'শিৱ পুৰাণ'ৰ একাদশ অধ্যায়ত শিৱ বিবাহৰ বর্ণনা পোৱা যায়। নাৰদ বিবাহৰ কিছু পূর্ব্বেই দক্ষালয়ত উপস্থিত হৈছে। তাৰ পিছতে মহাদেৱৰ সৈতে ঋষিবৃন্দ, ব্রহ্মা আৰু প্রমথসকলে দক্ষালয়লৈ যাত্রা কৰে। প্রমথ সকলেও নানা বাদ্য বজালে শঙ্খ-

দুন্দুভিকে ধৰি, দেৱতাসকলেও মনোহৰ বাদ্যযন্ত্ৰ বজালে। "কালিকা-পুৰাণ"তো দৰাৰূপী মহাদেৱৰ সাজ, যেনে—

ভুজঙ্গো ব্যাঘ্রকৃত্তিশ্চ জটা চন্দ্রকলা তথা।
জগাম ভূষণত্বঞ্চ তেনাপি পৰিদীপিতঃ।।
ততঃ ক্ষণেণ বলিনা বলীবর্দ্দেন বেগিনা।
সব্রক্ষনাৰদাদ্যৈশ্চ প্রাপ দক্ষালয়ং হৰঃ।[৪৪]

অর্থাৎ শিৱৰ ভূষণ হ'ল ভূজঙ্গ, ব্যাঘ্রচৰ্ম্ম, জঁটাজুট আৰু শশিকলা। সেই ভূষণৰে শোভিত হৈ মহাদেবে ব্রহ্মা আৰু নাৰদ আদিৰ লগত দক্ষালয়ত উপস্থিত হ'ল। দক্ষয়ো দৰাপক্ষৰ সকলো লোককে যথোচিত পূজা কৰি শুভমুহূর্তত নিজ দুহিতা সতীক আনন্দ মনে শিৱৰ হাতত সম্প্রদান কৰিলে। কালিকাপুৰাণৰ দ্বাদশ অধ্যায়ত ব্রহ্মা-বিষ্ণু-মহেশ্বৰক অভেদৰূপত দেখিবলৈ পোৱা যায়।[৪৫] এক পৰম ব্রহ্মাই হ'ল এই তিনিগৰাকী দেৱতাৰ স্রষ্টা। সেই জগদীশ্বৰেই পৃথিৱীৰ স্রষ্টা। তেৱেই তিনিওজন দেৱতাকে পৃথিৱীৰ ভাৰ বহন কৰিবলৈ নির্দ্দেশ দিছে। কালিকাপুৰাণৰ চতুর্দশ অধ্যায়ত শিৱ-বিহাৰৰ কথা আছে। শিৱই সতীৰ লগত হিমালয়ত বিহাৰ কৰিছে। ইয়াৰ উপৰিও পঞ্চদশ অধ্যায়তো শিৱ-পার্বতীৰ হিমালয় পর্ব্বতত বাস কৰাৰ প্রস্তাৱ। ষোড়শ অধ্যায়ত দক্ষযজ্ঞৰ কথা আছে। মহাত্মা দক্ষই মহাদেৱক কপালী বুলি যজ্ঞলৈ নামাতিলে। কিন্তু বাকী দেৱতা, ঋষি মুনি, ৰজা-মহা-ৰজা সকলোকে মাতিলে। সেয়েহে সতীয়ে ক্রোধত পিতৃগৃহলৈ গ'ল আৰু পিতৃৰ মুখৰ পৰা শিৱনিন্দা সহ্য কৰিব নোৱাৰি যজ্ঞতে, সতীয়ে দেহত্যাগ কৰিলে। শিৱই সতীৰ মৃত্যুৰ পিছৰ দক্ষযজ্ঞ ধ্বংস কৰে। শিৱৰ খণ্ডত উৎপত্তি হোৱা বীৰভদ্র নামৰ অসুৰটোৰ দ্বাৰা দক্ষৰ যজ্ঞ ধ্বংস কৰে। দক্ষযজ্ঞ ধ্বংস কৰাৰ পিছত সতীৰ মৃত্যুত শিৱই শোকতে সাধাৰণ পুৰুষৰ দৰে কান্দিবলৈ ধৰিলে। তেতিয়া দেৱতা সকলে মহাদেৱ-শিৱক স্তুতি কৰিবলৈ ধৰিলে। অৱশেষত শিৱই সতীৰ মৃতদেহ কান্ধত লৈ বিলাপ কৰি পূর্ব্বাভিমুখে যাত্রা কৰিবলৈ ধৰিলে।

ব্রহ্মাদি দেবতাসকলে সতীৰ শৱদেহ বিচ্যুত কৰাৰ কাৰণে উপায় চিন্তা কৰিবলৈ ধৰিলে। ব্রহ্মা, বিষ্ণু আৰু শনিয়ে সেয়েহে যোগমায়া বলেৰে সতীৰ শৱ-দেহত প্রবেশ কৰি খণ্ড খণ্ড পুণ্যতীর্থ কৰিবৰ উদ্দেশ্যে পৃথিৱীৰ স্থানে স্থানে শৱ-দেহ কাটি পেলালে। এনেদৰে সতীৰ শৱ-শৰীৰৰ যি যি অংশ যি যি ঠাইত পৰিল তাতে একোটা পুণ্যতীর্থ স্থাপন হ'ল।[৪৬] যেনে পৃথিৱীৰ দেবীকূটত সতীৰ পদযুগল, উদ্দীয়নত উৰুযুগল, কামৰূপত যোনিমণ্ডল, কামৰূপৰ পূর্বভাগত নাভিমণ্ডল, জলন্ধৰত স্তন যুগল, কান্ধ পৰিল পূর্ণগিৰিত, কামৰূপৰ শেষভাগত মুৰটো পৰিল।

অকল সেয়ে নহয় সতীৰ যি যি অঙ্গ য'ত য'ত পৰিল সেই স্থানতে শিৱই সতী-স্নেহ বশতঃ লিঙ্গ ৰূপত অৱস্থিত হ'ল। ব্রহ্মা-বিষ্ণু আৰু শনিয়েও সতীৰ পাদাদিৰ অঙ্গ পূজা কৰিলে। আনকি লিঙ্গ ৰূপী মহেশ্বৰক ব্রহ্মাদি দেৱতা সকলেও পূজা কৰিবলৈ ধৰিলে। যেনে—

মহাদেৱং শিৱং স্থানুমুগ্রং ৰুদ্রং বৃষধ্বজম্।
শশ্মানবাসিনং ভর্গং সর্ব্বান্তকৰণং পৰম্।।[৪৭]

'লিংগ পুৰাণ'তো শিৱ চৰিত্রৰ মহিমা ব্যাপক। লিঙ্গ পুৰাণৰ পূর্ব্বভাগৰ প্রথম অধ্যায়তে শিৱক নাৰদে লিঙ্গৰূপত পূজা কৰি নৈমিষাৰণ্যলৈ গৈছে।[৪৮] ইয়াত মহর্ষি নাৰদ শিৱভক্ত। চতুর্থ অধ্যায়ত ব্রহ্মৰূপী শিৱই প্রকৃতি সৃষ্টি কৰিছে। সপ্তম অধ্যায়ত মহেশ্বৰৰ পূজা কৰিলে যে তত্ত্বজ্ঞান লাভ কৰিব পাৰে, যোগৰ ফলত মুক্তি লাভ কৰিব পাৰে সেই কথাৰ বিস্তৃত বর্ণনা আছে। অষ্টম অধ্যায়ত শিৱ আৰাধনা বিধি আৰু অষ্টাঙ্গ সাধনৰ কথা উল্লেখ আছে। অষ্টপ্রকাৰ যোগ হ'ল— যম, নিয়ম, আসন, প্রাণায়াম, প্রত্যাহাৰ, ধাৰণা, ধ্যান আৰু সমাধি। অষ্টাদশ অধ্যায়ত বিষ্ণুৰ দ্বাৰা শিৱ স্তুতিৰ বর্ণনা আছে। ইয়াত বিষ্ণুৱে শিৱক ৰুদ্র, আদিদেৱ, সূৰঞ্জয্য, সোম, অগ্নি, বাম, ঈশান, উর্দ্ধলিঙ্গ, লিঙ্গী, হেম, জল, মঙ্গলময়, তেজ, সর্ব্বব্যাপী, অন্তৰীক্ষ, পৃথিবী, অনঙ্গ, শ্বেত, মহাস্য কপর্দ্দিন আদি নামেৰে শিৱক নমস্কাৰ কৰে।[৪৯] উনবিংশ অধ্যায়ত ব্রহ্মা আৰু বিষ্ণুৱে বৰ লাভ কৰে। একবিংশ অধ্যায়ত ব্রহ্মা-বিষ্ণুৰ শিৱ স্তৰ। দ্বাবিংশ অধ্যায়ত মহাদেৱে ব্রহ্মা-বিষ্ণুক বৰ প্রদান কৰে প্রজাপতিৰ দেহৰ পৰা একাদশ ৰুদ্রৰ উৎপত্তি। প্রজাপতি ব্রহ্মাৰ প্রাণলাভৰ কথা পোৱা যায়। ত্রয়োবিংশ অধ্যায়ত ব্রহ্মাৰ প্রশ্নৰ অনুৰোধত শিৱই সদ্যোজাততত্ত্ব কথন আৰু গায়ত্রী মাহাত্ম্য বর্ণনা কৰিছে। চতুর্বিংশ অধ্যায়ত ব্রহ্মাৰ ওচৰত শিৱই যোগ বা ধ্যান কীর্তন, পঞ্চবিংশ অধ্যায়ত মহেশ্বৰক লিঙ্গৰূপত পূজা কৰাৰ কথা বর্ণন। সপ্তবিংশ অধ্যায়ত লিঙ্গ পূজাৰ বিধি, অষ্টাবিংশ অধ্যায়ত মানস শিৱপূজা, ত্রিংশ অধ্যায়ত শিৱ আৰাধনাৰ প্রভাৱত শ্বেতৰ মৃত্যু গ্রাসৰ পৰা মুক্তি, একত্রিংশ অধ্যায়ত ব্রহ্মা কথিত বিধি অনুসাৰে ঋষিসকলৰ শিৱ সাক্ষাৎকাৰ, দ্বাত্রিংশ অধ্যায়ত ঋষিসকলৰ শিৱস্তৰ, ত্রয়স্ত্রিংশ অধ্যায়ত শিৱই ঋষিসকলৰ শিৱস্তৰ আৰু শৈৱ সকলৰ মাহাত্ম্য কীর্ত্তন কৰিছে।

অষ্টত্রিংশ অধ্যায়ত বিধাতাৰ ওচৰত বিষ্ণুৰ শিৱ মাহাত্ম্য বর্ণনা আৰু সৃষ্টি, দ্বিচতাবিংশ অধ্যায়ত শিৱৰ প্রসাদত শিলাদঋষিৰ পুত্র লাভ, ত্রিচত্বাবিংশ অধ্যায়ত নন্দীৰ মনুষ্যাকাৰ

প্রাপ্তি আৰু শিৱৰ অনুগ্রহ লাভৰ বর্ণনা আছে। পঞ্চষষ্টিতম অধ্যায়ত সূর্য্যবংশ আৰু চন্দ্রবংশৰ বর্ণনা প্রসঙ্গত শিৱ সহস্র নাম স্তোত্র, সপ্ততিতম অধ্যায়ত শিৱ কৃষ্ণ আদি সৃষ্টি কথন, দ্বি সপ্ততিতম অধ্যায়ত ত্রিপুৰনাশৰ বাবে মহাদেৱৰ অভিযান, ত্রিসপ্ততিতম অধ্যায়ত দেৱতাসকলক ব্রহ্মাই লিঙ্গ পূজা কৰিবলৈ দিয়া উপদেশৰ বর্ণনা, চতুঃসপ্ততিতম অধ্যায়ত লিঙ্গভেদ আৰু লিঙ্গস্থাপনৰ ফল, পঞ্চ-সপ্ততিতম অধ্যায়ত নির্গুণ শিৱৰ যোগ-অযগ্যতা, ষট্সপ্ততিতম অধ্যায়ত বিবিধ শিৱমূর্ত্তি প্রতিষ্ঠাফল, সপ্তসপ্ততিতম অধ্যায়ত শিৱালয় নির্মাণ আৰু শিৱক্ষেত্রৰ পৰিমাণ আদিৰ বর্ণনা পোৱা যায়। আশীতিতম অধ্যায়ত শিৱ আৰু দেৱতাসকলৰ কথোপকথন, দেবগণৰ পশুত্ব মোচন, সপ্তাশীতম অধ্যায়ত শিৱৰ প্রসাদত মায়াৰ পৰা সনৎকুমাৰৰ মুক্তি লাভ, একনবতিতম অধ্যায়ত মৃত্যু চিহ্ন, প্রণৱ মাহাত্ম্য আৰু শিৱ উপাসনাৰ বর্ণনা, অষ্টনবতিতম অধ্যায়ত বিষ্ণুকৃত শিৱ সহস্র নাম স্তৱ, নয়ন কমল প্রদান পূর্ব্বক বিষ্ণুৰ শিৱপূজা, শিৱৰ ওচৰৰ পৰা বিষ্ণুৰ সুদর্শন চক্রলাভ, নবনবাতিতম অধ্যায়ত দেৱীৰ শিৱ বামাঙ্গ-স্বৰূপত্বকথন, দক্ষ তথা হিমালয়ৰ পৰা দেৱীৰ উৎপত্তি কথন, শততম অধ্যায়ত দক্ষযজ্ঞৰ বর্ণনা, একাধিক শততম অধ্যায়ত পার্ব্বতীৰ তপস্যা আৰু মদন কামদেৱ ভস্ম, দ্ব্যধিকশততম অধ্যায়ত দেৱীৰ শঙ্কৰ প্রসাদ লাভ, এ্যধিকশততম অধ্যায়ত শিৱ-বিবাহৰ বর্ণনা, চতুৰধিক শততম অধ্যায়ত বিঘ্নৰাজৰ সৃষ্টিৰ কাৰণে দেৱতাসকলৰ কালীৰ উৎপত্তি আৰু সপ্তাধিক শততম অধ্যায়ত ভক্ত উপমন্যুৰ প্রতি শিৱৰ অনুগ্রহ আদিৰ বর্ণনা পোৱা যায়।

'লিঙ্গপুৰাণ'ৰ উত্তৰ ভাগৰ নবম অধ্যায়ত পশু নিৰূপণ শাপকথন আৰু শিৱৰ পশুপতি নাম হোৱাৰ কাৰণ নির্দ্দেশ আছে। দশম অধ্যায়ত শিৱৰ আজ্ঞাক্রমে সর্ব্বসৃষ্টি আৰু একাদশ অধ্যায়ত শিৱ-শিৱাৰ বিভূতি কথন আৰু লিঙ্গ পূজা মাহাত্ম্য কথন আছে। চতুর্দ্দশ অধ্যায়ত শিৱৰ পঞ্চব্রহ্ম স্বৰূপতা কীর্তন, ষোড়শ অধ্যায়ত শিৱৰ নানাবিধ নামৰূপ কথন, অষ্টাদশ অধ্যায়ত ব্রহ্মাদিকৃত শিৱস্তৱ, ঊনবিংশ অধ্যায়ত মণ্ডলৰ শিৱপূজনবিধি, বিংশ অধ্যায়ত মণ্ডল পূজা অধিকাৰী সকলৰ শিৱমন্ত্র দীক্ষা বিধি, একবিংশ অধ্যায়ত শিৱপূজা নিয়মাদি কথন, ত্রয়োবিংশ অধ্যায়ত শিৱপূজা নিয়মাদি কথন, ত্রয়োবিংশ অধ্যায়ত মানস শিৱপূজা বিধি, চতুর্ব্বিংশ অধ্যায়ত শিৱপূজাৰ বিশেষ বিধি আৰু পঞ্চবিংশ অধ্যায়ত শিৱ কথিত অগ্নিকার্য্যৰ বর্ণনা পোৱা যায়। তেনেদৰে সপ্তচত্বাবিংশ অধ্যায়ত লিঙ্গ স্থাপন আৰু চতু:পঞ্চাশ অধ্যায়ত ত্রিয়ম্বক মন্ত্রৰ দ্বাৰা শিৱ পূজা বিধি বর্ণনা আছে। পঞ্চপঞ্চাশ অধ্যায়ত ক্রমে যোগকথন, লিঙ্গপুৰাণ পাঠ শ্রৱণ আৰু শ্রৱণৰ ফলৰ বর্ণনা পোৱা যায়। মুঠতে 'লিঙ্গপুৰাণ'ত শিৱক লিংগৰূপতে পূজা-উপাসনা কৰা হৈছে।

'বিষ্ণু পুৰাণ'ৰ মতেও বাণ শিৱৰ পৰম ভক্ত আছিল। আনকি ভক্ত বাণাসুৰক ৰক্ষাৰ বাবে ত্রিশূল পাণি শম্ভুৱে শ্রীকৃষ্ণৰ বিপৰীতে যুদ্ধত অৱতীর্ণ হৈছিল। যেনে—

হৰি শঙ্কৰযোযুর্দ্ধ মতীবাসী ৎ সুদাৰুণম্।
চক্ষুভুঃ সকলা লোকা যত্রাস্ত্রাং শুপ্রতাপিতাঃ।।
প্রলয়ে হয় মশেষস্য জগতা নূন মাগতঃ।
যেণিয়ে ত্রিদশা যত্র বর্তমানে মহাহৱে।।
জৃম্ভণাস্ত্রেণ গোবিন্দো জুম্ভয়ামাস শঙ্কৰম্।
তত প্রণেশুর্দৈতেয়াঃ প্রথমাশ্চ সমন্ততঃ।[৫০]

'ব্রহ্মবৈৱর্ত পুৰাণ'তো শিৱৰ সৃষ্টি সম্পর্কে চমু আভাস পোৱা যায় ব্রহ্মখণ্ডত। ব্রহ্মখণ্ডত পোৱা যায় যে পৰমব্রহ্ম শ্রীকৃষ্ণৰ বাওফালে পঞ্চানন অর্থাৎ মহাদেৱ জন্ম গ্রহণ কৰে।[৫১] মহাদেৱৰ মুখ পাঁচখন আছিল কাৰণে তেওঁক পঞ্চানন বুলি কোৱা হয়। চাৰিওফালে চাৰিখন মুখ আৰু সম্মুখৰফালে এখন মুখ। শিৱ মহাযোগী আৰু প্রত্যেকখন মুখতে তিনিটাকৈ চকু আছে। মহাদেৱৰ শিৱজঁটাৰে পৰিপূর্ণ, ত্রিশূলধাৰী; হাতত জপমালা আৰু কপালত চন্দ্রই শোভা কৰে। ইয়াতো শিৱ যোগী, মৃত্যুঞ্জয়ী আৰু বৈষ্ণৱৰ চূড়ামণি বা শ্রেষ্ঠ দেৱতা। ব্রহ্মখণ্ডতে দক্ষই শিৱৰ ওচৰলৈ গৈ দক্ষৰ কন্যাসকলৰ পতি দান বিচাৰে। কিন্তু শিৱই কপালত আশ্রয় দিয়া চন্দ্রক এৰি দিব বিচৰা নাছিল। কিন্তু যেতিয়া শিৱক দক্ষই অভিশাপ দিব খোজে তেতিয়া শিৱই শ্রীকৃষ্ণক স্মৰণ কৰিবলৈ ধৰে। শ্রীকৃষ্ণই জনাৰর্দ্দন ব্রহ্মাৰ ৰূপ ধৰি দক্ষ আৰু শিৱৰ সন্মুখত উপস্থিত হৈ দুয়োজনৰ কাজিয়াৰ অন্ত পেলায়।

শ্রীকৃষ্ণই তেওঁৰ সুদর্শন চক্রেৰে অর্দ্ধচন্দ্র কাটি আনি দক্ষৰ হাতত দিলে আৰু ৰোগহীন অর্দ্ধচন্দ্র শিৱৰ কপালত থাকিল।[৫২] 'ব্রহ্মবৈৱর্ত পুৰাণ'ৰ ব্রহ্ম খণ্ডতে শিৱ যোগীৰূপে কৈলাসত অৱস্থান কৰি আছে। অসংখ্য ঋষিমুনিয়ে যোগবলেৰে সেই মহাশূণ্যত সাধনা কৰি আছে। শিৱৰ কৈলাস নগৰীত সূর্য্য বা চন্দ্রৰ ৰশ্মি নাই, কেৱল আছে অগ্নিৰ শিখা। এই শিৱপুৰীৰ আয়তন একলক্ষ যোজন আৰু তাত তিনিকোটি ৰত্ন-গৃহই শোভা কৰিছে। ইয়াত ৰোগ, শোক, জন্ম-মৃত্যু বুলি একো নাই। ইয়াত শিৱ মৃত্যুঞ্জয়ী, সর্ববেশী, সিদ্ধিদাতা ঈশ্বৰ। নাৰদে এই কৈলাসত শিৱৰ ওচৰলৈ গৈছে দীক্ষা লবৰ বাবে। নাৰদে বেদোক্ত মন্ত্রেৰে শিৱক পূজা-আৰাধনা কৰিছে। শিৱই নাৰদক হৰিৰ মন্ত্র, স্তোত্র,

হৰি পূজা, হৰিৰ কবচ আৰু হৰিৰ জ্ঞান শিকালে। ইয়াৰ উপৰিও শিৱই নাৰদক বিপ্ৰৰ আহ্নিক বিধি সম্পৰ্কে উপদেশ দিলে। তেনেদৰে প্ৰকৃতি খণ্ডতো তাৰাক যেতিয়া চন্দ্ৰই হৰণ কৰি নিলে তেতিয়া গুৰু বৃহস্পতিয়ে শোকত ম্ৰিয়মান হৈ পৰিছিল। সেই সময়ত শিৱৰ ওচৰলৈ গুৰু বৃহস্পতিয়ে উপায় বিচাৰি যোৱাত শিৱই গুৰুক কৃষ্ণ পূজা কৰিবলৈ উপদেশ দিলে। আনকি স্বয়ং শিৱই গুৰু বৃহস্পতিক লৈ নৰ্ম্মদা তীৰলৈ লৈ গৈছে আৰু ব্ৰহ্মা-বিষ্ণুৰ সাক্ষাতত বৃহস্পতিৰ দ্বাৰা কৃষ্ণ পূজা কৰোৱাইছে।[৫৩]

গতিকে শিৱ সম্বন্ধীয় ওপৰৰ আলোচনাৰ পৰা বুজা যায় যে শিৱ দেৱতাৰ চৰিত্ৰ বিভিন্ন সাংস্কৃতিক সমলৰ সামগ্ৰিক যৌগ। বৈদিক ৰুদ্ৰ আৰু পৌৰাণিক শিৱৰ অপূৰ্ব সমন্বয় ঘটিছে ৰামায়ণ মহাভাৰত আৰু পুৰাণসমূহত। বৈদিক অগ্নি আৰু বৈদিক সোমৰ সংমিশ্ৰণৰ ফলত শিৱৰ সামগ্ৰিক ৰূপৰ প্ৰতিফলন ঘটিছে। মুঠতে পৌৰাণিক শিৱ পৰমব্ৰহ্ম, ঈশ্বৰ, অৰ্দ্ধনাৰীশ্বৰ, ৰুদ্ৰ, মহাকাল, নৃত্যৰাজ (নটৰাজ) হৰ, যোগী-ধ্যানী, গ্ৰহাত্মক, শিৱ, শম্ভু দিগম্বৰ সোমনাথ বৃষভ বাহন, মহাভৈৰৱ আদি।

ফুট নোট ঃ

১. চক্ৰৱৰ্তী, পঞ্চানন (সম্পা.) ঃ ৰামেশ্বৰ ৰচনাৱলী, পৃ. ১০৭

২. শৰ্মা নবীনচন্দ্ৰ (সম্পা.) শিৱপুৰাণ, পৃ. ১০৮-১০৯

৩. উক্ত গ্ৰন্থ, পৃ. ১০৯

৪. (ক) নাথ চৌধুৰী ভূপেন্দ্ৰ (অনু.)। ঋগ্বেদ সংহিতা (১০ম মণ্ডল), পৃ. ২৪২

(খ) শৰ্মা ফুকন পঞ্চানন (অনু.) ঃ ঋগ্বেদ সংহিতা (সম্পূৰ্ণ) পৃ. ৫৩০

৫. (ক) নাথ, চৌধুৰী ঃ প্ৰাগুক্ত গ্ৰন্থ, পৃ. ২৪২

(খ) শৰ্মা, ফুকন: প্ৰাগুক্ত গ্ৰন্থ, পৃ: ৫৩০

৬. শৰ্মা থানেশ্বৰ ঃ বৈদিক সাহিত্যৰ ৰূপৰেখা, পৃ. ৬২, ৬২

৭. চক্ৰৱৰ্তী, পঞ্চানন (সম্পা.) ঃ ৰামেশ্বৰ ৰচনাৱলী, পৃ. ১০৭

৮. উক্ত গ্ৰন্থ, পৃ. ১০৭

৯. শৰ্মা নবীনচন্দ্ৰ ঃ প্ৰাগুক্ত গ্ৰন্থ, পৃ. ১১০

১০. উক্ত গ্ৰন্থ, পৃ. ১১০

১১. উক্ত গ্ৰন্থ, পৃ. ১১১

১২. উক্ত গ্ৰন্থ, পৃ. ১১১

১৩. চক্ৰৱৰ্তী পঞ্চানন (সম্পা.) প্ৰাগুক্ত গ্ৰন্থ, পৃ. ১০৭

১৪. দত্ত বৰুৱা, হৰিনাৰায়ণ (সম্পা.) ঃ মাধৱ কন্দলি বিৰচিত *'ৰামায়ণ'*, পৃ. ২১৩-২১৬

১৫. বৰ্মন, ৰবিচন্দ্ৰ শিৱ সহস্ৰ নাম, পাতনি

১৬. বৰুৱা, বিৰিঞ্চি কুমাৰ (মুখ্য সম্পা.) ঃ মহাভাৰতৰ বন পৰ্ব্ব ঃ পৃ. ১১৪-১২৪

১৭. বৰুৱা, বিৰিঞ্চি কুমাৰ (মুখ্য সম্পা.) ঃ মহাভাৰতৰ দ্ৰোণপৰ্ব্ব, ২০২ অধ্যায়, পৃ. ৬৮৯-৬৯৮

১৮. শৰ্মা, নবীনচন্দ্ৰ ঃ প্ৰাগুক্ত গ্ৰন্থ, পৃ. ১২৮

১৯. বৰুৱা, বিৰিঞ্চি কুমাৰ (মুখ্য সম্পা.) ঃ মহাভাৰতৰ অনুশাসন পৰ্ব ১৪/২৩০-৩৩

২০. বৰুৱা, বিৰিঞ্চি কুমাৰ (মুখ্য সম্পা.) ঃ মহাভাৰতৰ সৌপ্তিক পৰ্ব ১৭/২১-২৩

২১. উক্ত গ্ৰন্থ, ১৭/১৩-১৪

২২. শৰ্মা, নবীন চন্দ্ৰ (সম্পা.) ঃ স্বৰ্গদেৱ ৰুদ্ৰসিংহ বিৰচিত 'শিৱ পুৰাণ', পৃ. ১২১

২৩. ভাগৱত পুৰাণ ৪/২-৭

২৪. ভাগৱতী, সুৱেণ (সম্পা.) ঃ শিৱ পুৰাণ, জ্ঞানসংহিতা, পৃ. ৩, শ্লোক সংখ্যা-১১

২৫. শৰ্মা, নবীনচন্দ্ৰ (সম্পা.) ঃ ৰুদ্ৰসিংহ বিৰচিত 'শিৱ পুৰাণ', পদ — ২৬৭-৮৯, পৃ. ৬৪-৬৮

২৬. ভট্টাচাৰ্য্য হংস নাৰায়ণ ঃ হিন্দুদেৱ দেৱ-দেৱী, দ্বিতীয় পৰ্ব, পৃ. ১০৯

২৭. তৰ্কৰত্ন, পঞ্চানন (সম্পা.) ঃ শিৱ-পুৰাণ, জ্ঞান সংহিতা, ৪২/১৫-১৭

২৮. উক্ত গ্ৰন্থ, ৪২/২৭-৩৫

২৯. বৰ্মন, ৰবিচন্দ্ৰ (অনু.) ঃ শিৱ পুৰাণ, পাতনি, পৃ. ২৫

৩০. উক্ত গ্ৰন্থ, পাতনি, পৃ. ২৫

৩১. উক্ত গ্ৰন্থ, পাতনি, পৃ. ২৬

৩২. উক্ত গ্ৰন্থ, পাতনি, পৃ. ২৬

৩৩. উক্ত গ্ৰন্থ, পাতনি, পৃ. ৯

৩৪. উক্ত গ্ৰন্থ, পাতনি, পৃ. ৯

৩৫. তৰ্কবত্ন, পঞ্চানন (সম্পা.) স্কন্দ পুৰাণ (প্ৰভাস খণ্ড),

শ্লোক সংখ্যা ঃ ২১-২২

৩৬. উক্ত গ্রন্থ, (অর্বুদ খণ্ড) শ্লোক সংখ্যা ১৪-১৫

৩৭. উক্তগ্রন্থ (মাহেশ্বৰ খণ্ড) শ্লোক সংখ্যা ৪-৫

৩৮. তর্কৰত্ন, পঞ্চানন (সম্পা.) অগ্নি পুৰাণ, শ্লোক সংখ্যা ১-৪, (পৃ. ১০৫)

৩৯. তর্কৰত্ন, পঞ্চানন (সম্পা.) ঃ বামণ পুৰাণ, ৬/৬৩

৪০. উক্ত গ্রন্থ, ৬/৬৫

৪১. উক্ত গ্রন্থ, ৬/৮৪-৮৬

৪২. তর্কবতু, পঞ্চানন (সম্পা.) কালিকা পুৰাণ, ১০ম অধ্যায়

৪৩. উক্ত গ্রন্থ, শ্লোক সংখ্যা ১৫

৪৪. উক্ত গ্রন্থ, একাদশ অধ্যায়, শ্লোক সংখ্যা ১৩-১৪

৪৫. উক্ত গ্রন্থ, দ্বাদশ অধ্যায়, শ্লোক সংখ্যা- ১-১০

৪৬. উক্ত গ্রন্থ, অষ্টাদশ অধ্যায়, শ্লোক সংখ্যা ৪১-৪৪

৪৭. উক্ত গ্রন্থ, অষ্টাদশ অধ্যায়, শ্লোক সংখ্যা- ৫৬

৪৮. তর্কৰত্ন, পঞ্চানন (অনু) লিঙ্গ পুৰাণ, ১/১-৩

৪৯. উক্ত গ্রন্থ, শ্লোক সংখ্যা- ১-১৫

৫০. বিষ্ণু পুৰাণ ৩৩/২২-২৪

৫১. দাস মানিক চন্দ্র (অনু.) ঃ ব্রহ্মকৈৰর্ত পুৰাণ, ব্রহ্ম খণ্ড, পৃ. ৩

৫২. উক্ত গ্রন্থ, ব্রহ্ম খণ্ড, পৃ. ২২-২৩

৫৩. উক্ত গ্রন্থ, প্রকৃতি খণ্ড, পৃ. ২৬৯-২৭১

গ্রন্থপঞ্জী ঃ

গোস্বামী, বিজন বিহাৰীলাল (অনু.) ঃ শুক্ল ও কৃষ্ণ যজুর্বেদ সংহিতা, প্রথম প্রকাশ মহালয়া ২৫ আহিন, ১৩৮৪, অক্টোবৰ, ১৯৭৭।

(অনু., সম্পা.) ঃ অথর্বেদ, হৰফ প্রকাশনী, কলিকতা, ১৯৮৮।

তর্কৰত্ন, পঞ্চনন (সম্পা.) ঃ স্কন্দ পুৰাণ্ম (প্রভাস খণ্ড), ভবানীচৰণ দত্ত ষ্ট্রীট, বঙ্গবাসী ইলেক্টো মেচিন প্রেস, কলিকতা, ১৩১৮।

র্কৰত্ন, পঞ্চনন (সম্পা.) ঃ স্কন্দ পুৰাণম্ (মাহেশ্বৰ খণ্ড), ভবানীচৰণ দত্ত ষ্ট্রীট, বঙ্গবাসী ইলেক্টো মেচিন প্রেস, কলিকতা, ১৩১৮।

..... (সম্পা.)ঃ লিঙ্গ পুৰাণম্, নৱভাৰত পাবলিশার্স, কলিকতা, প্রথম নৱভাৰত সংস্কৰণ ফাল্গুন, ১৩৯৬।

..... (সম্পা.)ঃ বামন পুৰাণম্, বঙ্গবাসী সংস্কৰণ, কলিকতা, ১৩৩৪।

..... (সম্পা.)ঃ ভাগৱত পুৰাণ, কলিকতা, ১৩১৫।

..... (সম্পা.)ঃ শিৱ পুৰাণম্, ৩৮/২ ভবানীচৰণ দত্তষ্ট্রীট বঙ্গবাসী ইলেকট্রো মেচিন মন্ত্র, ১৩১৪।

..... (সম্পা.)ঃ শিৱ পুৰাণম্, ভবানীচৰণ দত্তষ্ট্রীট বঙ্গবাসী ইলেকট্রো মেচিন প্রেস, কলিকতা, ১৩১৪।

..... (সম্পা.)ঃ ব্রহ্ম বৈৱর্ত পুৰাণম্, ভবানীচৰণ দত্তষ্ট্রীট, বঙ্গবাসী ইলেকট্রো মেচিন প্রেস, কলিকতা, ১৮২৭।

..... (সম্পা.)ঃ বিষ্ণু পুৰাণম্, ভবানীচৰণ দত্তষ্ট্রীট বঙ্গবাসী ইলেকট্রো মেচিন প্রেস, কলিকতা, দ্বিতীয় সংস্কৰণ ১৩৩১।

..... (সম্পা.)ঃ কূৰ্ম্ম পুৰাণম্, নৱভাৰত পাবলিছার্ছ, কলিকতা, নৱভাৰত সংস্কৰণ ফাল্গুন, ১৩৯৫।

বন্দ্যোপাধ্যা, চাৰুচন্দ্র (সম্পা.) ঃ শূণ্য পুৰাণম্, কলিকতা।

বিদ্যাৰত্ন, শ্রীকালীপ্রসন্ন (অনু.) ঃ বৃহৎ নাৰদীয় পুৰাণ, ১৩৩ বিপ্লৱী ৰাসবিহাৰী বসু ৰোড্, কলিকতা, ৭০০০০১।

শাস্ত্রী, শ্রীশ্রীৰাম আৰু সৰস্বতী, শ্রীনির্মলানন্দ ঃ শ্রীশ্রীনাৰদ পঞ্চৰাত্রম্ (জ্ঞানমৃতসাৰ সংহিতা), সংস্কৃত বুক ডিপো, কলিকতা, প্রথম সংস্কৰণ ১৩৫২ বঙ্গাব্দীয় জন্মাষ্টমী।

সেন, আশালতা (পদানুবাদ) ঃ বাল্মীকি ৰামায়ণ (সপ্তম কাণ্ড), কলিকতা, ৭০০০১২, প্রথম সংস্কৰণ, ১৯৭৭।

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অসমীয়া সাহিত্যত মৎস্য সংস্কৃতি

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সংক্ষিপ্ত সাৰঃ

অসম এখন প্ৰাকৃতিকভাৱে সমৃদ্ধ ৰাজ্য। ইয়াৰ পাহাৰ-ভৈয়ামত খাল-বিল, নৈ, জান-জুৰিৰে পৰিপূৰ্ণ হৈ আছে। এসময়ত এই নদ-নদী, খাল-বিলসমূহ মাছ-কাছৰে পূৰ্ণ হৈ আছিল। বৰ্তমান জনসংখ্যা বৃদ্ধিৰ ফলত খাল-বিল পুতি ঘৰ-বাৰী সৃষ্টি কৰা, নদী বান্ধ দিয়া, নদীসমূহৰ মৃত্যু হোৱা বিভিন্ন কাৰণত ইয়াৰ জৈৱ বৈচিত্ৰ্যত প্ৰভাৱ পৰিছে। জৈৱ বৈচিত্ৰ্যৰ অংশ হিচাপে অসমৰ নদ-নদীত প্ৰাপ্ত মাছ-কাছৰ ওপৰতো ইয়াৰ পোনপতীয়া প্ৰভাৱ পৰিছে। ফলস্বৰূপে অসমৰ থলুৱা বহু মাছ সংৰক্ষণ সজাগতাৰ অভাৱত লুপ্ত হৈ পৰিছে। এসময়ত মাছৰ নামেৰে ঠাই, বিল আদিৰ নামকৰণ হৈছিল। লোক সমাজত মাছ মৰা পৰম্পৰাই সমন্বয় আৰু সংস্কৃতিৰ অস্তিত্ব ৰক্ষা কৰিছিল। সমজুৱাকৈ মাছ ধৰিবলৈ যোৱা উৎসৱমুখৰ পৰিবেশৰ আনন্দ, গাঁৱৰ কোনে কিমান ডাঙৰ মাছ প'ল বা জালত পেলাব পাৰিছে, কোনে বেছিকৈ মাছ পাইছে, ডাঙৰ মাছ পালে ফুৰ্তিতে চিঞৰ-বাখৰ, হাই-উৰুমি কৰা, মাছৰশালীত তামোলখন বিচাৰি খোৱা আদি সৰু সৰু অথচ একতাৰ ডোলেৰে সমাজখনক বান্ধি ৰাখিব পৰা শক্তি থকা মৰম-স্নেহেই আছিল প্ৰকৃত সংস্কৃতিৰ চিহ্ন। বৰ্তমান বিহুৱে-সংক্ৰান্তিয়ে মাছ ধৰা পৰম্পৰা নোহোৱা হ'ল। থলুৱা মাছৰ বিপৰীতে চালানী বিবিধ বহিৰাগত মাছে অসমৰ বজাৰ শুৱনি হৈছে। বজাৰত উপলব্ধ মাছৰ সোৱাদ নোহোৱা হোৱাৰ দৰেই মাছ মৰা থলুৱা ঠাইৰ আন্তৰিকতাবোৰ নোহোৱা হৈ আছিছে। বৰ্তমান ঘৰে-ঘৰে ফিচাৰি, টেংকি আদিত মাছ পালন হৈছে। ই অৰ্থনৈতিক দিশৰ বাবে ভাল খবৰ, কিন্তু সাংস্কৃতিক, সামাজিক আৰু সাহিত্যিক প্ৰমূল্য ৰক্ষাৰ ক্ষেত্ৰত সফল বুলিব নোৱাৰি। মৎস্য সংস্কৃতিৰ সৈতে এসময়ত অসমৰ সমাজখনত যি আগ্ৰহ, আৱেগ আৰু আন্তৰিকতাই বিৰাজ কৰিছিল বৰ্তমান সেই প্ৰমূল্যই কৃত্ৰিমতাক আকোঁৱালি লোৱা দেখা গৈছে। ফলস্বৰূপ অসমৰ মৎস্য সংস্কৃতি, মাছৰ লগত জড়িত জীৱিকা প্ৰধান সমাজখন আৰু অৰ্থনৈতিক প্ৰমূল্যৰ তাৰতম্য ঘটিছে। সেয়েহে সময় থাকোঁতেই এনেবোৰ বিষয় আলোচনা কৰা প্ৰয়োজন।

বীজশব্দ ঃ ইতিহাস আৰু ঐতিহ্য, সাহিত্য, লোক-সাহিত্য, আধুনিক অসমীয়া সাহিত্য।

অৱতৰণিকাঃ

অসমৰ মৎস্য পৰম্পৰাৰ ইতিহাস বিচাৰিলে দেখা পাওঁ যে পু�ৰাণ, উপ-পুৰাণ, বেদ, মহাকাব্য আদিত মাছৰ উল্লেখ তথা মাছৰ সৈতে জড়িত জীৱিকা প্ৰধান জাতিৰ পৰিচয় পোৱা যায়। অসমীয়া চৰ্যাগীত, লোক সাহিত্যৰ ভিতৰত লোকগীতৰ—আইনাম, বিহুনাম, বিয়ানাম, নিচুকনি গীত; সাঁথৰ, ফকৰা-যোঁজনা, পটন্তৰ, সাধুকথা আদিত মাছৰ গুৰুত্ব আৰু জীৱিকাৰ প্ৰসঙ্গ পোৱা যায়। অসমৰ জাতি-জনগোষ্ঠীৰ মাজত মাছ মৰা পৰম্পৰাক কেন্দ্ৰ কৰি ভিন্ন অনুষ্ঠান পালন কৰি অহা পৰিলক্ষিত হয়। জোনবিল মেলাতো মাছ ধৰা পৰম্পৰা আছে। মাছ ধৰা মাছোৱৈ আৰু মাছ ধৰা সঁজুলিসমূহেও সাহিত্যত গুৰুত্বপূৰ্ণ স্থান লাভ কৰি আছে। মাছৰ লগত জড়িত লোক-বিশ্বাস, জন্ম-মৃত্যু-বিবাহকেন্দ্ৰিক লোকাচাৰত মাছৰ প্ৰয়োগ আৰু গুৰুত্বলৈ লক্ষ্য কৰি লোক জীৱনৰ সৈতে মৎস্য সংস্কৃতিৰ পৰম্পৰা নুই কৰিব নোৱাৰি। অসমীয়া সাহিত্যতো মৎস্য পৰম্পৰাৰ বিবিধ দিশৰ উল্লেখ আছে। সেয়েহে সাহিত্যত প্ৰতিফলিত এনেবোৰ দিশ অধ্যয়নৰ বিষয় হোৱা উচিত।

অধ্যয়নৰ পৰিসৰ গুৰুত্ব ঃ

অসমৰ মৎস্য সংস্কৃতিৰ পৰিসৰ অত্যন্ত ব্যাপক। ই সমাজ-সংস্কৃতি, সাহিত্য, আর্থ-সামাজিক আদি সকলো দিশতেই আধিপত্য বিস্তাৰ কৰি আছে। অসমীয়া লোক-সাহিত্য, আধুনিক অসমীয়া সাহিত্য, লোকচাৰ, লোক-বিশ্বাস, ভৌতিক সংস্কৃতি, কর্মসংস্কৃতি, খাদ্য-সংস্কৃতি, জীৱিকা, মৎস্য পালনৰ পদ্ধতি আৰু বিজ্ঞান-প্রযুক্তি আদিত মৎস্য পৰম্পৰা জড়িত হৈ আছে। চাবলৈ গ'লে এই বিষয়ত ডক্টৰেট ডিগ্রীৰ দৰে উচ্চ পর্যায়ৰ গৱেষণা হোৱাৰ স্থল আছে। কিন্তু এখন ক্ষুদ্র আলোচনা পত্রত মৎস্য পৰম্পৰাৰ দৰে বৃহৎ ক্ষেত্রখনৰ সকলো দিশ সামৰি প্রাপ্ত তথ্যসমূহ বিস্তৃত ৰূপত উত্থাপন কৰা সম্ভৱ নহয়। গতিকে বিষয়ৰ ব্যাপকতালৈ লক্ষ্য কৰি এই আলোচনাত কেৱল মাছৰ সৈতে জড়িত অসমীয়া লোক-সাহিত্য আৰু আধুনিক অসমীয়া সাহিত্যত সৎস্য পৰম্পৰাৰ দিশটো সামৰি লোৱা হৈছে।

অধ্যয়নৰ উদ্দেশ্য আৰু গুৰুত্ব ঃ

এই আলোচনা পত্রৰ মূল উদ্দেশ্য আৰু লক্ষ্য হৈছে অসমীয়া সাহিত্যত মৎস্য সংস্কৃতিয়ে অসমৰ জনজীৱনৰ সামগ্রিক দিশক কিদৰে চহকী কৰি ৰাখিছে তাক বিচাৰ-বিশ্লেষণ কৰা। সাহিত্যত মৎস্য সংস্কৃতিৰ সামাজিক প্রমূল্য, আধুনিক অসমীয়া সাহিত্যত মৎস্য পৰম্পৰাৰ প্রাসঙ্গিকতাই কেনে ভূমিকা পালন কৰিছে ইত্যাদি বিষয়বোৰ বিশ্লেষণ কৰাই আমাৰ উদ্দেশ্য। কাৰণ পূর্বৰ মৎস্য পৰম্পৰাৰ ৰূপবোৰ হেৰাই গৈছে। কিন্তু সাহিত্যই সেই ঐতিহ্য সংৰক্ষণ কৰি সমাজ জীৱনৰ উপকৃত কৰিছে।

অধ্যয়নৰ পদ্ধতি ঃ

'অসমীয়া সাহিত্যত মৎস্য সংস্কৃতি' বিষয়টি অধ্যয়ন কৰিবৰ বাবে পুথিভঁৰালৰ সহায় লোৱা হৈছে। সাহিত্যত মৎস্য পৰম্পৰাৰ অনুসন্ধান কৰিবলৈ যাওতে বিভিন্নজন লেখক, গীতিকাৰৰ কবিতা, গল্প, উপন্যাস, নাটক আৰু গীতক মুখ্য সমল হিচাপে গণ্য কৰা হৈছে। লগতে বিভিন্ন কাকত, আলোচনীত প্রকাশিত লেখনি, প্রৱন্ধ, সামাজিক মাধ্যমত প্রচাৰিত হোৱা বিভিন্ন তথ্যকো পুনৰ বিচাৰ-বিশ্লেষণৰ দ্বাৰা বিবেচনা কৰা হৈছে। বিষয়টি অধ্যয়নৰ বাবে বিশ্লেষণাত্মক আৰু বর্ণনাত্মক পদ্ধতি অৱলম্বন কৰা হৈছে।

পূর্বসূৰীৰ কীর্তি ঃ

অসমৰ মৎস্য সংস্কৃতিক লৈ অসমী গগৈৰ 'অসমৰ মৎস্য সংস্কৃতি'(২০১২) নামেৰে এখনি গ্রন্থ প্রকাশিত হৈছে। কিন্তু গ্রন্থখনিত প্রাচীন অসমীয়া সাহিত্য (আদি, মধ্য আৰু র্বত মান) তথা আধুনিক অসমীয়া সাহিত্যত মৎস্য সংস্কৃতিৰ প্রকাশ আৰু প্রতিফলনৰ দিশটো দৃষ্টিগোচৰ হোৱা নাই। সামাজিক মাধ্যমত, কাকত-আলোচনীৰ কোনো কোনো ঠাইত, অসমৰ মীন বিভাগৰ পৰা আধুনিক মীনপালনৰ বিষয়ে সজাগতা, সৱলীকৰনৰ দুই-এটা লেখনি প্রকাশিত হৈছে। কিন্তু জনজীৱনৰ আধাৰ সাহিত্যত মৎস্য পৰম্পৰাৰ দিশটোৰ গুৰুত্ব সম্পর্কে বিশেষ আলোচনা পাবলৈ নাই।

সাহিত্যত মাছ ঃ

সাহিত্য হৈছে লোক-সমাজৰ প্রকাশ। চহা কবিয়েই হওক আধুনিক লেখকৰ দলেই হওক সাহিত্য সকলোৰে বাবে সমাজ নির্ভৰশীল। অসমৰ সমাজ জীৱনৰ সৈতে ওতঃপ্রোতভাৱে জড়িত হৈ থকা মাছকেন্দ্রিক পৰম্পৰাই সাহিত্যৰো বিষয় হিচাপে স্থান লাভ কৰিছে। এনেবোৰ সাহিত্যই সামাজিক প্রমূল্য আৰু মৎস্য পৰম্পৰাৰ ঐতিহ্য নির্ধাৰণত সহায়ক ভূমিকা পালন কৰি আহিছে। মহাকাব্যত শ্রীকৃষ্ণই মৎস্য *(মৎস্য,কুর্ম নৰসিংহ, বামন পৰশুৰাম)*অৱতাৰত বেদ উদ্ধাৰ কৰা-*মৎস্য ৰূপে অৱতাৰ ভৈলা প্রথমত/উদ্ধাৰিলা চাৰিবেদ প্রলয় জলত।*অর্জুনে মাছৰ চকুলৈ লক্ষ্য কৰি শৰ নিক্ষেপ কৰা, শকুন্তলাৰ আঙঠি মাছৰ পেটত ওলোৱা আদি অনেক কাহিনী শুনিবলৈ পাওঁ। অসমীয়া লিখিত সাহিত্যৰ ইতিহাসলৈ লক্ষ্য কৰিলে দেখা যায় যে, খ্রীষ্টীয় দশম একাদশ শতিকাৰপৰা আৰম্ভ কৰি চতুর্দশ শতিকালৈ প্রাৰম্ভিক বা উদ্ভৱকালীন যুগৰ সাহিত্য হিচাপে চর্যাপদসমূহেই গুৰুত্বপূর্ণ হৈ আছে। চর্যাপদত সেই সময়ৰ সমাজখনৰ বিভিন্ন দিশৰ উল্লেখ পোৱাৰ লগতে কহুশাদৰ চর্যাত মৎস্য বৃত্তি, তাঁতৰ কাম, জাল গোঁঠা, নাও বোৱা (শর্মা,৩৮) আদি বৃত্তিৰ উল্লেখ আছে। অসমীয়া সাহিত্যৰ আদিযুগ বা প্রাক্‌বৈষ্ণৱ যুগৰ প্রাচীন অসমীয়া সাহিত্যত মাধৱ কন্দলীৰ ৰামায়নত উপমা, ৰূপক অলংকাৰ আদি প্রয়োগৰ ক্ষেত্রত মাছৰ উল্লেখ আছে—*প্রজ্ঞা-মৎস্য কচ্ছপ তৰত পৰি মৰে।*

ৰাম শোক মৎস্যৰঙ্গে খেদি খেদি ধৰে।।(শর্মা, ৬৭) কন্দলি ৰামায়ণত প্রয়োগ হোৱা ঘৰুৱা উপমাবোৰত মাছৰ উল্লেখে সেই সময়ৰ সমাজত মাছৰ জনপ্রিয়তাৰ কথাই চিত্রিত কৰে। যেনে—

১। *অলপ পানীৰ মাছ দদৰা-দদৰি*

২। *বৰশীয়া ৰাৱণৰ পুঙা তেসে দৃষ্টি*

৩। *তপত খোলাত মাছ কৰে যেন মত।* (শর্মা, ৬৯)

মহাভাৰতৰ বন পৰ্বত জনক ৰজাই ঋষি অষ্টাবক্ৰৰ পাণ্ডিত্যৰ পৰীক্ষা ল'বলৈ সোধা সাঁথৰৰ্ধমী প্ৰশ্নৰ উত্তৰত অষ্টাবক্ৰই দিয়া উত্তৰত আছে—

মৎস্য সুপ্তে নিমিষত্যগুং জাতং ন চোপতি।

অশ্মনো হৃদয়ং নাস্তি, নদী বেগেন বৰ্দ্ধতে।। অৰ্থাৎ মাছে শুই থাকোঁতেও চকু নুমুদে, কণী জন্মৰ সময়তো স্পন্দিত নহয়, পাষাণ স্বৰূপ নিৰ্দয় লোক হৃদয়হীন আৰু নদী বেগেৰে বৃদ্ধি পায়। (বৰুৱা, ৭৩)

শংকৰী যুগৰ কবি অনন্ত কন্দলীৰ 'কুমৰ-হৰণ' কাব্যত ৰন্ধন প্ৰণালীৰ প্ৰসঙ্গত মাছৰ উল্লেখ পাওঁ—

কচ্ছপৰ মাংসত দিলেক বৰকলা।

ৰম্ভামূলে বৰাহৰ মাংস বিতোপন।

বৰালীৰ ঘণ্টি লাড়ি মৎস্যত মসুৰ।

দৰিকে বেঙেনা আৰি মৎস্যত পালঙ। (শৰ্মা,৯২)

বৈষ্ণৱ আন্দোলনৰ প্ৰভাৱমুক্ত পাঁচালি সুকবি নাৰায়ণদেৱৰ ৰচনাত সেই সময়ৰ ভোজন ব্যৱস্থা আৰু খাদ্যৰুচিৰ সন্ধেদ আছে— *ৰৌমাছৰ গদা, চিতলৰ কলঠি, আমলখিৰ লগত পোনামাছ, বগৰিৰ লগত শল মাছ।* (শৰ্মা, ১০৮)

কবি ঠিক সেইদৰে মহেশ্বৰ নেওগ সম্পাদিত 'গুৰু-চৰিত-কথা'ত 'দুধনাথ যুগুৰিঘোপাত পানীকুৱা কাতল মাছ তুলি লৈ খাগৰিকটা বালিত ভোজন' প্ৰসঙ্গত উল্লেখ পাওঁ— *তাৰতে গৈ যুগুৰিঘোপা নামে দুদনাথৰ সেইখিতেঃ বগা দেখি গুৰুজনে বোলে সেই মাচনেকি চোৱাহকঃ চাই দেখে কাতল মাচ গোটে পানিকুৱাঃ ঠাকুৰে বোলে নুতুলিবা নালাগে আমাকঃ গুৰুজনে বোলে তোলা মাচ বস্তু এৰিব নাপাইঃ ...ঠাই অতাই জাজিখৰি আনি টিঙ্গিৰি মাৰি যুই ধৈলেঃ মাচ বাকলি গুচাই খুতুৰা কৈ তৰাপাত পতৰা কৈলেঃ গুৰু স্নানকৈ যুই দিলেঃ ...মাচ চোটকৈ আদখাৰ ভজা টেঙ্গা জনি জালুক হলিদ্রা দি ৰান্ধিলেঃ গন্ধে আমোদিত হলঃ ভোজন কৰিছে ঠাকুৰক তাকৰ কৈ দিছে ঢুকাল ঃ বোল দিমনেঃ বোলে দিয়া জকঃ বোলো হোঁ তুমি দহো তুলিবই নিদিয়াঃ বোলে তেনে মাচ এনে হই হুলি কোনে জানে।* (গুৰু-চৰিত-কথা,১২৮) গতিকে আমি দেখিছো মাছ খোৱা ৰন্ধন প্ৰণালী আদিৰ বিষয়েও সাহিত্যত পোৱা যায়। ক'ব পাৰি অসমীয়া লোক-সাহিত্য, প্ৰাচীন আসমীয়া সাহিত্য, বুৰঞ্জী সাহিত্য, আধুনিক অসমীয়া সাহিত্যত মাছৰ এক দীঘলীয়া প্ৰাচীন ঐতিহ্য সংৰক্ষিত হৈ আহিছে।

লোক-সাহিত্যত মাছ ঃ

লোক সাহিত্য হৈছে লোক জীৱনৰ দলিলস্বৰূপ। লোক-জীৱনত যি ঘটে, লোক সাহিত্যত তাৰ প্ৰতিফলন হয়। অসমৰ মৎস্য সংস্কৃতিৰ ইতিহাস বিচাৰি লোক-সাহিত্য অথবা মৌখিক সাহিত্যৰ ওচৰ চাপিলে দেখা যায় যে—মন্ত্ৰ সাহিত্যত মাছৰ প্ৰসঙ্গ আছে; যেনে— *ৰামৰ আজ্ঞায়ে ৰৰশী লৈ মাছলৈ যাওঁ। মোৰ ৰৰশীত কুঁঢ়ি চেনি খাই। লোকৰ ৰৰশীত ওচৰে নেযাই। মচুনন্দৰীৰ বচনে শিৰে দিলে হাত। মোৰ ৰৰশীত মাছ লাগি থাক। মোৰ চোঙ এৰি আন চোঙে যাৱ। তেৱে মহাদেৱৰ মাথা খাৱ।* (সং., গোহাঁই) লোক গীতৰ ভিতৰত বিভিন্ন শ্ৰেণীৰ বেলাড বা মালিতা, ধৰ্মীয় গীত, প্ৰণয় গীত, কৰ্মগীত, নিচুকনি গীত, চিকাৰ আদিৰ লগত জড়িত গীত, বিহুনাম, খেল-ধেমালিৰ লগত জড়িত গীতত মাছৰ উল্লেখ পাওঁ। তেনে কেতবোৰ লোকগীতৰ ভিতৰত বুৰঞ্জীমূলক আখ্যান-গীত নাহৰৰ গীতত মাছৰ প্ৰসঙ্গ এনেদৰে পাও—

কি মাছ মাৰিবৰ মালি,

দকৈ পুখুৰী খনালে নাহৰে

বন্ধালে সেন্দুৰী আলি। (চলিহা,৩), গৌৰীনাথ সিংহৰ গীত (তৰাবতীৰ গীত)ত মাছৰ উল্লেখ এনেদৰে পাওঁ— *দধি-দুগ্ধ এৰি থৈ স্বৰ্গদেৱে খালে পুঠি মাছৰ পেটু*

পুঠি মাছৰ পেটু, বাঁহৰ চেঁচু (চলিহা,৫১) বৰফুকনৰ গীতত মাছমৰা জালোৱাৰ কথা উল্লেখ আছে— *জালোৱা ডোমক তেওঁ অনালে মাতি।*

...জালোৱা নাৱেৰে পাৰকৈ দিবি।

.....কত গলা দূৰ, মলছি পেলাওঁ মই শাঁকে-সেন্দুৰ।

মাছ মৰাই থ'লোঁ (চলিহা,৬৪-৬৫)। ছন্দোবদ্ধ ৰূপত ৰচিত বৰফুকনৰ গীতত অসমৰ সেই সময়ৰ থলুৱা মাছৰ নামকেতবোৰ পোৱা গৈছে। গীতত অলংকাৰৰ প্ৰয়োগ মনকৰিবলগীয়া—

এদেউ, কিনো মাছ মাৰিবৰ শ'ল

ঘিনাই বৰফুকনদেউ ভটীয়াই গ'ল।

এদেউ, কিনো মাছ মাৰিবৰ তোৱা,

বিলাতত ল'লৈগৈ বিলাতী ঘোঁৱা।

এদেউ, কিনো মাছ মাৰিবৰ নাৱ,

কলিকতাত খালেগৈ বিলাতী পাৱ।

এদেউ, কিনো মাছ মাৰিবৰ এলেং,

গাত লৈ গৈছিলো গঁৰিয়লি চেলেং

এদেউ, কিনো মাছ মাৰিবৰ আৰি,

ঘিনাই বৰফুকনৰ নপকিল দাঁড়ি।(চলিহা,৬৭) বৰফুকনৰ গীতত শ'ল মাছৰ প্রসঙ্গ একাধিকবাৰ উল্লেখ পোৱা গৈছে। গীতৰ আন আন অংশত মাছৰ প্রসঙ্গ এনেদৰে উল্লেখ পাওঁ — ১। *মাছ মাৰিবৰ বামি/ সেইটি*

কথালৈ নেখাওঁ পানী।,২। এনে মাছেমৰা ঘৰী/ধনেখাই ফুকনক নাহিবি এৰি।,৩। মাছ কুমলীয়া শ'ল/বাপেৰক ধৰিবলৈ কালিয়ে গ'ল।, ৪। পথাৰৰ পোনামাছ চান্দে/হিয়া ভুকু মাৰি ফুকনৰ জীয়েকে কান্দে।,৫। চেঙেলী মাছৰে খোৰ/চিঠি চাই ফুকনে তললৈ কৰিলে মূৰ। (চলিহা,৯৫-৯৯) বুৰঞ্জীমূলক মালিতা মণিৰাম দেৱানৰ গীতত মাছৰ প্রসঙ্গ এনেদৰে পাওঁ— *কি মাছ মাৰিবৰ শ'ল ঐ মণিৰাম কি মাছ মাৰিবৰ শ'ল* (চলিহা,১২৬)। হলকম্ব চাহাবৰ গীতত আছে—*কাছ কাটি পেলাবৰ চলং লগৰীয়া/কাছ কাটি পেলাবৰ চলং/হালকন চাহাবক আবৰীয়ে কাটিলে/দিহিঙত বন্ধালে দলং*(চলিহা,১৩২) আখ্যানমূলক গীতৰ ভিতৰত অসহযোগ আন্দোলনৰ গুৰি ধৰোঁতা মহাত্মা গান্ধীক লৈ ৰচিত গান্ধীৰ গীততো মাছৰ উল্লেখ আছে—*ৰউ মাছৰ বাজ্জা,/ খেলা-খেতি তপ কৰি/ওলাল গান্ধী ৰাজা/ৰউ মাছৰ বাঞ্জা*(চলিহা,১৬২)। বিবিধ বিষয়ক আখ্যান গীতৰ ভিতৰত জনশ্রুতিমূলক মণিকোঁৱৰৰ গীতত পাঁও—১। *জহাকৈ ধাৰে গেলাকৈ পইতা/ককিলা মাছৰে ভজা।* (চলিহা,২০২), ২। *দেও দি এৰিলে দেও দৰিকণা/লুটি দি এৰালে শ'ল* (চলিহা,২১৯), ৩। *মাছৰ সৰু সৰু মোৱা নে দেউতা/মাছৰ সৰু মোৱা*(চলিহা,২৩৭)। ঠিক একেদৰে ফুলকোঁৱৰৰ গীতত আছে—*কোবাই পুঠিমাছ নিলে ঐ টোকাৰি/কোবাই পুঠি মাছ নিলে,* ২। *ৰজাৰে নগৰখন কোৰোকা-কুৰুকি/লয় ৰৌমাছে কুৰ,* (চলিহা,২৫৬)। গীতত মাছৰ আচৰণ সম্পর্কে দিয়া জ্ঞান কৌশলপূর্ণ হৈ উঠিছে। মাছ বাছিবলৈ ব্যৱহাৰ কৰা সঁজুলিৰ উল্লেখো ফুলকোঁৱৰৰ গীতত পাওঁ—*খৰি লুৰিবৰে দা কৈ কুঠাৰে/মাছে বাছিবলৈ দা* (চলিহা,২৮০)। থলুৱা মাছৰ উল্লেখ এনেদৰে পাওঁ—১। *বোকাতে ঘুৰিলে বোকাৰে গৰৈ মাছ/দলনিত মৰিলে শ'ল* (চলিহা,২৮৫)। পগলা পার্বতীৰ গীতত মাছ ধৰা সঁজুলিৰ উল্লেখ এনেদৰে পাওঁ—*মোৰে বৰে বিলত পৰ তই পার্বতী/জুলুকী বাই মই ধৰিম।/জুলুকি বায়ে ধৰ তই পগলা/শামুক খেলুৱৈ হ'ম।*(চলিহা,৩৬৯) গীতত উল্লেখ থকা জুলুকি হ'ল বাঁহ-বেটেৰে প্রস্তুত এবিধ মাছ ধৰা সঁজুলি। ই অসমৰ থলুৱা পদ্ধতিৰে মাছ ধৰা পৰম্পৰাৰ অন্যতম আহিলা। ময়নামতীৰ গীততো উপমা অলংকাৰ প্রয়োগে সঁজুলিৰ উল্লেখ কৰিছে—১। *মন হইলে বৰশি বাছা পৰন হইল সূতা।,* ২। *মাছে চিনে গহীন গাংৰে যাদু পঙ্খয় চিনে ডাল। মাৰে জানে ছাওয়াৰ আদৰ যাৰ বুকেৰ শেল* (চলিহা,৩৮১)। দুবলা শান্তিৰ গীতত আছে—*'কি মাছ মাৰছা কুঁৰৰে কি মাছ্ মাৰ্ছা'/'নামাৰু বৰ্হীৰ মাছ চাওঁ তোৰ ৰূপ।।'*((চলিহা,৪৩০)। ধর্মীয় গীতৰ ভিতৰত আইনামত, লখিমী সবাহৰ গীতত মাছৰ উল্লেখ পাওঁ—*জাকৈ ভালে কৰি বাবি ঐ দেওধাই/খালৈ ভালে কৰি চাবি এ/খেপিয়াই খেপিয়াই লাহেকৈ ধৰিবি/লক্ষ্মী আইক হাততে পাবি এ*(গগৈ,২৬)। অসমীয়া বিহুনামত বিশেষকৈ প্রণয়নমূলক গীতত মাছৰ উল্লেখ পোৱাৰ লগতে মাছ মাৰোঁতে ছোৱালী চোৱা, দলনি পথাৰত মাছ মাৰিবলৈ যোৱা আদি বিষয়বোৰো বিহুনামত পোৱা গৈছে—*তোমাৰ গাল দুখনি পাভ মাছৰ নিচিনা/ঘোঁৱাফানৰ নিচিনা চুলি* (গগৈ, ২৭)। বৰশী বোৱা এক প্রকাৰ কর্ম। বহুতে ইয়াক আজৰি সময়ত নিজৰ চখ হিচাপেও গ্রহণ কৰা দেখা যায়। বৰশীবোৱা কর্মৰ লগত জড়িত যেনে—*'খুট চেঙেলী খুট, মোৰ বৰশীত খুট'* আদিয়ে মাছ ধৰা কার্যত প্রয়োজন হোৱা ধৈর্য্য আৰু আত্মবিশ্বাসৰ উমান দিয়ে। উজনি অসমৰ ধেমাজি অঞ্চল বিশেষত প্রচলিত বিয়া নামত বিশেষকৈ জোৱা নামত মাছৰ উল্লেখ পোৱা গৈছে—*ভলুকা বাঁহৰ লেকেচি, ভলুকা বাঁহৰ লেকেচি। দৰাৰে ভায়েকটো সাত ঘাটৰ চেঙেলি। চেঙেলি যদি চেঙেলি ,কইনা ঘৰৰ ছোৱালীবোৰ সুর্পনশা সুন্দৰী।*

অসমীয়া লোকসাহিত্যৰ ৰহ্ঘৰা ফকৰা-যোজনা, প্রবাদত মাছ সম্পর্কীয় তথ্য আৰু জ্ঞানৰ প্রকাশ মনকৰিবলগীয়া। ডাক-প্রবচনত কি মাছ কেনেদৰে ৰান্ধি খাব লাগে তাৰ সুন্দৰ বর্ণনা আছে—

১। পোৰোলা সাক ৰোহিত মাছ। ডাকে বোলে সেই বেঞ্জন সাচ।।

মাগুৰ মাচক কচি কুটিয়া। হালধি মৰিচ হিঙ্গক দিয়া।।

তৈল লোন দি কৰিবা পাক। এই বেঞ্জন সাৰ বোলে ডাক।।

কাঁয়ৈ মাচক কচি কুটিয়া। হালধি মৰিচ হিঙ্গক দিয়া।।

ওলোট-পালট কৰিবা পিঠি। খাই পাইবা তেবে দৃষ্টি।।

চেঙ্গা চেঙ্গেলি জামিৰৰ ৰসে। কাহুদি দিয়া জেৰে পৰিসে।।.....

ইলিছ মাচক কচি কুটিয়া। ত্রিকটু দিয়া তৈলে ভাজিয়া।।...
কচ বচ চিতলৰ আগখান। নেমু লোন দি বুঁঝি পৰিমান।।
আকে খাই পাই সন্তোস প্রচুৰ।(শর্মা, ২৩-২৪)

সাধাৰণ কথাকো অর্থঘন কৰি ব্যক্ত কৰাত সহায় কৰা ফকৰা-যোজনা, পটন্তৰত মাছৰ নাম, মাছৰ ৰন্ধন প্রণালী আৰু মাছ মাৰিবলৈ ব্যৱহাৰ কৰা সঁজুলিৰ উল্লেখ পোৱা যায়—*১।আহু চাবা গধূলি, শালি চাবা পুৱা, জাকৈ বাওঁতে ছোৱালী চাবা কোন কেনেকুৱা।*(বৰুৱা,৮২), *২। অধিক মাছত বগলী কণা, ৩। দূৰৰ ৰৌ-বৰালী, ওচৰৰ পুঠি-খলিহনা, ৪। মাছৰ তেলেৰে মাছ ভজা, ৫। মাছে গৰকা পাচলি খাবা। শাহুৰে গৰকা বোৱাৰী বাবা। ৬। মাছ ধুই খাবা পানী। পহু ধুবা জানি নাজানি।* ইত্যাদি আপ্তবাক্যবোৰে জন সমাজত মাছৰ জনপ্রিয়তাৰ কথা সোঁৱৰায়।

ঠিক একেদৰে তীক্ষ্ণ বুদ্ধিমত্তাৰ পৰিচায়ক, লোকজ্ঞানৰ ভাণ্ডাৰ, ৰহস্যময় প্রশ্নোত্তৰ সদৃশ কথন কৌশল সাঁথৰসমূহত মাছৰ উল্লেখ এনেদৰে পাওঁ—*১। মাছৰ দুখন ফিচা, বুৰ মাৰিলেই সকলো মিছা। উত্তৰ-নাওঁ।, ২।ৰজাৰ ফুলনি বাৰী সোমাব পাৰি, ওলাব নোৱাৰি, উত্তৰ—থোহা, চেপা।, ৩। ৰজাৰ ঘৰৰ কলী গাই, ঘাটে ঘাটে পানী খাই। উত্তৰ-বৰশী।*

অসমীয়া লোক-সাহিত্যৰ অন্যতম অংশ লোককাহিনী বা সাধুকথাত মাছৰ উল্লেখে সমসাময়িক সমাজত মাছৰ প্রয়োগ আৰু জনপ্রিয়তাৰ কথাই চিত্রিত কৰিছে। অসমীয়া সমাজত যুগে যুগে প্রচলিত হৈ অহা বিভিন্ন সাধুকথাত মাছৰ উল্লেখ পাওঁ । তাৰ ভিতৰত 'তিনিটা মাছৰ কাহিনী', 'এটা শিঙৰা মাছৰ কথা', 'তুলা আৰু তেজা' আদি সাধুকথাত মাছৰ উল্লেখ পাওঁ। যেনে 'এটা শিঙৰা মাছৰ কথা' সাধুটোত আছে—'*এদিন এটা দুখীয়া মানুহে জকাই বাবলৈ গৈ দিনৰ দিনটো জকাই বালে, কিন্তু এটা শিঙৰা মাছৰ বাহিৰে সি একো নাপালে*' (বেজবৰুৱা, ৫৭)। 'তুলা আৰু তেজা' সাধুটোত উল্লেখ আছে—'*এদিন লাগীয়ে এলাগীক জকাই বাবলৈ মাতি লৈ গ'ল। লাগীৰ জকাইত কেঁকোৰা, কুচিয়া, আঙুলিচেপা আদি উঠিল, এলাগীৰ জকাইত কুঢ়ি, চেনি, লাচোন, ভাঙোন আদি ভাল ভাল মাছ উঠিল।*'(বেজবৰুৱা, ৫৯)

অসমৰ গ্রাম্য সমাজখনত সততে প্রয়োগ কৰা গালি-গালাজত মাছৰ প্রসঙ্গ উত্থাপন অতি গুৰুত্বপূর্ণ। গালিত মাছৰ প্রয়োগ যেনে—*১। কাৰৈ মাছ বছা দিম, ২। সাত ঘাটৰ চেঙেলি, ৩। কেকোঁৰা চেপা দিম, ৪। কুচিয়া কটা দিম* আদিৰ দৰে গালিসমূহ বিভিন্ন সময়ত প্রয়োগ কৰা পৰিলক্ষিত হয়। দেখা যায় যে, লোকমনৰ অভিব্যক্তি প্রকাশক লোকসাহিত্যৰ বিচিত্র বিষয়সমূহত মাছ সম্পর্কীয় বহুবোৰ দিশৰ প্রতিফলনে লোকসমাজখনত মাছৰ প্রমূল্য নির্ধাৰণ কৰে।

আধুনিক অসমীয়া সাহিত্যত মাছঃ

সাহিত্য সৃষ্টিকাৰসকল সমাজমুখী চেতনাৰে সমৃদ্ধ ব্যক্তি। সময়ে সময়ে সৃষ্ট সাহিত্যৰাজিয়ে সমসাময়িক সমাজ ব্যৱস্থাক প্রতিফলিত কৰি আহিছে। সাহিত্য সমাজৰ দাপোন স্বৰূপ। তেনে দিশৰ পৰা বিচাৰ কৰিলে চহা ৰচকৰ ৰচনাত যিদৰে অসমৰ মৎস্য পৰম্পৰা সম্পর্কীয় লোক দৃষ্টিৰ আভাস পাওঁ, ঠিক সেইদৰে চহৰ-নগৰৰ আধুনিক সাহিত্যিকসকলেও তেওঁলোকৰ ৰচনাত মৎস্য সংস্কৃতিৰ বিবিধ দিশ সামৰি লোৱা পৰিলক্ষিত হয়। আধুনিক সমাজ ব্যৱস্থাত অভ্যস্থ কবি-সাহিত্যিকসকলেও মাছক লৈ ন ন সাহিত্য সৃষ্টি কৰা বা ৰচনাৰ মাজত মাছ সম্পর্কীয় তথ্যৰ উপস্থাপনে লেখক-পাঠকৰ মাজত আপোনত্বৰ ভাৰ সৃষ্টি কৰাত সহায় কৰিছে। আধুনিক অসমীয়া সাহিত্যত মাছৰ গুৰুত্ব বিচাৰ কৰিবলৈ গৈ আধুনিক অসমীয়া কবিতা, চুটিগল্প, নাটক, উপন্যাস, গীতি সাহিত্যৰ ওচৰ চাপি দেখা গ'ল যে, আধুনিক অসমীয়া সাহিত্যত মাছৰ গুৰুত্ব কোনো গুণে কম নহয়।

অসমীয়া কবিতাত মাছক বিভিন্ন প্রতীকি অর্থত প্রয়োগ কৰাৰ লগতে মাছৰ লগত জড়িত বিষয়বোৰকলৈ ন ন কবিতাও সৃষ্টি হৈছে। সৰুতে প্রাথমিক বিদ্যালয়ৰ পাঠ্যপুথিত পঢ়িবলৈ পাইছিলোঁ—*নাৰ বাট পাভ মাছ আৰু এটি কাছ বাৰ টকাত কিনি আনি কিয় বাৰু নাচ ?* সেয়েহে আদুনিক অসমীয়া কবিতাত মাছৰ প্রসঙ্গ এৰাই চলিব নোৱাৰি। আদুনিক অসমীয়া কবিসকলৰ ভিতৰত দৈৱচন্দ্র তালুকদাৰৰ 'প্রেমপটৰ পৰা' কবিতাটিত মাছৰ প্রসঙ্গ এনেদৰে পাওঁ—*কঁকালত আটি বান্ধিছে মলোৱে*

মাছ ভৰাবলৈ কোক,
মাছকে মাৰিছে কোক ভৰি ভৰি
পাহৰি পিয়াহ ভোক।
মাছ মাৰি মাৰি মলোৰ শৰীৰত
নাই উৰাদিহ আৰু,
জোলোকা-জোলোক্ ঘাম ওলাইছে
ঘামতে তিতিছে পল।
মাছকে মাৰোঁতে মাছকে মাৰোঁতে
বেলি ঠিক হ'ল পোন।(নেওগ, ৩২৮) নৰকান্ত

বৰুৱাই—'উজানৰ বগা মাছে ৰুপোৱালী নকৰে নিজৰা ?' (ইয়াত নদী আছিল)দৰে কবিতাত মাছৰ প্ৰসঙ্গ উত্থাপন কৰিছে। মহিম বৰাৰ 'মাছ' এটি গুৰুত্বপূৰ্ণ কবিতা। কবিতাটিত মাছৰ ভিন্ন ৰঙক প্ৰতীকাত্মকভাৱে ব্যৱহাৰ কৰিছে—

সোণালী ৰূপালী মাছ, নীলা বেঙুনীয়া মাছ
উজ্জ্বল হীৰাৰ ছটা অযুত অৰ্ব্বুদ মাছ.....
সোণালী ৰূপালী মাছ, নীলা বেঙুনীয়া মাছ,
জন্মেৰে ৰঙীন মাছ, ৰঙেৰে ৰঙীন আৰু
অজস্ৰ মৃত্যুৰঃ
চেপা, খোকা, পল, দলঙাত,
ঘাট-জাল, খেৱালিত, ঘিলাধাৰী নৈৰ বুকুত,
তথাপি অমৰ।

হে মাছ, হে চিৰন্তন মাছ (নেওগ, ৪০৯) কবিতাৰ বাবে জ্ঞানপীঠ বঁটা বিজয়ী কবি নীলমণি ফুকনে—*'বিশাল চিলাপথাৰত দেও-ডঁৰিকনাৰ খলকনি'* (শিলৰ ৰথত ঘোঁৰা চেঁকুৰাই সেয়া) বুলি ডঁৰিকনা মাছক প্ৰতীকি অৰ্থত প্ৰয়োগ কৰিছে। তেওঁ আন এটি কবিতাত মাছমৰীয়াৰ প্ৰসঙ্গ টানি আনিছে—*ক'লৈ গ'ল এতিয়া মাছমৰীয়াবোৰ, কি বিচাৰিছিল সিহঁতে, মাছমৰীয়া হৈও নেজানিলে সি কি মাছ*(অন্তহীন জলৰেখাত জ্বলন্ত এডাল মমৰ দৰে)। হীৰেণ ভট্টাচাৰ্যই কৈছে—*হঠাৎ কৌতূহলী হৈ পানীত যিদৰে নচুৱায় মাছ* (দেশ আৰু অন্যান্য বিষয়ক)। একবিংশ শতিকাত আশাসুধীয়াকৈ কবিতা চৰ্চাত মনোনিবেশ কৰি থকা কবি নীলিম কুমাৰৰ ৰচিত 'এদিন মাছবোৰ' এটা গুৰুত্বপূৰ্ণ কবিতা। তেওঁ কবিতাটিত মাছ আৰু মানুহৰ মাজত এক আবেগিক, আত্মিক সম্পৰ্ক স্থাপনৰ আশা ব্যক্ত কৰিছে। য'ত মাছবোৰ আৰু মাছমৰীয়াৰ মাজত বুজাবুজিৰে আস্থা আৰু ভৰসা স্থাপন হ'ব। মাছমৰীয়াই মাছ মাৰিবলৈ এৰি দিব। মানুহে মাছ খাবলৈ এৰি দিব, মাছবোৰে ফিছা নচুৱাই নচুৱাই মাছমৰীয়াৰ ভৰিৰ আঙুলিৰ স'তে খেলিব। কবিয়ে আশা কৰিছে মাছবোৰে এদিন নিজৰ ইতিহাস লিখিবলৈ সক্ষম হ'ব—

এদিন সেইদিন আহিব
মাছ মাৰিবলৈ যাওঁতে মাছমৰীয়া এজনে
ভুলতে নিজে পতা জালত মাছৰ দৰে পৰিব।
আৰু পানীত ডুবি প্ৰায় মৰাৰ দৰে হ'ব।
তেতিয়া পানীত যিমান মাছ আছে সকলোৱে আহি
জাল ফালি মুকলি কৰিব মাছমৰীয়াক
আৰু ঠেলি ঠেলি পাৰত তুলি বচাব
সিদিনাকপৰা মাছমৰীয়াজনে

মাছ মাৰিবলৈ এৰি দিব (ভাগৰতী,৯৭) কবিতাটিত মাছ আৰু মাছমৰীয়াৰ মাজত সম্পৰ্ক স্থাপনত ন-চিন্তাৰ প্ৰয়োগ অৰ্থৱহ হৈ উঠিছে। দেখা গ'ল বিভিন্নজন আধুনিক অসমীয়া কবিয়ে তেওঁলোকৰ কবিতাত মাছক প্ৰতীকাত্মকভাৱে ব্যৱহাৰ কৰাৰ লগতে কবি মনৰ অভিব্যক্তি প্ৰকাশকাৰী ইঙ্গিতময় প্ৰতিফলন হিচাপেও ব্যৱহাৰ কৰিছে।

কবিতাৰদৰেই আধুনিক অসমীয়া বহু গল্পকাৰৰ চুটিগল্পত মাছৰ প্ৰসঙ্গ আশানুৰূপ হৈ উঠিছে। তাৰ ভিতৰত লক্ষ্মীনাথ বেজবৰুৱাৰ 'ভদৰী'ত মাছ বাচিবলৈ ব্যৱহৃত কৰা মৈটা, 'যেনে চোৰ তেনে টাঙোন'ত জীয়া ৰৌ মাছৰ টেঙা আঞ্জা ৰন্ধাৰ কথা পোৱা যায়। ইয়াৰোপৰি মাছ ধৰা কৌশল বৰশী বোৱা সম্পৰ্কে সুন্দৰ বিৱৰণ বেজবৰুৱাৰ গল্পত পোৱা যায়—*সি নিতৌ বৰশী বায়, কিন্তু মই এদিনো তাক এটাও মাছ ধৰা নেদেখিলোঁ। নৈত যে মাছ নাই এনে নহয় বা বৰশীত খোটা সিহঁতৰ অভ্যাস নাই এনেও নহয়। লোকৰ ল'ৰাই বৰশী বাই সেই নৈৰে মাছ জোকাজোকে লৈ গৈ তিনিতেলনি মাৰি খায়* (কন্যা,১৩০)

মহিম বৰাৰ 'মাছ আৰু মানুহ' এটি উল্লেখযোগ্য গল্প। গল্পটিত এসময়ৰ অসমৰ লোকসমাজখনত সমজুৰাকৈ মাছ চিকাৰ কৰা, গাঁৱৰ ৰাইজ একেলগ হৈ মাছ ধৰা সংস্কৃতিৰ নিভাঁজ চিত্ৰ আৰু অতীত ঐতিহ্য, সম্প্ৰীতিৰ এক মধুৰ বাস্তৱক তুলি ধৰিছে। যিবোৰ পৰিবেশ বৰ্তমান দেখিবলৈ পোৱা নাযায়। 'মাছ আৰু মানুহ' গল্পটিত গল্পকাৰে সমজুৰাকৈ ৰাইজ ল'গ হৈ মাছ মৰাৰ আনন্দ, মাছ ধৰা বিভিন্ন সঁজুলি আদিৰ বৰ্ণনাৰে অতীত বাস্তৱক গল্পৰ মাজেৰে সজীৱ কৰি তুলিছে—*'জানো ভগৱান, চকু মেলি চাবা প্ৰভু। আজি চাৰিবছৰে সি ঘৈণীয়েকক ভাল মাছ এটা ধৰি দেখুৱাব পৰা নাই। মাত্ৰ নাৱ, বাট, কুঢ়ি, বৰালি, কেএগ। ভয়ঙ্কৰ ৰৌ বা বাহু মাছ এটা ধৰিব পাৰিলে ৪/৬ জনে ভাৰ সাঙোৰী কৰি আনি ঘপহ কৰে চোতালৰ আগত পেলাই দিব—গাঁৱৰ মুনিহ-তিৰোতা,ল'ৰা-ছোৱালীয়ে মাছটো বেঢ়ি ধৰিব।' গল্পটিৰ আন এঠাইত মাছ ধৰা সঁজুলিৰ বৰ্ণনা আছে—ল'ৰাবিলাকে জুলুকি লৈছিল। জুলুকি পল'তকৈ সৰু আৰু চাপৰ। তাৰ মেৰটো পল'ৰ সমান বহল নহয়। জুলুকি দ' পানীত বাব নোৱাৰি...। পানীত নামিব নোখোজা দুই-এটাই হাতত ওভোতা কোল বা পচা লৈ পাৰে পাৰে আগবাঢ়িল। সৰু-সুৰা মাছ খুঁচিব পাৰিব* (ভৰালী,২০৪) গল্পটিত মাছ আৰু মানুহৰ মাজৰ অসহায় অৱস্থাৰ হৃদয় বিদাৰক উপস্থাপনো মন কৰিবলগীয়া—*কিন্তু, আমি যে পৰমবন্ধু-মাছ -আমি যে পৰম বন্ধু-বিপদৰ বন্ধু। সৌৱা সিঁহত আহিলেই, মানুহ আহিলেই*

মাছ-ডম্বৰু এই পায়, এই পায়, আৰু যে সময় নাই মাছ, আৰু যে সময় নাই। (ভৰালী,২১৩)গল্পটিত গ্ৰাম্য জীৱনৰ মাটিৰ সুবাস বিচাৰি পোৱাৰ লগতে ডাঙৰ মাছ ধৰা কৌশলৰ বৰ্ণনাই অভিজ্ঞতালব্ধ পৰম্পৰাগত জ্ঞানৰ সম্ভেদ দিয়ে। বৰাৰ 'টোপ' গল্পত মাছ ধৰা সঁজুলি বৰশী প্ৰস্তুতৰ এটি নিভাঁজ বৰ্ণনা পোৱা যায়—*শিঙিপুখুৰীত শ'লমাছ পৰিছে। বহুতে অকল শ'ল টোপায়ে পকা পকা শ'লমাছ আনিছে। বেণুৱে তাৰ সমনীয়া চেনিক খবৰটো জনাবলৈ লৰ দিলে। চেনিয়ে তাতকৈও আগতেই জানে খবৰটো। দুয়ো নিৰুপায়। বৰশী এটাৰো নাই। ককায়েকহঁতৰ বৰশী চুবলৈ নিদিয়ে। 'মই ডোল বটিব জানোঁ। বৰশী ডাঁৰি দুডাল তিনি মাহমানৰ আগতে কাটি থৈছোঁ।' কৰালি অলপ সেকি পোন পাজৰ কৰি ল'লেই হ'ল। বেণুৱে উপায় উলিয়ালে। কিন্তু সূতা ক'ত পাব? মুগা সূতা লাগিব। এই একোটা পকা শ'ল-শণ বা মুগা সূতা নহ'লে চিঙ্গি লৈ যাব। চেনিয়ে হাতেৰে মাছৰ আকাৰ-প্ৰকাৰ দেখুৱাই দিয়াৰ লগে লগে বেণুৱে মাছটো দেখিলে। পেটৰ ফালে ৰঙা দীঘলীয়া, ক্ৰমাৎ লাহী শ'লমাছ, মাজে মাজে ক'লা দাগ, দীঘলীয়াকৈ আৰম্ভ হোৱা মূৰৰ খোলাটো, পানীৰ তলে তলে ফিছা কোবাই কোবাই সি আহিছে কাঁড় এপাট অহাদি।*(গোহাঁই, ১৬) বীৰেন্দ্ৰ কুমাৰ ভট্টাচার্য্যৰ ৰচিত 'মাছ' চুটিগল্পটিত মানুহৰ কৰ্মফল আৰু পূৰ্ব জন্ম তথা ইহ জন্মৰ সৈতে মাছৰ সম্পৰ্ক স্থাপন আৰু ইঙ্গিতধৰ্মী প্ৰয়োগ পোৱা যায়—*এটা জনমত শোষক হৈ জন্ম লোৱা মানুহবোৰে সেই জনমত শাস্তি নাখাই সাৰি গ'লে ঘূৰি জনমত মাছ হৈ জনম পায়। ডাঙৰ শোষকবোৰ ৰৌ মাছ হয়।* (গোস্বামী, ভট্টাচার্য্য, ৩৩) সম্প্ৰতি আধুনিক অসমীয়া গল্পকাৰসকলৰ ভিতৰত অনুৰাধা শৰ্মা পূজাৰীৰ 'মাছ' এটি উল্লেখযোগ্য গল্প। গল্পটো ২০১৫ চনৰ অক্টোবৰ মাহৰ সাতসৰীত প্ৰকাশ পাইছিল। গল্পটিত বোধন নামৰ সৰল চৰিত্ৰ এটিয়ে ৰজত বৰাৰ পুখুৰীপাৰ চাফা-চিকুণ কৰাৰ জৰিয়তে মাছ আৰু মানুহৰ মাজৰ যি চিৰন্তন সত্য গঢ় লয়। তাৰ চিত্ৰাকৰ্ষক ছবি এখন দাঙি ধৰিছে—*কলবাৰীৰ গাতে লাগি আছে বৃহৎ পুখুৰীটো। বছৰি বৰাই পুখুৰীত মাছৰ পোনা মেলে, লাখ টকাৰ মাছ বিক্ৰী কৰে, সিঁহতক এটাও নিদিয়ে। অথচ বোধনে পুখুৰীৰ পাৰ এনেয়ে চাফ-চিকুণ কৰি থাকে।....বেয়া মতলবৰ মানুহে এই বিহ দি পুখুৰী বিলত মাছ মৰাৰ কথা সি জানে। এই কথাবোৰ পুনিৰ বুকুৰ জুইকুৰা দুগুণে জ্বলায়। ৰজত বৰা পুখুৰীটোৰ মাছ কোনোবাই মাৰিলে বা নামাৰিলে, পুখুৰীৰ পাৰ চিকুণাই দিবলৈ বোধনৰ কি গৰজ।.....মই বেয়া কাম এটা কৰি থৈ আহিম বুলি ভাবিছিলোঁ.....নহ'লেগৈ, পুখুৰীটোৰ মাছসোপাকে মাৰি থৈ আহিব পৰা হ'লে...নে-নেপায়। স্মা-ছ ক্কেইটাৰ ক্কি দোষঙ্গ কেই-ইদিন সি হঁত জী-জীৱঙ্গ থকা দি-দিনকেইটা ভা-ভালে থক। সি-হঁত আ-মাৰ দৰেইন-হয় জা-নো? অ-হা স্মাহত বে-পাৰীয়ে আ-হি ল্লৈ য্যাব। ন্নে-পায়।*(যৌগি,১৭১) ইয়াৰোপৰি মহিম বৰাৰ 'এখন নদীৰ মৃত্যু', অৰুণ গোস্বামীৰ 'মাছমৰীয়া ছোৱালীৰ লাজ' আদি গল্পই অসমৰ মৎস্য সংস্কৃতিৰ প্ৰতি থকা সাহিত্যিকসকলৰ দায়বদ্ধতাক তুলি ধৰিছে।

আন আন সাহিত্যৰদৰে অসমীয়া উপন্যাস সাহিত্যতো মৎস্য সংস্কৃতিৰ প্ৰকাশ ঘটিছে। দৈবচন্দ্ৰ তালুকদাৰৰ 'ধুঁৰলি কুঁৰলি' উপন্যাসত গ্ৰাম্য সমাজৰ দৈনন্দিন জীৱনৰ উমান পোৱাৰ লগতে সেই সময়ত খাদ্য হিচাপে মাছৰ ব্যৱহাৰৰ প্ৰতি মানুহৰ আগ্ৰহ তথা মাছ ধৰা আদি দিশ প্ৰতিফলিত হৈছে—*পৰঙি জালত পুঁঠি-খলিহা পলাই গ'লেও পেহীয়েকৰ মুখৰ পৰা কীৰ্তনৰ নামবোৰ পলাব নোৱাৰিছিল।* (দাস,১১) নৱকান্ত বৰুৱাৰ 'কপিলীপৰীয়া সাধু' উপন্যাসখনিত ৰূপাই চৰিত্ৰটিৰ জৰিয়তে সেই সময়ৰ সমাজত মাছৰ ব্যৱসায়, মাছ ধৰা, মাছৰ দৰ-দাম আদিৰ উদাহৰণ আছে; যেনে—*কপিলীপাৰৰ উঁইহাফলুত বহি মাছ মৰা চাইছে।...আকৌ কেইদিনমানৰ ভিতৰতে পানী হঁহকি যায় খোল-ডোঙত মাছ-পুঠি থৈ।*(বৰা, ৪৫৭) মাছৰ বেপাৰ যে হৈছিল তাৰ সম্ভেদ পাওঁ—*'অ' তোমালোক মাছ বেচেগা-হামলোক মাছ নাই বেচেগ। পথাৰমে মাছ মাৰতা আৰু পঁইতা ভাতকা লগত পুৰপুৰকে খাতা। কাছ পানেছে ভোজ দেগা।*((বৰা, ৪৫৮), *কাৰৈ মাছ একুৰি ২অনা ৬পাই*(বৰা, ৪৬৫) ইত্যাদি। নিৰুপমা বৰগোঁহাঞিৰ উপন্যাস 'ইপাৰৰ ঘৰ সিপাৰৰ ঘৰ'ত এখন ঘৰুৱা চিনাকি ছবি চিত্ৰিত কৰিছে—*ঐ, সাবি, পাহ যদি মাছ দুটামান দি যাবি, আমাৰ ভাল জাখে-খানোকে লৈ য়, তহোঁতোৰখান ভাঙা নহয়।...হাঁহি-খিকিন্দালি কৰি সাবিত্ৰী,* শনে আৰু *পত্মা গৈ পোতা পুখুৰী পালেগৈ আৰু চাব চাব জাকৈ মাৰি সিঁহতে অকণি অকণি মোৱা মাছকেইটামান পালে। কঁকালত আৰি লোৱা খালৈত তাকে ভৰাই প্ৰথমতে এজনীয়ে এটা গান জুৰি দিলে, তাৰ পাছত ই দুজনীয়েও ধৰিলেঃ ঐ,ঘাটোৰ ছেল্‌কেনি বৰাহোৰ পুঙা/ক'ৰ পৰা আহিলি পুলপুৱা মুৰা?/পুলপুলা মুৰাৰে মুখোতে ডাঢ়ি,/মাইহনাবোক পিন্ধেছি মাইলানোৰ শাৰী।/মাইলানোৰ শাৰীতে পাটোৰে চোলা/বৰাহোত উঠিল শামুকোৰ খোলা/(তাই) দিমানটো কৰে কাম খাৰাৰে যোগাৰ/(যদিও) লালাকে কৰা নাই আকোৰে বাজাৰ। (তাই) বাটেদি মানুহ*

গেলি হাত বাউল দি মাতে । ইয়াৰোপৰি সৰু মাছৰ ৰন্ধৰ দিহা উপন্যাসখনিত পোৱা গৈছে—*পটেই খোৱা মাছ কেইটা ভাজিবলৈ তেলৰ বটলটো আনি চালে, তলত অলপ মান তেল লাগি আছে। তাকে তাই চৰুত দি মাছকেইটা ভজাৰ নিয়ম ৰক্ষা কৰিলে। মাছকপৰা আহোতে সাবিয়ে বাটৰ দাঁতিৰ ঢেঁকীয়াকেইডালমান বুটলি আনিছিল, পটেই সেইখিনি কলপাতেৰে নুৰিয়াই জুইতে গোজা মাৰি থ'লে।সেইদিনা ৰাতি মাক-জীয়েকৰ আহাৰ বেছ তৃপ্তিকৰ হ'ল, গৰম ভাত, ঢেঁকীয়া পোৰা আৰু মোৱা মাছ ভাজি।* (বৰগোহাঁঞি,১২)

অসমৰ লোকজীৱনক কেন্দ্ৰ কৰি ৰচনা কৰা লীলা গগৈৰ 'নৈ বৈ যায়' উপন্যাসখনিৰ বিভিন্ন অংশত মাছ সম্পৰ্কীয় তথ্য আছে। বিশেষকৈ মাছৰ ৰন্ধন শৈলীৰ বিষয়ে পাওঁ—*কাতিমাহৰ গধূলি সোনকাল হয়। মলখু মাছলৈ গৈছিল। কোদো টোপ দি বৰশী বালে লখিমীজানত জোটা-জোঁটে পাভ মাছ পায়। সি উলটি আহিল। আহোঁতে বাটত পৰঙী জাল দুখেৰা মাৰি দুসাঁজমান মৰঠিপুঠি, শিঙৰা আৰু খলিহনা মাছো ধৰি আনিছিল। মাছখিনি বাছি, পেটুকাঢ়ি, ধুই-পখালি, আখলশালত যঁতাই দিলোঁ।...নলটেঙাৰ কুমলীয়া আগ এমুঠি বুটলি আনি টেঙা ৰান্ধিবলৈ দিলোঁ* (গগৈ, ১২৮) উপন্যাসখনিৰ আন এঠাইত মাছৰ ৰন্ধন প্ৰণালীৰ আভাস পাওঁ—*আহিনীয়া লাহী কচুৰ টেপু দুটামান আছে। পাভমাছ দি টেঙা ৰান্ধিম। তাৰ হেনো মাগুৰ মাছ শুকান খৰিছা দি ভাজি খাবলৈ মন গৈছে। মই মাছ দুটা মাৰি খৰিকাত ভৰাই, কচি থৈ আহিছোঁ, অঙঠা চাই জুইত দিবি। আধাসিজা হ'লেই হ'ব।* (গগৈ, ১২৯) সন্তান জন্ম হোৱা পোৱাতী এগৰাকীৰ স্বাস্থ্যৰ যতন লওঁতে খাদ্যই বিশেষ ভূমিকা পালন কৰে। তেনে খাদ্যৰ তালিকাত মাছৰ ৰন্ধন সম্পৰ্কে পাওঁ—*শাহুৰে বাঁহৰ চুঙা এটাত মোট বখলিয়াই কুচিয়া পোৱালি এটা, চেংমৰা দুডালমান, বৰা চাউল এমুঠি, জালুক দুটামান সিজাই জোলখিনি খাবলৈ দিলে। নিতৌ পুৱা-গধূলি শাহুৰে ভেদাইলতা, সৰু মানিমুনি, মাটিকাদুৰি, নৰসিংহৰ পাতৰ লগত নহৰু বাটি, কাঠমাছৰে সৈতে জোল কৰি খুৱাইছিল* (গগৈ, ১৪১) এনেদৰে উপন্যাসখনিত কচুজালৰ খাদ্য বা গাত শক্তি পাবলৈ খাবলৈ দিয়া খাদ্যৰ প্ৰসঙ্গত মাছৰ উল্লেখে অসমৰ লোক সমাজখনত মাছৰ ঔষধি প্ৰয়োগ সম্পৰ্কে জানিবলৈ দিয়ে। ইয়াৰোপৰি—*নতুন পানীৰ গোন্ধ পাই মাছবোৰ মতলীয়া হয়; উজান পৰে* (গগৈ, ১৫৭); *জাঁল মাৰোঁতে বুৰিয়াই মাছ ধৰা*(গগৈ, ১৪৪) উপন্যাসখনিত সেই সময়ৰ সমাজত মাছ কিনা, মাছ ধৰা আৰু মাছ ৰান্ধি খোৱা বিষয়বোৰে গ্ৰাম্য জনজীৱনৰ সুবাস বিয়পাই—*বগী পোহাৰীয়ে ধান সলাই মাছ দিয়ে। মৰা ধান নেথাকিল মুঠি দুখৰমান উলিয়াই দিলে মাৰি-জাৰি নিয়ে। এদোণ ধানৰ মাছে মুখ বুৰাই খালেও দুসাজ যায়। জীয়া মাছ; পুৰি, পিটিকা কৰি, টেঙা দি খাব পাৰি। মাছৰ আটক নাই; বিলত পল-জুলুকি বালেও মাছ পায়। জেঠ-আহাৰমহীয়া দশমীহঁতে পথাৰত জাকৈৰে সৰু মাছ ধৰে। পাততে দি পিটিকা কৰি দিওঁ বা মেটেকা পুলি, ঢেকীয়া শাকেৰে ভাজি দিওঁ। বাৰীৰ ঢাপত, নৈৰ পাৰৰ চোমনিত থোৰালি থোৰালি ঢেকীয়া অপাৰ। কচু থুৰি এমুঠি বুটলি, ঔ টেঙা এবখলা বা থেকেৰা দুফুলামান দি মাছ-পুঠি দুটামান পেলাই দিলেই এখন আঞ্জা হয়* (গগৈ, ২৮৯) উপন্যাসখনিত পোৱা এনে বৰ্ণনাই অসমৰ লোক-খাদ্য আৰু ৰন্ধন প্ৰণালীৰ স্পষ্ট আভাস দিয়ে। হোমেন বৰগোহাঞিৰ উপন্যাসতো—*ইটামৰা পুখুৰীত বৰশি বাবলৈ যাব*(সাউদৰ পুতেকে নাও মেলি যায়,৫),*বৰল বা কেঁচুৰ টোপেৰে বৰশী বাই পাভ মাছ ধৰা*(সাউদৰ পুতেকে নাও মেলি যায়,৮২) আদি লোক জীৱনৰ নিভাঁজ ছবি বিচাৰি পোৱা যায়। বৰগোহাঞিৰ 'পিতাপুত্ৰ', চৈয়দ আব্দুল মালিক, বীনা বৰুৱা, মামনি ৰয়ছম গোস্বামী, বীৰেন্দ্ৰ কুমাৰ ভট্টাচাৰ্য্য আদিৰ উপন্যাসত সমসাময়িক সমাজ ব্যৱস্থাত মাছৰ প্ৰয়োগ সম্পৰ্কে ন ন কথাৰ সম্ভেদ আছে।

মাছক বিষয়বস্তু হিচাপে লৈ বা নাটকত মাছ সম্পৰ্কীয় কথ্যকাহিনীৰে বিভিন্ন নাটক ৰচনা হৈছে। বহু নাট্যকাৰে গ্ৰাম্য পৰিবেশ সূচনাৰে মাছমৰীয়া জীৱনক লৈ, জালখনক লৈ নাটক ৰচনা কৰি আহিছে। তাৰ ভিতৰত পদ্মনাথ গোহাঞিবৰুৱাৰ ধেমেলীয়া (মঞ্চ নাটক) 'টেটোন-তামুলি'ত মাছৰ প্ৰসঙ্গ ৰসালকৈ উপস্থাপন কৰিছে—*টেটোনঃ-(অকলশৰে ইফাল-সিফালকৈ টহলি) আহক বাইটি মাছৰপৰা আজি। মই, বাপেকে, এইখিনিতে খালৈৰপৰা পোনেই বৰকাৰৈ এটা আৰু মৰঠী-পুঠি এজনী লৈ, বেলেগ খৰিকাত দিমগৈ।বোপাই পথাৰৰপৰা আহি নৌ পাওঁতেই, বাপেকে, খৰিকা-দিয়া পেট পাবগৈ।আকৌ, আইৰপৰাও আঞ্জাত দিয়াৰো ভাগ লম নহয়, মই বাপেকে।....জাকৈয়া নাহেমানে ময়ো পদূলিমূৰৰপৰা নাতৰোঁ নহয়।...আজি ভিনিহিকো মাতি পঠিয়াইছে নহয়।সেইটো আহি পালে, আমাৰ কাৰৈ মাছৰ মূৰ চোৰোৱাটি হৈঠে আৰুঙ্গ* (গোহাঞিবৰুৱা,২৮৫) উয়াৰোপৰি গোহাঞিবৰুৱাৰ 'ভূত নে ভ্ৰম' নাটকত জালোৱা চৰিত্ৰৰ উল্লেখ আছে।মহেন্দ্ৰ বৰঠাকুৰৰ 'সিঁচা পানীৰ মাছ' (কলিতা,১৩৭) এখনি উল্লেখযোগ্য নাটক। নাট্যকাৰ নৰজ্যোতি বৰাৰ 'ফটা জালৰ মাছ' নাটকখনি সৰল

আপোনভোলা মাছমৰীয়া আৰু সাধাৰণজনৰ জীৱন কাহিনীৰে গঠিত মঞ্চ সফল নাটক। কৈলাশ নেওগৰ ৰচিত আৰু উকা ড্ৰামা ওৱৰ্কচ শিৱসাগৰৰ দ্বাৰা সদৌ অসম শিশুনাট সমাৰোহ, চঞ্চুচু ত পৰিবেশন কৰা শিশুনাট 'মাছ' এখন অতি উপভোগ্য শিশু নাটক। অসমীয়া নাট্য সাহিত্যৰ ইতিহাসত বিশেষকৈ মঞ্চ নাটকৰ বেলিকা মাছকেন্দ্রিক বহু নাটক ৰচিত আৰু মঞ্চস্থ হৈছে। আধুনিক অসমীয়া নাটকত তেতিয়াবা প্রতীকি অর্থত, কেতিয়াবা মাছমৰীয়াৰ জীৱন সংগ্রামক প্রতিফলিত কৰাত নতুবা লোকজীৱনৰ দৈনন্দিন জীৱনৰ বাস্তৱতাক তুলি ধৰিবলৈ যাওঁতে মাছৰ প্রসঙ্গ গুৰুত্বপূর্ণ হৈ উঠিছে।

অসমীয়া সাহিত্যৰ আন আন ধাৰাসমূহৰদৰে সাহিত্যৰ আটাইতকৈ জনপ্রিয় আৰু সংবেদনশীল ধাৰা আধুনিক অসমীয়া গীতি-সাহিত্যতো মাছৰ সঘন উল্লেখ মনকৰিবলগীয়া। অসমীয়া লোকগীত, চর্যাগীতসমূহত যিদৰে মাছ আৰু মাছুৱৈৰ বিষয়ে পোৱা যায়; ঠিক সেইদৰে আধুনিক গীতিকাৰসকলেও অসমৰ লোকজীৱনৰ গুৰুত্বপূর্ণ অংশ মৎস্য পৰম্পৰাক গীতৰ মাজেৰে সজীৱ কৰি তুলিছে। অসমীয়া ছবি 'ধুমুহা'ত ভূপেন হাজৰিকাৰ কথা, সংগীত আৰু কণ্ঠদান কৰা এটি অতি জনপ্রিয় গীত হ'ল 'পৰহি পুৱাতে টুলুঙা নাৱতে'। গীতটিত মাছমৰীয়াৰ জীৱন সংগ্রামৰ জীয়া বাস্তৱক তুলি ধৰিছে–

পৰহি পুৱাতে টুলুঙা নাৱতে
ৰংমন মাছলৈ গ'ল
মাছকে মাৰিবলে' নেলাগে যাবলে'
ধুমুহা আহিবৰ হ'ল।(দাস,৮৪)

'ৰাংঢালী' বোলছবিত হেমেন হাজৰিকাৰ কথা আৰু সংগীতেৰে মহানন্দ মজিন্দাৰ বৰুৱা, ৰুণুমী ঠাকুৰ আৰু আনন্দ নাৰায়ণ দেৱে কণ্ঠদান কৰা 'হেই জাক জাক জাকৈয়া ছোৱালী' গীতটিত অসমীয়া জীয়ৰী-বোৱাৰীহঁতে দলনি পথাৰ, বিল আদিত মাছ যে মাৰিছিল তাত জীৱন্ত উদাহৰণ ধৰি ৰাখিছে

হেই জাক জাক জাকৈয়া ছোৱালী
হেই ৰাংঢালী জীয়ৰী-বোৱাৰী
চিৰাজুলি পদুমনি বিললৈ
জাল জাকৈ পল হাতত লৈ
আজি সিঁচিমে সিঁচিমে বিল।(দাস,১৪৩)

দিগন্ত ভাৰতীৰ কথা আৰু সুৰেৰে জুবিন গার্গৰ কণ্ঠত প্রাণ পাই উঠা 'অ' মোৰে ল'ৰাৰ মাক' গীতটিৰ মাজেৰে মাজলৈ যোৱা, জাকৈ কাথিত সযতনে থোৱা, বাৰীৰ পাচলি আৰু মাছেৰে জুতি লগাই খোৱা অসমীয়াৰ মনটোৰ লগতে মাছলৈ গ'লেই যে খালেয়ে খালেয়ে মাছ-পুঠি অসমৰ খালে-বিলে পোৱা গৈছিল, তাৰ সম্ভেদ পোৱা যায়। এনেবোৰ গাতে এসময়ৰ অসমৰ নদ-নদীত মাছে নদন-বদন হৈ থকাৰ কথা শুৱৰাই—*অ' মোৰে ল'ৰাৰ মাক/মাছলৈ যাওঁ, নাখাওঁ শুদা ভাত../চুবুৰীৰ ৰংমনে উভতি আহিলে/ কঁকালৰ খালৈটি পূৰাই/ খলিহনা, পুঠি আৰু গৰৈ, চেঙেলী /দেখি মোৰ দেহা জ্বলি যায়, /শাকনি বাৰীৰে লাই পালেং শাক /বেগেতে তুলি তুলি ৰাখ /মাছলৈ যাওঁ, নাখাওঁ শুদা ভাত*।(দাস,৩৮৭) ইয়াৰ বিপৰীতে নীল আকাশৰ *'মাছলৈ গৈছিলোঁ, এজনিও নাপালোঁ'* গীতটিয়ে বর্তমানৰ খাল-বিলত মাছৰ সংখ্যা হ্রাস পোৱা তৰাং ছবিখন তুলি ধৰিছে বুলিব পাৰি। যদিও কথা গীতিকাৰৰ কল্পনাপ্রসুত, কিন্তু ই পৰিবেশৰ উচিত অনুধাৱন দুলিব পাৰি। বিহুসুৰীয়া যেনে—*'মাছে মাৰিবলৈ সুবর্ণ চালনি/বহি জাৰিবলৈ পীৰা', 'মাছে মাৰিবলৈ এ পদুম নিদিও তোমাক যাবলৈ'* ইত্যাদি গীতত মাছৰ উল্লেখ তথা মাছক গুৰুত্বপূর্ণ অভিধা হিচাপে গ্রহণ কৰাই সর্বকালত অসমৰ জন মানসত মাছৰ প্রতি থকা দুর্বলতা আৰু আবেগক প্রতিফলিত কৰে।

উপসংহাৰ ঃ

'অসমীয়া সাহিত্যত মৎস্য সংস্কৃতি' শীর্ষক বিষয়টি আলোচনা কৰি দেখা গ'ল যে, প্রাচীন অসমীয়া (প্রাক্ শংকৰী, শংকৰী, শংকৰোত্তৰ) সাহিত্য, আধুনিক অসমীয়া সাহিত্যৰ বিবিধ ক্ষেত্রত মৎস্য পৰম্পৰাৰ আধিপত্য পোৱা গৈছে। ইয়াৰোপৰি লোক-চিকিৎসাত মাছৰ প্রয়োগ; যেনে—পুঠিমাছৰ পেটু ব্যৱহাৰ কৰা, বহুবছৰীয়া শুকান মাছৰ ঔষধ কৰি কুকুৰাৰ বেমাৰ নিৰাময় কৰা , গাত তেজ কম হ'লে কুচিয়া, শিঙিমাছ খাবলৈ দিয়া পৰম্পৰা আছে। পাতিমুতুৰা মাছখোৱা খাবলৈ দিলে সৰু ল'ৰা-ছোৱালীয়ে বিচনাত প্রস্রাৱ কৰাৰ পৰা ৰক্ষা পৰে। কুকুৰে কামোৰা বেমাৰত শুকান মাছ ব্যৱহাৰ কৰা, গর্ভৱতী মহিলাই মাছ হত্যা নকৰা আদি লোক-বিশ্বাসো জনসমাজত প্রচলন আছে।এনে দিশবোৰে অসমৰ সমাজ জীৱনত মাছৰ গাঢ় সম্পর্কৰ কথাই নির্দেশ কৰে। অসমীয়া লোক-সাহিত্যৰ বিভিন্ন শ্রেণী লোকগীতৰ ভিতৰত ফুলকোঁৱৰ, জনা গাভৰু গীত, মণিকোঁৱৰ গীত, নাহৰৰ গীতৰ পৰা মহাত্মা গান্ধীকলৈ ৰচিত আখ্যানমূলক গীতত, বিহুনাম, আইনাম, বিয়ানাম আদিত সৰু-বৰ মাছ, জালোৱা, সঁজুলি আদি মাছৰ সৈতে সম্বন্ধ থকা শব্দৰ ব্যৱহাৰ লক্ষণীয়। অসমৰ বিভিন্ন জনগোষ্ঠীৰ লগতে উজনি-নামনি, পাহাৰ-ভৈয়াম অঞ্চলত মাছৰ লগত জড়িত গীত-মাত, পূজা-পাতল, লোকাচাৰ আদিত ভিন্নভাৱে মাছৰ প্রয়োগ

হৈ আহিছে।

অসমৰ সমাজ ব্যৱস্থাত মাছৰ প্ৰভাৱ ইমানেই গভীৰ যে,অসমৰ বিভিন্ন জিলাৰ বিভিন্ন অঞ্চল মাছৰ নামেৰে নামাকৰণ হোৱাটো গুৰুত্বপূৰ্ণ কথা। কামৰূপৰ—ৰৌমাৰী, পুঠিমাৰী; দৰঙৰ—কাছমাৰী, শ'লমাৰী, কাৰৈমাৰী, মোৱামাৰী, গৰৈমাৰী; ববপেটাৰ-গৰৈমাৰী; তেজপুৰৰ-মিছামাৰী; ধেমাজিৰ—গৰৈমাৰী, বাটমাৰী, শিঙিয়া, মাছখোৱা, খলিহামাৰী, পুঠিমাৰী; লক্ষীমপুৰৰ—শিঙিমাৰী, ভাঙনমাৰী, মাগুৰী বিল আদি উল্লেখনীয়।এনেবোৰ দিশলৈ লক্ষ্য কৰি অসমৰ মৎস্য পৰম্পৰাক লৈ ভাষিক অধ্যয়নৰ স্থল আছে।

গ্ৰন্থপঞ্জী ঃ

কলিতা, মণিৰাম (সম্পা.)ঃ নাট্যালোচনা, অলিম্পিয়া প্ৰকাশন, ১৮ নৱেম্বৰ, ২০১৬ চন।

গগৈ, লীলাঃ নৈ বৈ যায়, **বনলতা, গুৱাহাটী, নতুন সংস্কৰণ,** ২০০৪ চন।

গোহাঁই, হীৰেণ(সম্পা.)ঃ মহিম ববা গল্প সমগ্ৰ, বনলতা, চন।

গোস্বামী, অতুলানন্দ, ভট্টাচার্য্য, বিনীতা(সং., সম্পা.)ঃ বীৰেন্দ্ৰ কুমাৰ ভট্টাচার্য্যৰ গল্প-সম্ভাৰ (প্ৰথম খণ্ড), চন্দ্ৰ প্ৰকাশ, প্ৰথম প্ৰকাশ, অক্টোবৰ, ২০০৯ চন।

চলিহা, ভৱপ্ৰসাদ (সং., সম্পা.) ঃ অসমীয়া আখ্যান-গীত সংগ্ৰহ, অসম প্ৰকাশন পৰিষদ, দ্বিতীয় প্ৰকাশ, জুন ২০১২ চন।

ঠাকুৰ, নগেন(সম্পা.)ঃ এশ বছৰৰ অসমীয়া উপন্যাস, জ্যোতি প্ৰকাশন, গুৱাহাটী, প্ৰথম প্ৰকাশ, নৱেম্বৰ,২০০০ চন।

দাস, যোগেশ (সম্পা.) ঃ দৈবচন্দ্ৰ তালুকদাৰ উপন্যাস সাহিত্য, অসম প্ৰকাসন পৰিষদ, ডিচেম্বৰ ১৯৯৭ চন।

দাস, শোণিত বিজয় আৰু বায়ন, মুনীন (সম্পা.) ঃ- সৌৰভ কুমাৰ চলিহা ৰচনাৱলী, প্ৰথম প্ৰকাশ, ২০০০চন।

দাস, অৰুণলোচন(সং.,সম্পা.)ঃ অসমৰ সুৱদিসুৰীয়া গীত, ৰেখা প্ৰকাশন, ষষ্ঠ প্ৰকাশ, জুন, ২০২৫ চন।

নৰহ, জীৱন (সম্পা.) ঃ মহিম ববা ৰচনা-সমগ্ৰ, প্ৰথম প্ৰকাশ, ছেপ্তেম্বৰ, ২০১৮ চন।

নেওগ, মহেশ্বৰ(সম্পা.)ঃসঞ্চয়ন, সাহিত্য অকাদেমি, পঞ্চম মুদ্ৰণ, ২০০৩ চন।

নেওগ, মহেশ্বৰ(সম্পা.)ঃ গুৰু-চৰিত-কথা, বিশ্ববিদ্যালয় প্ৰকাশন বিভাগ, গুৱাহাটী বিশ্ববিদ্যালয়, দ্বিতীয় তাঙৰণ (সংশোধিত),২০০৩ চন।

নিৰুপমা বৰগোহাঞিৰ উপন্যাস সম্ভাৰ, জ্যোতি প্ৰকাশন, প্ৰথম প্ৰকাশ, ফ্ৰেব্ৰুৱাৰী, ২০০১চন।

নীলমণি ফুকনৰ সম্পূৰ্ণ কবিতা, আঁক-বাক, জানুৱাৰী, ২০১৩ চন।

বৰগোহাঞি, হোমেনঃ সাউদৰ পুতেকে নাও মেলি যায়, ষ্টুডেণ্টচ্ ষ্ট'ৰচ্, একাদশ সংস্কৰণ, জুলাই, ২০০২ চন।

বৰা, নিত্য(সম্পা.)ঃ বেজবৰুৱা ৰচনাৱলী(প্ৰথম খণ্ড), অসম প্ৰকাশন পৰিষদ, প্ৰথম সংস্কৰণ, জানুৱাৰী, ২০১৪

বৰা, প্ৰাণ্জিৎ (সম্পা.)ঃ নৱকান্ত বৰুৱা ৰচনাৱলী (প্ৰথম খণ্ড), অসম প্ৰকাশন পৰিষদ, প্ৰথম প্ৰকাশ, ডিচেম্বৰ, ২০২১চন।

বৰুৱা, প্ৰ !াদ কুমাৰ(সম্পা.)ঃ অসমীয়া লোকসাহিত্য, অসম সাহিত্য সভা, প্ৰথম সংস্কৰণ, ফেব্ৰুৱাৰী, ২০০১চন।

বেজবৰুৱা, লক্ষ্মীনাথ ঃ বুঢ়ী আইৰ সাধু, অসম বুক ট্ৰাষ্ট, প্ৰথম প্ৰকাশ, আগষ্ট ২০১২ চন।

ভৰালী, শৈলেন(সং.,সম্পা.)ঃ শ্ৰেষ্ঠ অসমীয়া চুটি গল্প, চন্দ্ৰ প্ৰকাশ, প্ৰথম প্ৰকাশ, ডিচেম্বৰ, ২০১৪চন।

ভট্টাচার্য, হীৰেণঃ নিৰ্বাচিত কবিতা, সুগন্ধি পখিলা, বনলতা, গুৱাহাটী, চতুৰ্দশ প্ৰকাশ, জানুৱাৰী, ২০১১চন।

ভাগৱতী, প্ৰকল্প ৰঞ্জন (সম্পা.)ঃ পাৰিপার্শ্বিক কবিতা, অসম পাবলিচিং কোম্পানী,গুৱাহাচী, প্ৰথম প্ৰকাশ, ২০২৩ চন।

যোগী, সৌমিত্ৰ (সম্পা.)ঃ২০১৫ চনৰ নিৰ্বাচিত ২৭ টা গল্পৰ সংকলন বছৰৰ গল্প, ২০১৫, আঁক-বাংক,প্ৰথম প্ৰকাশ, ডিচেম্বৰ, ২০১৫চন।

শৰ্মা, সত্যেন্দ্ৰনাথঃ অসমীয়া সাহিত্যৰ সমীক্ষাত্মক ইতিবৃত্ত, সৌমাৰ প্ৰকাশ, পুনৰ মুদ্ৰণ, জুন, ২০০৬ চন।

শৰ্মা, নবীন চন্দ্ৰঃ ডাক-প্ৰবচন আৰু ডাক-পৰম্পৰা, জ্যোতি প্ৰকাশন, দ্বিতীয় প্ৰকাশ, নৱেম্বৰ, ২০১২ চন।

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নন্দিতা দেৱীৰ ‘বঙল বহু দূৰ’ - এক চমু আলোচনা

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সাম্প্ৰতিক অসমীয়া সাহিত্যৰ এক শক্তিশালী ঔপন্যাসিক নন্দিতা দেৱী। গতানুগতিক কাহিনীৰ পৰা নিজস্ব শৈলীৰে উপন্যাস ৰচনা কৰা নন্দিতা দেৱীৰ প্ৰতিখন উপন্যাসৰ কাহিনী যেন একো একোখন সুনিৰ্মিত ইতিহাস। পেশাগতভাৱে এগৰাকী চিকিৎসক নন্দিতা দেৱীৰ ‘বঙল বহু দূৰ’ অসমীয়া সাহিত্যত এক উল্লেখনীয় সংযোজন। কামৰূপৰ গ্ৰাম্য জীৱন তথা সমাজৰ এক নিৰ্মোহ বিশ্লেষণ উপন্যাসখনৰ পাতে পাতে প্ৰতিফলিত হৈ উঠিছে। তাৰ সমান্তৰালভাৱে পুৰণি কামৰূপৰ লগত পূৰ্ববংগৰ সম্পৰ্ক, ধৰ্মীয় তথা সাংস্কৃতিক সম্পৰ্ক আদিৰ দিশবোৰৰো এক নিৰ্মোহ বিশ্লেষণ দাঙি ধৰা হৈছে। বিভিন্ন চৰিত্ৰৰ সমাবেশেৰে জীপাল হৈ উঠা উপন্যাসখনৰ অন্তঃস্ৰোত হিচাপে কাহিনীৰ সমান্তৰালভাৱে বৈ আছে গভীৰ মানবীয় চেতনা তথা বিষাদবোধ। এই চেতনা কেতিয়াবা যদি ব্যক্তিকেন্দ্ৰিক, কেতিয়াবা আকৌ সমাজকেন্দ্ৰিকভাৱে সজীৱ হৈ উঠিছে।

বীজ শব্দ ঃ বঙল, বঙলা পিতে, কালিন্দ্ৰী, যজমনি, ৰঙা নিচান, জমিদাৰ, পুৰুহিত।

০.০ প্ৰস্তাৱনা ঃ

ঔপন্যাসিক নন্দিতা দেৱীৰ এখন উল্লেখনীয় উপন্যাস হ’ল ‘বঙল বহু দূৰ’। ২০২১ বৰ্ষৰ অসম প্ৰকাশ পৰিষদ সাহিত্য বঁটা প্ৰাপ্ত উপন্যাসখন প্ৰথমতে প্ৰান্তিক আলোচনীত ছোৱা-ছোৱাকৈ প্ৰকাশ পাইছিল। উপন্যাসখনৰ কাহিনীয়ে এছোৱা দীঘলীয়া সময় সামৰি লৈছে। ‘বঙলা পিতে’ নামৰ মূল চৰিত্ৰটোক কেন্দ্ৰ কৰি ঔপন্যাসিকে কামৰূপৰ গ্ৰাম্য জীৱন তথা সমাজ, প্ৰাচীন কামৰূপৰ দিনৰ পৰা অসম, উত্তৰবংগ, পূৰ্ববংগ আদিৰ সামাজিক তথা সাংস্কৃতিক যোগাযোগ, দেশ বিভাজন, মানুহৰ বিপৰ্যয় আদি দিশবোৰ অতি আকৰ্ষণীয় ৰূপত উপন্যাসৰ পাতত চিত্ৰিত কৰি দেখুৱাইছে। কাহিনীৰ সমান্তৰালভাৱে ঔপন্যাসিকে গভীৰ মানবীয় দৃষ্টিভংগীয়ে তথা সংবেদনশীলতাৰে মানুহৰ সুখ-দুখ, একান্ত আত্মীয়তা লগতে জীৱনৰ ওপৰেদি পাৰ হৈ যোৱা অপ্ৰতিৰোধ্য ঘটনা আদিৰ চিত্ৰায়ণো উজ্জ্বল ৰূপত চিত্ৰিত কৰি দেখুৱাইছে।

০.১ অধ্যয়নৰ উদ্দেশ্য ঃ

বঙল বহুত দূৰ একেষাৰতে ক’বলৈ গ’লে এখন মহাকাব্যিক উপন্যাস। উপন্যাসখনৰ মাজেদি ভিন্ন তথা বহু চৰিত্ৰৰ সমাবেশ ঘটা উপন্যাসখনৰ মাজত বঙলা পিতেৰ সামগ্ৰিক জীৱন চিত্ৰিত হৈ উঠিছে। এক দীঘলীয়া সময়ৰ সমাজ-সাংস্কৃতিক তথা ৰাজনৈতিক, অৰ্থনৈতিক দিশবোৰৰ বিষয়ে লগতে উপন্যাসৰ পাতত জিলিকি উঠা সামগ্ৰিক দিশ বিচাৰ কৰি চোৱাই আমাৰ উদ্দেশ্য।

০.২ অধ্যয়নৰ গুৰুত্ব আৰু প্ৰয়োজনীয়তা ঃ

‘বঙল বহু দূৰ’ পুৰণি কামৰূপৰ এটা সময়ৰ জীৱন্ত ইতিহাস বুলি ক’ব পাৰি। কাহিনীৰ গুৰুত্বৰ উপৰিও উপন্যাসখনৰ পাতত গ্ৰাম্য কামৰূপৰ সমগ্ৰ জীৱনচৰ্য্যা উজ্বলি উঠিছে। গভীৰ মানবীয়তাৰে ঔপন্যাসিকে মানৱ জীৱনৰ প্ৰতিটো দিশ তুলি ধৰাৰ যি প্ৰচেষ্টা তাক অধ্যয়ন কৰাৰ যথেষ্ট গুৰুত্ব তথা প্ৰাসংগিকতা আছে।

০.৩ অধ্যয়ন পদ্ধতি ঃ

বিষয়টো অধ্যয়নৰ বাবে বৰ্ণনাত্মক পদ্ধতিৰ সহায় লোৱা হ’ব। মুখ্য উৎস হিচাপে নন্দিতা দেৱীৰ ‘বঙল বহু দূৰ’ আৰু গৌণ উৎস হিচাপে বিষয়ৰ লগত সম্পৰ্কিত তথ্য পাতি তথা প্ৰৱন্ধ আদিৰ সহায় লোৱা হ’ব।

০.৪ নন্দিতা দেৱীৰ বঙল বহু দূৰ ঃ

নন্দিতা দেৱীৰ জনপ্ৰিয় উপন্যাস হ'ল 'বঙল বহু দূৰ'। তুলনামূলকভাৱে সচৰাচৰ উপন্যাসৰ কাহিনীতকৈ নন্দিতা দেৱীৰ উপন্যাস বহু ক্ষেত্ৰত পৃথক হোৱা দেখিবলৈ পোৱা যায়। কাহিনীৰ সমান্তৰালভাৱে একোখন ইতিহাসৰ ছবি দেখিবলৈ পোৱা যায়। 'বঙল বহু দূৰ' ৰ দৰে তেখেতৰ আন এখন জনপ্ৰিয় উপন্যাস হ'ল 'ৰূপৰ ধোঁৱা খোৱা সোণৰ ধোঁৱা খোৱা'।

বঙল বহু দূৰ উপন্যাসখনৰ কাহিনী আৰম্ভ হৈছে বঙলা পিতে নামেৰে জনাজাত বিখ্যাত পুৰুহিত শ্ৰীশ্ৰী অনন্ত ঠাকুৰৰ বঙলালৈ বেপাৰৰ বাবে উভটি যোৱাৰ কথাৰে। বঙলা পিতেৰ নিজৰ পৰিয়াল তথা গাঁও এৰি ব্যৱসায়ৰ বাবে সুদূৰ ৰায়গঞ্জ অঞ্চলৰ পিপলানত বসবাস কৰে। ছমাহ কেতিয়াবা বছেৰেকত ঘৰলৈ আহে। গাঁৱৰ ঘৰত ল'ৰা-ছোৱালী কেইটাৰ সৈতে পত্নী কালিন্দ্ৰী আই। ওচৰা-ওচৰিকৈ থকা ঘৰবোৰত বঙলা পিতেৰ বুঢ়ী পেহীয়েক ঢেকীয়াগাজি, এমুৰে বৌৱেক প্ৰিয়ম্বদা, আনফালে ভায়েকৰ ঘৰ। কামৰূপৰ ব্ৰাহ্মণৰ প্ৰতি উত্তৰবংগ, পূৰ্ববংগৰ মানুহৰ অসীম আগ্ৰহ।

> *"যজমানসকলৰ মানত প্ৰাগজ্যোতিষপুৰৰ ব্ৰাহ্মণৰ স্থান অন্যান্য ঠাইৰ ব্ৰাহ্মণতকৈ অনেক ওপৰত। কামৰূপ তেওঁলোকৰ বাবে তন্ত্ৰ-মন্ত্ৰৰ দেশ। যোনিপূজা হোৱা কামৰূপৰ কামাখ্যাৰ প্ৰতি তেওঁলোকে সুদূৰৰ পৰাই মাথা নত কৰে।" (বঙল বহু দূৰ, পৃ. ৯)*

বঙলৰ পৰা অহা কেইদিন বঙলা পিতেৰ মুখত কেৱল বঙলৰ কথা। চোতালত সকলোৱে তেওঁৰ কথাবোৰ সাধু শুনাদি শুনে। শস্য-মৎস্যে পৰিপূৰ্ণ সেই দেশৰ এক ছয়াময়া ছবি সকলোৰে মনত জাগি উঠে। কল্পনাৰে পৰিপূৰ্ণ দেশত অভাৱ নাই বুলি ভাবিলেও বঙলা পিতেৰ কথাৰ পৰাই জনা যায়, কেইঘৰমান অৱস্থাপন্ন মানুহ আৰু জমিদাৰ শ্ৰেণীৰ বাহিৰে প্ৰায় বেছিভাগ মানুহেই কঙাল অষ্টম দৰিদ্ৰ। বঙলা পিতেৰ ঘৰখনো বঙলা পিতে আহিলে ভৰি পৰিলেও, বঙলা পিতেৰ অবৰ্ত্তমানত কাঙাল। ছমাহ-বছেৰেকে মানুহজন ঘৰলৈ আহিলে ভাৰে-ভেটিৰে আহে। কেৱল যে ঘৰৰ মানুহখিনিয়ে বাট চাই থাকেএনে নহয়, গোটেই চুবুৰীটোৱে বাট চাই থাকে। কিয়নো বঙলা পিতে কাকো বিমুখ নকৰে।

> *"লগত লৈ আহে বৰ-বৰ টোপোলাত ফিন্দ খাই থকাকৈ শান্তিপুৰী ধুতি, ৰঙা পাৰীৰ শাড়ী, বাংলা গামোচা, পাণধোৱা, কাঁহৰ বাটি, পিতলৰ টিলিঙা, ক'লা কম্বল, ক'লা-ৰঙা মাৰ্কিন কাপোৰ, দানৰ চাউল-পাত, ভোজনিৰ দাইল, আলু, হালধি, নিমখকে ধৰি জবাকুসুম তেল, অগৰু, আলতা, সেন্দুৰৰ পুৰিয়া, পৰ্যন্ত হৰেক ৰকমৰ বস্তু।" (বঙল বহুত দূৰ, পৃ. ৩৭)*

ফিন্দ খাই অহা বস্তু দিওঁতে দিওঁতে এদিন শেষ হৈ আহে। কালিন্দ্ৰীয়ে আটাহ পাৰি উঠে -

> *'মানুহটোৰ্‌পে গতাই উপায় নহঅ হৈছি এ। বঙলৰ বস্ত্ৰ গিলা গতাই বিলে বিলে শেষ কইৰব ইতা'। (বঙল বহু দূৰ, পৃ. ৪১)*

ঘৰৰ অভাৱ পুৰাবলৈ, ঘৰখন চলিবৰ বাবেই মন নাথাকিলেও বঙলা পিতে পুণৰ বঙলালৈ যাত্ৰা কৰে। বঙলাৰ পৰা অহা কেইদিন বঙলা পিতেৰ ঘৰখনেই উখল-মাখল হৈ নাথাকে, চুবুৰীটোও উখল-মাখল হৈ থাকে।

বঙলা পিতেৰ চোতালৰ এমুৰে বৌৱেক প্ৰিয়ম্বদাৰ ঘৰ। বৌৱেকৰ প্ৰতি বঙলা পিতেৰ অগাধ ভক্তি। সৰু কালৰে পৰা পোৱা বৌৱেকৰ স্থান মাতৃতুল্যা। কালিন্দ্ৰীতকৈ বৌৱেকৰ স্থান বহুত ওপৰত। হাজাৰ জুতি-বুধি লগাই ৰান্ধিলেও কালিন্দ্ৰীৰ জুতিয়ে বঙলা পিতেক বান্ধি ৰাখিব নোৱাৰে। সকাম-নিকাম, কাজ-কৰ্মৰ লেঠা ক'তো নাথাকিলে গধুলা-গধুলা মানুহটোৱে বৌৱেক প্ৰিয়ম্বদাৰ আখলৰ জুতি লয়গৈ -

> *"সেইখন জুহালৰ আঞ্জাৰ বৰ জাল, বৰ চোক। যিকোনো মানুহকে অৱশ কৰি দিব পৰা আঞ্জাৰ সোৱাদ।" (বঙল বহু দূৰ, পৃ. ৪৩)*

সাধাৰণ নাৰী হ'লেও প্ৰিয়ম্বদা অসাধাৰণ। আগ্ৰাসী তথা প্ৰভাৱশালী প্ৰিয়ম্বদাক কালিন্দ্ৰীয়ে শ্ৰদ্ধা নকৰে, কিন্তু ভয় কৰে। সাধাৰণ নাৰী হ'লেও প্ৰিয়ম্বদা অসাধাৰণ। কিয়নো -

> *"প্ৰিয়ম্বদা যি প্ৰিয়ম্বদাই। বৰ প্ৰভাৱশালী তিৰোতা। সকলোকে বান্ধি ৰাখিব পৰা মহিমা। ... ... সেইজনী মানুহৰ অহৰহ প্ৰচেষ্টা, চৌপাশৰ সকলোকে নিস্প্ৰভ কৰি দিয়াৰ। কোনো সাৰি নাযায়। কোনেও মূৰ তুলি কথা নকয়। বাহিৰে মৰম-চেনেহেৰে ওপচাই দিওঁ যেন কৰিলেও ভিতৰি সকলোকে গ্ৰাস কৰাৰ প্ৰয়াস তেওঁৰ, সকলোকে হাতৰ মুঠিত ৰখাৰ প্ৰচেষ্টা।" (বঙল বহুত দূৰ, পৃ. ৪৩)*

এইজনী প্ৰিয়ম্বদাৰ বাবেই কালিন্দ্ৰীৰ কেতিয়াবা তীৰ্থযাত্ৰী হৈ গুচি যাবৰ মন যায়, ঘৰ এৰি ক'ৰবালৈ গুচি যোৱাৰ ভাৰ হয়। বৌৱেকৰ বিপক্ষে বঙলা পিতেক ক'ব নোৱাৰে। সকলো লুণ্ঠিত হৈ যোৱাৰ ভয় এটা বুকুত সামৰি কালিন্দ্ৰীয়ে মাথো সহি থাকে -

> *"সহি সহি বৌৱেকৰ সমস্ত কাণ্ড-কাৰখানা মাথোঁ নিৰীক্ষণ কৰি থাকে। চোৱাই যাওঁকচোন, মানুহ এজনী হওঁ বুলি এটা জীৱনত কিমান দুৰ্বলৈকে আগ্ৰাসী হ'ব পাৰে। (বঙল বহুত দূৰ, পৃ. ৪৪)*

লাহে লাহে কালিন্দ্ৰীয়ে অনুভৱ কৰে, দেওৰেক বৌৱেকৰ মাজত যেন কালিন্দ্ৰী ৰামায়ণৰ উৰ্মিলা হ'বলৈ আগবাঢ়ে। মন্ত্ৰোচ্চাৰণেৰে নিজ হাতে নাৰীশক্তিক পূজা কৰা বঙলা পিতে কাহানিও ভাবি নাচায় নিজৰ ধৰ্মপত্নীক দিয়া মৰ্যাদাৰ কথা কালিন্দ্ৰীয়ে মৰ্মে মৰ্মে উপলব্ধি কৰে আগ্ৰাসী নাৰীয়ে প্ৰতি খোজে অদৃশ্যভাৱে কালিন্দ্ৰীৰ সংসাৰত খোজ পেলাইছে। কালিন্দ্ৰীয়ে বুজি পায় সকলো সমন্ধৰে একোটা সীমা থকা উচিত। কিন্তু বঙলা পিতেক সেয়া ক'ব নোৱাৰে।

ঘৰলৈ আহিলে বঙলা পিতে যাবৰ মন নাযায়। যাবলৈ ওলোৱা বঙলা পিতেক বৌৱেকৰ এষাৰ কথাই বাধা দিয়ে। গিৰিয়েকলৈ বুলি বন্ধা টোপোলা কালিন্দ্ৰীৰ তেনেকৈয়ে পৰি ৰয়। কালিন্দ্ৰীয়ে অনুভৱ কৰে -

> *"প্ৰিয়ম্বদাই যেন গঁড়ে চেলেকাদি চেলেকে কালিন্দ্ৰীৰ শৰীৰ। গঁড়ে মানুহ নাখায়। চেলেকোঁতেই মঙহ চিৰাচিৰ হৈ হাড়লৈকে ওলাই পৰে। (বঙল বহু দূৰ, পৃ. ৫১)*

নিজৰ মনৰ মাজত হাজাৰবাৰ যুদ্ধ কৰি কালিন্দ্ৰী সিদ্ধান্তলৈ আহে। তাই পৰিয়ালসহ একেবাৰেই উঠাদি বঙললৈ গুচি যাব। অত্যন্ত সাহস আৰু দৃঢ়তাৰে কালিন্দ্ৰীয়ে বঙলা পিতেক তাইৰ সিদ্ধান্তৰ কথা জনাঁলে। বঙলা পিতে জকজকাই উঠিল। পুৱা-গধূলি কাজিয়াৰে ঘৰ ভৰিল। কালিন্দ্ৰীৰ খুটি পুটি বহা কথাত মানুহজনে থতমত খাইছিল। বাহিৰত নিজৰ প্ৰতিমূৰ্ত্তি বজাই ৰাখি প্ৰিয়ম্বদায়ো ৰায় দিলে গিৰিয়েক ঘৈনেকৰ কথাত তেওঁ নোসোমায়। তথাপি -

> *"মৰ কথা হ'ল ইতাই ভাগ হবা নাই। পিতৃ-মাতৃৰ শ্ৰাদ্ধৰ দিনা চোতলত চাইনৰ তলত সকলই আৰ্শীবাদ ল'বা লাইগব, ইথান কৈ থ'লো"। (বঙল বহু দূৰ, পৃ. ৭১)*

সঁচাকৈয়ে কালিন্দ্ৰী গিৰিয়েকৰ লগত পৰিয়ালসহ বঙল পালেহি। ল'ৰা-ছোৱালী ডাঙৰ কৰিলে। বঙলৰ সমাজৰ লগত মিলি থাকিবলৈ শিকিলে। গধূলি বজাৰত লগ পোৱা মানুহৰ পৰা বঙলা পিতেৰ মুখৰ পৰা গাঁৱৰ বতৰাও পাই থাকিল। পুত্ৰসম উদ্ধৰে নিজৰ বুলি মাজে-সময়ে খবৰ লৈ থাকিল। গোটেই পৰিয়াল পুণৰ উদ্ধবৰ বিয়াৰ বাবেহে ঘৰলৈ আহিল। পুণৰ ঘূৰি গ'ল। কিন্তু সময় সদায় একেদৰে নাথাকিল। সকলোৰে জীৱন সলনি কৰি পেলালে। বয়সে আচোৰা বঙলা পিতে থাকিম বুলিও একেঠাইতে থাকিব নোৱাৰিলে। ৰঙা নিচানৰ "নাঙল যাৰ মাটি তাৰ" শ্লগানে সমগ্ৰ বংগ কঁপাই তুলিলে। বঙলা পিতে জমিদাৰৰ কথা ৰাখিব নোৱাৰাৰ বাবে ঠাই সলাবলগীয়াত পৰিল। জমিদাৰৰ ৰাজবাৰীৰ পুৰুহিত পৰৱৰ্ত্তী সময়ত মাকোৰপাৰা, বৰিশালৰ দৰে ঠাইত পুৰহিতালি কৰিবলৈ ল'লে। অৱশ্যে জমিদাৰৰ তলৰ থকা অশান্তিতকৈ এই জীৱনত বঙলা পিতে শান্তি পালে। সকলোৰে জীৱন সলনি হৈ পৰিল। বঙলা পিতেৰ লগলাগি কাঠত ইন্দ্ৰকুট তেল লগাই ঘৰ সজাব সপোন প্ৰিয়ম্বদাৰ মৃত্যুৰ লগতে সমাধিস্থ হ'ল। প্ৰতাপী মানুহজনীয়ে জীৱনত বিচৰাখিনি একোৱেই নাপালে।

বঙলা পিতেৰ জীৱনলৈও ধুমুহা আহিল। বয়সে গৰকা মানুহহাল নিজৰ কোনো দোষ নথকাকৈয়ে পৰিস্থিতিয়ে ব'ব নোৱাৰা বোজা দিলে। কমিউনিষ্ট আন্দোলনৰ ল'ৰাবোৰক অলপ মৰমৰ প্ৰশ্ৰয় দিয়াৰ বাবেই সৰুপুত্ৰ চন্দ্ৰনাথ গ্ৰেপ্তাৰ হৈ কেইবাবছৰ জেলত থাকিবলগীয়া হ'ল। ভাগ্যৰ দোষতেই হওঁক বা ল'ৰাৰ দোষতেই হওঁক বৰপুত্ৰ ইন্দ্ৰনাথে সন্ন্যাসৰ কঠোৰ ব্ৰতত নিমজ্জিত হ'ল। শেষ সময়তো সেই হেৰাই যোৱা পুত্ৰৰ লগত দেখা নহ'ল, কাহানিও বঙলৰ পৰা উভটি নাহো বুলি ভবা বঙলা পিতেক দেশৰ পৰিস্থিতিয়ে পুৰণি ভেঁটিলৈ ঘূৰি আহিবলৈ বাধ্য কৰিলে। দেশৰ অশান্তিকৰ পৰিস্থিতিত পুত্ৰ চন্দ্ৰনাথ, পত্নী কালিন্দ্ৰী সহিতে ঘৰলৈ বুলি বাট লোৱা বঙলা পিতে এটা মৃতদেহ হৈহে ঘৰৰ চোতাল পাবলৈ সক্ষম হ'ল।

গভীৰ মানবীয় চেতনা অন্তঃ সলিলাৰ দৰে বৈ থকা উপন্যাসখনত মানুহৰ জীৱনৰ বিভিন্ন দিশ পৰিস্থিতি অনুযায়ী চিত্ৰিত কৰিছে। আপোনভোলা বঙলা পিতে সাধ্য অনুসৰি সকলোকে সহায়ৰ হাত আগবঢ়োৱা পুত্ৰসম উদ্ধৰক মৌজাদাৰণী ঘৰৰ কামত সুমুৱাই দি সময়ত প্ৰতিষ্ঠিত হয়। উদ্ধৰেও জীৱনজুৰি মানুহহালক আৱৰি ৰাখে। এসময়ত কৰি থোৱা উপকাৰৰ বাবেই কিদৰে পৰিস্থিতিয়ে অসম্ভৱ বুলি কোৱা কথাত সম্ভৱ হৈ উঠিছে। যাৰ বাবে প্ৰতিকুল পৰিৱেশটো নিজে

নজনাকৈয়ে চন্দ্রনাথে উদ্ধাৰ পাইছে। বিপদৰ সময়ত মুছলমান নাৱৰীয়াৰ পৰা বন্ধু নিত্যহৰিলৈকে বঙলা পিতেক আৱৰি ৰাখিছে। অষ্টম দৰিদ্ৰ এচাম মানুহৰ মাজত যজমানি কৰিয়েই বঙলা পিতে শেষ বয়সত চলি আছে। জীৱনত মানুহৰ পৰা পাবলগীয়া সন্মান বঙলা পিতে জীৱনজুৰি পাইছে। হেজাৰ-হতাশা, থকা ঠাই এৰাৰ যন্ত্রণা, ঘৰ হেৰুৱাৰ যন্ত্রণাটো মানুহেই মানুহৰ সাহস হৈ থকাৰ দিশটো ঔপন্যাসিক সজীৱতাৰে অঙ্কণ কৰিছে।

উপন্যাসত প্রাসঙ্গিক ভাৱে বঙ্গৰ জমীদাৰসকলৰ প্রসঙ্গও টানি আনিছে। ৰঙা নিচানধাৰীৰ আন্দোলনৰ লগে লগে বংগত অতীজৰে পৰা বর্তি থকা জমিদাৰী ব্যৱস্থাৰ ভাঙোনমুখী স্বৰূপৰ ইংগিতো ঔপন্যাসিকে দি গৈছে। কিয়নো পৰৱর্ত্তী সময়ত দেখা গ'ল বৃটিছে পুৰণি জমিদাৰী ব্যৱস্থা ভাঙি তাৰ ঠাইত নতুন নীতিৰ প্রৱর্তন কৰিছিল। শেষলৈ জমিদাৰসকলে এঘাৰ ভাগৰ এভাগ নিজলৈ ৰাখি বাকী ১০ ভাগ কোম্পানী ঘৰত জমা দিব লাগিছিল। [১] (ভাৰতবর্ষৰ ইতিহাস সপ্তম খণ্ড) ১৭৫০ খ্রীঃ ৰ পৰা ১৮৫৭ খ্রীঃ লৈ। ভূ-স্বামী জমিদাৰৰ সময়ৰ লগে লগে দেখুওৱা কঠোৰতা, আন্দোলনকাৰী নেতাৰ দুর্গতি, বৃটিছৰ শোষণ নীতি, জমিদাৰৰ লগত সম্পর্ক, পেটে-ভাতে খাই থকা মানুহবোৰ দুর্দশা, প্রব্রজন আদি দিশবোৰে সমগ্র উপন্যাসখনত মহাকাব্যিক ৰূপদান কৰিবলৈ সক্ষম হৈছে।

নাৰী মনস্তত্ত্বৰ এটি সুগভীৰ দিশ কেইবাগৰাকী নাৰীৰ জড়িয়তে দেখুৱাইছে। কালিন্দ্রী, প্রিয়ম্বদা, মৌজাদাৰণী, দীপা, উদ্ধৱৰ পত্নী মণি প্রত্যেকৰে সমস্যা সুকীয়া সুকীয়া। নিজৰ সমস্যাৰ লগত যুঁজি থকা কালিন্দ্রী অথবা মণিৰ সমস্যা একোজন পুৰুষ নহৈ কিন্তু নাৰীহে। পুৰুষৰ নাৰীৰ প্রতি থকা ভালপোৱা আনহাতে অন্তঃ কৰণেৰে কাৰোবাৰ প্রতি থকা আসক্তি দুয়োটা বেলেগ তাক বঙলা পিতে, উদ্ধৱৰ মনস্তত্ত্বৰ জড়িয়তে দেখুৱাইছে। যিটো সহজতে চকুত নপৰে বা আলোচিত নহয়। আনহাতে নাৰীৰ চিৰন্তন হাবিয়াস স্পষ্ট ৰূপত প্রকাশ কৰিছে -

> *"আহ নিজ সংসাৰত ৰাজৰাণী হৈ থকাৰ হাবিয়াসেই নাৰীৰ চিৰন্তন স্বপ্ন। নাখাই থাকিলেও পৃথিৱীৰ কোনো নাৰীয়ে জীৱনত সহ্য কৰিব পাৰেনে মহাকাব্যৰ উর্মিলাৰ দৰে চিৰকাল উপেক্ষিত হৈ ৰোৱাৰ যাতনা।" (বঙল বহু দূৰ, পৃ. ১৩১)*

সমগ্র উপন্যাসখনত ভাষাই এক অনন্য ভূমিকা গ্রহণ কৰি আহিছে। কামৰূপৰ গ্রাম্য অঞ্চলত প্রচলিত কথিত ভাষা সমগ্র উপন্যাসখনৰ মাজত ব্যপ্ত হৈ আছে। তদুপৰি বঙলত প্রচলিত কথিত ভাষা, ঠাইভেদে থকা ভাষাৰ বিচিত্র ৰূপেও উপন্যাসখনত ভুমুকি মাৰিছেহি। তদুপৰি কামৰূপ অঞ্চলত প্রচলিত লোকবিশ্বাস, অন্ধবিশ্বাস, বাল্যবিবাহ, খাদ্যাভাষ, বিবাহ অনুষ্ঠান, বেমাৰ-আজাৰ, ওজা, জগন্নাথৰ পাণ্ডা, অন্যান্য উৎসৱ-পার্বণ, লোকগীত আদিবোৰ সমাজ-সাংস্কৃতিক তথা লোকসাংস্কৃতিক দিশবোৰ সজীৱতাৰে উপস্থাপন কৰিছে। আলোচনাৰ শেষত ক'ব পাৰি -

১) বঙল বহুত দূৰ এখন মহাকাব্যিক উপন্যাস।

২) পুৰণি কামৰূপৰ যি ঐতিহ্য, ধর্মচেতনাৰ গভীৰতা তাক নির্মোহভাৱে উপস্থাপিত হৈছে।

৩) শেষৰ ফালে প্রব্রজনৰ দৰে সমস্যাৰ ইংগিতো ঔপন্যাসিকে দি গৈছে।

শেষত ক'ব পাৰি 'বঙল বহু দূৰ' কেৱল এখন উপন্যাস নহয়। ই সমগ্র অসম তথা পূর্ববংগৰ এটা দীঘলীয়া সময়ৰ ইতিহাস। যি ইতিহাসত লিখা আছে সাধাৰণ মানুহৰ শোকগাথা। দুখ-বেদনা, হতাশা, নিৰাশাৰ শেষটো পুৱাৰ জী উঠাৰ অদম্য আশা। ইয়াৰ পাতে পাতে থকা কাহিনী নপঢ়িলে, ৰূপকথাৰ পৃথিৱীৰ কথা নাজানিলে জীৱনৰ প্রতি অনুভৱ যেন আধৰুৱা হৈ ৰ'ব।

মূল গ্রন্থ ঃ

দেৱী, নন্দিতা ঃ বঙল বহু দূৰ, জ্যোতি প্রকাশন, পাণবজাৰ, গুৱাহাটী, প্রথম প্রকাশ, অক্টোবৰ, ২০১৯

সহায়ক গ্রন্থপঞ্জী ঃ

ভূঞা, প্রাঞ্জল ঃ ভাৰতবর্ষৰ ইতিহাস, (সপ্তম খণ্ড)ভূঞা, প্লাবন (১৭৫০ খ্রীঃ ৰ পৰা ১৮৫৭ খ্রীঃ লৈ)

খাটনিয়াৰ, ৰুবুল কৌশাম্বী, ডি ডি (অনু) ঃ ভ া ৰ ত ৰ ইতিহাস

ভট্টাচার্য্য, বীৰেন্দ্র কুমাৰ ঃ প্রকাশক, হেমাঙ্গ কিশোৰ শর্মা, অসম প্রকাশন পৰিষদ, ষষ্ঠ প্রকাশ, আগষ্ট, ২০১৪

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লিখনত যতি চিনৰ গুৰুত্বঃ এটি বিশ্লেষণ
(অসমীয়া ভাষাত ব্যৱহৃত যতি চিনৰ বিশেষ প্রসংগসহ)

ৰুকুনুদ্দিন আহমেদ
সহকাৰী অধ্যাপক, অসমীয়া বিভাগ
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সংক্ষিপ্তসাৰ

কথিত বা লিখিত — উভয় ভাষাৰ ক্ষেত্রতে সঠিক অর্থ জ্ঞাপনৰ বাবে যতিৰ যথাযথ প্রয়োগ গুৰুত্বপূর্ণ। মৌখিক কথা-বতৰাত কথনভংগী বা সুৰ লহৰৰ জৰিয়তে বক্তাই প্রকাশ কৰিব বিচৰা ভাৱ-অর্থ বুজিব পাৰি। কিন্তু লিখিত ভাষাৰ যোগেদি মনৰ ভাৱ স্পষ্ট আৰু অর্থপূর্ণভাৱে ফুটাই তুলিবলৈ লিখনত কেতবোৰ চিন ব্যৱহাৰ কৰিবলগীয়া হয়। প্রস্তাৱিত লেখাটোত এই সাংকেতিক চিহ্নবোৰৰ স্বৰূপ আৰু প্রয়োগৰ নিয়ম সম্পর্কে অসমীয়া ভাষা লিখনত ব্যৱহাৰ হোৱা যতি চিনৰ পৰিচয় উদাহৰণেৰে সৈতে দাঙি ধৰিবৰ প্রয়াস কৰা হৈছে। নির্বাচিত বিষয়বস্তুৰ পর্যালোচনা কৰিবলৈ বিভিন্ন উৎসৰ পৰা সংগৃহীত তথ্যসমূহৰ সহায়ত বর্ণনামূলক আৰু বিশ্লেষণাত্মক পদ্ধতিৰে লেখাটি যুগুত কৰা হৈছে।

বীজ শব্দ ঃ অসমীয়া, চিন, বাক্য, ভাষা, যতি।

০১ ঃ অধ্যয়নৰ লক্ষ্য-উদ্দেশ্য ঃ

নির্বাচিত বিষয়বস্তুৰ অধ্যয়নৰ লক্ষ্য-উদ্দেশ্য হৈছে মূলতঃ যতিৰ ধাৰণা স্পষ্ট কৰা আৰু অসমীয়া ভাষাত ব্যৱহাৰ হোৱা বিভিন্ন যতি বা বিৰাম চিন সম্পর্কে বিশ্লেষণ দাঙি ধৰা।

০২ ঃ অধ্যয়নৰ গুৰুত্ব ঃ

ভাষা লিখনত যতিৰ ভূমিকা গুৰুত্বপূর্ণ; সঠিক অর্থবোধৰ বাবে লিখনত উপযুক্তভাৱে যতি বা বিৰাম চিন প্রয়োগৰ বিধি সম্পর্কে সম্যক জ্ঞান আহৰণ কৰাটো শিক্ষার্থীসকলকে মুখ্য কৰি সর্বস্তৰৰ লেখক-পাঠকৰ বাবে আৱশ্যকীয়।

০৩ ঃ অধ্যয়নৰ পৰিসৰ ঃ

বর্তমান প্রবন্ধটিৰ অধ্যয়নৰ পৰিসৰ হৈছে অসমীয়া ভাষা লিখনত ব্যৱহৃত বিভিন্ন যতি চিনৰ পৰিচয় প্রদান কৰা আৰু সেইবোৰৰ ব্যৱহাৰিক প্রয়োগ সম্পর্কে উদাহৰণসহ সামগ্রিক বিশ্লেষণ আগবঢ়োৱা।

০৪ ঃ অধ্যয়নৰ পদ্ধতি ঃ

প্রস্তাৱিত বিষয়টোৰ অধ্যয়নৰ পদ্ধতি হিচাপে মূলতঃ বর্ণনামূলক আৰু বিশ্লেষণাত্মক পদ্ধতিৰ সহায় লোৱা হৈছে।

০৫ ঃ অধ্যয়নৰ তথ্য আহৰণৰ উৎস ঃ

বিষয়টিৰ সৈতে সম্পর্কযুক্ত বিভিন্ন গ্রন্থৰ পৰা অধ্যয়নৰ বাবে প্রয়োজনীয় তথ্য-সমল আহৰণ কৰা হৈছে।

১.০০ ঃ প্রস্তাৱনা ঃ

মানুহৰ মনৰ ভাৱ প্রকাশৰ আটাইতকৈ শক্তিশালী তথা সর্বোৎকৃষ্ট মাধ্যমবিধ হৈছে ভাষা। ভাষাৰ প্রধান ৰূপ দুটা-কথিত ভাষা আৰু লিখিত ভাষা। মানুহে কথা কওঁতে ক'তো নোৱোৱাকৈ একেলেঠাৰিয়ে শব্দবোৰ উচ্চাৰণ নকৰে। কথা এযাৰ কওঁতে উপযুক্ত ভাৱ প্রকাশ কৰিবলৈ, উশাহ-নিশাহৰ সুবিধা হোৱাকৈ, কথাৰ ছন্দ আৰু সুৰ-লহৰ অটুট ৰাখিবলৈ শব্দ বা বাক্যৰ মাজে মাজে নির্দিষ্ট সময়ৰ বিৰতিত জিৰোৱা বা ৰৈ দিয়া হয়। ভাষাৰ কথন আৰু লিখন দক্ষতা আয়ত্ত্ব কৰাত যতি বা বিৰামৰ প্রয়োগত মন দিয়া আৱশ্যক। ইয়াৰ যথাযথ প্রয়োগে বক্তাৰ কথনভংগীক বোধগম্য, অর্থপূর্ণ আৰু শ্রুতিমধুৰ কৰি তোলাৰ দৰে লিখনত যতি চিনৰ উপযুক্ত ব্যৱহাৰে লেখা এটাক সৰল, স্পষ্ট আৰু প্রভাৱশালী কৰি তোলে। মনৰ ভাৱ স্পষ্টভাৱে ব্যক্ত কৰিবলৈ আৰু বুজাত সুবিধা হ'বলৈ কথা-বতৰাৰ মাজত কম-বেছি সময় জিৰণি লোৱাকে যতি বা বিৰাম বুলি কোৱা হয়।

'যতি' শব্দৰ ব্যুৎপত্তিগত অর্থ হৈছে: যম্ (সংযত কৰা) ক্তিন যতি। অভিধানসমূহত যতি বা বিৰাম চিনৰ অর্থ নির্দেশ কৰা হৈছে এনেদৰে- বিৰাম চিন; বিৰামসূচক চিন; পঢ়ি যাওঁতে ৰ'বলগীয়া ঠাই নির্দেশক চিন; পঢ়াৰ মাজত য'ত ৰ'ব লাগে তেনে ঠাই, পঢ়োতে ৰ'বলগীয়া ঠাই সূচোৱা দাঢ়ি, ক'মা আদি চিন; পঢ়ি যাওঁতে অর্থ স্পষ্ট কৰিব পৰাকৈ কোন ঠাইত ৰ'ব লাগে তাৰ চিন। ইংৰাজীত ইয়াক Punctuation mark বা Mark of punctuation বুলি সাধাৰণতে কোৱা হয়।

১.০১ ঃ মূল বিষয়বস্তুৰ বিশ্লেষণ ঃ

লিখিত যোগাযোগৰ ক্ষেত্রত বিৰাম চিন বা যতি চিনৰ ব্যৱহাৰ, দুটা শব্দৰ মাজৰ বিৰতি, বাক্যৰ সমাপ্তিৰ বিৰতি, কথাৰ ভাৱ আদি বিষয়বোৰৰ প্রতিও মনোযোগ দিয়া জৰুৰী। কথা কওঁতে বাক্য এটা ক'ত শেষ হৈছে আৰু বাক্যটোৱে কি অর্থ প্রকাশ কৰিছে- তাৰ উমান পোৱা যায় বক্তাৰ কথাৰ সুৰলহৰৰ দ্বাৰা। লিখাৰ ক্ষেত্রত বাক্য এটা কোনখিনিত সম্পূর্ণ হৈছে, বাক্যটোৱে কেনে অর্থ জ্ঞাপন কৰিছে (সাধাৰণ বর্ণনা, আদেশ, ভাৱ নে প্রশ্ন)- সেয়া বুজাবলৈ বিভিন্ন যতি চিনৰ প্রয়োগ হয়। কথিত ভাষাত ব্যক্তিৰ বাক্-ভংগীৰ জৰিয়তে এই যতি বা বিৰামৰ উমান পোৱা যায়; এই ক্ষেত্রত বিৰামসূচক কোনো প্রতীক বা চিন ব্যৱহাৰ কৰাৰ উপায় নাই; বক্তাৰ কথাৰ সুৰলহৰে সেই কার্য সম্পাদন কৰে। কিন্তু লিখিত ভাষা ইয়াৰ ব্যতিক্রম। কথিত ভাষাক লিখিত ৰূপত উপস্থাপন কৰোঁতে বা লিখিত ৰূপত থকা কোনো পাঠ (Text) পঢ়োঁতে স্থান বিশেষে কম-বেছি পৰিমাণে ৰ'বলগীয়া হয়। এনেদৰে লিখিত ভাষাৰ ক্ষেত্রত নির্দ্দিষ্ট বিৰতিত ৰ'বলৈ বা বিৰাম দিবলৈ কিছুমান ঠাইত কেতবোৰ সাংকেতিক চিহ্নৰ ব্যৱহাৰ কৰা হয়। বাক্য বা কথাৰ মাজত ব্যৱহৃত এই চিনবোৰেই যতি চিন বা বিৰাম চিন। উপেন্দ্রনাথ গোস্বামীয়ে 'অসমীয়া ভাষাৰ ব্যাকৰণ' (১৯৮১) পুথিত বাক্যত ব্যৱহৃত যতি চিনৰ প্রয়োগ সম্বন্ধে লিখিছে -

> কোনো এষাৰ কথা কওঁতে আমি কথাষাৰত ব্যৱহাৰ হোৱা আটাইবোৰ শব্দক একেলেথাৰিয়ে ক'তো নোৰোৱাকৈ নকওঁ। কৰবাত অলপ সময় আৰু কৰবাত অলপ বেছি সময় ৰওঁ। কৰবাত ৰোৱা বা বিৰামেই যতি। তাৰ দ্বাৰা কথাষাৰৰ অর্থখিনি বেছি স্পষ্ট হৈ উঠে। কথা কওঁতে আমি বিৰতি বুজাবলৈ কোনো চিন ব্যৱহাৰ কৰিব নোৱাৰোঁ। লেখোঁতে বাক্যত ব্যৱহাৰ হোৱা শব্দবোৰৰ সম্পর্ক বুজাবলৈ আৰু অর্থ বেছি স্পষ্ট কৰিবলৈ কিছুমান চিন ব্যৱহাৰ কৰা হয়। সেইবোৰকে যতি চিন বোলে। (পৃঃ ২০২)

লিখিত ভাষাৰে যোগাযোগ তথা ভাব-বিনিময় কৰাৰ ক্ষেত্রত যতি চিনবোৰৰ উপযুক্ত ব্যৱহাৰ কৰাটো অতি গুৰুত্বপূর্ণ। কাৰণ যতি চিনবোৰৰ প্রত্যেকৰে নামৰ লগতে ব্যৱহাৰিক বৈশিষ্ট্য তথা প্রকৃতি আৰু ভূমিকা ভিন ভিন। কোনোবাটো যতি চিন ব্যৱহাৰ হোৱা স্থানত যিমান ক্ষণ ৰ'ব লাগে, আন কোনোবাটোৰ ঠাইত তাতকৈ কিছু বেছি বা কম সময় ৰ'ব লাগে। কোনোবাটো যতি চিনে যদি আশ্চর্য-বিস্ময় ভাৱ প্রকাশ কৰে, আন কোনোবাটোৱে আকৌ প্রশ্নসূচক বা কৌতূহল, আগ্রহৰ ভাৱহে প্রকাশ কৰে। কিছুমান যতি চিন যদি বাক্যত ব্যৱহৃত পদ বা শব্দৰ মাজে মাজে ব্যৱহাৰ কৰা হয়, আন কিছুমান আকৌ বাক্যৰ শেষতহে ব্যৱহাৰ কৰা হয়। গতিকে লিখিত পাঠত ভাৱ আৰু অর্থ প্রকাশৰ স্পষ্টতা, বিষয়বস্তুৰ বোধগম্যতা আৰু শ্রুতিমাধুর্য বা সুখপাঠ্যতাৰ বাবে যতি চিনবোৰ উপযুক্ত স্থানত যথাযথভাৱে ব্যৱহাৰ কৰাটো নিতান্তই প্রয়োজনীয়।

যতি চিনৰ আন এটা নাম বিৰাম চিন; নামটোতে এই চিন ব্যৱহাৰৰ প্রধান প্রয়োজনীয়তাৰ কথা নিহিত আছে। কথা কোৱা বা লিখিত পাঠ পঢ়াৰ ক্ষেত্রত উশাহ লোৱা আৰু নিশাহ এৰি দিয়াৰ সুবিধাৰ বাবে মাজে মাজে জিৰণি বা বিৰতিৰ দৰকাৰ। শ্বাস-প্রশ্বাসৰ সুবিধার্থে যি বিৰাম লোৱা হয় তাকে শ্বাসযতি বোলে। উচ্চাৰিত ধ্বনিসমূহৰ সঠিক অর্থ প্রকাশৰ বাবে আৰু ভাৱৰ স্পষ্টতা আৰু সহজবোধ্যতাৰ বাবেও ভাষাত যতি চিনৰ ব্যৱহাৰ আৱশ্যকীয়। বিশেষকৈ লিখিত ভাষাত যতি চিনৰ যথোপযুক্ত প্রয়োগে বর্ণনীয় বিষয়ৰ ভাবার্থ স্পষ্ট আৰু বুজিব পৰা বিধৰ কৰি তোলে। এই দৃষ্টিৰে এনেধৰণৰ যতি চিনক অর্থযতি বা ভাবযতি বুলি কোৱা হয়। আকৌ উচ্চাৰিত ধ্বনিৰ ছন্দ, লয় আৰু ভাষাৰ শ্রুতি-মাধুর্য গুণ বর্তাই ৰাখিবলৈ, লিখিত পাঠ একোটাৰ সুখপাঠ্যতা গুণ সৃষ্টিৰ তাগিদাতো নির্দিষ্ট বিৰতিৰ অন্তৰে অন্তৰে যতি চিন ব্যৱহাৰ কৰাটো আৱশ্যক। এনেধৰণৰ যতিক ছন্দযতি বোলা হয় আৰু ইয়াৰ ব্যৱহাৰ প্রধানকৈ কাব্য-কবিতাত। সাধাৰণতে বাক্যৰ শব্দবোৰৰ মাজে মাজে, দুটা বাক্যাংশৰ মাজত আৰু বাক্যৰ শেষত যতি চিন ব্যৱহাৰ হয়। কিছুমান বাক্যৰ মাজত যতি চিন নাথাকিবও পাৰে, কিন্তু প্রত্যেক বাক্যৰ শেষত নিশ্চিতভাৱে যতি চিন থাকে বা দিয়াটো নিতান্তই দৰকাৰী। মনকৰিবলগীয়া যে প্রয়োজনসাপেক্ষে আৰু যথাস্থানত যতি চিনবোৰৰ ব্যৱহাৰেহে লিখিত পাঠৰ বাক্য বা কথাৰ সঠিক অর্থ বুজাব পাৰে।

১.০২ অসমীয়া ভাষাত ব্যৱহৃত যতি চিনঃ পৰিচয় আৰু প্রয়োগ বিধি ঃ

যতি চিনসমূহ ভাষাৰ এক গুৰুত্বপূর্ণ অংগ। সংস্কৃত আৰু সংস্কৃত মূলোদ্ভৱ অসমীয়া, বাংলা আদি ভাষাত আগৰে পৰা

বহুল ব্যৱহৃত দুটা যতি চিন হৈছে- পূর্ণ ছেদ বা দুডাল দাঁৰি (।।) আৰু ছেদ বা এডাল দাঁৰি (।)। প্ৰাচীন অসমীয়া, বাংলা আদি ভাষাৰ সাহিত্যত উচ্চাৰণ শাসন আৰু বিৰাম বুজাবলৈ উক্ত দুটা চিনৰ লগতে কোলন বা বিসৰ্গৰ (ঃ) দৰে যতি চিন ব্যৱহাৰ হৈছিল। কমকৈ ব্যৱহাৰ হৈছিল-ক'মা (,), প্ৰশ্নসূচক (?) আৰু উৰ্ধ ক'মা (''—'') আদি যতি চিন। এই ভাষাবোৰত পিছলৈ ব্যৱহাৰ হ'বলৈ ধৰা যতি চিনবোৰ ইংৰাজী ভাষাৰ প্ৰভাৱত আহিছে। যতি চিনবোৰৰ মাজৰ কিছুমান হৈছে পূর্ণ বাক্যৰ যতি; যিয়ে বাক্য এটাৰ সমাপ্তি বুজায়। দাঁড়ি (।), প্ৰশ্নবোধক (?) আৰু ভাৱবোধক চিন (ঙ্গ) আদিৰে পূর্ণ বিৰাম সূচোৱা হয়। আনহাতে ক'মা (,), ডেচ (—), চেমিক'লন (;) আদিয়ে অপূর্ণ বিৰাম বুজায়; এনে যতিয়ে বাক্যটো শেষ হোৱা নুবুজায় যদিও 'বিৰতি' বা 'বিৰাম' বুজায়। অসমীয়া ভাষাত ব্যৱহাৰ হৈ থকা বিভিন্ন যতি চিনৰ পৰিচয় আৰু সেইবোৰৰ ব্যৱহাৰৰ নিয়ম সম্পৰ্কে তলত আলোকপাত কৰা হ'ল-

ক'মা (,) ঃ ইয়াক লঘুযতি বা অল্পযতি বুলিও কোৱা হয়। বাক্যত থকা পৰস্পৰ সম্বন্ধযুক্ত পদ বা শব্দৰ মাজত সম্বন্ধ ৰক্ষা কৰিও সিবোৰক পৃথক পৃথক কৰি দেখুৱাবলৈ এই বিৰাম চিন ব্যৱহাৰ কৰা হয়। বাক্যৰ একাধিক ব্যক্তি, বস্তু, কিতাপ, কবিতা, প্ৰবন্ধৰ নাম, ভাৱ আৰু বিশেষণ, সর্বনাম, ক্ৰিয়াপদ আদিক পৃথক কৰিবলৈ ক'মা ব্যৱহাৰ কৰা হয়। যথাস্থানত ক'মা ব্যৱহাৰ নকৰিলে বাক্য বিকৃত হয়, অর্থত ব্যাঘাত জন্মে। এই চিন থকা ঠাইত এটা বর্ণ বা আখৰ উচ্চাৰণ কৰাৰ সমান সময় ৰ'ব লাগে। যেনে - অসমৰ মহাবিদ্যালয়সমূহত কলা, বিজ্ঞান, বাণিজ্য আৰু বৃত্তিমূলক শাখাত অধ্যয়নৰ ব্যৱস্থা আছে।

অসমাপিকা ক্ৰিয়াযুক্ত বাক্যৰ বাক্যাংশৰ মাজতো ক'মা চিন দিয়া হয়। যেনে- তোমালোকে ক্লাছৰ পিছত লাইব্ৰেৰীলৈ যাব বিচাৰিছা, যাব পাৰা।

কাৰোবাক সম্বোধন কৰাৰ পিছত ক'মা বহে। যেনে- ছাৰ, আপুনি কিনিবলৈ কোৱা কিতাপ দুখন কালি কিনিলোঁ।

চর্ত বুজোৱা জটিল বাক্যৰ বাক্যাংশৰ মাজতো ক'মা ব্যৱহাৰ হয়। যেনে- আগেয়ে যদি জীৱনৰ বাস্তৱতা উপলব্ধি কৰিলোঁহেঁতেন, পৰিশ্ৰম কৰি ভাল ফল পাব পাৰিলোঁহেঁতেনঙ্গ প্ৰত্যক্ষ উক্তিৰ আগত থকা খণ্ডবাক্য বা বাক্যাংশৰ শেষত ক'মা বহে। যেনে-গান্ধীজীয়ে কৈছিল, ''ভাল হাতৰ আখৰ শিক্ষাৰ এক গুৰুত্বপূর্ণ অংগ।''। ইয়াৰ উপৰি তাৰিখ-মাহ, চন, বাৰ লিখোঁতে, চিঠি-আবেদন আদিত প্ৰতি, প্ৰযত্নে আদি লিখাৰ পিছত, ঠিকনা, ডিগ্ৰী আদি লিখোঁতে ক'মা চিন ব্যৱহাৰ কৰা হয়। যেনে- ৫ চেপ্তেম্বৰ, ২০২৬ তাৰিখ, শনিবাৰ, শিক্ষক দিৱস।

গুৰুযতি বা চেমিকোলোন (;) ঃ দুটা বাক্যৰ মাজৰ সম্বন্ধ বুজাবলৈ বা পৰস্পৰ সম্বন্ধ ৰক্ষা কৰিবলৈ এই চিনটো ব্যৱহাৰ কৰা হয়। ক'মাতকৈ বেছি কিন্তু দাঁৰিতকৈ কম সময় ৰ'বলৈ এই চিন ব্যৱহাৰ হয়। ইয়াৰ অর্ধযতি বা অর্ধছেদ বুলিও কোৱা হয়। চেমিকোলোন মাজত থকা দুয়োটা বাক্যৰ অর্থৰ পূর্ণতাৰ বাবে উভয় বাক্যই পৰস্পৰে পৰস্পৰৰ সৈতে সম্পর্কযুক্তভাৱে নির্ভৰশীল। যেনে — পৰীক্ষাৰ দিন চমু চাপিলেই; কিন্তু পঢ়া হোৱা নাই।

বহুক্ষেত্ৰত বিপৰীত অর্থ বুজোৱা বা বিপৰীতার্থক শব্দ থকা দুটা বাক্যৰ মাজত বিৰোধমূলক সম্পর্ক বুজাবলৈ চেমিকোলোন ব্যৱহাৰ হয়। যেনে — আজিৰ ল'ৰা-ছোৱালীক মানুহে অধ্যয়নবিমুখ বুলি ভাবে; কিন্তু এতিয়াও অধ্যয়নশীল ছাত্ৰ আছে।

দাঁৰি (।) ঃ ইয়াক দাঁৰি, পূর্ণযতি, পূর্ণ বিৰাম বা পূর্ণ ছেদ আদি নামেৰে বুজোৱা হয়। সাধাৰণতে বাক্যৰ পূর্ণতা বুজাবলৈ বাক্যৰ শেষত দাঁৰি ব্যৱহাৰ হয়। বাক্য এটাৰ শেষত দাঁৰি ব্যৱহাৰ কৰা মানে বাক্যটোৰ সম্পূর্ণ যতি পৰা বুজায়। সেয়ে, অর্থপূর্ণ বাক্য একোটা শেষ হোৱাৰ পিছত এই চিন দিয়া ঠাইত দুটা আখৰ উচ্চাৰণ কৰাৰ সমান বিৰতি ল'ব লাগে। যেনে — অসম আমাৰ জন্মভূমি।

প্ৰাচীন আৰু মধ্যযুগীয় অসমীয়া কাব্য-কবিতাত এডাল দাঁৰি আৰু দুডাল দাঁৰি ব্যৱহাৰ কৰি পূর্ণযতি পৰা বুজোৱা হৈছিল।

কোলোন আৰু কোলোন ডেছচিন (ঃ / ঃ—) ঃ ইহঁতক দৃষ্টান্ত চিন বা উদাহৰণৰ চিন হিচাপে ব্যৱহাৰ কৰা হয়। লিখিত যোগাযোগৰ ক্ষেত্ৰত ব্যৱহাৰ হোৱা এই কোলোন (ঃ) চিন কোনো বিষয় সম্পর্কে ব্যাখ্যা দিয়াৰ আগতে বা কোনো শীর্ষকত এটা বিষয় উত্থাপন কৰি তাৰ সন্দর্ভত আন এটি বিষয় স্পষ্ট কৰাৰ বাবেও বহুওৱা হয়। কোনো কথা বা ঘটনাৰ উদাহৰণ দিওঁতে কোলোন চিন ব্যৱহাৰ কৰা হয়। যেনে- ভাষা-জ্ঞান আহৰণৰ প্ৰধান কৌশলকেইটা হৈছে ঃ— শ্ৰৱণ, কথন, পঠন আৰু লিখন।

কথাৰ গুৰুত্ব আৰু সংযোগ সাধনৰ বাবে এটা অপূর্ণ বাক্যৰ পিছত আন এটা বাক্য লিখিবলৈ মাজত কোলোন চিন ব্যৱহাৰ কৰা হয়। যেনে- সত্য সূর্য্যঃ ইয়াক ঢাকি ৰাখিব নোৱাৰি।

সংজ্ঞাশব্দ, পৰিভাষা আৰু বিশেষ তথ্যজ্ঞাপক শব্দৰ পিছত আৰু কোনো বিষয়ৰ সূত্ৰ দিবলৈ নামোল্লেখৰ পিছত কোলোন আৰু কোলোন ডেছ চিন বহে। যেনে- মূল্যঃ ২৫০.০০ টকা। উচ্চাৰণঃ- কোনো ধ্বনি, শব্দ বা কথা কোৱাৰ ধৰণ বা প্ৰক্ৰিয়াকে উচ্চাৰণ বোলে।

মন কৰিবলগীয়া যে এই চিন দুটাৰ ওপৰোক্ত প্ৰসংগ বা স্থানবোৰত বিকল্প প্ৰয়োগ হোৱা দেখা যায়। কোলোন বা কোলোন ডেছ থাকিলে বিৰতিৰ পৰিমাণ এক ছেকেণ্ড বা এটা ধ্বনি উচ্চাৰণৰ সময়।

হাইফেন (-) ঃ ইংৰাজী ভাষাৰ প্ৰভাৱ তথা অনুকৰণৰ আদৰ্শত অসমীয়ালৈ অহা যতি চিনবোৰৰ ভিতৰত ই অন্যতম। ইয়াক যোগৰেখা, সম্বন্ধচিন, সমাসচিন, পদযোজক চিন আদি বিভিন্ন নামেৰেও বুজোৱা হয়। এই চিন দেখাত বিয়োগ চিনৰ দৰে; ইয়াৰ আকাৰ ডেছ চিনতকৈ চুটি। একাধিক পদৰ মাজত সম্পৰ্ক বুজাবলৈ, সমাসবদ্ধ পদৰ অংশবোৰ বিচ্ছিন্ন কৰি দেখুৱাবলৈ, বিপৰীতাৰ্থক শব্দৰ যোৰ বুজাবলৈ, বিপৰীত লিংগবাচক শব্দৰ যোৰ বুজাবলৈ, অনুৰূপ শব্দ বুজাবলৈ; মুঠতে যুৰীয়া শব্দৰ মাজত হাইফেন ব্যৱহাৰ কৰা হয়। যেনে- ছাত্ৰ-শিক্ষক, তামোল-পাণ, পোহৰ-আন্ধাৰ, শিক্ষক-শিক্ষয়িত্ৰী, বা-বাতৰি, মাছ-তাছ আদি। ক'মা, চেমিকোলোন, কোলোন আদিৰ দৰে হাইফেন হৈছে সন্ধি নিৰ্দেশক যতি চিন। হাইফেনৰ প্ৰয়োগ ইতিপূৰ্বে উল্লেখ কৰা ধৰণে হৈ আহিছে যদিও এই সন্দৰ্ভত ভাষাবিদ গোলোকচন্দ্ৰ গোস্বামীয়ে এনেদৰে মন্তব্য কৰিছে-

> অসমীয়া ভাষাত হাইফেনৰ প্ৰয়োগৰ কোনো বাছ বিচাৰ নোহোৱা হৈছে। প্ৰকৃত অৰ্থত হাইফেনৰ ব্যৱহাৰ নকৰাকৈয়ে ভাষা লিখিব পাৰি, আৰু লিখা উচিত। হাইফেন ইংৰাজী ভাষাৰ পৰাহে আমাৰ ভাষাবোৰত সোমাইছে। ক'মা, চেমিকোলোনো ইংৰাজীৰ অৱদান। দাঁড়ি, দুডাল দাঁড়ি আৰু কোলন অৱশ্যে পুৰণি ভাষাতো আছিল। কিন্তু উৰ্দ্ধকমা, হাইফেন আৰু ডেছ (-) সমূলি নাছিল।
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> হাইফেনৰ প্ৰয়োগ কমোৱা উচিত। কিছুমান চুটি চুটি শব্দ (যেনে - ছাত্ৰছাত্ৰী, মাহচাউল, হাঁহপাৰ, টকাপয়চা আদি) লগলগাই লিখা ভাল, মাতোঁতে অথবা বুজোঁতে অকণো আহুকাল নহয়। কিন্তু যিবোৰ শব্দত হাইফেন নিদিলে উচ্চাৰণ ভুল হয় বা ভুল হোৱাৰ সম্ভাৱনা থাকে (যেনে- আ-অলঙ্কাৰ, ডা-ডাঙৰীয়া, ন-দি, ন-কৈ, ন-নৈ, ব-লাগি) সেইবোৰত দিব লাগে। হাইফেন নিতান্ত নিদিলেই নহয় বুলি ভবা শব্দবোৰো একে লগ লগাই নিলিখি ওচৰা-উচৰিকৈ অতি সামান্য ফাঁক ৰাখি (যেনে- ৰ লাগি, ন নৈ, দ কৈ) লিখিলেও বেয়া নহয়। (নতুন সংশোধিত সংস্কৰণৰ কথা (১৫), অসমীয়া ব্যাকৰণৰ মৌলিক বিচাৰ, ২৮ ফেব্ৰুৱাৰী, ২০০৪ চন)।

প্ৰশ্নবোধক চিন (?) ঃ ইয়াক প্ৰশ্নসূচক চিন বুলিও কোৱা হয়। প্ৰশ্ন সুধিবলৈ বা প্ৰশ্ন বুজোৱা বাক্যৰ শেষত এই চিন ব্যৱহাৰ কৰা হয়। যেনে- অসমীয়া ভাষাৰ আদিজননী কি?

জিজ্ঞাসা বা প্ৰশ্নবোধক অৰ্থ প্ৰকাশক বাক্যৰ শেষত সাধাৰণতে এই প্ৰশ্ন চিহ্ন বহে যদিও কোনো বক্তব্য বিষয় সন্দৰ্ভত লেখকৰ সন্দেহ হ'লে বা কোনো বিষয়ে প্ৰশ্ন বা সন্দেহৰ অৱকাশ থাকিলে সন্দেহ থকা শব্দ, পদ বা বিষয়টোৰ কাষতে, চন্দ্ৰ বন্ধনীৰ মাজত (?) চিনটো বহুৱাব লাগে। তেতিয়া এই যতি চিনৰ নাম হয় সন্দেহবোধক চিন। যেনে- ১৮৭২ চনত (?) কলিকতাত এ.এছ. এল. ক্লাব প্ৰতিষ্ঠা হৈছিল।

ভাৱবোধক চিন (ঙ) ঃ বিস্ময়, আশ্চৰ্য, আনন্দ-বিষাদ, হা-হুমুনিয়াহ,আশা-নিৰাশা, উৎকণ্ঠা, যন্ত্ৰণা, সন্দেহ, অনুৰাগ, মিনতি আদি মনৰ তীব্ৰ তথা বিচিত্ৰ ভাব-আবেগ, চিন্তা, অনুভূতি আদি প্ৰকাশ কৰিবলৈ এই চিন ব্যৱহাৰ কৰা হয়। যেনে- বাহঙ্গ কি সুন্দৰ দৃশ্যঙ্গ

তীব্ৰ হৃদয়ানুভূতি প্ৰকাশৰ উপৰি, বিশেষকৈ পুৰণি কালত আৰু এতিয়াও সীমিতভাৱে কাৰোবাক সম্বোধন কৰিবলৈ এই চিনটোৰ প্ৰয়োগ হৈ আহিছে। যেনে- হে ঈশ্বৰঙ্গ তুমিয়েই শেষ ভৰষা। ঈশ্বৰে আপোনাৰ মংগল কৰকঙ্গ

কিন্তু আধুনিক নিয়ম অনুসৰি সম্বোধন কৰাৰ পিছত ক'মা (,)- হে বহে; পুৰণি লেখাত সম্বোধনৰ পিছত ভাৱবোধক বা বিস্ময়সূচক চিহ্ন থাকিলেও এতিয়া আৰু তাৰ ব্যৱহাৰ প্ৰায় নহয়েই। যেনে- মৰমৰ ছাত্ৰ-ছাত্ৰীসকল, আজি আমি যতি চিহ্নৰ বিষয়ে আলোচনা কৰিম।

ডেছ বা দীৰ্ঘৰেখা (-) ঃ একাধিক বাক্য বা বাক্যাংশৰ মাজত সম্বন্ধ বুজাবলৈ, বাক্যৰ অংশ বিশেষত অধিক জোৰ দিবলৈ, বিৱৰণৰ মাজত উদাহৰণসহ বুজাবলৈ (উদাহৰণবাচক যেনে, যথা, উদাহৰণস্বৰূপে আদি শব্দৰ পাছত) এই চিন ব্যৱহাৰ কৰা হয়। ইয়াক ঢাপলি ৰেখা বুলিও কোৱা হয়। সত্যনাথ বৰাৰ 'বহল ব্যাকৰণ'-ত উল্লেখ আছে: "কোনো বাক্য এটাৰ হঠাৎ ভাৱৰ ব্যাঘাত হোৱা বুজাবলৈ ডেছ ব্যৱহাৰ কৰা হয়।" (পৃ.২১৭)। কোনো কথাৰ বিস্তৃত দৃষ্টান্ত বুজাবলৈ, খণ্ডবাক্যৰ পৰস্পৰ সম্পৰ্ক নিৰ্দেশৰ বাবে, কথাৰ বা গল্প, উপন্যাস আদিৰ বৰ্ণনা-প্ৰসংগৰ পৰিৱৰ্তন ব্যাখ্যাৰ ক্ষেত্ৰত, নাটকাদি গদ্য ৰচনাৰ সংলাপৰ আগত ডেছ চিন ব্যৱহাৰ কৰা হয়। যেনে- এইখনেই সেইখন ঠাই — য'ত ৰাণী অভয়েশ্বৰীৰ দৰে বিদ্যোৎ সাহী নাৰীৰ জন্ম হৈছিল; ভাৰতবৰ্ষই সেইখন দেশ — যি পঞ্চশীলনীতি মানি চলে।

উদ্ধৃতি চিহ্ন আৰু উৰ্ধ ক'মা ('—'/ "—") ঃ উদ্ধৃতি চিহ্নৰ ব্যৱহাৰ লেখা এটাত কোনো লেখা (গল্প, কবিতা,

উপন্যাস, ৰচনা, প্ৰবন্ধ আদি)-ৰ নাম নিৰ্দিষ্টকৈ বুজাবলৈ আৰু যিকোনো বিষয় বিশেষভাৱে নিৰ্দেশ কৰিবলৈ, আনে কোৱা কথা (প্ৰত্যক্ষ উক্তি) বা লিখাৰ পৰা কোনো উক্তি বা কথা উদ্ধৃত কৰিলে (মূল লেখাৰ পৰা হুবহু তুলি দিলে) কথাখিনি ঊৰ্দ্ধকমাৰ ভিতৰত লিখা হয়। এই উদ্ধৃতি চিহ্ন বা ঊৰ্দ্ধক'মা দুই ধৰণে প্ৰয়োগ হয়- এককভাৱে ('.....') আৰু দ্বিত্বভাবে ("....."))। সেই অনুসৰি এই চিহ্ন দুই প্ৰকাৰৰ- একক ঊৰ্ধ ক'মা (single inverted comma) আৰু যুগ্ম /দ্বিগুণ/ দ্বিত্ব ঊৰ্ধ ক'মা (double inverted comma)।

লেখাৰ মাজত কোনো গ্ৰন্থৰ নাম, বস্তু বা বিষয়ৰ নাম আদিত জোৰ দি বিশেষভাৱে বুজাবলৈ নামটোৰ দুয়োফালে একক ঊৰ্ধক'মা ব্যৱহাৰ কৰা হয়। যেনে- 'জ্ঞানমালিনী' কবিতাপুথিৰ ৰচক মফিজুদ্দিন আহমদ হাজৰিকা। কোনো বিশেষ শব্দ, পাঠৰ নাম (কবিতাৰ নাম, গদ্য পাঠৰ নাম, প্ৰবন্ধৰ নাম), বাক্যাংশৰ উদ্ধৃতি, উপাধি, আখ্যা বা বিভূষণ আৰু পুৰস্কাৰ, বঁটা আদিক নিৰ্দিষ্ট কৰি বুজাবলৈ এই চিন ব্যৱহাৰ কৰা হয়। যেনে- সংস্কৃত 'যোগ' শব্দৰ উচ্চাৰণ অসমীয়াত 'যোগ' হিচাপে হয়। চৈয়দ আব্দুল মালিকে অসম সাহিত্য সভাৰ তৰফৰ পৰা 'সাহিত্যাচাৰ্য' উপাধি লাভ কৰিছে। হীৰেণ ভট্টাচাৰ্যক 'সুগন্ধি পখিলাৰ কবি' হিচাপে জনা যায়।

আনে কোৱা কথা অৰ্থাৎ প্ৰত্যক্ষ উক্তিৰ মাজত, দ্বিত্ব ঊৰ্ধ ক'মাৰে আগুৰা বাক্যৰ মাজত কোনো বিশেষ কথা উদ্ধৃতিৰূপে দিব লগা হ'লে এককভাৱে ঊৰ্দ্ধ ক'মা ব্যৱহাৰ কৰিব লাগে। যেনে- আলোচকজনে লিখিছে, "শংকৰদেৱ-মাধৱদেৱৰ মিলন অসমীয়া জাতিৰ বাবে এক অপূৰ্ব ঘটনা; অসমীয়া সাহিত্যত ইয়াক 'মণিকাঞ্চণ সংযোগ' বুলি কোৱা হয়।" কোনো বিশেষ শব্দ, ভাৱ, ৰচনা আদিত গুৰুত্ব দিবলৈ বা বিশেষভাৱে বুজাবলৈও উদ্ধৃতি চিহ্ন ব্যৱহাৰ কৰা হয়। এইক্ষেত্ৰত একক ঊৰ্দ্ধক'মাৰ ব্যৱহাৰ কৰা হয়। যেনে- অসমীয়া সংস্কৃতি সম্পৰ্কে আলোচনা কৰাৰ পূৰ্বে 'অসমীয়া' আৰু 'সংস্কৃতি'- এই শব্দ দুটাৰ অৰ্থ সম্বন্ধে সম্যক ধাৰণা থকা আৱশ্যক।

আকৌ কোনো ব্যক্তিৰ প্ৰত্যক্ষ উক্তি, গদ্য-পদ্য ৰচনা বা লেখাৰ অংশ বা বাক্য হুবহু তুলি দিবলৈ দুয়োফালে যুগ্ম ঊৰ্ধক'মা ব্যৱহাৰ কৰা হয়। আনে কোৱা কথা হুবহু উদ্ধৃত কৰিলে তাক প্ৰত্যক্ষ উক্তি বোলা হয়। এই প্ৰত্যক্ষ উক্তিত দ্বিত্বভাৱে ঊৰ্দ্ধক'মা ব্যৱহাৰ কৰিব লাগে। যেনে- লক্ষ্মীনাথ বেজবৰুৱাই কৈছে, "স্বদেশ আৰু স্বজাতিৰ উন্নতিৰ মংগল মন্দিৰৰ সিংহদুৱাৰ হৈছে মাতৃ ভাষা।" বাণীকান্ত কাকতিয়ে আমিয়েলৰ অৱস্থাৰ আভাস তেওঁৰ (আমিয়েলৰ) বাণীৰেই এনেদৰে উদ্ধৃত কৰিছে- "সত্যৰ প্ৰতি মোৰ এনে গভীৰ প্ৰীতি, কিজানি কেতিয়াবা ভুল হয়, এই ভাবতেই কোনো বিষয়ে মই মতামত বা সিদ্ধান্ত দিব নোৱাৰোঁ।"

বন্ধনী চিন ঃ এই চিন বিবিধ ধৰণৰ- সৰু বন্ধনী (চন্দ্ৰ) বন্ধনী, বৰবন্ধনী, কুটিল (মাজু) বন্ধনী আদি। অংক শাস্ত্ৰত এইবোৰৰ ব্যৱহাৰ আছে যদিও বাক্য বা লেখাৰ মাজত অৰ্থ স্পষ্ট কৰিবলৈ, প্ৰসংগাৰ্থ বহলাবলৈ, কোনো শব্দ বা বাক্যাংশৰ বিশেষ অৰ্থ ব্যাখ্যা বা নিৰ্দেশ কৰিবলৈ, জন্ম-মৃত্যু আদিৰ চন বুজাবলৈ, বিশেষ ঘটনাৰ সময় উল্লেখ কৰিবলৈ বন্ধনী ব্যৱহাৰ কৰা হয়। উল্লেখযোগ্য যে ভাষাৰ ক্ষেত্ৰত চন্দ্ৰ বন্ধনীৰহে প্ৰয়োগ বেছি। যেনে- আত্মম্ভৰিতা (অহংকাৰ ভাৱ) ভাল লক্ষণ নহয়; চৈয়দ আব্দুল মালিক (১৯১৯-২০০০)-এ অসম সাহিত্য সভাৰ অভয়াপুৰী অধিৱেশন (১৯৭৭)-ত সভাপতিত্ব কৰিছিল।

একত্ৰে বা যুটীয়াভাৱে একাধিক বিষয় সংলগ্ন কৰি দেখুৱাবলৈ উমৈহতীয়া বিষয়টো লিখি বাওঁফালে কুটিল বন্ধনীৰে বুজোৱা হয়। যেনে-

শোণিত বিজয় দাস

মুনীন বায়ন

আকৌ অংকৰ বিধি মানি খুব সীমিত ক্ষেত্ৰত বৰ বন্ধনীৰ ব্যৱহাৰ হয়। যেনে- সত্যেন্দ্ৰনাথ শৰ্মাই লিখিছে: "সাদিনীয়া নবযুগ' (১৯৬৬ [১৯৬৩]-৬৭) সপ্তম দশকৰ আলোচনী তথা সংবাদপত্ৰ ৰূপে এক সাহসী পদক্ষেপ আছিল।" এই কথাখিনিৰ বৰ বন্ধনীৰ মাজত দিয়া প্ৰথম চনটোহে শুদ্ধ; কিন্তু মূল লেখকে ১৯৬৬ বুলি লিখা ভুল চনটোৰ শুধৰণি হিচাপে এনেকৈ শুদ্ধ তথ্য নিৰ্দেশ কৰা হৈছে।

লুপ্ত চিন বা বৰ্জন চিন (...) ঃ লেখাৰ মাজত বা উদ্ধৃত কথাৰ মাজত কোনো কথা হেৰাই গ'লে বা শব্দ বাক্য বা বাক্যাংশ আদি বাদ দিব লগা হ'লে এই চিন ব্যৱহাৰ কৰা হয়। যেনে- "প্ৰাচীন ভাৰতবৰ্ষৰ বিশ্ববিদ্যালয়বিলাক কেনেকৈ সৃষ্টি হ'ল সেই কথা ক'বলৈ গ'লে অনেক কথা ক'ব লাগে।... আজিলৈকে অনুসন্ধানৰ ফলত জানিব পৰা গৈছে যে প্ৰাচীন ভাৰতত এই ছটা বিশ্ববিদ্যালয় আছিল, যেনে- তক্ষশীলা, শ্ৰী ধান্যকটক, নালন্দা, উদান্তপুৰী, দেৱ-বিহাৰ বা বিক্ৰমশীল আৰু উজ্জয়িনী।" ('শিক্ষাৰ ইতিহাস আৰু ছাত্ৰ'- হেমচন্দ্ৰ গোস্বামী)। ইয়াৰে... চিন থকা ঠাইত এটা বাক্য বাদ দিয়া হৈছে।

কবিতা বা গদ্য পাঠ (Text)-ৰ ব্যাখ্যা কৰোঁতে আৰু তাৰ পৰা উদ্ধৃতি দিওঁতে বৰ্ণনীয় বিষয়ৰ বাবে বিশেষ প্ৰাসংগিকতা নথকা অংশ যেতিয়া এৰি যোৱা হয়, তেতিয়া সেই এৰি যোৱা অংশত উক্ত চিন ব্যৱহাৰ কৰা হয়। ব্যাখ্যা কৰোঁতে সময় ৰাহি কৰিবলৈ আৰু বৰ্ণনাত সুষম ৰূপ দিবলৈ এনে কৰা হয়।

বৰ্জন বা লুপ্ত অৰ্থ বুজাবলৈ কিছুমান ক্ষেত্ৰত কোনো শব্দৰ ঠাইত এটা আখৰ লুকাই ৰাখি উচ্চাৰণ কৰিবলৈ (') লোপ

চিহ্ন হিচাপে ব্যৱহাৰ কৰা হয়। বিশেষকৈ কবিতাৰ ক্ষেত্ৰত উচ্চাৰণ সংক্ষিপ্ত, লয়যুক্ত আৰু শ্ৰুতিমধুৰ কৰিবলৈ এই চিন ব্যৱহাৰ কৰা দেখা যায়। যেনে: স'তে (সৈতে), মু'খনি (মুখখনি)।

তাৰকা চিন (*)ঃ বাক্যত বিশেষ কথা থাকিলে বা কোনো বিষয়ে যদি সবিশেষ বৰ্ণনা দিব লাগে, সেয়া নিৰ্দেশ কৰিবলৈ তাৰকা চিন ব্যৱহাৰ কৰা হয় আৰু উক্ত চিনৰ ব্যাখ্যেয় কথাখিনি পাদটীকাত ব্যাখ্যা কৰা হয়। ইয়াক 'পাদটীকা চিন' বা 'ফুটনোট চিন' বুলিও কোৱা হয়।

কাটকুটা বা ৰৈ যোৱা বুজোৱাৰ চিন (^) ঃ ইয়াৰ বহুল প্ৰচলিত নাম— কাপ পো চি। লিখোতে বাক্যত কোনো শব্দ বা একাধিক শব্দ ৰৈ গ'লে এই চিন দি ওপৰত ৰৈ যোৱা অংশ লিখি সম্পূৰ্ণ কৰা হয়।

প্ৰাণত

যেনেঃ দৰাচলতে মানুহৰ (^) যিটো সৌন্দৰ্য্যবোধ, সেইটো অন্তৰ্জগতৰ বস্তু।

এইবোৰৰ উপৰি ধাতু বুজোৱা চিন, উৎপন্ন চিন, সমান চিন, চন্দ্ৰবিন্দু আদি চিনবো প্ৰয়োজনসাপেক্ষে ভাষা লিখনত নিৰ্দিষ্ট অৰ্থ জ্ঞাপক হিচাপে ব্যৱহাৰ হোৱা দেখা যায়। দৰাচলতে ইংৰাজী ভাষাৰ অনুকৰণ আৰু মুদ্ৰণ ব্যৱস্থাৰ ক্ৰমোন্নতিৰ প্ৰভাৱত অসমীয়াকে ধৰি আন বহুতো ভাৰতীয় ভাষালৈ বিচিত্ৰ বিৰাম বা যতি চিহ্নৰ আগমন ঘটিছে।

১.০৩ সামৰণি ঃ

লিখিত ভাষাৰ এক গুৰুত্বপূৰ্ণ বিষয় হৈছে যতি চিহ্নৰ ব্যৱহাৰ। যতি বা বিৰাম চিনৰ উপযুক্ত ব্যৱহাৰৰ ওপৰত অৰ্থৰ স্পষ্টতা আৰু যথাযথ ভাৱ প্ৰকাশৰ দিশটো নিৰ্ভৰশীল। বাক্য বা লেখা বিৰামহীনভাৱে পঢ়িলে এফালে যিদৰে অৰ্থৰ সুস্পষ্টতাত ব্যাঘাত জন্মে, আনফালে তেনেদৰে অবিৰতভাৱে পঢ়াত কষ্ট হয়, মাধুৰ্য হ্ৰাস পায়। যথাস্থানত যতি চিন প্ৰয়োগ নকৰিলে লিখিত পাঠ বা বাক্যই উপযুক্ত বা অভীষ্ট অৰ্থ প্ৰকাশ কৰিব নোৱাৰে। মাথো শব্দেৰে ব্যক্ত কৰিব নোৱৰা বহু ভাৱ-চিন্তা, আৱেগ-অনুভূতি যতি চিনৰ জৰিয়তে ফুটাই তুলিব পাৰি। এই চিনবোৰৰ যথোপযোগী ব্যৱহাৰে ভাৱৰ পূৰ্ণতা আৰু লেখকৰ কথনৰীতি বা বাক ভংগীৰ আভাস দাঙি ধৰে। ইয়াৰ সৈতে জড়িত আছে সুৱলহৰৰ দিশটো। গোলোকচন্দ্ৰ গোস্বামীৰ ভাষাত —

> বিৰামৰ চিন বা যতি চিহ্নৰ দ্বাৰা সাধাৰণতে সুৱলহৰ সূচিত হয়। দাঁড়িয়ে সাধাৰণ বিবৃতিসূচক বাক্য শেষ হোৱা বুজায়। প্ৰশ্নবোধক চিনেৰে বাক্যই যে প্ৰশ্ন বুজায় তাৰ গম পোৱা যায়। সেইদৰেই আশ্চৰ্যবোধক চিনে আচৰিত হোৱাৰ ভাৱ প্ৰকাশ কৰে। লিখিত ভাষাত সাধাৰণতে এই তিনিটা বিৰামসূচক যতিকে বাক্য শেষ কৰা যতি বুলি ধৰা হয়। এইবোৰৰ বাহিৰেও খণ্ডবাক্য, গৰ্ভবাক্য, বাক্যাংশ আদি বুজাবৰ কাৰণে কমা, ছেমিকোলন, কোলন, হাইফেন আৰু ডেছ আদি যতিৰ ব্যৱহাৰ হয়। (অসমীয়া ব্যাকৰণৰ মৌলিক বিচাৰ, পৃঃ১৭১)।

গতিকে ক'ব পাৰি যে যতি চিনবোৰৰ যথাযথ আৰু কৌশলপূৰ্ণ বা চাতুৰ্যপূৰ্ণ প্ৰয়োগে সাধাৰণ বাক্যৰ ভাৱ আৰু অৰ্থক স্পষ্টতা আৰু সম্পূৰ্ণতা দিয়াৰ লগতে মহত্বও প্ৰদান কৰে।

প্ৰসংগসূত্ৰঃ

গোস্বামী, উপেন্দ্ৰ নাথ। অসমীয়া ভাষাৰ ৰূপকথা। গুৱাহাটী, মণিমাণিক প্ৰকাশ, ১৯৯১।

গোস্বামী, গোলোক চন্দ্ৰ। অসমীয়া ব্যাকৰণ প্ৰৱেশ। পঞ্চম প্ৰকাশ। গুৱাহাটী, বীণা লাইব্ৰেৰী, ২০১২।

গোস্বামী, গোলোক চন্দ্ৰ। অসমীয়া ব্যাকৰণৰ মৌলিক বিচাৰ। দশম প্ৰকাশ। গুৱাহাটী, বীণা লাইব্ৰেৰী, ২০১৭।

গোস্বামী, দীনেশ চন্দ্ৰ (সম্পা.)। বিজ্ঞান লেখকৰ হাতপুথি। তৃতীয় প্ৰকাশ। গুৱাহাটী, অসম বুক হাউচ , ২০১৭।

নেওগ, মহেশ্বৰ। নিকা অসমীয়া ভাষা। (দ্বিতীয় পুনৰ মুদ্ৰণ) গুৱাহাটী, লয়ার্ছ বুক ষ্টল, ২০১৯।

পাঠক, ৰমেশ। অসমীয়া ভাষা-সাহিত্য চৰ্চাকাৰীসকলৰ হাতপুথি। গুৱাহাটী, স্পন্দন প্ৰকাশ, ২০১৪।

বৰা, বিন্দু ভূষণ। অসমীয়া ভাষা শিকাৰুৰ হাতপুথি। গুৱাহাটী, জাগৰণ সাহিত্য প্ৰকাশন, ২০১৯।

শৰ্মা, কিশোৰ আৰু কিৰণ দেৱী (সম্পা.)। বহল ব্যাকৰণ। লেখক সত্যনাথ বৰা। চতুৰ্থ প্ৰকাশ। তেজপুৰ, মিনতি প্ৰকাশ, ২০১৫।

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ডিজিটেল যুগত অসমীয়া ভাষাৰ সাধুকথা ঃ সমকালীন চিন্তা আৰু প্ৰাসংগিকতা

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সাৰাংশঃ

সাধুকথা একো একোটা ভাষাৰ সাহিত্য আৰু লোকসংস্কৃতিৰ গুৰুত্বপূৰ্ণ অংশ। লোকসাহিত্যৰ এই বিশেষ অংশই সমাজ-জীৱনৰ মহত্বপূৰ্ণ গতি-প্ৰকৃতি সংৰক্ষণ কৰি ৰাখে। সাধুকথাসমূহ আন এক বিশেষ দিশ হৈছে, শিশুৰ বাবে এইবোৰৰ আকৰ্ষণীয়তা আৰু গুৰুত্ব।

অসমীয়া ভাষাতো পূৰ্বাপৰ প্ৰচলিত বহু সাধুকথাই লোকসাহিত্য সমৃদ্ধিশালী কৰি ৰাখিছে। মিছনেৰীসকলৰ সময়ৰপৰা বৰ্তমান সময়লৈকে সাধুকথাৰ সংকলন কৰাৰ ক্ষেত্ৰত বহু ব্যক্তিয়ে অৱদান আগবঢ়াইছে। এতিয়ালৈকে অসমীয়া ভাষাত অলেখ সাধুকথা সংগ্ৰহ আৰু সংকলন কৰা হৈছে। অসমত পূৰ্বাপৰ বসবাস কৰি অহা অন্যান্য জনজাতিসমূহৰ ভিতৰতো নিজা নিজা সাধুকথাৰ ভাণ্ডাৰ আছে আৰু ভিন ভিন ভাষাত এইবোৰৰো সংকলনৰ কাম সময়ে সময়ে কৰা হৈছে।

এই আলোচনাত বৰ্তমান ডিজিটেল যুগত সাধুকথাৰ প্ৰাসঙ্গিকতা তথা এইবোৰৰ সংৰক্ষণ, সংকলনৰ ক্ষেত্ৰত কৰণীয় চিন্তা তথা কাম সম্পৰ্কে ভিন ভিন দিশ সামৰি আলোচনা আগবঢ়োৱাৰ প্ৰয়াস কৰা হৈছে। লোকসাহিত্যৰ অঙ্গ হিচাপে সাধুকথাৰ গুৰুত্ব সম্পৰ্কীয় আলোচনাৰ লগতে সাধুকথাৰ শিশুৰ বাবে উপযোগিতাৰ প্ৰসঙ্গ বিশেষভাৱে আলোচনা কৰা হৈছে।

বীজ শব্দঃ সাধুকথা, ডিজিটেল যুগ, সাংখ্যিকীকৰণ, লোকসাহিত্য, 'সাধুকথাৰ দিন', শিশু-সাহিত্য

অৱতৰণিকাঃ

সাধুকথাৰ মাজত এখন দেশ, জাতি আৰু সমাজৰ বিভিন্ন দিশৰ প্ৰতিফলন ঘটে। ইবিলাকে সমাজ-জীৱনৰ বেলেগ বেলেগ স্তৰৰ আৰু বেলেগ বেলেগ সময়ৰ চিত্ৰ সংৰক্ষণ কৰি ৰাখে। সমাজভেদে সাধুকথাসমূহ নিজ সমাজৰ লগত খাপ খোৱাকৈ পুনৰ্গঠন কৰাও দেখা যায়। বিশ্বৰ ভিন ভিন ভাষাত সাধুকথা অৰ্থত বেলেগ বেলেগ শব্দ ব্যৱহাৰ কৰা হয়। ইংৰাজী ভাষাত Tale, Legend, Myth, Fable আদি বিবিধ শব্দৰে বিভিন্ন পৰ্যায়ৰ লোককথাসমূহক নিৰ্দেশ কৰা হয়। এনে কাহিনীবোৰক অসমীয়া ভাষাত সাধুকথা শব্দৰে সামৰি লোৱা হয়। সাধুকথাৰ শিশুৰ বাবে উপযোগিতাৰ প্ৰসঙ্গক এই আলোচনাত প্ৰধানকৈ গুৰুত্ব প্ৰদান কৰা হৈছে।

অসমীয়া লোকসাহিত্যৰ এক বৃহৎ অংশ সাধুকথাবোৰে অধিকাৰ কৰি আছে। মৌখিক পৰম্পৰাৰে চলি অহা সাধুকথা ছপাৰূপত সংকলন কৰাৰ কাম মিছনেৰী যুগত আৰম্ভ হয়। আমেৰিকাৰ বেপ্টিষ্ট মিছনেৰীসকলে প্ৰকাশ কৰা এলিজা ব্ৰাউনৰ সাধুকথাৰ সংকলন 'সাধুৰ পুথি' (১৮৫০ খ্ৰীঃ) অসমীয়া ভাষাৰ প্ৰথম সাধুকথাৰ সংকলন বুলি জনা যায়। এই প্ৰসংগত ডিম্বেশ্বৰ নেওগে তেওঁৰ অসমীয়া সাহিত্যৰ বুৰঞ্জীত উল্লেখ কৰিছে, 'শিশু সাহিত্যৰূপে প্ৰথম অসমীয়া সাধুৰ কিতাপ এলিজায়ে ১৮৫০-ত প্ৰকাশ কৰে।' (নেওগ, ৫৭১)। সাহিত্যৰথী বেজবৰুৱাৰ 'বুঢ়ী আইৰ সাধু' (১৯১১) অসমীয়া সাধুকথাৰ সংকলনৰ মাইলৰ খুঁটি। ত্ৰৈলোক্যেশ্বৰী দেৱী বৰুৱানী (১৮৭৫-১৯৫৪)-ৰ

'সাধুকথা' (১৯৩৩), 'সন্ধিয়াৰ সাধু' (১৯৩৭); শৰৎ চন্দ্ৰ গোস্বামী (১৮৮৭-১৯৪৭)-ৰ 'অসমীয়া সাধুকথা' ( ); বেণুধৰ শৰ্মা (১৮৯৪-১৯৮১)-ৰ 'মঙলতীৰ কণ্ঠীমালা', 'ৰাংপতা' (১৯৪৩), 'লাতুমণি' (১৯৫৯) আদি অসমীয়া সাধুকথাৰ উল্লেখনীয় সংকলন। বৰ্তমান সময়লৈকে অসমীয়া ভাষাত অসংখ্য সাধুকথাৰ পুথি প্ৰকাশিত হৈছে। ডিজিটেল মাধ্যমতো বৰ্তমানে অসমীয়া ভাষাৰ সাধুকথাৰ শ্ৰব্য অথবা দৃশ্য-শ্ৰব্য ৰূপৰ সমল উপলব্ধ হৈছে।

অধ্যয়নৰ লক্ষ্য আৰু গুৰুত্ব ঃ

এই অধ্যয়নৰ ক্ষেত্ৰত বিশেষভাৱে গুৰুত্ব প্ৰদান কৰা দিশসমূহ হৈছে-

ক) লোকসাহিত্য হিচাপে সাধুকথাৰ গুৰুত্ব তথা প্ৰয়োজনীয়তা,

খ) সাধুকথাৰ শিশুৰ বাবে উপযোগিতা,

গ) সাধুকথাৰ ওপৰত ডিজিটেল যুগৰ নব্যচিন্তাৰ প্ৰভাৱ,

ঘ) বৰ্তমান কালত সাধুকথাৰ প্ৰাসঙ্গিকতা।

অধ্যয়নৰ পৰিসৰ আৰু সামগ্ৰীঃ

অধ্যয়নৰ বাবে প্ৰধানকৈ ছপা আৰু ডিজিটেল ৰূপত প্ৰাপ্ত অসমীয়া ভাষাৰ সাধুকথাৰ পুথি আধাৰ হিচাপে লোৱা হৈছে। অসমীয়া ভাষাত প্ৰাপ্ত অলেখ ছপা পুথিৰ মাজৰপৰা এনে সমল সাধাৰণ বিবেচনাৰে সংগ্ৰহ কৰা হৈছে। ডিজিটেল সমলৰ ক্ষেত্ৰতো একে পদ্ধতি অৱলম্বন কৰা হৈছে।

অধ্যয়নৰ পদ্ধতিঃ

অধ্যয়নৰ বাবে প্ৰধানকৈ পৰিচয়মূলক আৰু বিশ্লেষণাত্মক অধ্যয়ন পদ্ধতিৰ সহায় লোৱা হৈছে। বিষয়বস্তু উপস্থাপনৰ বাবে MLA-ৰ দ্বাৰা নিৰ্ধাৰিত পদ্ধতিৰ প্ৰয়োগ কৰা হৈছে।

সাধুকথাঃ বিবিধ দিশ-ভিন্ন চিন্তা

পৰম্পৰাগতভাৱে প্ৰচলিত হৈ অহা লোক-কাহিনীসমূহক সাধুকথা আখ্যা দিয়াৰ অন্তৰালত দুটা কথা জড়িত হৈ থাকিব পাৰে। প্ৰথম, 'সাধু' শব্দই প্ৰকাশ কৰা সন্ত বা সৎকথাৰ অৰ্থ। দ্বিতীয়, সাউদ বা সদাগৰসকলে সণ্ঢালনি কৰা কথাৰ অৰ্থত সাউদ-কথাৰ পৰা সাধুকথা। হেমকোষ অভিধানৰ মতে, সাধুকথা হ'ল— 'সন্ত কথা, উপাখ্যান; সন্তসকলে কয়, এতেকে কোনো এটা উপদেশ দিবৰ কাৰণে সজা কথা, উপকথা, সঁচা বা মিছা পুৰণি উপাখ্যান।' লক্ষ্মীনাথ বেজবৰুৱায়ো (বেজবৰুৱা,পাতনি) এই মত সমৰ্থন কৰিছে। আধুনিক অসমীয়া শব্দকোষৰ মতে, সাধুকথা হৈছে— '(সাধাৰণতে সৰু ল'ৰা-ছোৱালীক কোৱা অলৌকিক বৰ্ণনাপূৰ্ণ) কাহিনী, ৰূপকথা।' প্ৰফুল্লদত্ত গোস্বামীয়ে (গোস্বামী, ৪৯) মত প্ৰকাশ কৰিছে যে 'কামৰূপৰ দক্ষিণ পাৰে সাধুক সাজোকথা বোলে, কিয়নো সাধাৰণতে সাঁজ লাগিলেহে সাধু কোৱা সময় পৰে। দেশ-বিদেশত বেহা-বেপাৰ কৰি ফুৰা সাধু বা সাউদৰ মুখত শুনা কাহিনীয়ে সাধুকথা; অসমীয়া বহুতো সাধুত বণিজলৈ যোৱা সাউদৰ উল্লেখ লক্ষ্য কৰিব পাৰি।' লীলা গগৈয়ে (গগৈ, ১৮১) উল্লেখ কৰিছে, "সাধুকথা শব্দৰ মূল বিচাৰি বহুতে কয় যে কাহিনীৰ অন্তৰালত সাধু, সৎ বা নীতি কথা একোটা জড়িত থাকে বাবেই পুৰণি লোক-কাহিনীবোৰক মানুহে সাধুকথা বোলে। সংস্কৃত ভাষাৰ পঞ্চতন্ত্ৰ, হিতোপদেশ আদি নীতিজ্ঞানমূলক কথাবোৰ অসমত প্ৰচলিত হোৱাৰ পিছত সাধুকথা শব্দটো নীতিজ্ঞানমূলক বুলি ভাবিবলৈ অৱকাশ পাইছে। পুৰণি কালত বুঢ়া-বুঢ়ী মানুহে অনেক সময়ত সাধুকথাক সাউদ কথা বুলি কৈছিল। আনপিনে সংস্কৃত ভাষাত সাধু শব্দই বণিক বা সদাগৰকো বুজায়। অসমত বণিক শব্দটোৰ পৰিৱৰ্তে সাউদ শব্দটো বহুলভাৱে প্ৰচলিত আছিল। সৰহীয়া ডিহা লৈ বণিজলৈ যোৱা সাউদ বহুত দিনৰ মূৰত ঘৰলৈ উলটি আহে। দেশ-বিদেশৰ ৰসাল কাহিনী টোপোলা বান্ধি লৈ আহে সাউদে। গাঁৱৰ গঞাৰ আগত সাউদে নিজৰ বিচিত্ৰ অভিজ্ঞতা বৰ্ণনা কৰে। এই সাউদ কথাই এসময়ত সাধুকথা হৈ পৰে।" গতিকে বিভিন্ন সময়ত বিভিন্নজনক উদ্দেশ্যি বিবিধ কাৰণত প্ৰচলিত, অলৌকিক বিৱৰণপূৰ্ণ, মূলতঃ কাল্পনিক অথবা কল্পনাৰ ৰহণযুক্ত সঁচা বা মিছা আখ্যানকে 'সাধুকথা' আখ্যা দিব পাৰি (বৰুৱা, ৮৭-৮৮)।

সাহিত্যিক তথা সামাজিক দিশৰপৰা সাধুকথাৰ চৰ্চাৰ দুই ধৰণৰ কাৰ্যকাৰিতা আছে। সেয়া হৈছে, প্ৰথম-লোকসংস্কৃতি তথা লোকসাহিত্যৰ অঙ্গ আৰু দ্বিতীয়, শিশুৰ বাবে উপযোগিতাৰ দিশৰপৰা। লোকসংস্কৃতিৰ আলোচকসকলে লোকসংস্কৃতিৰ অধ্যয়নৰ ক্ষেত্ৰত সাধুকথাৰ ক্ষেত্ৰখনক যথেষ্ট গুৰুত্ব প্ৰদান কৰে। লোকসাহিত্যৰ আটাইবোৰ গুণ আৰু বিশেষত্বৰে সমৃদ্ধ সাধুকথাবোৰে সমাজ-সংস্কৃতিৰ বিবিধ দিশ সঞ্চিত কৰি ৰাখে। সেয়ে ভৱিষ্যত কালত অতীতৰ সমাজ-সংস্কৃতিৰ বিষয়ে জ্ঞান আহৰণৰ বাবে সাধুকথাবোৰ মহত্ত্বপূৰ্ণ সম্পদ। সেই দিশৰপৰা এই সম্পদৰ সংৰক্ষণ অত্যাৱশ্যকীয় বিষয়। আনহাতে শিশুৰ ক্ষেত্ৰত সাধুকথাৰ চৰ্চা বিবিধ দিশৰপৰা কাৰ্যকৰী। ভাষা আহৰণ, সাংস্কৃতিক চেতনা জাগ্ৰত কৰা, সামাজিকীকৰণ, নৈতিক শিক্ষা প্ৰদান, কল্পনা শক্তিৰ বিকাশ সাধন আদি বিবিধ দিশৰ কথা এই প্ৰসঙ্গত উল্লেখ কৰিব পাৰি।

এনে দিশসমূহৰ প্ৰতি লক্ষ্য ৰাখিয়েই দেশে-বিদেশে সাধুকথাৰ চৰ্চাই ব্যাপক গুৰুত্ব লাভ কৰিছে। সাধুকথা সম্পৰ্কীয় চিন্তা-অধ্যয়ন কৰিবৰ বাবে একাধিক অনুষ্ঠানৰ জন্ম হৈছে। উল্লেখ্য যে 'Indian Storytelling Network', 'National Storytelling Network', 'International Storytelling Centre', 'Society for Storytelling', 'World Storytelling Institute' আদি প্ৰতিষ্ঠানে বিশ্বৰ বিভিন্ন ঠাইত সাধুকথা পৰিৱেশনৰ প্ৰশিক্ষণ দিয়াৰ লগতে সাধুকথা সম্পৰ্কীয় বিভিন্ন অনুষ্ঠানাদিৰ আয়োজন কৰি আহিছে। বৰ্তমান সময়ত পৃথিৱীৰ ভিন ভিন ঠাইৰ লগতে অসমতো সাধুকথা কোৱাৰ প্ৰতিযোগিতা আদি অনুষ্ঠিত হোৱা দেখা যায়।

সাধুকথাৰ গুৰুত্ব আৰু প্ৰয়োজনীয়তাৰ প্ৰতি লক্ষ্য ৰাখি ১৯৯১-৯২ চনৰ পৰা বিশ্বৰ বিভিন্ন ঠাইত বছৰৰ ২০ মাৰ্চ দিনটো 'সাধুকথাৰ দিন' (World Storytelling Day) হিচাপে পালন কৰিবলৈ লোৱা হৈছে। প্ৰতিবছৰে একো একোটা বিষয় সাধুকথাৰ দিনৰ বাবে বিশেষভাৱে নিৰ্ধাৰণ কৰি লোৱা হয়। [Each year, many of the individual storytelling events that take place around the globe are linked by a common theme. Each year, the theme is identified by and agreed upon by storytellers from around the world using the WSD listserve and Facebook group. 2004-Birds; 2005-Bridges; 2006-The Moon; 2007-The Wanderer; 2008-Dreams; 2009-Neighbours; 2010-Light and Shadow; 2011-Water; 2012-Trees; 2013-Fortune and Fate; 2014-Monsters and Dragons; 2015-Wishes; 2016-Strong Women; 2017-Transformation; 2018-Wise Fools; 2019-Myths, Legends and Epics; 2020-Voyages; 2021-New Beginnings; 2022-Lost and Found; 2023-Together We Can; 2024-Building Bridges; 2025-Deep Water; 2026-Light In The Dark (www.wikipedia.org)]।

সাধুকথা বিষয়ক সমকালীন চিন্তা আৰু প্ৰাসংগিকতা

সাধুকথাসমূহ চিৰনতুন। কিন্তু সময়ৰ লগে লগে সামাজিক পৰিবেশৰ পৰিৱৰ্তনৰ সমান্তৰালভাৱে সাধুকথাত বৰ্ণিত পৰিৱেশ-পৰিস্থিতি নতুন প্ৰজন্মৰ বাবে অচিনাকি হৈ পৰে। দ্বিতীয় কথা, পুৰণি কালত আমাৰ সমাজত ককাক-আইতাকে জোনাক নিশা চোতালত ঢাৰি-পাটি পাৰি নাতি-নাতিনীক সাধু কোৱাৰ পৰম্পৰা আজিকালি নোহোৱা হৈছে। মাক-দেউতাকসকল ব্যস্ত হোৱাৰ ফলত শিশুৱে সাধুকথাৰ সোৱাদ নোপোৱা হৈ আহিছে। পৰিয়ালৰ গাঁথনি সলনি হোৱাৰ পৰিপ্ৰেক্ষিতত সাধুকথাৰ চৰ্চাৰ পৰম্পৰাগত ব্যৱস্থা নোহোৱা হৈছে। তৃতীয়তে, সময়ে সময়ে বিশেষকৈ ডিজিটেল যুগত শিশুৰ ৰুচিবোধলৈ পৰিৱৰ্তন আহিছে। সাধুকথাৰ পৰম্পৰাগত চৰ্চাৰ সলনি সময়ৰ লগত খাপ খুৱাই নতুন ৰূপত চৰ্চা হোৱাৰ প্ৰয়োজন। গতিকে সাম্প্ৰতিক কালত গুৰুত্ব দিবলগীয়া বিষয় হৈছে, সাধুকথাৰ দৃশ্য-শ্ৰব্য, কমিক ৰূপদান তথা সাংখ্যিকীকৰণ (Digitalization) আদি।

উল্লেখ কৰিব পাৰি, বৰ্তমান সময়ত সাধুকথা সম্পৰ্কীয় এটি বিষয়ে বিশেষ চৰ্চা লাভ কৰে। সেয়া হৈছে, সকলোবোৰ সাধুকথা শিশু উপযোগী নহয়, সেয়ে শিশুৰ বাবে উপযোগী কৰি সাধুসমূহ নতুনকৈ লিখা উচিত। এই প্ৰসঙ্গত মহত্ত্বপূৰ্ণ কথাটো হৈছে, সাধুকথাবোৰ কেৱল শিশু উপযোগী সাহিত্য বুলি কৰা ধাৰণা ত্যাগ কৰিব লাগিব। পূৰ্বে উল্লেখ কৰাৰ দৰে সাধুকথাৰ লোকসাংস্কৃতিক দিশৰ গুৰুত্বৰ কথা পাহৰি যোৱা উচিত নহয়। সেয়ে পৰম্পৰাগতভাৱে চলি অহা সাধুকথাবোৰ নতুনকৈ লিখিবলৈ চেষ্টা কৰাৰ লগে লগে পুৰণি সমাজ-সংস্কৃতিৰ কথা একেবাৰে পাহৰি যাবলগীয়া হ'ব। অৱশ্যে সাধুকথাৰ চৰিত্ৰ বা কাহিনীক কেন্দ্ৰ কৰি সুন্দৰ শিশু উপযোগী গল্প, উপন্যাস ইতিমধ্যে অসমীয়া সাহিত্যত ৰচিত হৈছে। উদাহৰণ স্বৰূপে, নৱকান্ত বৰুৱাৰ 'শিয়ালী পালেগৈ ৰতনপুৰ'-লৈ আঙুলিয়াব পাৰি। শিশু উপযোগিতাৰ দিশৰপৰা প্ৰয়োজন সাপেক্ষে সাধুকথাসমূহ দুটা ভাগত বিভক্ত কৰা উচিত--শিশু উপযোগী আৰু কেৱল জ্যেষ্ঠসকলৰ বাবে উপযোগী। দ্বিতীয়তে, নতুন বিষয় লৈ নতুন কাহিনী ৰচনা কৰিলে সেয়া 'গল্প' আখ্যা দিয়াহে বেছি উপযোগী হ'ব। তৃতীয়তে, বৰ্তমান সময়ত সামাজিক, অৰ্থনৈতিক কাৰণত পুৰণি কালত দৰে যৌথ পৰিয়াল ব্যৱস্থা অতি কমেইহে বৰ্তি থকা দেখা যায়। সেয়ে, ককাকৰ প্ৰজন্মৰ পৰা নাতিৰ প্ৰজন্মলৈ সাধুকথাৰ প্ৰবাহত স্বাভাৱিকতে বাধাৰ সৃষ্টি হৈছে। কিন্তু এতিয়াও বহু অভিভাৱকে নিজৰ সন্তানক সাধুকথাৰ প্ৰতি আকৰ্ষিত কৰিবলৈ বা সাধুকথা ক'বলৈ প্ৰয়াস কৰি আহিছে। এনে এক প্ৰচেষ্টাই সাধুকথাৰ চৰ্চাত নিশ্চয় অৰিহণা আগবঢ়াব।

বৰ্তমান সময়ত সাধুকথা সম্পৰ্কীয় চিন্তা-চৰ্চাৰ ক্ষেত্ৰত আটাইতকৈ উল্লেখনীয় দিশটো হৈছে সাধুকথাৰ দৃশ্য-শ্ৰব্য (Audio-Visual), কমিক ৰূপদান তথা সাংখ্যিকীকৰণ (Digitalization) আদি। বৰ্তমান সময়ত Youtube-ৰ দৰে মাধ্যমত অসমীয়া সাধুকথা বুলি বিচাৰিলে অলেখ সাধুকথা পোৱা যায়। তাৰে ভালেমান অসমীয়া ভাষাতে সৃষ্টি কৰা হৈছে, ভালেমান

আন দেশী-বিদেশী ভাষাৰপৰা Dubbing কৰা হৈছে আৰু ভালেসংখ্যক হৈছে 'সাধুকথা'-ৰ ছদ্মবেশ ধাৰণ কৰা 'গল্প'। উল্লেখ কৰিব পাৰি যে, অসমীয়াৰ বাহিৰেও দেশ-বিদেশৰ বিবিধ ভাষাত এনে বহু সাধুকথা বৰ্তমান উপলব্ধ। এনে সাধুবোৰৰ মান যথেষ্ট উচ্চ খাপৰ। কিন্তু অসমীয়া ভাষাত উপলব্ধ সাধুবোৰলৈ মন কৰিলে ভুল উচ্চাৰণ, ভাষাৰ অশুদ্ধ প্ৰয়োগ, ব্যাকৰণগত দোষদুষ্টতা, শব্দৰ অপপ্ৰয়োগ আদি বিভিন্ন ত্ৰুটি সহজে চকুত পৰে। মন কৰিবলগীয়া কথাটো হ'ল, আজিৰ শিশুৱে মোবাইল, ইণ্টাৰনেট আদিৰ জৰিয়তে বহু কথা আয়ত্ত কৰে। এনে মাধ্যমত ভুল ধৰণেৰে উপস্থাপিত সাধুকথাবোৰে শিশুক শব্দ, ভাষা আহৰণ তথা ব্যৱহাৰৰ ক্ষেত্ৰত ভুল শিক্ষা দিয়াৰ পূৰ্ণ সম্ভাৱনা আছে। কাৰণ সাধুকথাৰ এক বিশেষ লক্ষ্য আৰু উদ্দেশ্যই হৈছে শিশুক ভাষাৰ শিক্ষা প্ৰদান কৰা। তদুপৰি সাধুকথাই শিশুৰ কল্পনা শক্তিৰ আচৰিত ধৰণেৰে বিকাশ ঘটাব পাৰে। কিন্তু দৃশ্য-শ্ৰব্য মাধ্যমত উপস্থাপিত হোৱাৰ লগে লগে শিশুৱে নিজে যিকোনো কথা কল্পনা কৰাৰ প্ৰয়োজন আৰু অৱকাশ নোহোৱা হৈ যায়।

মন কৰিবলগীয়া কথাটো হৈছে, বৰ্তমান আমাৰ থলুৱা পৰিৱেশ-পৰিস্থিতিৰ দ্ৰুত গতিত পৰিৱৰ্তন সাধন হৈছে। সেয়ে আগৰ কালত শিশুৱে চকুৰ সন্মুখত দেখি সহজে বুজি পোৱা বহু বস্তু, ঘটনা আদি আজিৰ শিশুৰ বাবে অচিনাকি হৈ পৰিছে। এনে অৱস্থাত শিশুক থলুৱা পৰিৱেশৰ কথা বুজোৱা কঠিন হৈ পৰিছে। সেয়ে পৰিয়ালৰ মাজত যিমানদূৰ সম্ভৱ হয় সাধুকথাৰ চৰ্চা চলি থকা অতি প্ৰয়োজনীয় কথা। একে সময়তে প্ৰযুক্তিৰ ব্যৱহাৰেৰে ভিন ভিন মিডিয়াত (Media) সাধুকথাসমূহ শুদ্ধৰূপত উপস্থাপন কৰাৰ প্ৰয়োজন। সাধুকথাৰ দৃশ্য-শ্ৰব্য ৰূপদান কৰা ব্যক্তিসকলে এটা প্ৰয়োজনীয় আৰু গুৰুত্বপূৰ্ণ কাম সম্পাদন কৰিছে। কাৰণ এনেধৰণে উপস্থাপন কৰাৰ ফলত ভিন ভিন ভাষাৰ সাধুকথাই বহল পৰিসৰত দৰ্শক-শ্ৰোতা লাভ কৰিছে। কিন্তু তেওঁলোক কাৰিকৰীভাৱে দক্ষ হোৱাৰ লগতে ভাষিক দিশতো দক্ষ হোৱাৰ প্ৰয়োজন আছে। ভাষাৰ সঠিক ব্যৱহাৰ, উচ্চাৰণ, লয়, সুৰ আদিৰ সম্যক জ্ঞান অবিহনে এই গুৰুত্বপূৰ্ণ কামটো পণ্ডশ্ৰমৰ বাহিৰে একো নহ'ব। তদুপৰি সি ভৱিষ্যতে শিশুৰ ভাষা শিক্ষাৰ ক্ষেত্ৰত বিৰূপ প্ৰভাৱহে পেলাব। কল্পনাশক্তিৰ উপযুক্ত প্ৰয়োগ তথা চিত্ৰায়ণ আন এক গুৰুত্বপূৰ্ণ দিশ।

সাধুকথা পৰম্পৰাগত সাহিত্য। অতীতৰেপৰা মানৱীয় গুণৰাজিৰ বিকাশ, সামাজিকীকৰণ, ভাষা আহৰণ, সাংস্কৃতিক গুণৰাজি আহৰণ আদি বিবিধ দিশত সাধুকথাসমূহৰ কাৰ্যকাৰিতা লক্ষ্য কৰিব পাৰি। বৰ্তমান সময়তো এই দিশসমূহত সাধুকথাই সহায় আগবঢ়াব পাৰে। সেয়ে সাধুকথা চৰ্চাৰ উপযুক্ত পৰিৱেশ ধৰি ৰখাটো এক প্ৰয়োজনীয় বিষয়।

সামৰণিঃ

আমাৰ আলোচনাত স্পষ্ট হৈ পৰিছে, সাধুকথা একেসময়তে লোকসাহিত্যৰ গুৰুত্বপূৰ্ণ অংশ আৰু আনহাতে শিশুৰ মনোজগতৰ উৎকৰ্ষ সাধনৰ বাবে সাধুকথাসমূহ বিশেষ সমল। সাম্প্ৰতিক কালত সাধুকথাৰ চৰ্চা তথা অধ্যয়নৰ গুৰুত্বৰ প্ৰতি লক্ষ্য ৰাখি কেইটামান বিশেষ প্ৰসঙ্গলৈ আঙুলিয়াব পাৰি-

ক) সাধুকথাবোৰ কোনো নিৰ্দিষ্ট বয়সৰ ব্যক্তিৰ প্ৰতি লক্ষ্য কৰি ৰচনা কৰা হোৱা নাছিল। গতিকে সাধুকথা মাত্ৰেই শিশু-সাহিত্য বুলি কৰা ধাৰণা অত্যন্ত ভ্ৰমাত্মক।

খ) সাধুকথাবোৰ বিষয়বস্তু আৰু উপস্থাপনৰ প্ৰতি লক্ষ্য ৰাখি শিশুৰ বাবে উপযোগী হয় নে নহয়, সেয়া নিৰ্ণয় কৰা উচিত।

গ) শিশুৰ বাবে উপযুক্ত সাধুকথাবোৰ পৃথকভাৱে শিশু উপযোগী হিচাপে চিহ্নিত হ'ব লাগে।

ঘ) শিশুৰ বাবে উপযুক্ত কৰি তুলিবলৈ সাধু এটা নতুনকৈ লিখি উলিওৱাৰ ধাৰণাটো এটা ভ্ৰান্ত ধাৰণা। কাৰণ প্ৰতিটো সাধুৰে সুকীয়া গুৰুত্ব তথা বিশেষত্ব থাকে।

ঙ) বৰ্তমান সময়ত সাধুকথা সম্পৰ্কীয় চিন্তা-চৰ্চাৰ ক্ষেত্ৰত আটাইতকৈ উল্লেখনীয় দিশটো হৈছে সাধুকথাৰ দৃশ্য-শ্ৰব্য (Audio-Visual), কমিক ৰূপদান তথা সাংখ্যিকীকৰণ (Digitalization)। কিন্তু এই কামটো কাৰিকৰীভাৱে সবল ব্যক্তিয়ে যথেষ্ট সাৱধানতাৰে আৰু বিশেষ গুৰুত্বৰে কৰা প্ৰয়োজন। সৃষ্টিশীলতাৰ লগতে নিজ ভাষাৰ প্ৰতি দায়বদ্ধতা থকাটো এই ক্ষেত্ৰত অতি প্ৰয়োজনীয়।

চ) সাধুকথাৰ দৃশ্য-শ্ৰব্য ৰূপদান কৰাৰ ক্ষেত্ৰত শিশু উপযোগী সাধুকথাবোৰ বিশেষভাৱে বাচি লৈ কেৱল শিশুৰ বাবে উৎসৰ্গিত হিচাপে সজাই তোলা প্ৰয়োজন। এইক্ষেত্ৰত সংশ্লিষ্ট ভাষিক, সাংস্কৃতিক ৰূপসমূহ উপযুক্ত ধৰণেৰে ফুটাই তুলিব লাগে। ভাষাৰ উচ্চাৰণ, সুৰলহৰ, স্বৰ প্ৰক্ষেপ-এই আটাইবোৰ দিশ গুৰুত্বপূৰ্ণ।

সাধুকথাৰ ডিজিটেল ৰূপদান সাম্প্ৰতিক কালৰ প্ৰয়োজনীয় বিষয়। ভাষা-সাহিত্যৰ সমৃদ্ধি আৰু বিকাশৰ বাবেও এয়া অতি আৱশ্যকীয়। উল্লেখ্য, ইংৰাজী ভাষাত অসংখ্য

কথাছবি আছে আৰু সেইবোৰ যথেষ্ট উচ্চ মানৰ। কেৱল সাধাৰণ দৃশ্য-শ্ৰব্য সমল হিচাপে ৰূপদান কৰাই নহয়, সাধুকথাক কেন্দ্ৰ কৰি কথাছবি নিৰ্মাণ কৰাও প্ৰয়োজনীয়। উল্লেখ্য, 'কথানদী' (২০১৫)-ৰ দৰে কথাছবি তেনে এক প্ৰয়াসৰে ফচল। কিন্তু অসমীয়া ভাষাত কেৱল শিশুৰ বাবে Animation ৰূপত সাধুকথাৰে বোলছবি নিৰ্মাণ কৰাৰ প্ৰয়োজন আছে। কিন্তু এনে ৰূপদান উন্নত মানৰ, উচ্চ কাৰিকৰী গুণসম্পন্ন আৰু সৃষ্টিশীল হ'লেহে তেনে শ্ৰম সাৰ্থক হ'ব।

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শৰৎ চন্দ্ৰ সিংহৰ "বাঁহ পাতৰ ভেট" কবিতাপুথিত প্ৰকাশিত সমাজবাদী ভাব-চিন্তাৰ এটি আলোচনা ঃ

নীতামণি নাথ
সহকাৰী অধ্যাপক, অসমীয়া বিভাগ
ওৱেষ্ট গোৱালপাৰা মহাবিদ্যালয়

সংক্ষিপ্তসাৰ ঃ

অতীজৰে পৰা বৰ্তমানলৈকে সাহিত্য জগতখনত ৰাজনৈতিক সাহিত্যিকৰ পয়োভৰ দেখা যায়। বিশ্বৰ সাহিত্যৰ জগতখনত বহুকেইজন সফল ৰাজনৈতিক নেতা, ৰাজনীতিবিদ ওতঃপ্ৰোতভাৱে জড়িত হৈ থকা দেখিবলৈ পাওঁ। ইউনাইটেড কিংডমৰ প্ৰাক্তন প্ৰধানমন্ত্ৰী উইনষ্টন চাৰ্চোলিয়ে ১৯৫৩ চনত সাহিত্যত নোবেল বঁটা লাভ কৰিছিল। ভাৰতবৰ্ষৰ প্ৰেক্ষাপটত আৰ.কে নাৰায়ণ, মহাত্মা গান্ধী, জৱাহৰলাল নেহৰু, শশী থাৰু আদিৰ নাম ল'ব পাৰোঁ। অসমৰ ক্ষেত্ৰত লক্ষীনাথ বেজবৰুৱা, জ্যোতিপ্ৰসাদ আগৰৱালা, বিষ্ণু প্ৰসাদ ৰাভা, হেম বৰুৱা, শৰৎ চন্দ্ৰ সিংহ আদিৰ নাম উল্লেখযোগ্য।

অসমৰ প্ৰাক্তন মুখ্যমন্ত্ৰী শৰৎ চন্দ্ৰ সিংহ প্ৰজাহিতৈষী মুখ্যমন্ত্ৰীয়েই নাছিল, তেওঁ আছিল প্ৰবন্ধকাৰ কবি আৰু শিশু সাহিত্যিক। শৰৎ চন্দ্ৰসিংহৰ ভালেসংখ্যক সাৱৱা অৰ্থবহ, গাম্ভীৰ্যপূৰ্ণ প্ৰবন্ধ (নিবন্ধ) আছে। সিংহৰ দুখন কবিতা পুথি "শৰৎ চন্দ্ৰ সিংহৰ ৰচনা সমগ্ৰ" গ্ৰন্থখনিত সন্নিৱিষ্ট হৈ আছে। সিংহৰ "শব্দবাণ" আৰু "বাহঁ পাতৰ ভেট" নামৰ উল্লেখযোগ্য কবিতা পুথি দুখন বিষয় বস্তুৰে মনোগ্ৰাহী আৰু অকৰ্ষণীয়। আকাৰত সৰু-বৰ প্ৰায় যাঠি টা মানকৈ কবিতা প্ৰতিখন কবিতা পুথিত সন্নিৱিষ্ট হৈ আছে। উল্লেষযোগ্য যে সিংহৰ কবিতা ৰাজিত ৰোমাণ্টিক কবিতাৰ লক্ষণ আৰু বৈশিষ্ট্য আনহাতে আধুনিক কবিতাৰ লক্ষণ আৰু বৈশিষ্ট্যৰ উমৈহতীয়া প্ৰভাৱ দেখা যায়। সেই বিশেষত্বলৈ লক্ষ্য কৰিলে আমি তেখেতক কবিতাৰ উমৈহতীয়া ধাৰাটোত সন্নিৱিষ্ট কৰিব পাৰোঁ। অৱশ্যে এই বিষয়ে অধিক চৰ্চা আৰু গৱেষণাৰ প্ৰয়োজন আছে বুলি ভাবোঁ, যিহেতু শৰৎ চন্দ্ৰ সিংহৰ কবিতাৰাজিৰ বৰ্তমানেও সামগ্ৰিক চৰ্চা হোৱা নাই বুলি ক'লে অত্যুক্তি কৰা নহ'ব।

"বাহঁ পাতৰ ভেট" কবিতাপুথিখন ষাঠি টা সৰু বৰ কবিতাৰ সমষ্টি, কবিতাত প্ৰকাশিত ভাব বস্তু, বিষয়বস্তু বৈচিত্ৰ্যময়। ৰূপ বস্তু বা আংগিকৰ ক্ষেত্ৰত দেখিবলৈ পাওঁ কেতিয়াবা ছন্দোবদ্ধ আৰু কেতিয়াবা মুক্তক ছন্দ।

কবিতাপুথিখনত, জাতীয় চেতনা, সমাজচেতনা, সাংস্কৃতিক চেতনা, নিসঙ্গতা, ঈশ্বৰ প্ৰতি আস্থা লগতে আধ্যাত্মিক ভাব ধাৰা, মমনশীলতা, বৈজ্ঞানিক দৰ্শন, মৃত্যুচেতনা আদি ভাবেৰে সমৃদ্ধ।

প্ৰকৃততে কবি আছিল জনতাৰ কবি, মানুহৰ কবি। সাম্যবাদী চিন্তাৰে প্ৰেৰিত কবিৰ ভাষিক চাতুৰ্য্য সৰল আৰু কোমলকান্ত। শব্দ সংযোজনত ঘৰুৱা শব্দৰ ব্যৱহাৰ মনকৰিবলগীয়া।

গৱেষণা পত্ৰখনি যুগুত কৰোঁতে বিশ্লেষণাত্মক পদ্ধতিৰ সহায় লোৱা হ'ব।

বীজ শব্দ ঃ গণতন্ত্ৰ, জনতা, সাম্যবাদ, শোষণ, ভাব-চিন্তা।

অবতৰণিকা ঃ

প্ৰাক্তন মুখ্যমন্ত্ৰী শৰৎ চন্দ্ৰ সিংহ অসমৰ এক জটিল ৰাজনৈতিক সন্ধিক্ষণত মুখ্যমন্ত্ৰী আছিল। অতি জটিল কুটনৈতিক আৰু শিথিল ৰাজনৈতিক পৰিক্ৰমাৰ মাজেৰে শৰৎ চন্দ্ৰ সিংহই নিজকে নিকা মুখ্যমন্ত্ৰী ৰূপে প্ৰতিষ্ঠা কৰি থৈ গৈছে। ভাৰতবৰ্ষৰ ৰাজনৈতিক প্ৰেক্ষাপটত শৰৎ চন্দ্ৰ সিংহ সৰল, নিকা ব্যক্তিত্বৰে অন্যতম শ্ৰেষ্ঠ ৰাজনীতিবিদ আছিল। বিশ্বৰ ৰাজনৈতিক সাহিত্যিকৰ প্ৰেক্ষাপটখনলৈ যদি মন কৰো

দেখিবলৈ পাওঁ ১৯৫৩ চনত সাহিত্যত নোবেল বঁটা লাভ কৰা উইনষ্টন চাচৌলি ইউনাটেড কিংডমৰ প্ৰধানমন্ত্ৰী আছিল। ভাৰতৰ সকলোৰে পৰিচিত ভাৰতীয় সংসদত, ৰাজ্যসভাৰ সদস্য আৰ. কে. নাৰায়ণৰ অপূৰ্ব সৃষ্টি "Melgudi Days" খন শ্ৰেষ্ঠ সাহিত্যৰ নিদৰ্শন। "Melgudi Days" খন ভাৰতীয় দূৰদৰ্শনত সম্প্ৰচাৰ কৰা হৈছিল। অসমতো বিষ্ণু প্ৰসাদ ৰাভা, হেম বৰুৱাই বাট কাটি থৈ গৈছে। সেই ৰাজনৈতিক সাহিত্যিকৰ বাটেৰে শৰৎ চন্দ্ৰ সিংহই বাট বুলিছিল। অসমৰ বিশিষ্ট সাহিত্যিকসকলৰ ভিতৰত শৰৎ চন্দ্ৰ সিংহও উল্লেখযোগ্য সাহিত্যিক।

ৰাজনৈতিক ধ্যান-ধাৰণাৰ চিন্তা চৰ্চাৰ লগতে জীৱনৰ মধ্যবয়সৰ ফালে শৰৎ চন্দ্ৰ সিংহই সাহিত্য চৰ্চাতো মনোনিৱেশ কৰিছিল। অসমৰ বিশিষ্ট সাহিত্যিক সকলৰ সৈতে ফেৰ মাৰিব পৰা নহ'লেও ৰচনা ৰাজিত প্ৰকাশিত ভাৰ চিন্তা, ভাৰৰ গাম্ভীৰ্য্য, বিষয়বস্তু দূৰদৰ্শিতা সমসাময়িক পৰিৱেশ, বাস্তৱতা, সাধাৰণ জনতাৰ প্ৰতি সহমৰ্মিতা প্ৰকাশ পাইছে। নিজৰ অধিকাৰৰ প্ৰতি সচেনত ভাব এটা জনসাধাৰণৰ মন মানসিকতাত জগাই তোলাত কবিৰ কবিতাই এক শক্তিশালী কণ্ঠ ধাৰণ কৰিছে। কবিৰ প্ৰবন্ধ ৰাজিৰো গুৰুত্বতা অসীম, সমানে সাহিত্যিক মুল্যবোধ আৰু মূল্যাংকণৰ গুৰুত্বতা আছে।

শৰৎ চন্দ্ৰ সিংহই প্ৰায় তিনিশটা অসমীয়া আৰু ইংৰাজী ভাষাৰ প্ৰবন্ধ (নিবন্ধ) লিখিছিল। প্ৰবন্ধ সমূহ তথ্যসমৃদ্ধ আৰু বাস্তৱ বিজ্ঞানসন্মত দৃষ্টিভংগীৰে ৰচনা কৰা। দুখন কবিতা পুথি ক্ৰমান্বয়ে "বাহঁ পাতৰ ভেট" আৰু শব্দবান। শৰৎ চন্দ্ৰ সিংহই অনামা ককা ছদ্ম নামেৰে সাহিত্য চৰ্চা কৰিছিল, অৱশ্যে সেই ৰচনা সম্ভাৰ নিচেই তাকৰ। আমাৰ আলোচনা সত্ৰত কাব্যিক সত্বাটোহে আলোচনা মজিয়াত উপস্থাপন কৰা হ'ব। কবিয়ে নিজৰ কাব্যিক সত্তাটোৰ বিষয়ে কৈছিল "আমাৰ মনৰ ভাৰ ব্যক্ত কৰিবলৈ কবিতাৰ দৰে লিখা কবিতাত কিঞ্চিত উজু হয় কথাত প্ৰকাশ কৰিবলৈ কিছু পৰিমাণে টান। সেয়ে কবিতাৰ দৰে লিখা কবিতাৰ এটা থুপিৰে আমাৰ জীৱনৰ উপলব্ধিৰ কিঞ্চিতমান ৰাইজৰ সেৰালৈ আগবঢ়োৱা হ'ল।" কবিয়ে কবিতাৰ দৰে বুলি ক'লেও কবিৰ কবিতাসমূহ ভাৰ বস্তু, বিষয়বস্তুৰ গভীৰতা আৰু সাহিত্যিক মূল্যাংকণৰ গুৰুত্বতা যথেষ্ট পৰিমাণে আছে। কবিতাবোৰ জটিল নহয় পাঠকে সহজে আয়ত্ব কৰিব পৰা। কবিতাৰ ভাষা অধিক ব্যঞ্জনাময় আৰু জটিল নোহোৱাৰ বাবে কবিতাবোৰ বুজি পোৱাত সহজ আৰু মসৃণ। বহুতো কবিতা পঢ়ি যাওঁতে ভাৰসমূহ উপলব্ধি আৰু অনুভৰ কৰিব পাৰি। প্ৰকাশভঙ্গীৰ সৰলতাই কবিৰ মনক সহজে পাঠকৰ কাষ চপাই আনিব পৰা।

আমাৰ আলোচ্য 'বাহঁ পাতৰ ভেট' কবিতা পুথিখন কবিৰ মনত সঞ্চিত হৈ থকা ভাষাপ্ৰেম, জাতি প্ৰেম, সংস্কৃতি প্ৰেম, মানৱ প্ৰেমেৰে পৰিপূৰ্ণ। কবিতাৰ বুকুত মানুহৰ কথা। 'বাহঁ পাতৰ ভেট' আৰু 'শব্দবান' কবিতা পুথি দুখন সৰু বৰ এশ বিশটা কবিতাৰ সমষ্টি। দুয়োখন কবিতা পুথিত কবিতা ৰচনাৰ তাৰিখ, স্থান আৰু উদ্দেশ্য উল্লেখ কৰিছে। ইয়াৰ লগতে বহুকেইটা কবিতা মান্যবৰেষু, শ্ৰদ্ধাৰে, শুভেচ্ছাৰে আৰু আশীবাদেৰে ব্যক্তি বিশেষলৈ সমৰ্পিত। এনে আংগিকৰ উপস্থাপনে কবিতাবোৰ পাঠকৰ বাবে সহজবোধ্য হৈ পৰিছে। লগতে বৌদ্ধিক চিন্তা চৰ্চাই বিষয়ক এক বিশিষ্ট মাত্ৰা প্ৰদান কৰিছে।

'বাহঁ পাটৰ ভেট' কবিতা পুথিখন ষাঠিটা কবিতাৰ সমষ্টি। কবিতাবোৰ ভিন্ন স্বাদৰ। বিষয়বস্তু বৈচিত্ৰময়তাৰ সাৱলীল প্ৰকাশ ঘটিছে। ৰূপ বস্তু বা আংগিকৰ ক্ষেত্ৰত ছন্দোৱদ্ধ ৰচনা আৰু মুক্তক ছন্দ দুয়োটাই কবিতাৰ উপস্থাপন শৈলীক নতুনত্ব প্ৰদান কৰিছে। ব্যঞ্জণা, প্ৰতীকৰ বহুল ব্যৱহাৰ নাই যদিও নুই কৰিব নোৱাৰি। সাংস্কৃতিক শব্দৰ ব্যৱহাৰ, ঘৰুৱা শব্দৰ ব্যৱহাৰ মন কৰিব লগীয়া। ভাষিক কৌশল সৰল আৰু কোমল কান্ত।

কবিতাপুথিখনত জাতীয় চেতনা তথা দেশপ্ৰেম, মানৱপ্ৰেম, সমাজচেতনা, সাংস্কৃতিক চেতনা, নিসংগতা, ঈশ্বৰ প্ৰতি আস্থা লগতে আধ্যাত্মিক ভাৱ-চিন্তা, মমনশীলতা, বৈজ্ঞানিক দৰ্শন আৰু মৃত্যুচেতনা আদি ভাবেৰে সমৃদ্ধ।

প্ৰকৃততে কবি আছিল জনতাৰ কবি, মানুহৰ কবি, সমাজবাদী ভাব-চিন্তাৰে প্ৰেৰিত কবি মন সাধাৰণ মানুহৰ ন্যায্য প্ৰাপ্তিৰ প্ৰতি আকৰ্ষিত।

০.১ আলোচিত বিষয়ৰ গুৰুত্ব আৰু উদ্দেশ্য ঃ

সমাজতান্ত্ৰিক চেতনাৰে প্ৰেৰিত সমাজ সচেতক কবিয়ে সমাজৰ বাস্তৱতাক কাব্যিক ৰূপ দিয়াত সফলতা লাভ কৰিছে। কবিয়ে শোষিত-নিষ্পেষিত জনতাৰ সংগ্ৰামক হৃদয়ঙ্গম কৰিছে। শোষণ নীতি, দুৰ্নীতিৰ মেৰপেচত আক্ৰান্ত হোৱা সৰ্বহাৰা জনগণৰ অধিকাৰৰ বাবে কবিয়ে কোনো কোনো সময়ত বৈপ্লৱিক সত্তা ধাৰণ কৰিছে । কাব্যিকতাৰ মাজেদি সমাজ ব্যৱস্থাত প্ৰচলিত অসমতা, অৰাজকতা, অনিয়ম, অন্যায় অবিচাৰৰ বিৰুদ্ধে কবিয়ে জাগ্ৰত প্ৰহৰী হৈ মাত মাতিছে। জনসাধাৰণৰ প্ৰতি দেশৰ জাতীয়তাবোধৰ প্ৰতি কবিয়ে যি সামাজিক দায়বদ্ধতা পালন কৰিছে সেই দায়বদ্ধতাই মানৱীয় প্ৰমূল্যক তুলি ধৰিছে। সেয়ে কবিৰ কবিতাত সমতা,

সমঅধিকাৰৰ ভাৱ-চিন্তাই তীক্ষ্ণ সমালোচনাৰ ৰূপ ধাৰণ কৰিছে। কবিতাৰ মাজেৰে তেওঁ জনতাক জগাই তুলিবৰ চেষ্টা কৰিছে। শোষণ-বঞ্চনা-দূর্নীতিৰ বিৰুদ্ধে কবিৰ পক্ষপাতহীন মনোভাৱ আৰু জনসাধাৰণৰ মাজত সমতা স্থাপনৰ চিন্তা ধাৰাৰ বাবে বিষয়টো অধ্যয়নৰ গুৰুত্ব আছে বুলি ভবা হৈছে। আনহাতে গৱেষণা পত্রখনিৰ মধ্যমেদি অবিষয়টো স্পষ্টকৈ আলোচনা কৰাই ইয়াৰ মূল উদ্দেশ্য। সমসাময়িক প্রেক্ষাপটত এনে চর্চাৰ গুৰুত্ব আছে।

০.২ অধ্যায়নৰ পদ্ধতি ঃ

প্রস্তাৱিত আলোচনাত্মক বিষয়টি অধ্যয়নৰ সুবিধার্থে বিশ্লেষণাত্মক পদ্ধতিৰ সহায় লোৱা হ'ব।

০.৩ তথ্য আহৰণৰ উৎসঃ

আলোচ্য বিষয়টি প্রস্তুত কৰিবৰ বাবে শৰৎ চন্দ্র সিংহৰ 'বাহঁ পাতৰ ভেট' কবিতা পুথিখনৰ সহায় লোৱা হ'ব। উল্লেখযোগ্য যে কবিৰ 'বাহঁ পাতৰ ভেট' আৰু 'শব্দবান' কবিতাপুথি দুখন সুনীতি সোণোৱাল সম্পাদিত, 'শৰৎ চন্দ্র সিংহ ৰচনা সমগ্র' গ্রন্থখনত সন্নিৱিষ্ট হৈ আছে। মূল উৎস ৰূপে এই গ্রন্থখন লোৱা হ'ব লগতে বিষয়ৰ সৈতে সংযোগ থকা অথবা শৰৎ চন্দ্র সিংহ বিষয়ক বাতৰি কাকতৰ লেখা, আলোচনী লেখা, পূর্বে প্রকাশিত প্রবন্ধ আদি আনুসংগিক উৎসৰ সহায় লোৱা হ'ব।

১.০ বিষয় বস্তু বিশ্লেষণ ঃ

'বাহঁ পাতৰ ভেট' কবিতা পুথি খনত আমি বহু কেইটা ভাৱ-চিন্তা দেখিবলৈ পাওঁ। তাৰ ভিতৰত অন্যতম আৰু শ্রেষ্ঠ সমাজবাদী ভাৱ-চিন্তা। কবিৰ কবিতাৰ প্রধান বিষয় মানুহ। কবিতাৰ মাধ্যমেদি সমাজত সকলো শ্রেণীৰ মানুহৰ বাবে সমতা, একতা, ন্যার্য্য প্রাপ্তিৰ আহ্বান আৰু দূর্নীতিৰ বিৰুদ্ধে প্রত্যাহ্বান জনাইছিল। নিপীড়িত জনতাৰ প্রতি সহানুভূতি আৰু শাসক গোষ্ঠীৰ প্রতি তীক্ষ্ণ সমালোচনা কবিতাৰ অন্যতম এটা বৈশিষ্ট্য। শাসক আৰু শোষক, শোষণৰ বিৰুদ্ধে কবি সত্ত্বা জাগি উঠিছিল। ৰাজ-ব্যৱস্থা, সমাজ ব্যৱস্থা, অর্থনৈতিক ব্যৱস্থা আদিৰ জ্ঞান আৰু অভিজ্ঞতাৰে কবি পৰিপুষ্ট। কবিয়ে মুকলিকৈ সমসাময়িক গণতান্ত্রিক ব্যৱস্থাক সমালোচনা কৰিছে। মানসিক ভাৱে, বৌদ্ধিক ভাৱে শক্তিশালী কবিৰ প্রায়বোৰ কবিতা সামাজিক ভাৱ-চেতনাৰে সমৃদ্ধ।

জাতীয় প্রেম, দেশপ্রেম, অসমৰ প্রতি কবিৰ বুকুত অপাৰ ভালপোৱা। অসমৰ জনগণক বিভিন্ন দিশ সমূহৰ পৰা বঞ্চিত কৰা আৰু ৰাজনৈতিক মুনাফা আদায়েৰে অসমৰ জনগণক প্রতাৰণা কৰা, কেন্দ্রীয় চৰকাৰৰ যি সমতাহীন দৃষ্টিভংগী, সেই দৃষ্টিভংগীৰ বাবে কবিয়ে দিল্লীক তীক্ষ্ণ ভাষাৰে সমালোচনা কৰিছে --

শোষণ
বঞ্চনা
বৈষম্য,
দিছপুৰে কয়
দিল্লীৰ শোষণ
বঞ্চনা ভীষণ
অগ্রগতি যত
দিল্লীয়ে গ্রাসিছে
বঞ্চিত অসম।
বৈষম্য বাঢ়িছে
অসম ভূগিছে
যন্ত্রণা বিষম।

(শোষণ বঞ্চনা বৈষম্য)

চিষ্টেম ব্যৱস্থাৰ গণ্ডিৰ মাজত অসমক নিয়ন্ত্রণ কৰা দিল্লীয়ে স্বার্থ সিদ্ধিৰ বাবে বৈষম্যতা স্থাপন কৰিছে, য'ত বঞ্চনা আৰু বৈষম্যই অসমৰ জনসাধাৰণক প্রতাৰণা কৰিছে।

কবিৰ হৃদয়ত নিৰীহৰ সম অধিকাৰৰ প্রতি থকা প্রেমে কবিক জনসাধাৰণৰ সুখ দুখৰ সৈতে একাকাৰ কৰিছে। সাধাৰণ মানুহৰ শোষণ বঞ্চনাৰ ছবিখনে কেতিয়াবা কেতিয়াবা কবিৰ নমনীয় সত্তাক বৈপ্লৱিক চেতনালৈ ৰূপান্তৰিত কৰিছে। সাধাৰণ মানুহৰ দুখ, দুদর্শাৰ প্রতি কবি হৃদয়ত বিপ্লৱৰ চেতনা জাগ্রত হৈ উঠে ---

হায়। নীতিহীন ই কি ভ্রষ্টাচাৰ
এয়া কাৰ।। ত্রাহি ত্রাহি ৰ'ব?
কৰিব জাগিব পীড়িত উদ্ধাৰ
শুক্ল, অম্বে, মুক্ত তাসি হস্তে
আহিছে সৌৱা বিপ্লৱ অর্নিবাৰ।
থাপিব ন্যায়, থাপিব নীতি
যতেক অন্যায় কৰি বুন্দামাৰ।

(বিপ্লৱ অর্নিধাৰ)

সাধাৰণ মানুহৰ বাবে পৰিৱর্তনৰ যি সপোন দেখা হৈছিল সেই সপোন আজি ব্যাথিত। মানুহৰ বাবে সমতা স্থাপন কৰিব নোৱাৰা সুধিধাবাদী, ভণ্ড নেতাবোৰক কবিয়ে সকীয়াই দিছে -

হে ৰাজ দণ্ড
শুনা নাই নেকি
কাল মেঘ গর্জন
তোমাৰ উৎখাত
ৰাজদণ্ড উফৰিব
অসুৰ নিপাত।

(বিপ্লৱ অনিৰ্বাৰ)

শ্রমজীৱি সাধাৰণ মানুহৰ জীয়াই থকাৰ বাবে কৰা জীৱন সংগ্রাম, ন্যার্য্য প্রাপ্তিৰ স্বতাধিকাৰৰ হেতু পাঞ্চজন্য শংখ ধ্বনিৰে অসুৰ নিপাতৰ উদাত্ত আহ্বান জনাইছে। জনতাৰ অধিকাৰ, প্রাপ্য লুট কৰি খোৱা চোৰবোৰৰ বিনাশ বিচাৰিছে -

হে পাঞ্চজন্য
কৰা শংখ ধ্বনি
আহিছে ভূইকঁপ
হ'ব উল্কাপাত
চোৰৰ আট্রালিকা হ'ব নিশ্চিত ধূলিসাৎ

(পাঞ্চজন্য)

সমাজবাদত, সাম্যবাদত বিশ্বাসী কবিয়ে কোনো কার্লমাক্স, লেলিনৰ তত্ত্ব, সংজ্ঞা কবিতাত প্রয়োগ কৰা নাছিল। বাস্তৱ সন্মত চিন্তা চেতনাৰে দলিত, পীড়িত, শোষিত জনতাৰ দুখ আৰু যন্ত্রণাজর্জৰ ছবিখনৰ সৈতে একাত্মবোধ কৰিছিল।

জনতাৰ সৈতে সম্পৃক্ত কবি জনতাৰ সম অধিকাৰৰ বাবে ব্যাকুল। 'হে তৰুণ' কবিতাটোৰ মাধ্যমেদি সাম্যবাদত বিশ্বাসী কবিৰ মনত এক নতুন আশাবাদ জাগি উছিছে -

এই যে মাটিত
উপজিছা তুমি
এই মাটিতেই
ওপজে যে সোণ
বঞ্চিত যদিও
নহবা নিৰাশ
পাবা তাতে তুমি
আকাংখিত ধন।

(হে তৰুণ)

নতুন প্রজন্মক কবিয়ে উৎসাহ যোগাইছে, এই মাটি তোমাৰ, আমাৰ, সকলোৰে। আজি যদিও বঞ্চিত, উপেক্ষিত, এদিন এই মাটিয়েই আনি দিব পৰম আকাংক্ষিত ধন। আমাৰ মাটি, আমাৰ অধিকাৰ এই সমতাৰ নীতিগত বাণীৰে তৰুণ প্রজন্মক কবিয়ে উৎসাহ যোগাইছে।

সমাজত প্রচলিত দূর্নীতিৰ প্রতি কবিৰ মন মানসিকতাত আছিল তীব্র ঘৃণা। মানুহৰ সম্পদ শোষণ, লুণ্ঠন কৰি খোৱা কার্য্যই কবিৰ মানসিকতাত যন্ত্রণাই দগ্ধ কৰিছে। তথাপি কবিয়ে ভাৱে-

হে তৰুণ
হে শ্রমিক
হে কৃষক
দূর্নীতিৰ উদৰফালি
সোণালী ভৱিষৎ তোমাৰ কৰাহি উদ্ধাৰ

(হে তৰুণ)

জনতাক বঞ্চনা কৰি অসংবিভাজনৰ দ্বাৰা মই, মোৰ স্বার্থ পূৰণ কৰা দুর্নীতি নামৰ দৈত্যটোৰ প্রতি কবিৰ তীব্রক্ষোভ, প্রতিবাদ আৰু আক্ষেপ। সমাজ ব্যৱস্থাত প্রচলিত শোষণ, বঞ্চনাৰ নীতি ব্যৱস্থাৰ প্রতি কবি বীতশ্রদ্ধ। কবিয়ে বিছাৰিছে সকলো অৰাজকতাৰ অন্ত হওঁক। সমাজ ব্যৱস্থা সকলোৰে বাবে সমান হওঁক, ধনী-দুখীয়া, জাতি-বর্ণ, ধর্ম নির্বিশেষে এক সুস্থ গণতন্ত্র গঢ় লৈ উঠক। গণতন্ত্রত ৰাইজেই ৰজা। সকলো প্রজাই ৰাইজ, কিন্তু প্রজা যেতিয়া প্রাপ্য অধিকাৰৰ পৰা বঞ্চিত হয়, আইন যেতিয়া ইংগিতত পৰিচালিত হয় তেতিয়া গণতন্ত্রৰ প্রতি আস্থাহীনতাৰ শংকাত ভুগিব লগা হয়। গণতন্ত্রৰ অ-গণতান্ত্রিকতাৰ প্রতি কবিৰ আছে চোকা দৃষ্টি --

ৰাইজে ৰজা
বাপুজীৰ মন্ত্র
সিদ্ধ গণতন্ত্র
নাই, দেখোন। কলৈনো গ'ল?
'ডেম' ক্র্যচী বোলে
দিয়া মোক কুর্ছি
মই গণতন্ত্র
ই কি কথা। কেনেকে কি হ'ল?

(গণতন্ত্র ৰসাতলে গ'ল)

প্রজাৰ প্রতিথকা দায়িত্ববোধবোৰ এতিয়া চকীৰ মাজত আৱদ্ধ হৈ ৰ'ল। কবিৰ আক্ষেপ তথাকথিত ৰাজনৈতিক ব্যৱস্থাৰ প্রতি, য'ত গণতন্ত্র কেৱল মাত্র চকী শুৱনী। কবিৰ অনুভৱ আজিৰ গণতন্ত্র ৰসাতলে গ'ল -

ৰাইজৰ মত
ৰাইজৰ ভোট

অস্ত্রধনৰ জেপলৈ গ'ল।
বগাবোৰ মাথো ক'লা হ'ল।
গণতন্ত্র ৰসাততে গ'ল

(গণতন্ত্র ৰসাতলে গ'ল)

বগাবোৰ ক'লা হ'ল এই ব্যঞ্জণাময় শব্দ গুচ্ছই সমাজ ব্যৱস্থাৰ বহু কথাই কৈ গ'ল। কবিৰ মতে প্রকৃত গণতন্ত্রই আছিল সমাজ তন্ত্র। এদিন গণতন্ত্রই সমাজতন্ত্র আনিব আৰু সমাজৰ সকলোৰে বাবে সমতা স্থাপন কৰিব।

২.০ **সিদ্ধান্ত ঃ**

অধ্যায় আৰু বিশ্লেষণৰ অন্তত আমি কেইটামান সিদ্ধান্তত উপনীত হ'ব পাৰোঁ।

* কবি শৰৎ চন্দ্র সিংহৰ কবিতা ৰাজিৰ আলোচনা আৰু চর্চাৰ গুৰুত্ব আছে।
* শৰৎ চন্দ্র সিংহৰ কবিতাত প্রকাশিত ভিন্ন ভাৱ চিন্তা সমূহৰ সাহিত্যিক মূল্যাংকণ আছে।
* কবিৰ কবিতাত প্রকাশিত সমাজবাদী ভাৱ-চিন্তা অসমৰ প্রতিষ্ঠিত আন কবিসকলৰ ধ্যান-ধাৰণাৰ সৈতে একে যদিও কিছু পৃথক আৰু অনন্য।
* জনসাধাৰণৰ বাবে গণতন্ত্রৰ প্রতিষ্ঠাৰ দ্বাৰা সমাজ ব্যৱস্থাত সমতা স্থাপনৰ আহ্বান কবিৰ কবিতাত আছে।
* সাম্প্রতিক প্রেক্ষাপটত এনে সমাজবাদী ভাৱ-চিন্তাৰ প্রয়োজন আৰু সামাজিক ভূমিকা আছে।
* কবি শৰৎ চন্দ্র সিংহ আছিল মানুহৰ কবি, জনতাৰ কবি।

সামৰণি ঃ

আলোচনাৰ অন্তত ক'ব পাৰি যে শৰৎ চন্দ্র সিংহ মানুহৰ কবি, জনতাৰ কবি। অসমৰ সমাজ ব্যৱস্থাৰ ৰাজতন্ত্র, গণতন্ত্রৰ মানৱিক আৰু নৈতিক অৱক্ষয় ৰূপটোৰ গঠনমূলক সমালোচনা কৰিছে। কবিৰ মতে গণতন্ত্রই সমাজতন্ত্র আৰু ৰাইজেই গণতন্ত্র, কিন্তু বাস্তৱৰ ছৱিখন ইয়াৰ বিপৰীত ৰূপত প্রতিফলিত হোৱাত কবি ক্ষোভিত। বহু সময়ত কবিয়ে নৈতিক মূল্যবোধৰ পতনত আক্ষেপ কৰিছে। কবিৰ কবিতাত যি সমাজবাদী ভাৱ-চিন্তাৰ প্রকাশ ঘটিছে, এয়া সম্পূর্ণ বাস্তৱৰ সমাজ ব্যৱস্থাৰ ৰূপৰেখা। বাস্তৱবাদী পৰিৱেশ, পৰিস্থিতি, বিজ্ঞানসন্মত দৃষ্টিভংগী কবিতাৰ মাজত নিহিত হৈ থকা দেখিবলৈ পোৱা যায়।

কবিয়ে কবিতাৰ কৌশল অথবা শব্দৰ মায়াজাল অর্থৰ প্রহেলিকা সৃষ্টি কৰাত পক্ষপাতী নহয়। সহজ ভাষাৰে বক্তব্য বিষয় পৰিষ্কাৰ কৈ কোৱাতহে গুৰুত্ব দিছে।

কবিৰ কবিতাত জীৱন, নিসঙ্গতা, মৃত্যু চেতনা, জাতীয় চেতনা আদি বোৰ বিষয় সুস্পৃষ্ট হৈ থাকিলেও কবিয়ে দৰিদ্র, শোষিত, নিষ্পেষিত জনতাৰ চেতনাক জগাই তুলিব খোজা শব্দকহে প্রতিনিধিত্ব কৰিছে।

সহায়ক গ্রন্থপঞ্জী ঃ

ফোট নোট ঃ সোণোৱাল সুনীতি (সম্পাঃ) *শৰৎ চন্দ্র ৰচনা সমগ্র* পৃষ্ঠা নং-৬৬৩

মুখ্য উৎস

সম্পাঃ/সংকলিক

১। ফুকন, অদীপ কুমাৰ ঃ *জননেতা শৰৎ চন্দ্র সিংহ অন্য এক যাত্রা*, প্রকাশক, বনলতা, পাণবজাৰ, গুৱাহাটী - ২০০৬

২। তালুকদাৰ, হৰেন্দ্র মোহন ঃ *অসম সূর্য শৰৎ চন্দ্র সিংহ* জীৱন আৰু কৃতি, প্রকাশক, নির্মল প্রকাশন, গুৱাহাটী - ২০০৫

৩। হাজৰিকা, দিলীপ কুমাৰ, ভৰালী, উদয়াদিত্য, ভূঞা, অজিত কুমাৰ, শইকীয়া জ্যোতিপ্রসাদ, হুছেইন, হাইদৰ ঃ *জননেতা শৰৎ চন্দ্র সিংহ*, বি.এচ পাব্লিকেশ্বন, জু-নাৰেঙ্গী, গুৱাহাটী-২০১৪

৪। সোণোৱাল, সুনীতি ঃ *শৰৎ চন্দ্র সিংহ ৰচনা সমগ্র*, প্রকাশক, আঁক-বাক, পাণবজাৰ, গুৱাহাটী

গৌণ উৎস ঃ

সম্পাদিত-সংকলিত

১। নেওগ, মহেশ্বৰ ঃ *অসমীয়া সাহিত্যৰ ৰূপৰেখা*, চন্দ্র প্রকাশ, পাণবজাৰ, গুৱাহাটী-২০০০

২। হুছেইন, তচদ্দুক আমানুস ঃ *অসমৰ সংক্ষিপ্ত ইতিহাস*, প্রকাশক, বনলতা, নতুন বজাৰ, ডিব্রুগড়, দ্বিতীয় প্রকাশ-২০২১

৩। শর্মা, সত্যেন্দ্র নাথ ঃ *অসমীয়া সাহিত্যৰ সমীক্ষাত্মক ইতিবৃত্ত*, সৌমাৰ প্রিণ্টিং এণ্ড পাৱলিছিং লিমিটেড

৪। শর্মা, হেমন্ত কুমাৰ ঃ *অসমীয়া সাহিত্যত দৃষ্টিপাত*, বীণা লাইব্রেৰী, গুৱাহাটী-১৯৮৭

৫। আলি, তফুজ্জুল (সম্পাঃ) *মধ্যবিংশ শতিকাৰ অসমীয়া সাহিত্য*, অসম সাহিত্য সভা, ৪১ তম অধিৱেশন,

মংগলদৈ, প্রথম সংস্কৰণ, ১৯৭৪

৬। কলিতা, ৰঞ্জন (সম্পাঃ) *গৱেষণা হাতপুথি,* তেজপুৰ মহাবিদ্যালয় প্রথম প্রকাশ-২০১৪

৭। গগৈ, লীলা (সম্পাঃ) *আধুনিক অসমীয়া সাহিত্যৰ পৰিচয়,* ষ্টুডেণ্ট এম্পৰিয়াম, ডিব্রুগড়, প্রথম প্রকাশ, ১৯৯০

৮। শইকীয়া, চন্দ্রপ্রসাদ (সম্পাঃ) *জীৱনী সংগ্রহ,* অসম প্রকাশন পৰিষদ, গুৱাহাটী প্রথম প্রকাশ, ১৯৬১

৯। ঠাকুৰীয়া, ৰামচৰণ (মুখ্য সম্পাঃ) কটনিয়ানত চিন্তা-চর্চা, কটন কলেজ শত বার্ষিকী উদ্‌যাপন সমিতি, গুৱাহাটী, ২০২২

১০। বেগম, লুটফা ছেলিমা, কলিতা, কল্পনা শর্মা (সম্পাঃ সমিতি)ঃ সাহিত্য মালঞ্চ, কটন মহাবিদ্যালয়, অসমীয়া বিভাগ, ময়ূৰ প্রকাশ, ২০০৫

১১। শর্মা, বেণুধৰ ঃ *কংগ্রেছৰ কাঁচিয়লি ৰ'দত,* অমৰজ্যোতি, গুৱাহাটী, ১৯১৭

১২। দেৱ চৌধুৰী, ফণীন্দ্র কুমাৰ (সম্পাঃ) *এশ বছৰৰ অসমীয়া গদ্য সাহিত্য* (প্রথম খণ্ড) ১৯০০-১৯৯৯ এক বৌদ্ধিক যাত্রা, শিল্পীঘৰ, দুলীয়াজান, প্রথম প্রকাশ, ১৯৯৯

১৩। নেওঁত, মহেশ্বৰ (সং-সম্পাঃ) *পৰিত্র অসম,* অসম সাহিত্য সভা, দ্বিতীয় সংস্কৰণ-১৯৬৯

স্মৃতিগ্রন্থ ঃ

১। ৰায়, তৰণী কান্ত ঃ *অভিজ্ঞান,* ৰত্নপীঠ কলেজৰ ৰূপালী জয়ন্তী উৎসৱৰ স্মৃতিগ্রন্থ (অভিজ্ঞান) প্রকাশক- লাৱণ্য ছপাশাল, চেনিকুঠি, গুৱাহাটী - ২০০৬

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English Section

The Power of Social Media: A Critical Study of the Novel– "*A Burning*" by Megha Majumdarin the Present Digital-Day Context

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Abstract

Megha Majumdar's novel *A Burning* (2020) is a powerful political novel that explores the intersection of social media, state power, public opinion, and individual vulnerability in contemporary India. Set in Kolkata, the novel narrates the tragic story of Jivan, a young Muslim woman whose life is destroyed after a Facebook post is interpreted as anti-national following a terrorist attack. Through the entangled narratives of Jivan, Lovely, and PT Sir, the novelist exposes how social media platforms influence public discourse, amplify misinformation, and contribute to the marginalization of vulnerable communities. This paper examines the representation of social media in *A Burning* and analyzes its relevance in the present-day digital age. By exploring themes such as digital surveillance, trial by social media, fake news, political manipulation, and identity formation, the study argues that the novel serves as a cautionary tale about the immense power of social media in shaping social realities. The paper further relates the novel's concerns to contemporary global issues, including online vigilantism, cancel culture, misinformation campaigns, and the erosion of democratic discourse. The study concludes that *A Burning* remains profoundly relevant as it highlights the opportunities and dangers inherent in digital communication networks.

Keywords: Social Media, Digital Culture, Fake News, Political Propaganda, Public Opinion, Social Justice.

I. **Introduction**:

The twenty-first century has witnessed the unprecedented rise of social media as one of the most influential forces shaping human communication and social interaction. Platforms such as Facebook, X (formerly Twitter), Instagram, and YouTube etc. have transformed the way individuals access information, express opinions, and engage with political events. While these platforms have democratized communication, they have also created new avenues for misinformation, public manipulation, and social polarization. MeghaMajumdar's debut novel *A Burning* offers a penetrating exploration of these issues. Published in 2020, the novel revolves around Jivan, a young Muslim woman from a Kolkata slum who becomes the victim of a political and social witch-hunt after posting a critical comment on Facebook following a terrorist attack. What begins as a simple online expression of frustration escalates into a national controversy, eventually leading to her arrest and conviction. Through this narrative, Majumdar demonstrates how social media can function simultaneously as a tool of empowerment and a mechanism of oppression.

The novel is particularly relevant in the contemporary digital era, where online narratives often influence public opinion more rapidly than verified facts. By examining the relationship between technology, politics, and individual lives, *A Burning* provides valuable insights into the dangers and possibilities of social media in modern society.

II. Social Media as a Catalyst for Narrative Construction:

One of the central concerns of *A Burning* is the role of social media in constructing public narratives.

Jivan's Facebook post becomes the catalyst for her downfall. Although her statement merely questions governmental negligence during a terrorist attack, it is interpreted as evidence of sympathy for terrorism. As the post circulates online, public perception shifts rapidly against her. Majumdar demonstrates that in the digital age, truth often becomes secondary to virility. Once a narrative gains momentum online, it acquires an appearance of authenticity regardless of factual accuracy. Jivan's experience reflects a broader social reality where individuals are frequently judged not by evidence but by online representations. The novel suggests that social media has become a powerful site of meaning making. Information spreads rapidly, often without verification, allowing rumors and assumptions to shape public consciousness. This phenomenon is increasingly visible in contemporary societies where social media platforms often function as alternative courts of public opinion.

III. Trial by Social Media and Digital Vigilantism:

One of the most significant themes in *A Burning* is trial by social media. Before any legal proceedings begin, Jivan is effectively declared guilty in the court of public opinion. Her online activity becomes the basis for widespread condemnation. The digital audience acts as judge, jury, and executioner, creating an atmosphere where legal due process becomes irrelevant. This aspect of the novel resonates strongly with present-day phenomena such as online public shaming and online vigilantism. Social media users frequently engage in collective condemnation based on incomplete information. Individuals accused of wrongdoing often face severe reputational consequences before investigations are completed. Majumdar highlights the psychological and social consequences of such practices. Jivan's identity is reduced to a digital label associated with terrorism. Once this label is established, it becomes almost impossible for her to reclaim her innocence. The novel thus comments on the tendency of digital cultures to simplify complex realities into easily consumable narratives.

IV. The Spread of Misinformation and Fake News:

Another crucial dimension of *A Burning* is its portrayal of misinformation. Social media allows false narratives to spread quickly and widely. Jivan's Facebook post is selectively interpreted and manipulated to support political agendas. Facts become less important than emotionally appealing stories that reinforce existing prejudices. Contemporary research has shown that social media can facilitate the rapid dissemination of fake news and misleading information, particularly during periods of political or social unrest. The less barriers to content creation and sharing make it difficult to distinguish between credible information and deliberate misinformation.Majumdar's novel anticipates these concerns by illustrating how digital platforms can be weaponised to manipulate public consent. Jivan's story becomes a cautionary example of how misinformation can destroy lives when amplified through social networks.

V. Social Media and Political Exploitation

The novel also examines how political actors exploit social media to consolidate power. PT Sir's rise within a nationalist political party demonstrates the relationship between political ambition and media manipulation. Political organizations understand the persuasive power of digital narratives and strategically use them to influence public perception. Through PT Sir's transformation, Majumdar reveals how individuals can become complicit in systems of oppression for personal advancement. Political success increasingly depends on the ability to navigate and manipulate media environments. Social media becomes an instrument through which ideological messages are disseminated and opposition voices are silenced. This depiction mirrors contemporary political realities worldwide. Political campaigns now rely heavily on digital platforms for propaganda, voter mobilization, and image management. The novel, therefore, extends beyond the Indian context and addresses global concerns regarding the relationship between technology and political power.

VI. Marginalized Communities and Digital Vulnerability

Jivan's experience highlights the vulnerability of marginalized communities in digital spaces. As a young Muslim woman from a poor background, she occupies

multiple marginalized positions within society. These identities make her an easy target for public suspicion and political scapegoating. The novel suggests that social media does not always democratize communication equally. Existing social inequalities often become amplified online. Individuals from marginalized groups may face disproportionate scrutiny, harassment, and discrimination.Similarly, Lovely's experiences as a hijra demonstrate how digital and social visibility can be both empowering and dangerous. While visibility offers opportunities for recognition and advancement, it also exposes individuals to prejudice and exploitation. Through these characters, Majumdar illustrates the complex relationship between digital representation and social identity.

VII. Social Media and the Culture of Surveillance

A Burning also explores the surveillance functions of social media. Jivan's Facebook activity becomes an evidence used against her by authorities. Her online expression is monitored, interpreted, and criminalized. The novel thereby highlights the erosion of privacy in digital societies.In contemporary contexts, governments and institutions increasingly monitor digital communications. Social media platforms generate extensive data trails that can be used for surveillance purposes. Users often underestimate the permanence and visibility of their online activities. Majumdar presents a world where a single post can become a life-defining event. This serves as a reminder that digital spaces are not merely platforms for communication but also sites of observation and control.

VIII. The Psychological Impact of Social Media

Beyond political implications, the novel examines the psychological consequences of social media. Public humiliation, social exclusion, and fear emerge as recurring experiences for characters affected by online narratives. Jivan becomes trapped in a system where she is unable to escape the digital identity imposed upon her. The novel demonstrates how social media can create environments of anxiety and insecurity. Individuals become increasingly aware that their words and actions may be recorded, shared, and judged by vast audiences. This awareness influences behavior and contributes to self-censorship. The emotional intensity of *A Burning* reflects broader concerns regarding mental health in the digital age. Online hostility, cyberbullying, and public shaming have become significant social issues, affecting individuals across different cultural contexts.

IX. Relevance in the Present-Day Context

The themes explored in *A Burning* have become even more relevant in the present day. Contemporary societies continue to grapple with issues such as misinformation, digital polarization, hate speech, and algorithmic amplification of controversial content. Following are the developments highlight the novel's relevance:

1. The increasing prevalence of fake news during elections and political crises.
2. The rise of online mob behavior and digital ostracization.
3. Growing concerns regarding data privacy and digital surveillance.
4. The use of social media platforms for political propaganda.
5. The vulnerability of minority communities to online harassment and misinformation campaigns.

Majumdar's novel anticipated many of these developments by portraying a society in which digital communication profoundly influences legal, political, and social outcomes. The novel encourages readers to evaluate critically the information they consume and share online.þ

X. Conclusion

Megha Majumdar's*A Burning* is a compelling exploration of the power and dangers of social media in contemporary society. Through the tragic story of Jivan and the interconnected lives of Lovely and PT Sir, the novel exposes the mechanisms through which digital platforms shape public opinion, reinforce political agendas and influence individual destinies. The novel demonstrates that social media is neither inherently liberating nor inherently oppressive. Rather, its impact depends on the social, political, and economic structures

within which it operates. While digital platforms provide opportunities for expression and participation, they also facilitate misinformation, surveillance, and public manipulation.

In the present-day context, *A Burning* serves as a timely warning about the consequences of uncritical engagement with social media. The novel reminds readers that digital narratives possess real-world consequences and that the pursuit of truth, justice, and empathy remains essential in an increasingly connected world. By exposing the fragile boundary between online discourse and lived reality, Majumdar contributes significantly to contemporary discussions about technology, democracy, and human rights. By addressing these critical issues, this study opens new avenues for future research on regulating social media—ensuring its power is harnessed for the benefit of humanity rather than its vested harm.

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Colonialism, Resource Extraction and Environmental Exploitation in Assam : A Comprehensive Study

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Abstract

This study explores the relationship between colonialism, resource extraction, and environmental exploitation in Assam. During the colonial period, the British transformed Assam into a major resource frontier through the extraction of tea, timber, coal, and oil. These activities served imperial economic interests and led to deforestation, biodiversity loss, soil degradation, habitat destruction, and pollution. Colonial resource policies also restricted local access to natural resources, contributing to the displacement and marginalization of indigenous and local communities.Using both qualitative and quantitative approaches, this study examines the historical processes of resource extraction and their environmental impacts in Assam. Drawing on historical records, government reports, secondary literature, and statistical data, it compares colonial and contemporary patterns of extraction to identify continuities and changes in extractive development. The findings indicate that while colonial resource extraction generated economic benefits for the British Empire, it imposed significant ecological and social costs on Assam. Many contemporary environmental challenges, including deforestation, habitat fragmentation, pollution, and resource depletion, are closely linked to extractive systems established during the colonial period. The study highlights the need for sustainable resource management, environmental conservation, and inclusive development policies to address the enduring legacy of colonial exploitation in Assam.

Keywords : Colonialism, Resource Extraction, Environmental Exploitation, Assam, Sustainable Development.

Introduction:

Colonialism is the practice of one country for controlling and dominating another country, region and its people. It has played a crucial role in transforming the economic, social, and environmental structures of many regions across the world. In India, colonial rule was characterized not only by political domination but also by the systematic extraction of natural resources to support imperial economic interests. Assam's rich natural resources and commercial potential attracted British colonial interests, and the Treaty of Yandabo (1826) marked the beginning of British rule in the region. From the beginning of colonial rule, the British established a provincial administration in Assam under a Commissioner to achieve their colonial interests. They introduced their own laws, courts, and institutions by replacing traditional Assamese systems. They established tea plantations, leading to the influx of migrant labourers and transformation of Assam's economy. During the colonial period, the British imported Nepali and Bengali labourers to work in tea plantations and other industries, resulting in significant demographic changes in the state. For facilitating the communication, trade, and administration facilities they built roads, railways, and bridges. For the purpose of promoting English language and Western values in Assam they introduced their education system. Furthermore in 1850 British introduced a land revenue system, which led to the alienation of land from traditional owners to British planters and speculators. In this manner, the British consolidated their colonial rule in Assam for nearly a century until India's independence on 15 August 1947. Although colonial rule ended in 1947, the legacy of colonial resource extraction continues to affect Assam's economy and

environment. Tea plantations, petroleum production, coal mining, and commercial forestry, initiated by the British colonizers remain important components of the state's economy. At the same time, environmental challenges continue to persist, raising concerns about the long-term impacts of extractive development.

Literature Review:

1. Ranajit Guha in his work entitled "A Rule of Property for Bengal" (1963) highlights the British East India Company's exploitation policies. They ruthlessly exploited the natural resources of Bengal, including its forests and mineral reserves.
2. Amalendu Guha, in his influential work *Planter-Raj to Swaraj* (1977), offers a critical examination of the environmental consequences of colonial rule in Assam, with particular emphasis on the expansion of the tea plantation economy. He argues that colonial policies prioritized commercial interests and resource extraction, leading to significant ecological changes, including deforestation, land-use transformation, and the disruption of traditional socio-economic systems.
3. Jayeeta Sharma in her work "Empire's Garden" (2011) examines how colonial rule shaped Assam's tea plantation economy and contributed to ecological destruction and environmental degradation in the state. The study explores the complex relationship between colonialism, tea production, and environmental degradation of Assam.
4. Arupjyoti Saikia's work, *The Colonial State and the Forests of Assam* (2011), critically examines the impact of colonial forest policies on Assam's ecological and social landscape. The study demonstrates how colonial interventions reduced community access to forest resources, contributed to environmental degradation, and undermined the livelihoods of tribal and indigenous populations. Saikia further emphasizes the need for participatory and sustainable approaches to forest governance that balance conservation objectives with the rights and welfare of local communities.

Research Gap:

Existing studies on Assam have largely focused on colonial exploitation through tea plantations, forest extraction, and labour migration. However, limited attention has been given to the continuity of colonial extractive structures and their influence on contemporary environmental challenges. This study addresses this gap by examining the historical processes of resource extraction and their environmental consequences from the colonial period to the present. By combining historical evidence with contemporary data, it analyses the continuities and transformations of extractive practices and their implications for sustainable development in Assam.

Objectives:

1. To analyse the nature, extent, and changing patterns of resource extraction in Assam from the colonial period to the contemporary era.
2. To analyse the causes and consequences of colonialism in Assam.

Methodology:

The methodology of this paper is descriptive and analytical. Required data are collected from different secondary sources academic articles, books, and research papers on colonialism, economic history, and environmental studies have been used for the study.

Theoretical Framework:

The present study is based on Postcolonial Theory and Political Ecology Theory. Postcolonial Theory explains how colonial structures of economic exploitation, resource extraction, and unequal power relations continue to influence postcolonial societies even after political independence. In the context of Assam, the theory helps analyse the continuity of colonial patterns in tea plantations, oil extraction, mining, and land administration.

The study also applies Political Ecology Theory, which examines the relationship between political, economic, and environmental processes. It highlights how state policies, corporate interests, and capitalist

development contribute to environmental degradation, displacement of indigenous communities, and ecological imbalance.

Together, these theoretical perspectives provide a framework for understanding the continuing impact of colonial resource exploitation on the contemporary environmental scenario of Assam.

Discussion and Findings:

The relationship between the decline in per capita forest resources and the increasing severity of floods and riverbank erosion in post-colonial Assam reflects the long-term environmental consequences of resource extraction and forest depletion initiated during the British colonial period. The reduction in forest cover has weakened natural ecological barriers, contributing to soil erosion, increased surface runoff, loss of biodiversity, and greater vulnerability to recurrent floods. Simultaneously, flood-induced damages to agriculture, infrastructure, livelihoods, and human settlements have imposed significant economic costs on the state. A comparative picture of these trends is presented in the table below.

Table No. 1:

Declining Per Capita Forest Resources and the Growing Environmental and Economic Impacts of Floods and Riverbank Erosion in Post-Colonial Assam

Indicator	**Early Post-Colonial Period**	**Recent Period**
Per Capita Forest Area	0.14 ha (1991)	Approximately 0.03 ha forest cover per person; 0.094 ha forest and tree cover combined
Forest Cover Trend	Relatively higher	Continuous decline due to encroachment, deforestation, and developmental activities
Flood Frequency	Periodic major floods	Annual and increasingly severe floods
Area Affected by Floods	Comparatively lower	Around 40% of Assam's land area prone to flooding annually
Riverbank Erosion	Localized in several districts	Severe and widespread, particularly along the Brahmaputra and its tributaries
Agricultural Losses	Moderate	Extensive crop damage and loss of cultivable land
Economic Impact	Limited regional losses	Significant damage to infrastructure, housing, transportation, and livelihoods
Population Displacement	Relatively low	Thousands displaced annually due to floods and erosion
Environmental Consequences	Moderate ecosystem disturbance	Loss of biodiversity, wetland degradation, soil erosion, and habitat destruction

Source: Compiled from Forest Survey of India (FSI), India State of Forest Reports, Assam State Disaster Management Authority (ASDMA), Water Resources Department, Government of Assam, and secondary literature.

Forest Resources:

Assam's forests have long played a vital role in sustaining biodiversity, ecological balance, and local livelihoods. During the colonial period, extensive areas of forest were brought under state control and exploited for timber extraction, railway expansion, and tea plantation development, leading to significant deforestation and the marginalization of indigenous communities. The legacy of this extractive model remains evident today. According to the India State of Forest Report (ISFR) 2023, Assam's forest cover stands at 28,313.55 sq. km, accounting for 36.10% of the state's geographical area, although forest and tree cover declined by 83.92 sq. km between 2021 and 2023. Furthermore, the state has lost approximately 3,600 sq. km of tree cover since 2001 due to agricultural expansion, urbanization, infrastructure development, and resource extraction. While forests continue to contribute significantly to the state's economy, persistent challenges such as encroachment, illegal logging, mining, and developmental pressures underscore the continuing conflict between economic growth and environmental sustainability in Assam.

Table No. 2:

Colonial and Contemporary Forest Landscape of Assam

Indicator	**Colonial Period (c. 1900–1947)**	**Present Period (ISFR 2023)**
Forest Area	16,000–18,000 sq. km (estimated under administration)	28,313.55 sq. km
Share of Geographical Area	20–23% (estimated)	36.10%
Forest Governance	Colonial state control	State and community-based conservation
Major Resource Extraction	Timber, bamboo, fuel wood	Timber, bamboo, NTFPs, ecotourism
Main Drivers of Forest Loss	Tea plantations, railways, mining, oil extraction	Urbanization, infrastructure, encroachment, industrial activities
Environmental Concerns	Deforestation and habitat loss	Forest fragmentation, biodiversity loss, human-wildlife conflict

Source: Forest Survey of India (2023), *India State of Forest Report 2023*; Assam Forest Department.

Tea Plantations :

Tea plantations constitute one of the most enduring legacies of colonial resource extraction in Assam. Following the discovery of indigenous tea plants in 1823, the British rapidly expanded tea cultivation, clearing vast forest areas and transforming the region into a plantation-based economy. The area under tea cultivation increased from 27,000 acres in 1872 to over 300,000 acres by the end of colonial rule, resulting in extensive deforestation, biodiversity loss, habitat fragmentation, and ecological degradation. Plantation expansion was primarily driven by imperial economic interests, with little consideration for environmental consequences. Tea remains a cornerstone of Assam's economy today, covering approximately 358,000 hectares and producing 635.37 million kilograms annually (Economic Survey of Assam, 2025–26). However, contemporary tea cultivation continues to exert pressure on land, water resources, and biodiversity through habitat fragmentation, soil degradation, and agrochemical use. Consequently, many of the environmental challenges associated with Assam's tea industry reflect the enduring legacy of colonial patterns of resource extraction and land-use transformation.

Table No. 3: Growth of Tea Cultivation in Assam

Year	Area under Tea Cultivation	Tea Production
1872	27,000 acres	6 million lbs
1900	204,000 acres	75 million lbs
1947	300,000+ acres	Major global exporter
2025	358,000 hectares	635.37 million kg

Sources : Behal (2006, 2014); Economic Survey Assam (2025–26); Statistical Handbook Assam (2025).

Oil and Natural Gas in Assam under Colonialism :

Oil extraction represents a significant example of resource extraction in Assam, originating with the discovery of oil at Digboi in 1889 and the subsequent establishment of the Assam Oil Company and Digboi Refinery under British rule. Colonial petroleum production was primarily driven by imperial economic and strategic interests, making Digboi one of the most important oilfields in British India. In the contemporary period, Assam remains a major centre of India's petroleum industry, producing over 3.65 million tonnes of crude oil between April 2025 and January 2026 and contributing significantly to national crude oil and natural gas output. Despite changes in ownership and technology, environmental concerns associated with petroleum extraction persist, including deforestation, land degradation, water pollution, habitat fragmentation, and ecological disruption. Incidents such as the 2020 Baghjan blowout underscore the environmental risks of resource extraction. Consequently, while the petroleum sector remains vital to Assam's economy and energy security, it also reflects the enduring ecological challenges rooted in extractive development.

Table No. 4:

Colonial and Post-Colonial Patterns of Oil Extraction in Assam

Indicator	Colonial Period	Present Period (2025–26)
Discovery of Oil	1889, Digboi Oilfield	Continued exploration in Upper Assam and other basins
Major Operator	Assam Oil Company	Oil India Limited and Oil and Natural Gas Corporation
Refinery	Digboi Refinery (1901), first refinery in Asia	Digboi, Numaligarh Refinery Limited, and other refining facilities
Oil Production	Approximately 7,000 barrels per day during World War II	More than 3.65 million tonnes of crude oil (April 2025–January 2026)
Main Objective	Supply fuel and revenue for the British Empire	Energy security, industrial development, and economic growth
Land Use Impact	Forest clearance for oilfields, roads, and pipelines	Continued land-use change associated with extraction and infrastructure
Environmental Impact	Deforestation, habitat destruction, land degradation	Oil spills, gas leakages, water contamination, habitat fragmentation
Economic Beneficiaries	Colonial companies and British Empire	National economy, public-sector enterprises, and state revenues
Contribution to National Production	Major oil-producing region of British India	Approximately 15% of India's crude oil and 14% of natural gas production

Source: Compiled from Directorate General of Hydrocarbons (2025), Ministry of Petroleum and Natural Gas (2025), Statistical Handbook Assam (2025), Oil India Limited, ONGC, and secondary literature.

Coal Mining as a Form of Colonial Resource Extraction in Assam:

Coal mining emerged as a significant component of colonial resource extraction in Assam following the discovery of coal deposits in the Makum region during the nineteenth century. Developed to support tea plantations, railways, steam navigation, and other colonial industries, coal extraction contributed substantially to the colonial economy. However, mining activities led to extensive deforestation, land degradation, soil erosion, and water pollution, with little consideration for environmental sustainability or local welfare. In contemporary Assam, coal remains an important mineral resource, with reserves estimated at approximately 515 million tonnes, primarily located in the Makum, Dilli–Jeypore, and Namchik–Namphuk coalfields. Despite changes in ownership, technology, and regulatory frameworks, environmental challenges such as land degradation, acid mine drainage, biodiversity loss, and water contamination continue to accompany coal extraction. Thus, coal mining illustrates the enduring environmental legacy of colonial extractive practices and their continued influence on Assam's development trajectory.

Table No. 5:

Colonial and Contemporary Coal Mining in Assam

Indicator	**Colonial Period (c. 1880–1947)**	**Present Period**
Major Coalfield	Makum Coalfield	Makum, Dilli–Jeypore, Namchik–Namphuk
Primary Objective	Fuel for tea plantations, railways, steamships, and colonial industries	Energy production and industrial use
Ownership	British mining enterprises	Government and private-sector operators
Coal Reserves	Limited geological estimates available	Approximately 515 million tonnes
Production Pattern	Extraction to support colonial economic interests	Commercial production under regulatory oversight
Environmental Impact	Deforestation, soil erosion, water contamination	Land degradation, acid mine drainage, biodiversity loss, water pollution
Beneficiaries	British Empire and colonial industries	National and regional economy
Regulatory Framework	Minimal environmental regulation	Environmental laws and mining regulations

Sources: Indian Bureau of Mines (2024); Coal Controller's Organisation (2024); Government of Assam Statistical Handbook (2025); Saikia (2011).

Manufacturing Industries and Resource Extraction :

The expansion of manufacturing industries in Assam has contributed significantly to economic growth, employment generation, and industrial development. Resource-based industries such as cement production, paper manufacturing, petroleum refining, tea processing, and coal mining depend heavily on local natural resources, including limestone, forests, bamboo, coal, oil, and water. While these industries play a vital role in the state's

economy, they have also generated environmental challenges, including land-use change, deforestation, habitat degradation, pollution, and greenhouse gas emissions. Consequently, Assam's experience highlights the continuing tension between industrial development and environmental sustainability, underscoring the need for effective resource governance and sustainable industrial practices.

Table No. 6:

Contemporary Resource-Based Industries and Resource Extraction in Assam

Sector/Industry	**Key Resource Extracted or Utilized**	**Recent Data**
Tea Industry	Land, water, soil resources	358,000 hectares under tea cultivation; 635.37 million kg tea production (2025)
Oil and Gas Industry	Crude oil and natural gas	More than 3.65 million tonnes of crude oil produced (April 2025–January 2026)
Coal Mining	Coal reserves	Approximately 515 million tonnes of coal reserves
Forest-Based Industries	Timber, bamboo, non-timber forest products	Forest cover: 28,313.55 sq. km; Forest and tree cover: 30,415.01 sq. km (2023)
Cement Industry	Limestone	Assam possesses significant limestone deposits, particularly in Karbi Anglong and Dima Hasao districts
Paper Industry	Bamboo and forest resources	Historically dependent on bamboo from Assam's forests; continues to rely on forest-based raw materials
Petroleum Refining	Crude oil	Major refining centres at Digboi and Numaligarh Refinery Limited

Source: Government of Assam. Department of Industries, Commerce and Public Enterprise. *Economic Survey of Assam 2025–26*.

Assam's contemporary economy remains heavily dependent on resource-based industries, including tea, petroleum, coal, and forest products. While these sectors contribute significantly to employment, industrial growth, and state revenue, they also exert considerable pressure on land, forests, water resources, and biodiversity. From a historical perspective, this dependence reflects the enduring legacy of colonial extractive development, whereby natural resources were primarily utilized to serve external economic interests. Although the political and economic context has changed, the continued reliance on resource-intensive industries highlights important continuities between colonial and contemporary patterns of resource utilization in Assam.

Contemporary Dimensions of Resource Extraction and Neo-colonial Development:

In contemporary Assam, resource extraction and development are increasingly shaped by organized retail expansion, industrial policies, corporate investments, and state-led development strategies. The growth of shopping malls, supermarket chains, and digital commerce has improved market access and supply-chain efficiency but has also intensified waste generation, energy consumption, and pressure on traditional local markets. Similarly, investment-oriented industrial policies have promoted manufacturing growth and infrastructure development, particularly in resource-based sectors, while raising concerns about land acquisition, ecological degradation, and uneven distribution of economic benefits.

The growing involvement of large corporate enterprises in oil, gas, mining, energy, and infrastructure has further integrated Assam into national and global markets. Although these investments contribute to economic growth and employment, they have also generated environmental challenges, including deforestation, biodiversity loss, pollution, and resource depletion. Consequently, scholars argue that some contemporary development processes exhibit characteristics of neo-colonial resource extraction, where environmental costs are disproportionately borne by local communities while economic gains remain unevenly distributed.

Government policies and political institutions continue to play a central role in regulating resource use and development. However, tensions persist between economic growth, environmental sustainability, and the rights of indigenous and local communities. From a political ecology perspective, these dynamics reflect the enduring influence of colonial patterns of resource utilization, raising important questions of environmental justice, sustainable development, and equitable resource governance in Assam.

Table No. 7:

Contemporary Dimensions of Resource Extraction and Industrial Development in Assam

Indicator	**Recent Data**	**Significance**
Tea Cultivation Area (2025)	358,000 hectares	Continued utilization of land resources for plantation-based production
Tea Production (2025)	635.37 million kg	Major export-oriented resource-based industry
Crude Oil Production (Apr 2025–Jan 2026)	Over 3.65 million tonnes	Assam contributes about 15% of India's crude oil production
Natural Gas Production	About 14% of India's output	Strategic energy resource
Coal Reserves	Approximately 515 million tonnes	Important mineral resource for industry and energy
Forest Cover (2023)	28,313.55 sq. km	Resource base under increasing environmental pressure
Forest Cover Change (2021–2023)	–83.92 sq. km	Indicates continuing environmental stress
Investment Commitments (Advantage Assam 2.0, 2025)	[1]5.18 lakh crore (MoUs signed)	Expansion of industrial and infrastructure sectors
Retail Market Growth	Rapid expansion of organized retail and e-commerce platforms	Transformation of local production and consumption patterns
Major Resource-Based Industries	Tea, petroleum, coal, cement, paper, and petrochemicals	Continue to drive economic growth and resource extraction

Sources: Economic Survey Assam 2025–26; Statistical Handbook Assam 2025; Directorate General of Hydrocarbons (2025); Ministry of Petroleum and Natural Gas (2025); Forest Survey of India (2023); Advantage Assam 2.0 Summit Report (2025).

Consequences and Contemporary Legacy of Colonial Resource Extraction in Assam:

The persistence of colonial and neo-colonial influences in Assam is closely associated with its resource wealth, strategic location, exploitative labour systems, and institutional structures that continue to facilitate resource extraction. Consequently, many of the state's contemporary environmental challenges—including deforestation, biodiversity loss, and ecological degradation can be traced to colonial patterns of extractive development that prioritized economic gains over environmental sustainability and have continued, in modified forms, after independence.

Recent industrial incidents highlight the environmental risks associated with extractive industries. The 2020 Baghjan oil and gas blowout in Tinsukia district caused extensive ecological damage to the nearby Dibru–Saikhowa ecosystem and the Maguri-Motapung wetland. The incident resulted in biodiversity loss, contamination of water bodies, damage to agricultural land, and the displacement of local communities. Similarly, the crude oil pipeline leakage at Nazira in 2021 affected agricultural fields and raised concerns regarding soil and water contamination.

Industrial expansion in Assam has intensified pressures on land and natural resources, often leading to displacement, loss of traditional livelihoods, and environmental degradation. The conversion of agricultural and forest land for industrial and infrastructure development has further challenged ecological sustainability, biodiversity conservation, and rural livelihoods.

The increasing involvement of large corporate enterprises in sectors such as petroleum extraction, coal mining, energy production, infrastructure development, and plantation agriculture has further integrated Assam into national and global economic networks. While these activities contribute to economic growth, employment generation, and revenue creation, they have also been associated with environmental concerns, including deforestation, habitat fragmentation, pollution, biodiversity decline, and human–wildlife conflict.

From a political ecology perspective, contemporary resource use in Assam reflects significant continuities with colonial extractive practices. Despite changes in governance and ownership since independence, the tension between economic development and environmental sustainability continues to shape the state's development trajectory.

Conclusion:

The study demonstrates that colonial resource extraction fundamentally reshaped Assam's economy, society, and environment, establishing patterns of development that continue to influence the state economy today. While resource-based industries such as tea, petroleum, coal, and forestry remain important drivers of economic growth, they have also contributed to persistent environmental challenges, including deforestation, biodiversity loss, pollution, and ecological degradation. The findings highlight the need for sustainable resource governance that balances economic development with environmental conservation, social justice, and the protection of local communities.

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A Systematic study of some hydrophytic members of the familyHydrocharitaceae found in Sivasagar subdivision of Sivasagar district, Assam

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Abstract
Hydrophytes are plants in which the roots, when present, and a part or whole of the shoot are submerged in liquid water.Water conditions being uniform , there are fewer adaptations in aquatic plants than in xerophytes which grow in most varied conditions .The root system in hydrophytes are poorly developed or not at all branched.ln some cases they are altogether absent .The osmotic pressure in the hydrophytes is very low and the plants rapidly wilt when removed from water . Phytogeographically, the Sivasagar district of Assam is considered as a part of the foot hill region of the Eastern Himalaya. This district is situated in the sub-tropical zone of the Northern Hemisphere. The subtropical climate and the influence of the Himalaya have encouraged in accumulating a high diversity of floristic elements in the district. A systematic account on hydrophytic flora of this region is of prime importance to understand it's biodiversity. During this survey 3 different genera of the family Hydrocharitaceae such as *Hydrilla,Vallisneria* and *Ottelia* are found . Under these genera 3 different species such as *Hydrillaverticillata*, *Vallisneriaspiralis* and *Otteliaalismoides* are found during the survey.

Key words : Hydrophytes, Phytogeography, Biodiversity .

Introduction:

Aquatic plants are also known as hydrophytic plants. Hydrophytes are plants in which the roots, when present, and a part or whole of the shoot are submerged in liquid water (Kochar 1994). These plants are readily fall in to following categories (Gupta,1984) (1) Free floating (2) Anchored floating (3) Anchored emerged (4) Submerged (5) Suspended (6) Semi-aquatic. The anchored plants are better adapted as they easily obtain mineral supply from the mud at the bottom of water. The roots are poorly or not at all branched. The absorbing and conducting tissues are reduced to a minimum.

Phytogeographically the Sivasagar district of Assam is considered as a part of the foot hill region of the Eastern Himalaya. This district is situated in the sub-tropical zone of the Northern Hemisphere. The subtropical climate as well as the influence of the Himalaya have encouraged in accumulating a high diversity of floristic elements in the district as well as the entire North - East (NE) India, as evidenced by many published works including that of Janikiammal (1960). Hooker (1873). Kanjilalet. al. (1934-1940). Chowdhury (2005). Rao &Verma (1970.1974) etc.

Objectives:

1. To explore the hydrophyticflora of the family Hydrocharitaceaefound in Sivasagar sub division of Sivasagar District.
2. To characterised the aquatic plants for better understanding of the species.

Methodology:

Study Area :

Sivasagar sub-division of Sivasagar district, Assam is situated between 94°25' to 94°552 E

longitude and 26°522 to 27°102 N latitude (Fig. 1). The climate of the study area is typically sub-tropical with above 2000cm average annual rainfall, above 80% relative humidity round the year and atmospheric temperature ranging from 6°c -37°c. The Sivsagar sub-division is comprised of altogether 63127 hectare of land, out of which less than 2 percent in urban area. The study area is bounded by the Brahmaputra river on its North, Jhanji river on west and river Dehing on its East. The sourthern side is bounded by Nazira and Charaideo sub-division of Sivasagar district as well as the hills of Nagaland. The average altitude of the sub-division is nearly 86.6 meter MSL and comprised four tributaries of the river Brahmaputra including Namdang, Dorika, Disang and Demow.

Water bodies:

As much as 12.44 percent area of the sub-division is occupied by perennial swampy lands ("Beel") and nearly 7 percent area by deep water paddy ("Bao" paddy). The beels and bao paddy area is the repository of several aquatic plants many of which are under explored. Despite of all, the study area also comprises three manmade large ponds constructed more than 200 years back. Obviously, the entire sub-division is an ideal site to provide shelter to the hydrophytic elements both of native and alien origin.

Survey and collection:

Bare footed survey have been done in entire sub-division covering all sorts of aquatic bodies starting from ponds to the beels and rivers. The river Brahmaputra is also present to the west of the sub-division. The plants have been collected, dried, pressed for hubarium preparation by following the methods of Radford (1986) and Raju (1994). The Herbaria are prepared by following the techniques as follows in the Botanical survey of India (B.S.I.). Plant species were collected at flowering or atleast fruiting condition.

Field Observation:

Field characters like habitat, rooting behaviour, flower coloured, etc. have been observed at the time of collection of the plant. Ecological information about their habitat were also recorded very carefully. Uses of plants were recorded by discussing with local people.

Identification:

Flowers, fruits and leaves of each of the plants critically studied in the laboratory and such were carefully compared with published literature like local floras and monographs, (whenever available) for recognisation of the species and family. The identity of the species was finally confirmed by matching the specimen with the herbarium specimenavailable at Weed Herbarium of Assam Agricultural University, Jorhat. A few specimens were identified at Kanjilal Herbarium of Botanical Survey of India, Shillong .

Result and Discussion

HYDROCHARITACEAE

Aquatic herbs, Leaves undivided, Flowers monoecious or dioecious, enclosed in an entire or 2-leaved spathe, female solitary; perianth superior, sepals 3, green or petaloid; petals membranous or 0; stamens 3 - 12, anthers 2 celled; ovary inferior, placentas parietal or projecting and almost meeting; styles or style arms 3-12; ovules anatropous or orthotropous. Fruit rarely dehiscent, membranous or fleshy, few or many seeded. Seeds exalbuminous.

Key for Identification to genera :

la. Stem present, leaves cauline ……. Hydrilla.

1b. Stem present, leaves radial :

2a. Leaves sessile and linear ……vallisneria.

2b. Leaves petioled, much broader, never linear ……..…… Ottelia.

***Hydrilla*L.**

A submerged leafy dioecious herb, leave short, 3 - 4 nately whorled or opposite. Male flower solitary, shortly pedicelled, in a subglobose sessile muricatespathe; sepals 3, ovate or obovate, green; petals 3, oblong or cunei form; stamens 3, anthers large reniform, opeing elastically pistillod small. Female flowers 12, pessile in a tubular 2 toothed spatheperianth of the male flower, but leaflets narrower; ovary produced beyond the spathe in a filiform beak, 1 celled; styles 2-3, linear, undivided; stigmas 3, fimbricate; ovules anatropous. Fruit subulate. Seeds 2-3, oblong, testa shortly produced at each end.

Hydrillaverticillata. (L.f.) Royle, Illustr. Bot. Himal. t. 376. 1839.

*Serpiculaverticillata*L.f. suppl. 416. 1781.

Plants forming large masses. Submerged, stoloniferous, dioecious, copiously branched. Leave usually lower opposite, upper 3 8 nately whorled, linear oblong, 815x12 mm, entire or serrulate. Spathes solitary, axillary, sub-sessile male Spathessubglobose, clothed with subulate appendages and with an apical knob detaching to release a solitary flower which opens up and floats on reaching the water surface; Sepals ovate-oblong, 2-3×1 mm, reddish-white; petals 3, spathulate, 2-3× 0.5 mm reddish white, stamens 3 anthers subsessile, 4 celled; female: spathes cylindrical, bidentate, Ca 5mm long, brownish; sepals and petals as in the male. Overy-cylindrical, 34 mm long, with a filiform 2 - 7 cm long back which raises the rest of the flower to just above water-surface; styles 3, Fruits sub cylindrical, seeds 2 - 6 ellipsoid.

Note: Fls. &Frts - Oct to Feb. Submerged - suspended plant in almost all parts of perennial natural water bodies. Cultivated in aquaria.

***Vallisneria* L.**

A submerged tufted, stemless, stoloniferous-dioecious herb. Leaves very long, linear, Male flower very numerous, minute, in an ovoid 3 lobed shortly peduncledspathe; sepals 3; petals 0; stamens 1-3, anthers didynamous; pistillode 0. Female flowers solitary in a tubular. 3 toothed spathe terminating a very long filiform spiral scape, perianth of the male; staminodes 3, 2 fid; ovary narrow, not produced upwards, stigmas 3, broad, ovules numerous. Fruit linear, included in a spathe, many seeded.

Vallisneriaspiralis L. SP. Pl. 1015. 1753

Submerged, stoloniferous, dioecious. Leaves long or short according to the depth of water, green, translucent, entire or tips serrulate. Male spathes on 12 cm long scape, flowers many, shortly pedicalled, white, ultimately detaching and floating on the water surface. Sepals broadly ovate; petal 1, rudimentary; stamens2; staminode 1. Female spathe on long slender scape, cylindrical, flowers solitary, white; Sepals ovate, petals 3, rudimentary styles 3. Fruits subcylindrical, seeds numerous.

Note: Fls&frts Nov to July. A highly frequent submerged plants in ponds, beels and deep water rice fields. Cultivated in aquaria.

Otteliapers.

Submerged fresh water herbs. Leaves crowded, the submerged lanceolate, oblong or cordata. narrow, the floating long petioledovavte Flowers solitary, sessile on a tubular 2 fid spathe; sepals linear or oblong: petals - larger obovate or orbicular, base with fleshy appendages; stamens 6-15, anthers erect; ovary oblong, beaked almost 6 celled, styles 6, linear, 2 fid; ovules many. Fruits oblong, 6 valved enclosed in the spathe. Seeds many, oblong, testa pulpy.

Otteliaalismoides (L.) Pers Syn. Pl. I: 400, 1805. Stratiotesalismoides L. Sp. Pl. 535. 1753.

Submerged or partially floating, annual, monoecious herbs. Leaves very variable, mostly ovate, oblong or suborbicular. Cordate, truncate or attenuate at the base, rounded, acute or apiculate at the apex. Some linear- lanceolate, petioles 5-40 cm long, trigonous, smooth or denticulate. Peduncles 10-40 cm long; spathes ovate elliptic, 2 - 6 cm long, 1 flowered, 5-10 winged; wings up to 1cm broad, entire or wrinkeld, sometimes reduced to ribs. Flowers sessile, bisexual; sepals oblong lanceolate, green, persistent; petals obovate, 20-30 × 10-13 mm, white with yellow spotted base; stamens 6 (-9); filaments long, hairy; anthers long, yellow; ovary oblong. Styles 6 (-10), 5-10mm long. Fruits 2 - 5 cm long, irregularly dehiscing; seeds many, fusiform.

Note : Fls. &Frts: Throught the year. A submerged plants found in tanks and ditches throughout Assam.

Conclusion:

The flora of Assam as well as North East India is still under explored (Rao 1994). The plains of the region are full of water resources. Sivasagar Sub-division of Sivasagar district that belongs to upper Brahmaputra valley zone of Assam has more than 1/4th of its total area under submerged condition Accordingly this area possessed a good potentiality of harbouring a diversity of aquatic plants which in turn is the life support of thousands of animals including the migratory birds , fishes and herbivores .Local

inhabitants also acquired innumerable useful commodities from such aquatic situations led by the vegetations .During the survey 05 different species belonging to 02 different genera of the family Polygonaceae had been found

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Role of Government Schemes in Promoting Educational Equity in Assam: A Secondary Data-Based Study

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Abstract

Educational equity aims to ensure that all learners have equal opportunities to access quality education regardless of their socio-economic status, gender, ethnicity, religion, or geographical location. Assam, a diverse state in North-East India, faces significant educational challenges due to geographical barriers, poverty, gender disparities, and the presence of marginalized communities. To address these challenges, both the Central and State Governments have implemented several educational schemes. This study examines the role of government schemes in promoting educational equity in Assam through the analysis of secondary data obtained from government reports, educational surveys, policy documents, and research studies. The findings reveal that schemes such as SamagraShiksha, PM POSHAN, Pre-Matric and Post-Matric Scholarships, Kasturba Gandhi BalikaVidyalaya (KGBV), and Assam's Free Textbook and Uniform Distribution Programmes have contributed significantly to improving enrolment, retention, and educational participation among disadvantaged groups. However, challenges such as regional disparities, infrastructural deficiencies, and learning outcomes continue to affect equitable educational development.

Keywords: Educational Equity, Government Schemes, Inclusive Education, SamagraShiksha, Scholarships

Introduction

Education is recognized as a fundamental human right and a key instrument for social and economic development. Educational equity refers to fairness and inclusion in educational opportunities, ensuring that all students have access to quality education regardless of their social, economic, cultural, or geographical backgrounds. In a diverse state like Assam, educational inequalities persist among rural and urban populations, tribal communities, tea garden workers, minority groups, and girls.

To address these disparities, the Government of India and the Government of Assam have introduced various educational schemes aimed at increasing enrolment, reducing dropout rates, improving retention, and ensuring equal access to quality education. These interventions align with the objectives of the National Education Policy (NEP) 2020 and Sustainable Development Goal 4, which emphasizes inclusive and equitable quality education for all (Ministry of Education, 2021).

Objectives of the Study

1. To examine the concept of educational equity in Assam.
2. To analyze major government schemes aimed at promoting educational equity.
3. To assess the contribution of these schemes towards inclusive education.
4. To identify challenges and suggest measures for improving educational equity.

Methodology

The study is based on secondary data collected from government reports, official websites, policy documents, journal articles, and published literature. Information was gathered from SamagraShiksha Assam, Ministry of Education reports, PM POSHAN documents, and recent reports on educational schemes implemented in Assam.

Concept of Educational Equity

Educational equity is a fundamental principle in education that seeks to ensure fairness, inclusion, and equal opportunities for all learners. It emphasizes that every student should have access to quality education regardless of their socio-economic status, gender, ethnicity, language, religion, disability, or geographical location. Educational equity recognizes that students come from diverse backgrounds and may face different challenges; therefore, resources and support should be allocated according to their needs rather than being distributed equally to everyone (Organisation for Economic Co-operation and Development [OECD], 2023).

Educational equity differs from educational equality. While equality refers to providing the same educational resources and opportunities to all learners, equity focuses on addressing individual differences and removing barriers that prevent certain groups from achieving educational success. Equity aims to ensure that personal and social circumstances do not determine educational outcomes (OECD, 2024).

According to UNESCO (2017), educational equity involves identifying and eliminating obstacles to participation and learning, particularly for disadvantaged and marginalized groups. It promotes an inclusive education system where every learner is valued and provided with the necessary support to achieve his or her full potential. UNESCO further emphasizes that inclusive and equitable education is essential for achieving social justice and sustainable development.

Levinson et al. (2022) identify two key dimensions of educational equity: fairness and inclusion. Fairness implies that factors such as poverty, gender, ethnicity, disability, or place of residence should not hinder educational opportunities, while inclusion ensures that all learners attain at least a minimum standard of education. Thus, educational equity extends beyond access to education and encompasses participation, learning processes, and educational outcomes.

In the Indian context, educational equity has become a major policy priority. The National Education Policy (NEP) 2020 emphasizes equitable and inclusive education for all learners, particularly those belonging to socially and economically disadvantaged groups. The policy advocates targeted interventions to address barriers related to poverty, gender discrimination, disability, language diversity, and geographical isolation (Government of India, 2020).

In Assam, educational equity is particularly significant due to the state's socio-cultural diversity and geographical challenges. Educational disparities exist among tribal communities, tea garden workers, minority populations, children with disabilities, and students residing in remote and flood-prone areas. Therefore, government schemes and educational programmes aim to reduce these inequalities by providing financial assistance, nutritional support, infrastructure development, scholarships, and inclusive educational opportunities.

Major Government Schemes Promoting Educational Equity in Assam

The Government of India and the Government of Assam have implemented several educational schemes to address inequalities in access, participation, retention, and learning outcomes among disadvantaged groups. These schemes focus on promoting inclusive and equitable education by providing financial assistance, nutritional support, infrastructure development, and special interventions for marginalized communities.

1. Samagra Shiksha

Samagra Shiksha is an integrated school education programme launched by the Government of India in 2018. The scheme covers pre-primary to senior secondary education and aims to ensure inclusive and equitable quality education for all learners. It focuses on universal access, gender equity, infrastructure development, teacher training, digital education, and inclusive education for children with disabilities (Ministry of Education, 2021).

In Assam, SamagraShiksha has supported the construction of classrooms, provision of free textbooks and uniforms, establishment of digital learning facilities, and implementation of programmes targeting girls, Scheduled Tribes (STs), Scheduled Castes (SCs), minority communities, and tea garden populations. The

scheme has played a crucial role in reducing educational disparities and improving school participation among disadvantaged groups (SamagraShiksha Assam, 2025).

2. PM POSHAN Scheme

The PM POSHAN Scheme, formerly known as the Mid-Day Meal Scheme, is a centrally sponsored programme that provides nutritious meals to students enrolled in government and government-aided schools. The primary objective of the scheme is to improve children's nutritional status while enhancing enrolment, attendance, and retention rates (Government of India, 2024).

In Assam, PM POSHAN has been particularly beneficial for students from economically weaker sections, rural communities, and tribal populations. By reducing classroom hunger and improving students' health, the scheme contributes to better learning outcomes and promotes educational equity (Government of India, 2024).

3. Kasturba Gandhi BalikaVidyalaya (KGBV)

Kasturba Gandhi BalikaVidyalaya (KGBV) is a residential schooling programme designed for girls belonging to disadvantaged communities, including Scheduled Castes, Scheduled Tribes, Other Backward Classes, minority communities, and economically weaker sections. The scheme seeks to reduce gender disparities in education by providing free residential education to girls from marginalized backgrounds (Ministry of Education, 2021).

Several KGBVs have been established across Assam, particularly in educationally backward and remote areas. These institutions have contributed significantly to increasing girls' enrolment, retention, and completion rates at the upper primary and secondary levels.

4. Pre-Matric and Post-Matric Scholarship Schemes

Scholarship programmes for SC, ST, OBC, minority, and economically weaker students play an important role in promoting educational equity. These schemes provide financial assistance to students for meeting educational expenses such as tuition fees, books, uniforms, and hostel charges (Ministry of Social Justice and Empowerment, 2024).

In Assam, scholarship schemes have enabled thousands of students from disadvantaged backgrounds to continue their education and reduce the likelihood of dropping out due to financial constraints.

5. Free Textbook and Uniform Distribution Programme

The Government of Assam, under Samagra Shiksha and other educational initiatives, provides free textbooks and uniforms to students enrolled in government schools. This intervention aims to reduce the financial burden on economically disadvantaged families and ensure that all children have access to essential learning materials (SamagraShiksha Assam, 2025).

The programme has been particularly beneficial for students from rural and low-income households and has contributed to increased enrolment and regular attendance.

6. Nijut Moina Scheme

The Nijut Moina Scheme, launched by the Government of Assam, aims to encourage girls to continue their education and prevent child marriage. The scheme provides monthly financial assistance to girls pursuing Higher Secondary, Undergraduate, and Postgraduate education (Government of Assam, 2025).

By reducing financial barriers and encouraging educational continuity, the scheme has emerged as an important initiative for promoting gender equity and women's empowerment in Assam.

7. Inclusive Education for Children with Special Needs (CWSN)

Under Samagra Shiksha, special provisions are made for Children with Special Needs (CWSN). The programme provides assistive devices, therapeutic support, resource teachers, home-based education, and barrier-free access to educational institutions (Ministry of Education, 2021).

These interventions promote inclusive education and ensure that children with disabilities receive equitable educational opportunities alongside their peers.

8. Vocational Education Programme

Vocational education initiatives under SamagraShiksha aim to equip students with employable skills and career-oriented competencies. Training is provided in various sectors such as information technology, retail, healthcare, agriculture, and emerging technologies. These programmes are particularly beneficial for students from rural and socio-economically disadvantaged backgrounds, enabling them to improve their future employment prospects (NCERT, 2023).

Impact of Government Schemes on Educational Equity

Government schemes have played a crucial role in reducing educational disparities and promoting equitable access to education in Assam. Through targeted interventions focusing on enrolment, retention, infrastructure, financial assistance, nutrition, and inclusion, these schemes have contributed significantly to improving educational opportunities for disadvantaged groups.

1. Improved Access to Education

Government initiatives such as SamagraShiksha have expanded educational access by establishing schools in underserved areas, improving school infrastructure, and providing free textbooks and uniforms. These measures have helped increase school participation among children from economically weaker sections, Scheduled Tribes (STs), Scheduled Castes (SCs), minority communities, and tea garden populations. Consequently, educational opportunities have become more accessible to previously marginalized groups (Ministry of Education, 2021).

2. Increase in Enrolment and Retention Rates

Various government schemes have contributed to increased enrolment and improved retention rates across different levels of education. Financial assistance programmes, scholarship schemes, and free educational resources have reduced the economic burden on families. Furthermore, the PM POSHAN Scheme has encouraged regular school attendance by addressing nutritional needs, particularly among children from low-income households (Government of India, 2024). As a result, dropout rates have gradually declined in several districts of Assam.

3. Promotion of Gender Equity

One of the most significant impacts of government interventions has been the promotion of girls' education. The NijutMoina Scheme provides financial incentives to girl students pursuing higher secondary and higher education, thereby encouraging continued educational participation and reducing the risk of child marriage. Such initiatives have contributed to increased enrolment, retention, and transition rates among female students in Assam (Government of Assam, 2025). Gender-focused interventions under Samagra Shiksha have further supported girls through menstrual hygiene awareness, self-defence training, and life-skills education.

4. Inclusion of Marginalized and Vulnerable Groups

Government schemes have strengthened educational inclusion by targeting socially and economically disadvantaged populations. Inclusive education programmes under Samagra Shiksha provide support services, assistive devices, and specialized educational resources for children with disabilities. Similarly, scholarship programmes and community outreach initiatives have helped improve educational participation among tribal communities, minority groups, and first-generation learners (Ministry of Education, 2021).

5. Improvement in School Infrastructure

Infrastructure development has been a major component of educational schemes in Assam. Government investments have facilitated the construction of classrooms, girls' toilets, drinking water facilities, boundary walls, and digital learning resources. Improved infrastructure creates a more conducive learning environment and enhances students' attendance, safety, and academic engagement (Government of Assam, 2024).

6. Enhancement of Learning Opportunities

Schemes promoting vocational education, digital literacy, and skill development have expanded learning opportunities for students. Vocational education programmes implemented under SamagraShiksha equip

learners with practical skills and career-oriented competencies, thereby improving employability and reducing educational inequalities between urban and rural populations (National Council of Educational Research and Training [NCERT], 2023).

7. Reduction of Socio-Economic Barriers

Educational equity is often constrained by poverty and social disadvantage. Government scholarships, free uniforms, textbooks, bicycles, hostels, and direct financial assistance have reduced financial barriers to education. These supports enable students from economically disadvantaged backgrounds to remain in school and continue their education, thereby contributing to greater educational equity (Government of India, 2024).

8. Strengthening Inclusive Education

Government policies and schemes have increasingly focused on inclusive education by ensuring that all learners, regardless of gender, disability, ethnicity, or socio-economic status, have access to educational opportunities. The implementation of equity-focused programmes aligns with the objectives of the National Education Policy (NEP) 2020, which emphasizes inclusion, accessibility, and quality education for all learners (Government of India, 2020).

9. Improved Educational Outcomes

The combined effects of increased enrolment, improved infrastructure, nutritional support, teacher training, and financial assistance have contributed to better educational outcomes. Students benefiting from these schemes demonstrate improved attendance, higher retention rates, enhanced learning participation, and increased progression to higher levels of education (UNESCO, 2023).

10. Contribution to Social Justice and Sustainable Development

By addressing disparities based on gender, socio-economic status, disability, and geographical location, government schemes contribute to social justice and human development. Educational equity initiatives support the achievement of Sustainable Development Goal 4 (SDG 4), which seeks to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (United Nations, 2015).

Challenges in Promoting Educational Equity in Assam

Despite the significant contributions of government schemes towards improving educational access and inclusion, several challenges continue to hinder the achievement of educational equity in Assam.

1. Geographical and Regional Disparities

Assam's diverse geographical landscape, including flood-prone areas, char (riverine) regions, hilly terrains, and remote rural villages, creates substantial barriers to educational access. Schools in these areas often face disruptions due to annual floods, inadequate transportation facilities, and poor connectivity, affecting students' regular attendance and learning outcomes (Goswami, 2020). These geographical disadvantages disproportionately affect marginalized communities and contribute to educational inequalities.

2. Inadequate Educational Infrastructure

Although infrastructure development has been prioritized under various government schemes, many schools in rural and char areas still lack essential facilities such as functional classrooms, libraries, laboratories, drinking water, electricity, and separate toilets for girls. Inadequate school infrastructure negatively affects students' learning experiences and contributes to absenteeism and dropout, particularly among adolescent girls (Pegu, 2025). Recent reports indicate that many schools in Assam continue to struggle with basic infrastructural deficiencies, limiting the effectiveness of educational interventions (Times of India, 2025).

3. Teacher Shortages and Quality Concerns

The shortage of qualified teachers remains a major challenge in Assam's education system. Remote and rural schools frequently experience teacher vacancies, multi-grade teaching, and inadequate professional support. Limited access to continuous professional development programmes further affects teaching quality and student achievement. Teacher shortages disproportionately impact disadvantaged

communities and undermine efforts to provide equitable educational opportunities (Goswami, 2020).

4. Socio-Economic Barriers

Poverty continues to be a significant obstacle to educational participation and attainment. Many families, particularly those belonging to Scheduled Tribes, tea garden communities, and economically weaker sections, struggle to meet educational expenses despite the availability of government assistance. Children from low-income households are often required to contribute to household income or domestic responsibilities, resulting in irregular attendance and higher dropout rates (Devi & Paul, 2025).

5. Gender-Based Challenges

While initiatives such as the NijutMoina Scheme have improved girls' enrolment and retention, gender disparities persist in certain regions of Assam. Early marriage, domestic responsibilities, safety concerns, and traditional gender norms continue to affect girls' educational participation, particularly in rural areas. Studies indicate that adolescent girls often face multiple socio-cultural barriers that limit their educational opportunities and contribute to discontinuation of schooling (Devi & Paul, 2025).

6. Digital Divide and Technological Inequality

The increasing integration of digital technologies in education has highlighted significant disparities in access to digital resources. Rural and tribal students often lack access to smartphones, computers, reliable internet connectivity, and digital learning materials. Furthermore, limited digital literacy among students, parents, and teachers exacerbates educational inequalities. The digital divide became particularly evident during and after the COVID-19 pandemic and continues to affect equitable access to quality education in Assam (Sarma&Sarma, 2025).

7. Linguistic and Cultural Barriers

Assam is characterized by considerable linguistic and cultural diversity. Students from tribal and minority communities often encounter difficulties when instructional materials and digital content are not available in their native languages. Language barriers can negatively affect comprehension, participation, and academic achievement, thereby limiting educational equity (Sarma &Sarma, 2025).

8. Implementation and Monitoring Challenges

The success of educational schemes depends largely on effective implementation and monitoring. Delays in fund allocation, administrative inefficiencies, inadequate monitoring mechanisms, and uneven implementation across districts often reduce the impact of government programmes. Variations in local administrative capacity can result in unequal benefits for different regions and population groups.

9. Learning Outcome Gaps

Although enrolment rates have improved significantly, learning outcomes remain a concern. Several reports indicate that students in rural Assam continue to perform below national averages in foundational literacy and numeracy skills. Improving access alone is insufficient unless accompanied by measures to enhance the quality of learning and educational achievement (ASER, 2024).

Suggestions for Enhancing Educational Equity in Assam

Based on the findings of the study, the following suggestions are proposed to strengthen the effectiveness of government schemes and promote educational equity in Assam.

1. Strengthen Educational Infrastructure in Rural and Remote Areas

The government should prioritize the development of educational infrastructure in rural, flood-prone, char, and hilly regions of Assam. Adequate classrooms, libraries, laboratories, digital learning facilities, electricity, safe drinking water, and separate sanitation facilities for girls should be ensured in all schools. Improved infrastructure not only enhances learning outcomes but also increases attendance and retention rates among students from disadvantaged communities (UNESCO, 2023).

2. Enhance Teacher Recruitment and Professional Development

A sufficient number of qualified teachers should be recruited, particularly in remote and underserved areas. Regular teacher training programmes should be

organized to improve pedagogical skills, digital competencies, inclusive teaching practices, and classroom management. Continuous professional development can significantly improve the quality of education and reduce learning disparities among students (National Education Policy [NEP], 2020).

3. Expand Digital Inclusion Initiatives

The digital divide remains a major challenge in educational equity. Government agencies should ensure affordable internet access, digital devices, and digital literacy programmes for students and teachers in rural areas. Schools should be equipped with smart classrooms and ICT facilities to support technology-enabled learning. Special attention should be given to students from economically disadvantaged families who may lack access to digital resources (UNESCO, 2023).

4. Strengthen Financial Support for Disadvantaged Students

Scholarships, stipends, free textbooks, uniforms, bicycles, and hostel facilities should be expanded to support students from Scheduled Tribes (STs), Scheduled Castes (SCs), minority communities, tea garden families, and economically weaker sections. Financial assistance should be disbursed in a timely manner to reduce economic barriers and encourage students to continue their education (Ministry of Education, 2021).

5. Promote Girls' Education and Gender Equity

Although significant progress has been achieved through initiatives such as the NijutMoina Scheme, further efforts are required to address gender-based barriers. Awareness programmes should be conducted to discourage child marriage and promote the importance of girls' education. Schools should provide a safe and supportive environment through gender-sensitive infrastructure, menstrual hygiene management, and counselling services. Community participation should also be encouraged to support girls' educational aspirations (Government of Assam, 2025).

6. Improve Monitoring and Evaluation of Government Schemes

Effective implementation requires regular monitoring and evaluation of educational programmes. The government should establish robust monitoring mechanisms to assess the performance, coverage, and outcomes of various schemes. Data-driven decision-making can help identify gaps, improve resource allocation, and ensure that benefits reach the intended beneficiaries. Transparency and accountability should be strengthened at all administrative levels (Ministry of Education, 2021).

7. Enhance Community Participation and Awareness

Parents, local communities, village education committees, and civil society organizations should be actively involved in educational planning and implementation. Community engagement can increase awareness regarding the importance of education, reduce dropout rates, and create a supportive environment for learners. Special awareness campaigns should target marginalized communities where educational participation remains low (UNICEF, 2022).

8. Strengthen Inclusive Education Practices

Children with disabilities, first-generation learners, migrant children, and students from marginalized communities require additional support to achieve educational success. Schools should provide assistive devices, specialized learning materials, trained special educators, and barrier-free infrastructure. Inclusive classroom practices should be promoted to ensure that all learners receive equitable educational opportunities regardless of their abilities or backgrounds (NEP, 2020).

9. Focus on Learning Outcomes Alongside Enrolment

While government schemes have successfully increased enrolment rates, greater attention should be given to improving learning outcomes. Regular assessment of foundational literacy and numeracy skills, remedial teaching programmes, and learner-centred pedagogical approaches should be implemented. Educational quality should become a central focus of equity-oriented policies (ASER Centre, 2024).

10. Develop Context-Specific Educational Policies

Assam is characterized by significant geographical, linguistic, and cultural diversity.

Educational policies and programmes should be tailored to address the specific needs of tribal communities, char areas, tea garden populations, and minority groups. Local languages and culturally relevant teaching-learning materials should be incorporated into the curriculum to improve participation and learning outcomes among diverse populations (Government of India, 2020).

11. Strengthen Vocational and Skill-Based Education

Vocational education and skill development programmes should be expanded at the secondary and higher secondary levels. Such programmes can enhance employability, reduce school dropout rates, and provide alternative pathways for socio-economically disadvantaged students. Partnerships with industries and local enterprises can further improve employment opportunities for youth (NCERT, 2023).

12. Promote Interdepartmental Coordination

Educational equity is influenced by factors such as health, nutrition, social welfare, transportation, and rural development. Therefore, effective coordination among different government departments is essential for addressing the multidimensional barriers affecting educational participation. Integrated approaches can create a more supportive ecosystem for learners from disadvantaged backgrounds (United Nations, 2015).

Conclusion

Government schemes have played a significant role in promoting educational equity in Assam by improving access, participation, retention, and inclusion among disadvantaged populations. Programmes such as Samagra Shiksha, PM POSHAN, and NijutMoina have contributed substantially towards reducing educational disparities. However, achieving complete educational equity requires sustained policy efforts, adequate resource allocation, and continuous monitoring. Strengthening existing schemes and addressing persistent challenges will be essential for ensuring inclusive and equitable quality education for all learners in Assam.

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The role of translation in emergence of Modern Arabic Novel and enhancement of its global readership

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Abstract:

The emergence of novel in Modern Arabic literature is result of a broader process of resurrection and cultural assimilation. This process entailed a creative combination of two distinct vitalities. One is the rediscovering of the heritage of the Arabic literary tradition and the other is the translation of European literature into Arabic, its modification and imitation, and the eventual emergence of a native contemporary Arabic literary fiction.Rifa'a al-Tahtawi was the first Egyptian to translate a Western novel, namely *Les Aventures de Telemaque*by the French priest Fenelon, which he gave a rhyming title, *The Positions of the Planets in the Events of Telemaque,*and published in 1867 AD. After that many Arabic writers followed him and translated many European novels into Arabic. Later original novels were written especially In Syria and Egypt. Such novels were influenced by 'Maqama' style of Abbasid period. Finally HussainHykal wrote his famous novel *Zainab* which considered first fully fledged novel of literary merit in Arabic literature.From that time till today hundreds of Arabic novels have been written which enriched modern Arabic literary worlds. Again translation plays a pivotal role in communicating Arabic novels to the global readers, encouraging cultural understanding, and highlighting Arab literary history on the international arena. This article aims to explore how translation has contributed to the growth and development of Arabic novel and bringing it to the global readers.

Keywords : emergence of novel, cultural assimilation, rediscovering of the heritage, cultural understanding

Introduction:

Translation is a very important means for intercultural communication. It facilitates the exchange of ideas and beliefs amongst various societies. It has been crucial to the evolution of global culture. Translation has always served as a bridge between civilizations. In the Arab world, the act of translation dates back to the 2nd century when the Arabs translated Persian history into Arabic and it went through several stages of transformation. It reached its peak during theAbbasid Period especially at the time of Caliph Al-Mamun, who built 'Bait Al Hikma' (House of Wisdom) which was the greatest institute of translation at that time. During that time, the major Islamic capital cities of Baghdad, Cairo and Cordoba became the main intellectual centres for science, philosophy, medicine, trade, literature and education and the scholars from different parts of the world sought to learn and transfer knowledge to and from Arabic. They were keen on translating the knowledge of the ancient civilizations into Arabic and Persian. Later on, all of this knowledge which the Arabs developed was translated into western languages like Turkish, Hebrew and Latin. During this time, some prominent figures like Ibn al-Muqaffatranslated great manuscripts from Indian and Persian like *Kalilawa Dimna* (Panchatantra). History of Arabic literature can be divided into five key periods- Pre-Islamic period, Islamic period, Abbasid period, Ottoman period and modern period. The Modern Period that emerged during the 19th and early 20th centuries as a transformative era in Arabic literature has been marked by the influence of Western literary forms and

a revival of classical Arabic traditions. This period coincided with broader cultural and intellectual renewal in the Arab world, often referred to as the **Arab Renaissance** which sought to modernize literature while preserving its historical roots.

Arabic fictional traditionhas evolved significantly as a result of translation and it accelerated the shift from classical oral and prosimetric traditions to the modern Arabic novel. Itincorporated new narrative forms by providing Arab authors with the means to critique society and maintain their cultural identity. Rifa'a al-Tahtawi was the first Egyptian to translate a Western novel into Arabic.After that many Arabic writers followed him and translated many European novels into Arabic. Later original novels were written especially In Syria and Egypt following classical method. Finally HussainHykal wrote his famous novel *Zainab* which considered first fully fledged novel of literary merit in Arabic literature.Since then, hundreds of Arabic novels have been written and translated communicating them to the global readers. It helped to expand the readership and foster cultural understanding among people worldwide.

Emergence of Novel in modern Arabic Literature:

The novel is a literary genre and fictional narrative of considerable length and a certain complexity that deals with human experience imaginatively usually through a connected sequence of events involving a group of persons in a specific setting. In Arabic literature, it emerged in its modern form in the late 19th century, influenced by Western literature and its roots are drawn from traditional narrative arts such as Maqamatand folk tales.Translation had been a cornerstone in the emergence and development of the modern Arabic novel. It has not only facilitated the transfer of Western texts but has also established artistic forms, revitalized narrative language and introduced Arab culture to a global audience. Critical opinions vary regarding the first pioneering work. Some point to *Ghadat al-Zahira* by Zaynab Fawwaz, while others attribute the distinction to pioneers like Jurji Zaydan and his historical works. Many critics generally regard *Zaynab* by Muhammad Husayn Haykal (1914) as the first Arabic novel in the modern artistic sense.The Golden Era of Arabic novel started from Egyptian novelist Naguib Mahfouz who enriched the Arab literary canon with realist, historical and philosophical masterpieces and his achievements were crowned by winning the Nobel Prize in Literature in 1988.

Translation and its impact on the growth and development of Arabic novel:

The beginnings of the Arabic novel were linked to the translation and adaptation movement during the Renaissance. In 1867 AD, Rifa'a al-Tahtawi was the first Egyptian to translate a Western novel, namely *Les Aventures de Telemaque* by the French priest Fenelon which he named, *The Positions of the Planets in the Events of Telemaque* following the method that was common in many ancient Arabic works in later times. Among those who contributed to the translation of novels at that time was Muhammad Uthman Jalal, one of Rifa'a's students, who translated Bernardin Saint-Pierre'snovel *Paul and Virginie*in 1872 AD giving it the title*The Wishes and the Favour in the Discourse of Acceptance and the Rose of Paradise.*The other translators include Hafez Ibrahim, translator of *Les Miserables* by Victor Hugo, Saleh Gawdat, translator of *The Secret of Confession* (1905), *The Victim of Chastity*, *The Sinful Hand* and *The Hidden Weapon* (1906), Abdul Qader Hamza, translator of *Hania* (1905), and Al-Manfaluti, translator of *For the Sake of the Crown*, *The Poet or Cyran de Bergerac*, *Virtue or Paul and Virginie*, and *Magdalene or Under the Linden Trees*. These are just a few examples of the names of the pioneering Egyptians in the field of novel translation.

From Lebanan,mention can be made of Butrus al-Bustani who translated *Robinson Crusoe* by Daniel Defoe (1861)entitling it *The Garden Masterpiece on Crusader Travels,* and Yusuf Sarkis, translator of *The Flight in the Aircraft* by Jules Verne (1875). Alexis Zmukhul, the translator of *The Three Roses* by Francois Coppee and Khalil Thabit translator of *The Bride of the Nile* by the German Georg Ebers and YaqubSarruf, translator of *The Queen of England*are also the

Lebanese translators. From Palestine, Khalil Beidas is worth mentioning who translated some novels from Russian and others, such as-The *Captain's Daughter* by Pushkin (1898), *The Misery of Kings* by the English writer Marie Corelli ,*The Horrors of Despotism*and *Anna Karenina* by Tolstoy (1909), Ahmed Shaker Al-Karmi also translated a large number of short stories by Chaucer, Tolstoy, Oscar Wilde, Chekhov and Guy De Maupassant.

Among the translated novels in Iraq is the novel *Justice is the Foundation of the Kingdom*.It is translated from English, it promotes the value of justice and strictness in it as the basis of good governance. As for Yemen, references can be made of two translated stories*: A Widow on a Grave* by Charles Dickens (1944) and *My Wife or His Wife* by Bernard Hollywood translated by Abdullah Abdul Rahim (1945).There is also an Algerian translation of Chateaubriand's *The Last of the Sirajids* by Ahmed al-Faghoun published in 1864. In Tunisia, among the early translators of European novels, the names of Muhammad al-Mushirqi, al-Arabi al-Jalouli, Ibrahim Fahmi bin Shaaban, Muhammad Najib, and Abdul Aziz al-Waslatideserve tomention.

These early translations gave the Arab writer the opportunity to become acquainted with Western narrative techniques which helped in the crystallization of the art of the Arabic novel and its independence from the traditional narrative arts (such as the Maqama). Translation task formed a vital window through which Arab novelists looked out at international literary schools, such as realism, romanticism, stream of consciousness and magical realism. This interaction helped Arab writers to create artistic forms that combine the Arab spirit with modern techniques, such as incorporating elements of "self-translation" into newly developed novelistic forms. These translated novels played a vital role in developing the linguistic structure of Arabic literature and contributed to freeing narrative writing from the constraints of rhyme and rhetorical devices that were prevalent.

Role of translation in enhancement the global readership of Arabic novel:

Fictional tradition in modern Arabic literaturebegan in the second half of the 19th century with translation from French and English novels especially in Egypt and Lebanon. Later original novels were written; many of them appeared in serial form in magazines. The original Arabic novel as opposed to translation first flourished in Syria. The first novelist wasAntun al Saqqal (1825-85) whose novelis better known was *al ashumelnariya*.The poet Francis Fathullah Maras (1836-73) wrote a novel named *Durr al Sadaf fee Gharaib al Sadaf* in 1870. Nueman bin Abdul al Qastali (1854-1920) wrote three novels which were published in between 1880-1882. Some Syrian novelist chose historical themes. Abdul masihAntaki wrote *Amaiden of Israel* while Abdul hameed al-Zahawi wrote *Khadija Mother of Belivers*. In the Lebanon also, the novel also developed. Salim, the son of Butrus al Bustani wrote a series of social novels, while JurgiZaidan (1861-1914) wrote a series of historical novels. They are very popular and many have been translated into French, German and some oriental languages. Finally HussainHykal wrote his famous novel *Zainab* in 1914 which is considered the first fully fledged novel of literary merit in Arabic literature. From Husain Hykal the journey of Arabic novels in the modern artistic sense have been started and this journey is flourishing day by day.

Modern Arabic literature has produced numerous novels that transcended linguistic and cultural boundaries to reach readers across the globe. Arab authors have succeeded in creating works imbued with profound human values, thereby attracting the attention of international critics and translators. Consequently, many Arabic novels have been translated into various languages contributing to their widespread dissemination and global impact. Certain Arabic novels are distinguished by a unique character that blends compelling storytelling with a deep exploration of societal, political, and cultural issues earning them significant attention in the West. *One Thousand and One Night* influenced numerous international writers, while the works of Naguib Mahfouz paved the way for Arabic literature to secure prestigious global honour, such as the Nobel Prize.Furthermore, the works of novelists such as TayebSalih, Elias Khoury, and Alaa Al-Aswany have played a pivotal role in shaping the

realm of modern Arabic literature on the global stage. Their novels address themes of identity, colonialism and political transformation, garnering widespread appreciation from international readers and critics alike.

Naguib Mahfouz succeeded in placing Arabic literature on the global map when he won the Nobel Prize in Literature in 1988 becoming the first Arab writer to receive this prestigious honour. His works- such as *The Cairo, Trilogy* and *Midaq Alley*- reflected Egyptian reality across various social strata, lending them a universal quality that facilitated their reach to international readers.Mahfouz's novels addressed profound political and social themes including authoritarianism, poverty and the conflict between modernity and tradition garnering significant attention in the West. Consequently, his works have been translated into more than 30 languages establishing them as some of the most prominent literary pieces reflecting Arab society and its transformations over the decades.Beyond his literary impact, the Nobel Prize helped spotlight Arabic literature as a whole, paving the way for the translation of more Arab novels into global languages. Mahfouz's influence endures to this day as his works continue to be taught at universities worldwide and discussed within international literary circles.

The works of Tayeb Salih, Elias Khoury, and Alaa Al-Aswany have achieved widespread acclaim in global literary circles as they address universal human issues that transcend geographical and cultural boundaries. By exploring themes such as colonialism, identity and social conflict, these novels have captured the attention of readers and critics worldwide. Tayeb Salih's novel *Season of Migration to the North* garnered global attention by addressing the identity conflict between East and West through a protagonist living a dual existence between Sudan and Britain. Regarded as a seminal work examining the impact of colonialism on Arab peoples, the novel is studied at universities around the world and has been translated into numerous languages.

Elias Khoury produced literary works that reflect Palestinian and Lebanese issues through a distinctive narrative style. His novel *Gate of the Sun* earned global admiration for its portrayal of the Palestinian refugee tragedy and the impact of the occupation on their lives. Consequently, the novel attracted significant attention and was adapted into a feature film, further expanding its global reach.Alaa Al-Aswany succeeded in drawing attention to modern Egyptian society through his novel *The Yacoubian Building* which shed light on political corruption and class disparity in Egypt. The novel achieved immense global success, having been translated into more than twenty languages making it one of the most renowned Arabic novels of the modern era.

Conclusion:

The growth and development of Arabic novel underwent several stages before reaching maturity and widespread recognition. The beginning stage was translation and adaptation. The translation of western novels into Arabic gave the Arab writer the opportunity to become acquainted with Western narrative techniques, which helped in the upliftment of the art of the Arabic novel and its independence from the traditional style and technique. Translation formed a vital window through which Arab novelists looked out at international literary schools such as realism, romanticism, modernism, stream of consciousness and magical realism. This interaction helped Arab writers to create artistic forms that combine the Arab spirit with modern techniques such as incorporating elements of "self-translation" into newly developed novelistic forms. Just as translation played a role in importing literature, it has become a driving force in bringing Arab creativity to the global reader. Translations of Arabic novels (by prominent figures such as Naguib Mahfouz) have succeeded in placing Arabic literature on the world map resulting in the crowning of leading Arab novelists with prestigious international literary awards.In conclusion, translation serves as a cultural bridge that conveys ideas and creative visions from Arab culture to the rest of the world enabling Arab writers to reach new audiences and enhance their cultural and intellectual impact.

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Silver and Gold Nanoparticles Against Antimicrobial Resistance: Emerging Nanotechnological Strategies for Combating Drug-Resistant Pathogens

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Abstract

Antimicrobial resistance (AMR) is acknowledged as one of the biggest public health, food security and sustainable development challenges for the world. Multidrug-resistant (MDR) microorganisms are becoming more common, which means that these bacteria are no longer susceptible to traditional antibiotics, resulting in longer illnesses, more costs and greater mortality. The emergence of resistant pathogens has been very fast, and as a consequence, other antimicrobial strategies that could escape the already established resistance mechanisms are being sought. Nanotechnology is a promising area on this line as the nanoparticles have unique physicochemical properties. Silver Nanoparticles (AgNPs) and Gold Nanoparticles (AuNPs) are some of the metallic nanoparticles that have been in the spotlight due to their antimicrobial activity, targeting multiple structures of microorganisms at once, and potential to increase the effectiveness of existing antibiotics. The antimicrobial activity of silver nanoparticles is due to destruction of the cell membrane, induction of reactive oxygen species, denaturation of proteins and damage to DNA. Although Gold nanoparticles have comparatively lower intrinsic antimicrobial activity, it can be used as an excellent drug delivery system and can be functionalized with an antimicrobial molecule to enhance the therapeutic efficacy. This chapter addresses the emerging issue of antimicrobial resistance, mechanisms of microbial resistance, and the increased use of silver and gold nanoparticles to fight resistant pathogens**.**

Keywords: Antimicrobial resistance, Silver nanoparticles, Gold nanoparticles, Nanotechnology, Multidrug resistance, Antibacterial activity

Introduction

With the discovery of antibiotics, modern medicine and how we treat infectious diseases changed. Antibiotics have been a major contributor to lowering the morbidity and mortality due to bacterial infections since their advent in 1928 by Alexander Fleming. Major strides in surgery, organ transplantation, cancer treatment, and intensive care medicine have been made possible by the effectiveness of antibiotics. But, this life-saving medicine is becoming more compromised by the rise and spread of antimicrobial resistance (AMR) (Ventola, 2015).Antimicrobial resistance is when microorganisms develop resistance to the antimicrobial agents which were once effective against them. Treatment does not always eradicate resistant pathogens; they grow and multiply and result in persistent infections and greater spread of infection in communities and healthcare settings. AMR is the ability of microorganisms, such as bacteria, fungi, viruses and parasites, to grow in the presence of a substance that is typically lethal to them. Although bacterial resistance is the most recent crisis in the world (WHO, 2023).The general overuse and misuse of antibiotics in human medicine, veterinary medicine and agriculture have contributed to the development of resistance. Antibiotics are often indiscriminately or without clinical oversight given in many parts of the world. Likewise, the consistent use of antibiotics in animal husbandry also

aids in the emergence and spread of resistance. These practices put pressure on susceptible strains and allow resistant strains to spread resistance genes within a microbial population (More et al., 2023).The effects of AMR are far-reaching. Extended hospitalizations, greater costs of care, fewer treatment options and death rates are all linked to resistant infections. AMR is considered to be one of the greatest public health challenges in the world today by the World Health Organization. If left untreated, some of the most common bacterial infections could be again resistant and hard or impossible to treat, jeopardizing all the medical advances in decades (WHO, 2023).

Considering the limitations of the traditional antibiotics, researchers have started to look for alternative antimicrobial solutions. Nanotechnology is one of these solutions that has been found to be promising. Due to their small size, nanoparticles have special physical and chemical properties which allow them to interact with microbial cells in new ways. As opposed to traditional antibiotics that typically interfere with one function within the cell, nanoparticles can impact several functions and structures within the cell, making it harder to give rise to resistance (More et al., 2023).

Silver nanoparticles (AgNPs) and gold nanoparticles (AuNPs) have had the most promising results as antimicrobial agents among the different nanomaterials studied. They possess distinct physicochemical characteristics, against a wide range of microorganisms, and are able to complement current antimicrobial treatments, making them useful agents in combating antimicrobial resistance.

2.A Global Threat to Health: Antimicrobial Resistance

2.1.Understanding Antimicrobial Resistance

Antimicrobial resistance is a natural process of evolution; however, it has been hastened to a significant extent by human activities. Resistance can be either intrinsic or acquired. Intrinsic resistance is resistance in microorganisms that is intrinsic to the organism; that is, inherent to its natural structure or physiology. Resistance that occurs as a result of a mutation in the microorganism or the introduction of resistance genes by another microorganism is called acquired resistance (Blair et al., 2015).

The genes for resistance can be transferred from one bacterium to another by horizontal gene transfer (conjugation, transformation and transduction). These mechanisms make it possible for resistance determinants to be spread quickly among members of the bacterial population and even between bacterial species. This means that resistance can easily be transmitted in healthcare systems and communities (Munita& Arias, 2016).

2.2. Mechanisms of Antimicrobial Resistance

Microorganisms employ several mechanisms to evade the action of antimicrobial agents. One of the most common mechanisms involves enzymatic degradation of antibiotics. For example, â-lactamase enzymes hydrolyze â-lactam antibiotics such as penicillins and cephalosporins, rendering them ineffective (Blair et al., 2015).

Another important mechanism is target modification. Bacteria can change the molecular structure that the antibiotic binds to, making the drug less effective. For example, methicillin-resistant Staphylococcus aureus (MRSA) makes modified penicillin-binding proteins that have lower affinity to â-lactam antibiotics (Munita& Arias, 2016). Permeability changes of the membrane are also a major factor in resistance. Changes in membrane proteins reduce the uptake of antibiotics into the bacterial cells, reducing the concentration of antibiotic within the cell. Moreover, many bacteria have efflux pumps which actively pump the antimicrobial agent out of the cell before it can reach its targets (Blair et al., 2015).

Another important strategy for resistance is biofilm formation. Biofilms are complex microbial aggregates in an extracellular matrix produced by the microbes themselves. Biofilm bacteria are far more resistant to antibiotics and host immune responses than are free-living bacteria. Biofilm associated infections are especially hard to treat and can often lead to chronic infections or medical device associated infections (Costa et al., 2018).

2.3. Global Burden of Antimicrobial Resistance

AMR is a significant global problem and is on the rise. In 2019, a landmark study by Murryet al. (2022) estimated that direct bacterial antimicrobial resistance causation accounted for some 1.27 million deaths globally and was a contributor to almost 4.95 million deaths. These are just a few of why there is a pressing need for more effective solutions to tackle resistant infections.A few bacterial pathogens have become significant causes of death due to AMR. These are methicillin-resistant Staphylococcus aureus (MRSA), carbapenem-resistant Acinetobacterbaumannii, multidrug-resistant Pseudomonas aeruginosa and resistant strains of Escherichia coli and Klebsiellapneumoniae (Murray et al., 2022).

The economic impact of AMR is also worrying. Resistant infections can result in longer hospital stays, extensive testing and the use of more expensive second/third line drugs. Healthcare costs resulting from this put a large strain on healthcare systems globally. Furthermore, the economic and social costs of resistance are exacerbated by reduced productivity associated with disease and early death (WHO, 2023).

2.4. Need for Alternative Antimicrobial Strategies

In recent years, the efficacy of standard antibiotics has declined, and scientists are now keen on finding new methods to tackle infectious diseases. Some possible solutions are antimicrobial peptides, bacteriophage therapy, probiotics, immunotherapy, CRISPR-based technologies and nanotechnology-based interventions (Huh & Kwon, 2011).Of these new strategies, nanotechnology has been one of the most promising, as nanoparticles may have many ways of interacting with microorganisms. The small size, large surface area to volume ratio and surface tuning of these particles enable them to enter microbial barriers, disrupting the biofilms, induce oxidative stress, and deliver antimicrobial agents directly to the target cells (Rai et al., 2012).Silver and gold nanoparticles are among the most promising to fight resistant pathogens. They are able to bind to several cellular structures at once, making resistance much less likely, and providing new therapeutic potential for treating multidrug resistant infections.

3. Nanotechnology: A Hopeful Weapon to fight AMR

Nanotechnology is the science of controlling and using materials at the nanometer scale (1 to 100nm). At this scale, the materials possess special physical, chemical, optical and biological properties, which are totally different from those of bulk materials (Rai et al., 2012).

There are a number of benefits that nanoparticles can provide in antimicrobial use. Their micro scale allows close contact with microbial cells, and penetration into biofilms. Second, they have a big surface area which makes them more reactive and gives them a better antimicrobial effect. Third, nanoparticles can be tailored to deliver therapeutic compounds selectively, providing controlled release and targeted drug delivery. Lastly, they possess the capability to target microorganisms in several ways, which makes it less likely for resistance to occur (More et al., 2023).The most commonly studied and promising nanomaterials for antimicrobial applications are silver and gold nanoparticles because of their antimicrobial efficiency, versatility, and biomedical applications.

4. Silver Nanoparticles: Synthesis, Properties, Mechanisms and Applications to Combat Antimicrobial Resistance

Silver nanoparticles (AgNPs) are one of the more widely studied metallic nanomaterials used for antimicrobial purposes. Their strong antimicrobial activity and the fact they are relatively easy to synthesize and are active against a variety of microorganisms make them interesting alternatives for reducing antimicrobial resistance. Unlike conventional antibiotics, which typically attack a single pathway in the cell, silver nanoparticles act on several pathways that serve as multiple points of attack, thereby reducing the potential for the emergence of bacterial resistance (More et al., 2023).

4.1. Antibacterial and antifungal properties of silver nanoparticles

Silver's antimicrobial qualities have been known for thousands of years. Silver vessels were used by the ancient Greeks, Romans and Egyptians to store

water and food to keep it from spoiling. Silver compounds were used extensively in wound treatment and prevention of infection before the advent of antibiotics. Silver nitrate was commonly used in medicine, especially as a means of preventing neonatal eye infections and treating burns (Rai et al., 2012).Nanotechnology has greatly improved the antimicrobial abilities of silver. The researchers have shrunk the silver particles to a nanoscale size, which has boosted their surface area and reactivity, making them more capable of interacting with the microbial cells. Thus, silver nanoparticles have emerged as one of the most significant nanomaterials used in the investigation of antimicrobial properties.

4.2. Silver Nanoparticles Synthesis

The physical, chemical, and biological methods can be used to produce silver nanoparticles. The method of synthesis affects the size, shape, stability and biological activity of nanoparticles.

4.2.1. Physical Methods

Physically, the methods used for the synthesis of nanocrystals are evaporation-condensation, laser ablation, ball milling and thermal decomposition. The methods are typically very high purity, and do not require the use of harmful chemicals. But they are generally energy intensive and are expensive to purchase, making them more suitable for limited production and application (Menichetti et al., 2023).

4.2.2. Chemical Methods

One of the most common methods for the synthesis of AgNPs is chemical reduction. With this technique, the silver salts are reduced to metallic silver with sodium borohydride, citrate, hydrazine or ascorbic acid. To prevent aggregation and nanoparticle stability, usually stabilizers are added.Chemical synthesis provides benefits of simplicity, reproducibility and scalability. However, there are potential issues about the environmental and biological safety of using potentially hazardous chemicals.

4.2.3. Biological or Green synthesis

This green synthesis has become an environmentally-friendly way to make these. Nanoparticles are formed by using plant extracts, bacteria, fungi, algae and other biological materials as reducing and stabilizing agents.Plant-mediated synthesis is specially appealing as it is inexpensive, environmentally friendly and the production of biocompatible nanoparticles. Flavonoids, polyphenols, alkaloids, and terpenoids are some of the phytochemicals that are important in reducing the silver ions and stabilizing the resulting nanoparticles (Rodrigues et al., 2024).

4.3 Factors affecting the efficacy of silver Nanoparticles

The microbial action of compounds is affected by their physicochemical properties. The physicochemical properties that are known to affect the antimicrobial activity of compounds.The antimicrobial activity of silver nanoparticles is influenced by a variety of physicochemical properties such as size, shape, surface charge and surface functionalization.

4.3.1. Particle Size

One of the most important parameters of antimicrobial activity is particle size. Smaller nanoparticles show higher surface area to volume ratio, which means that there are more interactions with microbial cells. It has been observed that nanoparticles with a diameter less than 20 nm can have more significant antimicrobial properties due to their ability to penetrate the bacterial cell wall (Menichetti et al., 2023).

4.3.2. Shape and Morphology

Silver nanoparticles may have different shapes such as spheres, rods, cubes, triangles or prisms. Shape affects the exposure of crystal facets and how they interact with microbial cells. Various studies revealed that the antimicrobial activity of triangular nanoparticles is higher compared to spherical ones, because of the higher reactivity of their surfaces (Menichetti et al., 2023).

4.3.3. Surface Charge

The surfaces of most bacteria are negatively charged. Thus, the positively charged Ag nanoparticles may have greater interactions with the microbial membranes, thereby having increased antimicrobial activity.

4.3.4. Surface Functionalization

Nanoparticles can be modified by coatings and functionalization for biological behavior. Surface modification increases stability, decreases aggregation, increases biocompatibility and allows targeted antimicrobial action.

4.4. Mechanism of antimicrobial properties of silver nanoparticles

The attractive property of silver nanoparticles is that they possess several mechanisms for which they can attack microorganisms at the same time. This polyphasic mode of action does not allow pathogens to become resistant.

4.4.1. Cell membrane disruption: occurrence of this disrupts the integrity of the cell membrane.

The bacterial cell membrane is an important barrier to the transport of nutrients and waste products. Silver nanoparticles bind to cell surface, and react with cell surface proteins and phospholipids.

These interactions change the structure of the membranes and enhance their permeability, causing the leakage of intracellular components including ions, proteins and nucleic acids. At some point membrane disruption results in loss of cell integrity and cell death (More et al., 2023).

4.4.2. The production of Reactive Oxygen Species (ROS).

Silver nanoparticles activate the generation of ROS such as hydroxyl radicals, superoxide radicals, and hydrogen peroxide. When too much ROS is produced, it results in oxidative stress inside microbial cells.Oxidative stress affects vital cell components like lipids, proteins, enzymes and DNA in the cell. The antimicrobial effect of silver nanoparticles (AgNPs) is attributed to a build-up of oxidative damage (Rodrigues et al., 2024).

4.4.3. Release of Silver Ions

The antimicrobial properties of the silver ions (Agz) are continuously released by the silver nanoparticles. These ions disrupt metabolic function through the disruption of cell protein activity that contains thiol groups, resulting in enzyme inhibition.Silver ions may also be toxic to the enzymes needed for respiration to generate ATP, so affecting cell function (More et al., 2023).

4.4.4. DNA Damage and Inhibitions of Replication

Both silver nanoparticles and silver ions generated can enter the cells and directly react with DNA molecules of bacteria. This interaction disrupts DNA replication, transcription and gene expression.This results in a decrease in the growth of bacteria and cell division, and ultimately, death of the bacteria. The wide spectrum antimicrobial activity of AgNPs is also attributed to the damage inflicted on DNA.

4.4.5. Protein Denaturation

There are numerous cellular proteins with sulfhydryl groups which easily react with silver ions. Sterilisation of proteins by binding silver ions leads to the degradation of enzyme structures and functions and the disruption of key biochemical pathways.This process impacts multiple cellular functions at once, with the result being that microbial adaptation is more challenging.

4.4. 6Antibiofilm Activity

Biofilms are one of the most difficult features to deal with in relation to antimicrobial resistance. In biofilms, the microorganisms are enclosed in an extracellular polymeric matrix that shields them from the effects of antibiotics and immune system responses from the host.There is a remarkable antibiofilm activity of silver nanoparticles. They are able to invade biofilm matrixes, interfere with communication systems (quorum sensing) and prevent biofilm development. Furthermore, AgNPs can disrupt the existing biofilms and increase the ability of bacteria in biofilms to be more susceptible to antimicrobial agents (Costa et al., 2018).

Biofilm associated infections are the most common in chronic wounds, medical implants, urinary catheters and other healthcare associated settings, therefore the ability of silver nanoparticles to target these infections is of special interest.

5. Gold Nanoparticles: Properties and Applications Against Antimicrobial Resistance

The ease of surface modification, chemical stability and excellent biocompatibility of gold

nanoparticles (AuNPs) have made them an important biomedical nanomaterial in the field of biomedical research. The intrinsic antimicrobial activity of gold nanoparticles is lower than that of silver nanoparticles, but their characteristics make them extremely useful in antimicrobial therapy and drug delivery systems (Aguilar-Garay et al., 2024).

5.1. Acquiring Gold Nanoparticles for Synthesis.Getting Gold Nanoparticles for Synthesis.

Several methods are used for the synthesis of gold nanoparticles, such as physical, chemical and biological methods. The most common method still used for the reduction of chloroauric acid is by chemical means, such as sodium citrate. Maintaining the environmentally-friendly nature and low toxicity has led to an increased interest in biological synthesis using extracts from plants, fungi, algae and bacteria (Aguilar-Garay et al., 2024).

The size, morphology, stability and biological characteristics of the generated nanoparticles depend greatly from the synthesis method. The developments in green nanotechnology have led to the development of biocompatible gold nanoparticles that are appropriate for biomedical applications.

5.2.Biosurfactants: Natural Fungicides

Gold nanoparticles use different mechanisms to kill bacteria than silver nanoparticles and most do not rely on the release of ions as their main antimicrobial mechanism. Rather, it is more commonly linked with specific interactions with microbial cells and the presentation of bioactive molecules.

Gold nanoparticles can damage bacterial membrane, disrupt the cell metabolism, inhibit ATP production and interfere with protein synthesis. It has been demonstrated that AuNPs can affect the membrane potential and cause structural changes in microbial cells, significantly impacting their viability (Aguilar-Garay et al., 2024).In addition, gold nanoparticles are able to be attached to biomolecules such as antibodies, antimicrobial peptides, and antibiotics. This functionalization not only increases their antimicrobial activity but also enables targeted delivery to pathogenic microorganisms.

5.3 Drug Delivery Applications

The nanocarrier functionality is one of the most significant benefits of gold nanoparticles. Traditional antibiotics can also encounter issues like low bioavailability, low cellular uptake, high degradation rates and resistance. The use of gold nanoparticles resolves these issues by enhancing both the stability of the drugs and targeted delivery.AuNPs used in combination with antibiotics typically have stronger antimicrobial activity than free antibiotics. With enhanced delivery, the intracellular concentration of the drug is raised, which may improve the effectiveness of the drug against the target cell and could potentially reverse resistance mechanisms such as efflux pumps and lowered permeability (Huh & Kwon, 2011).

Moreover, gold nanoparticles can also be designed to release the drug in a controlled manner which decreases the number of doses required and limits the side-effects.

6. Comparative Analysis of Silver and Gold Nanoparticles.

Of the metallic nanomaterials, silver and gold nanoparticles have been the most widely studied for antimicrobial properties. Although some similarities exist, they have several biological differences and therapeutic uses.The antimicrobial properties are stronger in case of silver nanoparticles as they release silver ions, generate reactive oxygen species, and damage the structure of the microbes. They are shown to be broadly active and therefore are especially effective against multidrug resistant bacteria (More et al., 2023).In the case of gold nanoparticles, however, their biocompatibility is greatly increased and their toxicity is significantly reduced. They may not be as directly antimicrobial active as other peptides, but are excellent vehicles for drug delivery and multifunctional therapeutic platforms. Targeted antimicrobial therapy and diagnostics are possible thanks to their ease of functionalization (Aguilar-Garay et al., 2024).

Hence, silver nanoparticles are generally used in cases where strong antimicrobial activity is desired while gold nanoparticles are beneficial in targeted drug delivery and combination therapy.

7. Challenges for Drug Delivery with Nanoparticles

The use of nanoparticles along with traditional antibiotics is a promising approach to combat antimicrobial resistance. Many studies have shown that in combination, metallic nanoparticles and antibiotics can achieve increased antimicrobial activity and decreased development of resistance.Antibiotics like ampicillin, vancomycin, ciprofloxacin, tetracycline, gentamicin and chloramphenicol have been found to be synergistic with silver nanoparticles. Such combinations may decrease the MIC of antibiotics and increase the killing efficiency of the bacteria (Rai et al., 2012).

The synergy mechanisms are:

- Increased membrane permeability.
- Enhanced antibiotic uptake.
- Disruption of biofilms.
- Multiple cellular pathways targeted at the same time.
- Suppression of resistance mechanism(s).

Likewise, gold nanoparticles can be used to carry antibiotics and antimicrobial peptides, enhance their intracellular delivery, and thus benefit therapeutic results. In cases of multidrug-resistant pathogens, where single drug treatments might not work, such combination therapies prove to be especially useful.Combining nanoparticle with antibacterial agents could also lower the dosage of antibiotics needed, lowering the risk of side effects and limiting antibiotic resistance.

8. Future Perspectives

Nanoparticle antimicrobial treatment looks promising for the future. With the aid of nanotechnology, multifunctional nanoparticles that are capable of diagnosis, delivery of therapeutic agents, imaging and antimicrobial action are being developed in a single platform.The use of plant extracts, microorganisms, and biodegradable materials in green synthesis methods is anticipated to enhance sustainability and minimize environmental impacts. In addition, combinations of nanoparticles and antimicrobial peptides, bacteriophage therapy, photodynamic therapy, and immunotherapy may be extremely effective in fighting resistant infections (Huh & Kwon, 2011).The use of artificial intelligence and computational modelling is becoming a growing trend to enhance the design of nanoparticles and to predict their interactions with living cells. These technologies could help pave the way for the creation of better and safer antimicrobial nanomaterials.An alternate future direction of personalisednanomedicine is also very promising. Targeted approaches to individual patients and specific pathogens with nanoparticles may yield better therapeutic results and reduce toxicity.

9. Conclusion

A major problem in modern health care is antimicrobial resistance (AMR). The growing emergence of multidrug-resistant pathogens poses a challenge to the efficacy of current antibiotics and calls for novel therapeutic approaches. The antimicrobial effects of silver nanoparticles involve membrane disruption, generation of oxidative stress, enzyme inhibition, DNA damage and destruction of biofilms. Less intrinsically antimicrobial, but with high biocompatibility, gold nanoparticles can be used as a platform for targeted drug delivery and combination therapy.Although fears of toxicity, environmental effects, and regulatory clearance continue to arise, the advances of nanotechnology are likely to enhance the safety and efficacy of antimicrobial interventions involving nanoparticles. Silver and gold nanoparticles thus offer great potential to combat global antimicrobial resistance and can play a major role in the development of future generation antimicrobial agents.

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Yarsagumba : The Himalayan Gold of Nepal

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Abstract
Yarsagumba (Ophiocordycepssinensis), popularly known as the "Himalayan Gold," is a rare and highly valuable biological resource found in the alpine regions of the Himalayas, particularly in Nepal. Formed through a unique parasitic relationship between a fungus and the larva of a ghost moth, Yarsagumba has attracted global attention for its medicinal properties, economic significance, and ecological uniqueness. For centuries, it has been used in traditional medicine to enhance vitality, immunity, and overall health. In Nepal, the collection and trade of Yarsagumba provide a crucial source of income for mountain communities, contributing significantly to local livelihoods and regional economies. However, increasing commercial demand has led to concerns regarding overharvesting, habitat degradation, and the sustainability of natural populations. This article examines the biology, life cycle, historical background, cultural importance, medicinal applications, economic value, harvesting practices, and conservation challenges associated with Yarsagumba. It highlights the need for sustainable management strategies to balance economic benefits with environmental conservation, ensuring the long-term survival of this remarkable Himalayan resource.

Keywords:

INTRODUCTION

Yarsagumba, often referred to as the "Himalayan Gold," is one of the most valuable natural resources found in the high-altitude regions of the Himalayas. Known scientifically as Ophiocordycepssinensis, Yarsagumba is a unique organism formed by the interaction between a parasitic fungus and the larva of a ghost moth. It has fascinated scientists, traditional healers, traders, and mountain communities for centuries because of its rarity, medicinal properties, and extraordinary economic value. The name "Yarsagumba" originates from Tibetan words that roughly translate to "summer grass, winter worm." This name perfectly describes its unusual life cycle. During winter, it exists as a caterpillar buried beneath the soil. In summer, a fungal stalk emerges from the caterpillar's body, resembling a blade of grass. This remarkable transformation has made Yarsagumba one of nature's most extraordinary biological phenomena.Found mainly in Nepal, Tibet, Bhutan, and parts of India, Yarsagumba has become an essential source of income for thousands of families living in remote mountain regions. At the same time, increasing demand has raised concerns about overharvesting, environmental degradation, and the long-term sustainability of this precious resource.

This article explores the biology, history, cultural significance, economic importance, medicinal uses, harvesting practices, and conservation challenges associated with Yarsagumba.

BIOLOGICAL CHARACTERISTICS

Yarsagumba is neither purely a plant nor an animal. It is a combination of a fungus and an insect. The fungus belongs to the genus Ophiocordyceps, while the host is usually the larva of a ghost moth belonging to the family Hepialidae.The life cycle begins when fungal spores infect caterpillars living underground in alpine meadows. The fungus slowly grows inside the larva, consuming its tissues while keeping the external shape intact. Eventually, the caterpillar dies and becomes mummified. During the warmer months, a dark brown fungal stalk grows from the caterpillar's

head and emerges above the soil surface.This unique structure consists of two parts:

1. The mummified caterpillar body.
2. The fungal fruiting body that protrudes above the ground.

The entire organism is harvested and sold as Yarsagumba.

Scientists regard Yarsagumba as an example of a highly specialized parasitic relationship. The fungus has evolved specifically to infect certain moth species found in cold alpine ecosystems. This specialization contributes to its rarity and high market value.

HABITAT AND DISTRIBUTION

Yarsagumba grows in alpine grasslands and meadows at elevations ranging from approximately 3,000 to 5,200 meters above sea level. Such environments are characterized by:

- Low temperatures
- Short growing seasons
- High ultraviolet radiation
- Sparse vegetation
- Moist soils

Nepal is one of the world's most important sources of Yarsagumba. It is found in several mountainous districts, including Dolpa, Humla, Mugu, Jumla, Bajhang, Darchula, and Rukum. These regions provide suitable ecological conditions for both the host caterpillar and the parasitic fungus.In India, Yarsagumba occurs in parts of Uttarakhand, Himachal Pradesh, Sikkim, and Arunachal Pradesh. It is also found across the Tibetan Plateau and certain mountainous areas of Bhutan.Because the species requires highly specific environmental conditions, its distribution is naturally limited. Any changes in climate, vegetation, or soil conditions can significantly affect its abundance.

HISTORICAL BACKGROUND

The use of Yarsagumba dates back hundreds of years. Historical records indicate that Tibetan herders first noticed its effects when livestock became unusually energetic after grazing in areas where Yarsagumba grew.Traditional Tibetan medicine later incorporated Yarsagumba as a valuable remedy for fatigue, weakness, respiratory ailments, and reproductive health. Ancient medicinal texts described it as a powerful tonic capable of restoring vitality and promoting longevity.Chinese traditional medicine also adopted Yarsagumba, where it became highly prized among emperors and wealthy elites. Over time, its reputation spread throughout Asia and eventually reached international markets.

The global demand for Yarsagumba increased dramatically during the late twentieth century. As awareness of its medicinal and commercial value grew, collection activities intensified across the Himalayan region.

TRADITIONAL MEDICINAL USES

For centuries, Yarsagumba has been considered one of the most important medicinal substances in Himalayan and East Asian traditional medicine systems.Traditional practitioners use it for various purposes, including:

1. **Enhancing Energy:** Yarsagumba is widely regarded as a natural tonic that improves physical strength and reduces fatigue. Mountain communities often consume it to increase stamina during demanding physical activities.
2. **Respiratory Health:** Traditional healers prescribe Yarsagumba for conditions such as:
   - Chronic cough
   - Asthma
   - Bronchitis
   - Lung weakness

   It is believed to strengthen the respiratory system and improve oxygen utilization.
3. **Sexual Health:** One of the most famous traditional claims associated with Yarsagumba is its ability to enhance sexual performance and fertility. It is often marketed as a natural aphrodisiac.
4. **Immune Support:** Traditional medicine systems consider Yarsagumba beneficial for strengthening the body's defenses against illness and infection.
5. **Longevity:** Many ancient medical texts describe Yarsagumba as a rejuvenating substance capable of slowing aging and promoting overall wellness.

SCIENTIFIC RESEARCH AND MODERN MEDICINE

Modern scientific interest in Yarsagumba has increased significantly over the past few decades. Researchers have identified several bioactive compounds within the fungus, including:

- Cordycepin
- Adenosine
- Polysaccharides
- Sterols
- Peptides

Studies suggest that these compounds may possess:

- Antioxidant properties
- Anti-inflammatory effects
- Immunomodulatory activities
- Antimicrobial potential

Some laboratory studies indicate that Yarsagumba extracts may improve energy metabolism and immune function. Researchers have also investigated potential applications in cancer treatment, diabetes management, and cardiovascular health.However, many traditional claims have not yet been conclusively proven through large-scale clinical trials. While preliminary findings are promising, scientists emphasize the need for further research before making definitive medical recommendations.Therefore, Yarsagumba should not be viewed as a miracle cure but rather as a natural product with potential therapeutic benefits that continue to be studied.

HARVESTING PRACTICES

The harvesting season typically occurs between May and July, depending on local weather conditions and altitude. During this period, thousands of collectors travel to remote alpine meadows in search of Yarsagumba. Entire families often participate in collection activities.Harvesting requires exceptional patience and skill. Collectors carefully scan the ground for the tiny brown fungal stalk protruding from the soil. Since the stalk is often only a few centimeters tall, finding Yarsagumba can be extremely challenging.Once located, the collector gently excavates the surrounding soil to remove the entire organism without damaging it. Maintaining the integrity of both the caterpillar and fungal stalk is crucial because intact specimens command higher prices. After collection, Yarsagumba is:

- Cleaned carefully.
- Dried naturally.
- Sorted according to size and quality.
- Prepared for sale through local traders.

The harvesting season often resembles a large migration, with temporary camps appearing across mountain pastures.

ECONOMIC IMPORTANCE

Yarsagumba has transformed the economies of many Himalayan communities. In remote mountain districts where employment opportunities are limited, income from Yarsagumba collection often exceeds earnings from agriculture, livestock farming, or wage labor. For many households, a few weeks of harvesting can provide income sufficient to support:

- Education expenses
- Healthcare costs
- Household improvements
- Food security
- Investment in livestock and businesses

The trade chain typically involves:

- Local collectors
- Village traders
- Regional middlemen
- National exporters
- International markets

Prices vary according to quality, demand, and market conditions. High-quality specimens can sell for thousands of dollars per kilogram, making Yarsagumba one of the world's most expensive biological resources. Its economic significance has earned it the nickname "Himalayan Gold."

SOCIAL AND CULTURAL SIGNIFICANCE

Beyond economics, Yarsagumba plays an important role in the social and cultural life of Himalayan communities. The harvesting season often becomes a major annual event. Families travel together to alpine meadows, creating temporary settlements where people live for weeks. During this period, communities engage in:

- Social gatherings
- Cultural celebrations
- Traditional music and dance
- Exchange of information
- Trade activities

The collection season strengthens social bonds and contributes to local cultural identity. In many regions, customary rules govern access to harvesting areas. Local communities have developed traditional systems for managing resources and resolving conflicts related to collection rights.

CHALLENGES AND THREATS

Despite its value, Yarsagumba faces several serious threats:

1. **Overharvesting:** Growing global demand has encouraged intensive collection practices. Excessive harvesting may reduce the reproductive capacity of fungal populations and disrupt ecological balance.
2. **Habitat Degradation:** Large numbers of collectors can damage fragile alpine ecosystems through:
   - Trampling vegetation
   - Soil disturbance
   - Waste accumulation
   - Increased human activity
3. **Climate Change:**Climate change poses one of the greatest long-term threats to Yarsagumba.Rising temperatures may alter:
   - Snow patterns
   - Soil moisture
   - Vegetation composition
   - Host insect populations

These changes could significantly affect Yarsagumba distribution and productivity.

4. **Illegal Trade:** The high value of Yarsagumba has sometimes contributed to illegal harvesting and smuggling activities. Weak regulation can undermine sustainable management efforts.
5. **Resource Conflicts:** Competition for access to productive harvesting areas occasionally leads to disputes between communities and collectors.
6. **Conservation Efforts:** Recognizing these challenges, governments, researchers, and local communities have initiated various conservation measures.
7. **Regulation of Harvesting:** Many regions have introduced harvesting permits, collection fees, and seasonal restrictions to manage extraction levels.
8. **Community-Based Management:** Local communities increasingly participate in resource governance. Community management systems often include:
   - Harvesting quotas
   - Controlled access
   - Monitoring programs
   - Environmental education
9. **Research and Monitoring:** Scientists conduct ecological studies to better understand:
   - Population trends
   - Habitat requirements
   - Climate impacts
   - Sustainable harvesting levels
10. **Awareness Campaigns:** Educational initiatives encourage collectors to adopt environmentally responsible practices and protect fragile mountain ecosystems.
11. **Future Prospects:**The future of Yarsagumba depends on balancing economic benefits with ecological sustainability.Demand is likely to remain strong because of its reputation in traditional medicine and international markets. However, continued overexploitation could threaten long-term availability.Potential future developments include:
    - Improved resource management
    - Scientific cultivation techniques
    - Enhanced conservation programs
    - Better regulation of trade
    - Greater community participation

Researchers are also exploring methods for cultivating related fungal species in controlled environments. While artificial cultivation may reduce pressure on wild populations, replicating the unique natural conditions required for genuine Yarsagumba

remains challenging. Sustainable management strategies will be essential to ensure that future generations can continue benefiting from this remarkable resource.

CONCLUSION

Yarsagumba represents one of nature's most fascinating biological phenomena. Combining the life cycles of a caterpillar and a parasitic fungus, it has earned worldwide recognition for its rarity, medicinal reputation, and extraordinary economic value. For centuries, it has played an important role in traditional medicine systems across the Himalayan region and East Asia. Today, it serves as a crucial source of income for thousands of mountain households while attracting scientific interest for its potential therapeutic properties.However, the growing demand for Yarsagumba has created significant challenges, including overharvesting, habitat degradation, climate change impacts, and resource conflicts. These threats highlight the need for effective conservation measures and sustainable harvesting practices. The story of Yarsagumba is ultimately a story of the delicate relationship between humans and nature. Its future depends on responsible stewardship that protects both the livelihoods of mountain communities and the fragile ecosystems where this extraordinary organism thrives. By combining traditional knowledge, scientific research, and sustainable management, it is possible to preserve the Himalayan Gold for generations to come.

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Decentering the Human: Posthumanist Perpectives on Amitav Ghosh's *The Living Mountain*

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Abstract

The Living Mountain (2022) by Amitav Ghosh offers a compelling ecological fable that challenges anthropocentric assumptions and foregrounds the agency of the non-human world. The paper investigates this novella in terms of the posthumanist theory; it claims that Ghosh breaks the hierarchical boundary of humans and nature by making the mountain an active, listening, and responding being instead of an inactive resource. The narrative condemns the contemporary developmentalism paradigm that justifies the exploitation of nature under the guise of progress and economic expansion. By symbolically depicting the mountain and its ultimate retribution against human encroachment, Ghosh reveals the devastating effects of anthropocentric thinking and promotes a more personal and ethical perception of human-nature interactions. With the theoretical foundations of RosiBraidotti, Donna Haraway, Bruno Latour, and Cary Wolfe, this paper will explore the ways in which the novella decentralizes the human subject and prefigures the interrelatedness of all life forms. The article also explores how the text relates to the ecological wisdom of the indigenous people, which is the acknowledgment of the life force and agency of the non-human world. Placing nature as an active participant in the narrative challenges the dominant human-focused epistemologies and is part of contemporary debates on the Anthropocene, climate change, and environmental justice. Ultimately, *The Living Mountain* emerges as a significant posthumanist text that reimagines ecological relationships beyond the binaries of human and non-human, culture and nature, thereby offering an alternative ethical framework for addressing the environmental crises of the twenty-first century.

Keywords : Posthumanism; Anthropocentrism; Ecocriticism; Non-human Agency; Anthropocene; Environmental Ethics

Introduction

The twenty-first century has been characterized by the highest ecological crises such as climate change, loss of life, loss of forests, and environmental degradation. These disasters have challenged academics in different fields to challenge the anthropocentric view of the world that has traditionally put human beings at the center of life. Anthropocentrism is based on Enlightenment humanism which posits that humans are superior to every other type of life and that nature is designed primarily to serve humans. This worldview has been contributing to environmental exploitation and ecological imbalance.

Posthumanist theory has developed to address such anxieties and is a critical approach that challenges the idea of human exceptionalism and the recognition of human-animal, human-technology, and natural-environment interconnection. Posthumanism posits the relational ontology of existence that grants agency and meaning to all forms of existence, instead of prioritizing the human subject. Other scholars including RosiBraidotti, Donna Haraway, Bruno Latour and Cary Wolfe, have proposed redefining human identity in light of the complicity of human and non-human agents in mutual ecological effects.

Throughout his literary career, Amitav Ghosh has addressed environmental issues. His nonfiction, *The Great Derangement,* criticizes modern culture and literature as incapable of dealing with climate change sufficiently, and novels like *The Hungry Tide* and *Gun Island*preempt ecological themes. *The Living Mountain: A Fable for Our Times* (2022) proceeds with this engagement in a highly evocative allegorical narrative about the destructive relationship people have formed with nature.

The novella tells of a mountain that people living in a valley consider a living being. The community has lived in harmony with the mountain over the generations, understanding its sanctity and ecological importance. Nevertheless, with the influx of outsiders motivated by greed and profit, the mountain becomes a source of extraction and exploitation. With the increased mining and extraction of resources, the corresponding effect of ecological destruction ensues, leading to disastrous outcomes. Ghosh uses this narrative to criticize anthropocentric development and encourages a more symbiotic interaction between man and nature.

The paper claims that *The Living Mountain* can be effectively read with the posthumanist perspective. Presenting the mountain as a living and contiguous subject instead of a passive background, Ghosh disrupts the traditional anthropocentric views and foregrounds the subject agency of non-human subjects. The novella, therefore, finds its contribution to modern discourses about environmental ethics, climate change, and the Anthropocene.

Theoretical Framework: Posthumanism and the Critique of Anthropocentrism

Posthumanism as a concept was a reaction to the constraints of classical humanism. The philosophies of humanism are traditionally glorified with rationality, autonomy, and human control over nature. Although these concepts led to the advancement of science and technology, they also solidified a hierarchical worldview that separated humans and the rest of nature.

Cary Wolfe assures that posthumanism does not imply the disappearance of humans; instead, it is the voice of criticism of the premises of human exceptionalism. As Wolfe asserted, post-humanist thought challenges the notion that humans are placed in a privileged position in existence. Rather, it acknowledges the seamless flow between the human and non-human life forms.

Likewise, the posthuman condition is described by RosiBraidotti as a moral and philosophical reorientation out of anthropocentrism. She promotes a relational conception of subjectivity that considers the interrelation between humans, animals, environments and technologies. To Braidotti, ethical responsibility is developed not through human superiority but when such intricate interrelationships are acknowledged.

These ideas of making kin hold by Donna Haraway further oppose the strict division of nature and culture. The relationships between species that Haraway insists on are not those of exploitation. Multispecies relationships should be developed on the premise of mutual coexistence and care. Through her work, one tries to understand the ecological systems as a network of interrelated beings instead of hierarchies made up of human beings.

The contemporary division of nature and society is also criticized by Bruno Latour. Latour suggests through the Actor-Network Theory that the human and non-human objects have a role to play in the formation of reality. Mountains, rivers, forests, animals and technologies do not exist as lifeless things but act in the ecological and social networks.

These are theoretical viewpoints that can be used to analyze*The Living Mountain*. The novella refutes the anthropocentric assumptions by stating that the mountain is a living being with the ability to act, memorize, and exercise power. Instead of discussing the mountain as a simple environment where human activity takes place, it becomes one of the main actors whose reactions determine the flow of events of the narrative. Such a representation is well aligned with posthumanist attempts to reconsider human-nature interactions and acknowledge the activity of the non-human world.

Moreover, the text echoes the material ecocriticism, which underlines the agency of matter itself. SerenellaIovino and SerpilOppermann are material ecocritics who hold that landscapes,

ecosystems, and bodily spaces make a difference and convey their meanings. The mountain plays this role exactly in the novella of Ghosh: it acts, it reacts, and it eventually finds a way of defying human exploitation.

Posthumanism, as such, can provide a powerful approach to the way *The Living Mountain* critiques anthropocentric ideologies and imagines other ecological futures founded on interconnectedness, reciprocity and environmental responsibility.

The Living Mountain as a Posthuman Narrative

The Living Mountain is centered on the critique of anthropocentric thoughts about the natural world. The novella does not follow the conventional patterns in which nature is regarded as an auxiliary setting of human actions. Instead, Ghosh constructs a world of the narrative in which the mountain plays the central role as a living and moving entity. This rhetorical device assists the text in aligning itself with posthumanist efforts to de-center human subject position and take into account non-human agency.

The mountain has an early relationship of reciprocity with the people in the valley. They do not view it as a non-living process or storage of resources that can be exploited. Instead, they understand it as a life-giving mechanism that supports life with its rivers, forests and ecological balance. The ecological awareness found in this worldview is a contrast to the developmental ideologies of the modern world. It is not the mountain that exists out there in human life, but a network of relationships, and this is what holds the community together.

The mountain is viewed radically differently with the arrival of outsiders. They are convinced by economic reasons and explore the terrain through the logic of excavation and commodity. The mountain is valuable not due to its ecological importance but due to the wealth hidden within. Posthumanist theorists have referred to this attitude as the anthropocentric desire to enslave nature to human needs.

Ghosh reveals the violence embedded in this worldview in his narrative. When the visitors excavate into the mountain and drain it of its resources, they interfere with ecological systems that have been developing over generations. There is pollution of rivers, deforestation, and the delicate balance of humanity and nature is beginning to unravel. The Anthropocene ecological crises which involve the prevalence of human domination of planet systems are manifested in the suffering of the mountain.

The fact that the novella does not depict nature as inert is the difference between the novella and the traditional environmental narratives. Mountain is the one that responds to human activities. Its ultimate opposition means the renaissance of agency in the inhuman world. This narrative decision might be viewed as an ecological interaction with posthumanist interpretation, where non-humans can influence what happens and can impact the outcome.

This way, the text dismantles the classical dichotomy between two that is functioning humans and passive nature. Ghosh gives the mountain narrative a meaning and a voice, and this calls on the reader to re-evaluate the prevailing notions of human placement within nature. The novella is not merely a warning of the devastation of the environment, but a philosophical commentary on living and co-existing.

Non-human Agency and the Living Mountain

One of the most significant posthumanist features of *The Living Mountain* is a non-human agency. The agency of rational humans has typically been considered by Western traditions of philosophy. The current understanding of mountains, rivers, forests, and animals has seen them as inert objects with no intentionality or activity. Posthumanism theory resists this by recognizing that non-human animals actively support the building of ecological and social worlds.

This non-human agency is reflected in the mountain in the novella by Ghosh. It is not merely a representative expression of nature but a living presence, the action of which impacts the human community and the form of nature itself. The title itself assumes the life of the mountain, its significance being a living being rather than an inanimate geological formation.

Throughout the narrative there is a life that is sustained by the mountain. It provides water, regulates ecological processes, and, in addition, supports the livelihoods of the valley people. All these roles show

that they are not passive in their efforts to maintain a balance in the environment. The mountain affects the lives of people not only on the material level but also on the cultural beliefs, the social practices, and collective identities.

These relationships are interfered with by the exploitation of the mountain. It begins to show signs of distress as more mining and extraction of the mountain take place. This definition recalls ecocritical theories of matter in which matter and ecological systems are seen as possessing agency. SerenellaIovino and SerpilOppermann state that landscapes do not form silent backgrounds but are members of the meaning and experience production processes. This capacity is demonstrated by the operation of the mountain to the activation of exploitation.

Its subsequent explosion of resistance can be viewed as a claim of agency against anthropocentrism domination. Instead of resigning to its commodification, the mountain asserts its existence based on forces of nature that are beyond human power. This opposition eradicates the false illusion of human dominance in nature and shows that technology and economic power has its boundaries.

According to the posthumanistapproach, the acts of the mountain portray relatedness between the human and non-human experience. Ecological stability is crucial to human prosperity, which is why contemporary societies tend to disregard it. The disaster in the novella is not the hostility of nature but rather the result of the inability of people to acknowledge ecology as interdependent.

Ghosh urges readers to embrace a broader perspective of ethics by foregrounding agency of the non-human. This is the framework that appreciates that mountains, rivers, forests and other ecological groups have a value instead of the value they provide to humans. The novella thus serves as a contribution to more general posthumanist attempts to reconstruct the notion of agency and responsibility in the era of environmental crisis.

Indigenous Ecological Wisdom versus Developmental Modernity

The comparison of aboriginal ecological knowledge and the contemporary developmental policies is another valuable element of *The Living Mountain*. The conflict is one of the major themes of the novella and can be viewed as a criticism of mainstream approaches to progress, in which economic development takes precedence over environmental sustainability.

The people living in the valley have a worldview that is based on respect for the mountain and its ecological importance. They interact with the environment in a reciprocal relationship with the environment. They are aware that the survival of mankind hinges on the need to ensure that we are in balance with the environment. This view can be applied to most native traditions globally, as mountains, rivers, forests, and animals are globally viewed as living beings who deserve respect and care.

This ecological wisdom is a challenge to how modern people view development. Outsiders coming to the valley see the mountain as a means of wealth, mostly. They conceptualize progress in terms of extraction, accumulation and expansion. Natural resources are not embraced except to the extent to which they are utilized in economic development. The inherent value and ecological purposes of the mountain are disregarded.

Ghosh does not consider this conflict merely as the tension between tradition and modernity but the placement of two gravitantly different ontologies against each other. The people in the valley appreciate the interrelatedness, whereas the external forces are guided by a logic of segregation. Nature becomes an object and as such, exists outside human communities and is thus subject to abuse.

The ecological worldview as shown by the valley inhabitants, is closely associated with posthumanist theory. Focusing on the relational networks between humans and non-humans, scholars like Donna Haraway argue that this should be seen as an essential measure. Conversely, indigenous ecological cultures do not usually accept the strict division between nature and culture and tend to think that the two are part of one world.

The novella conveys the idea that the ecological

crises of the modern world are conditioned mostly by the prevailing paradigms of development that disregard these relationships. By giving precedence to instant economic profit over environmentally friendly sustainability, contemporary civilizations destroy the very premises under which they can live. The destruction of the mountain thus symbolizes the broader consequences of unsustainable development.

At the same time, Ghosh avoids romanticizing indigenous knowledge. Instead, he puts it as a functional alternative model of environmental relations. The readers are also encouraged through the narrative to examine their views about the future and reflect upon potential choices of co-existing, but on the basis of respect, relatedness, and ecological responsibility.

Anthropocene, Environmental Crisis, and Resistance

The concept of Anthropocene presupposes a very convenient approach in terms of which the problems of the environment voiced in *The Living Mountain* are to be viewed. Anthropocene is a geological period during which human activity has played a central role in the impact on the planetary regimes. Its characteristics include climate change, deforestation, extinction, and pollution.

The novella that Ghosh wrote can be understood as an anthropocene allegory. The mountain destruction process is a mirror of the ecological catastrophes, on the example of extractive industries, unwise development, and humanistic attitudes to nature. Oversaturation of outsiders with wealth is an expression of bigger processes of the world that prefer financial growth at the expense of the environment.

Among the significant conclusions of the Anthropocene discourse, one can identify the fact that humanity is no longer a phenomenon that can be viewed as being outside the context of the ecological processes. Human actions have transformed the world in a way never before in history and these have become a feedback mechanism that affects climate systems, biodiversity and environmental stability. These dynamics are reflected in the catastrophe reported in the novella. Eventually, the environment inflicts its destruction on the same communities that caused all this destruction.

But *The Living Mountain* is never just a criticism of the ecological degradation. It also features a narrative of struggle. The reaction of the mountain to exploitation is the symbolic system of refusing nature to be a passive object of human domination. This opposition helps to dismantle the anthropocentrism that holds that humans are in absolute charge of ecological processes.

Bruno Latour believes that earth agency is demonstrated by modern environmental crises. Political and social realities are affected more strongly and more often by climate events, geological processes and ecological transformations. The mountain portrayed by Ghosh works similarly. Human plans are interfered with by their actions and show the insufficiency of assumptions about mastery and control.

There is also an ethical connotation of the novella focusing on resistance. It implies that environmental justice needs to recognize the rights and agency of the non-human being. This exposure undermines the traditional legal, political, and philosophical systems, which put the interests of humans first.

Finally, a change in human consciousness is demanded in the text. The ecological crises of the Anthropocene cannot be resolved based only on technological solutions. They need the re-evaluation of the human relationship towards the non-human world. Ghosh presents a more ecological coexistence that can lead to more sustainable futures by foregrounding interdependence and non-human agency.

Conclusion

The Living Mountain by Amitav Ghosh is an unusually strong ecological fable that confronts the anthropocentric worldview of the modern world of environmental disaster. The novella breaks down traditional boundaries between humans and nature and prefigures the agency of the non-human world through its representation of a mountain as a living and responsive being.

A posthumanist reading shows the way the text undermines human exceptionalism and the devastating nature of development ideologies based on exploitation and commodification. The mountain is not a passive

landscape object but is an active subject of the ecological and social dynamics. Its inaccessibility to man is an expression in the figurative language of the constraints of anthropocentric power and the necessity of recognition of ecological interdependency.

The novella is like a reminder of the importance of the indigenous ecological knowledge that offers alternative conceptual views of the relations of humans and nature based on reciprocity, respect, and coexistence. When these attempts are juxtaposed with extractive theories of development, Ghosh highlights that we should have a more sustainable and ethical development in environmental management.

The Living Mountain becomes a warning and a call to the context of the Anthropocene. It also challenges readers to supersede human-centred categories and relational sense of being that recognises the agency and vitality of any life. As environmental crises continue to rise, the fable by Ghosh is a worthy contribution to posthumanist thought and environmental humanities by hypothesizing ecological futures that rest on a foundation of interrelatedness, accountability, and solicitation.

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Indian Knowledge System and Its Challenges in Modern Societies

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Abstract:

The Indian Knowledge System (IKS) encompasses a diverse and profound body of knowledge developed over millennia, covering various disciplines, from philosophy, mathematics, and science to arts, literature, and medicine. Indian knowledge system aims to support and facilitate further research to solve contemporary societal issues. IKS is based on Vedic literature, the Vedas and the Upanishads. Existing IKS courses may be synced to digital learning platforms.Initial seed funding will be provided for the establishment of IKS Centres in various HEIs.In contemporary times, IKS is experiencing a renaissance as it interacts with modern scientific and technological developments. However, the challenges to preserving, promoting, and integrating this vast knowledge repository into global academic and practical discourse are immense. This paper explores the Indian Knowledge System in the context of contemporary issues, with a focus on its philosophical foundations.The role of traditional knowledge in modern societyand the integration of IKS into global knowledge systems.

Keywords: India, Knowledge, Traditional, Contemporary, Global

Introduction

The Indian Knowledge System, also known as Bharatiya Gyan Paddhati, refers to the collective intellectual tradition of India, which spans multiple disciplines and centuries. This knowledge system is rooted in ancient texts such as the Vedas, Upanishads, Puranas, and various treatises on mathematics, astronomy, medicine (Ayurveda), and architecture (Vastu Shastra). It is an interdisciplinary tradition that integrated philosophy with practical knowledge, emphasizing holistic development, sustainability, and interconnectedness with nature. In the modern era, IKS faces significant challenges and opportunities. The advent of Western scientific paradigms, globalization, and technological advancements has created tensions between traditional knowledge systems and contemporary knowledge frameworks. This paper aims to examine how IKS interacts with contemporary issues, such as the preservation of knowledge, modernization, the commercialization of traditional knowledge, and the role of IKS in the global knowledge ecosystem.

Objectives:

The main objectives of this article are like as follows-

1. The Indian Knowledge System (IKS) aims to support and facilitate further research to address contemporary societal issues in various fields, including health, Psychology, Environment, and Sustainable development.
2. The primary objective is to draw from the past and integrate Indian knowledge systems tosolve contemporary and emerging problems, utilizing the uninterrupted tradition of knowledge transfer and the unique perspective of "BhâratiyuDrishti" (Indian viewpoint).
3. To discuss a meaningful conclusion based on the findings.

Methodology:

The present study is based on secondary sources of data. The data are collected from different sources, books, journals, Government website etc. Here I try to establish a relationship between the Indian Knowledge System and its challenges in the Global society. I shall try my level best to established here how the IKS is different from traditional to modern system.

Significance of Indian Knowledge System in the present scenario

1. **Well-being:** Ayurveda, a traditional Indian medical system, advocates a holistic approach to well-being. In a world where health-related challenges are increasing, Ayurveda promotes natural healing methods, personalized remedies, and a focus on preventive health measures.
2. **Stress Management:** Yoga, originating in ancient India, provides a comprehensive approach to internal, physical, and spiritual well-being. Yoga has proven effective in reducing stress, enhancing internal health, and bolstering overall well-beingespecially pertinent in today's fast-paced and stressful world.
3. **Sustainable Living:** Indian knowledge systems stress the interconnectedness of all beings, promoting sustainable living practices. Given the pressing environmental concerns and the need for natural resource conservation, these principles gain increasing significance.
4. **Spiritual Growth:** Systems like Vedanta offer insights into the nature of reality, mindfulness, and spiritual well-being. Grounded in ancient Vedas, they provide guidance on emotional intelligence, mindfulness, and the pursuit of meaning and purpose crucial in a modern world where many seek deeper fulfilment.
5. **Innovation:** Indian knowledge systems historically contributed to scientific advancements in mathematics, astronomy, and metallurgy. Concepts like zero, the decimal system, and trigonometry, originating from ancient Indian thought, continue to play a pivotal role in contemporary science.

The Foundation of Indian Knowledge System

Philosophical Underpinnings of IKS At its core, the Indian Knowledge System is guided by the principle of dharma, a code of ethical and moral responsibility that governs not only human behaviour. IKS emphasizes holistic and non-dual approaches, particularly within traditions like Vedanta, which speaks of the interconnectedness of all beings and the universe. Prominent schools of philosophy in India, such as Nyaya, Vaisheshika, Samkhya, and Mimamsa, contribute to the intellectual foundation of IKS. These philosophies are deeply rooted in empirical observations and logical reasoning, shaping both spiritual practices and scientific inquiries. For instance, the Vaisheshika school's approach to categorizing the physical world can be seen as an early form of atomic theory. Scientific and Technological Contributions Historically, IKS has contributed significantly to various fields of knowledge. Indian scholars like Aryabhata, Brahmagupta, and Bhaskara made groundbreaking advancements in mathematics, astronomy, and geometry long before their Western counterparts. The concept of zero, the decimal system, and early calculus were pioneered in India, challenging the linear narratives of scientific history. In medicine, Ayurveda, and Siddha systems offer insights into holistic health and wellness. Ayurvedic texts, such as the Charaka Samhita and Sushruta Samhita, contain vast amounts of knowledge about human anatomy, surgery, and the treatment of diseases that are only now being recognized for their importance in contemporary medical practices.

Global Challenges ofIndian Knowledge System

Globalization and the Westernization of Knowledge The rise of globalization has brought new opportunities and challenges to the Indian Knowledge System. On one hand, IKS has the potential to bridge the gap between traditional wisdom and modern scientific inquiry. On the other hand, the dominance of Western academic frameworks often sidelines or dismisses indigenous knowledge systems. Many elements of IKS, such as Ayurveda and Vastu Shastra, are often misunderstood or reduced to commercialized practices in the global marketplace. The commodification of traditional knowledge, often without acknowledging its philosophical or cultural roots, has led to a dilution of its essence. Preservation and Documentation of Knowledge A significant challenge to IKS in contemporary times is the preservation of its vast and diverse body of knowledge. Many ancient manuscripts and texts have been lost or are at risk of

deteriorating due to climate change, neglect, and the lack of a structured documentation and archiving system. Digitization efforts, such as those led by institutions like the National Mission for Manuscripts in India, have contributed to preserving many ancient texts. However, there is still much work to be done in safeguarding oral traditions, regional knowledge systems, and the living practices that constitute the fabric of IKS. While there is recognition of the scientific validity of certain aspects of IKS, such as in Ayurveda and environmental sustainability practices, the integration is often met with scepticism due to the lack of empirical evidence or the perceived "unscientific" nature of traditional knowledge. There is a growing interest in interdisciplinary research that explores the intersections between IKS and contemporary scientific methodologies.

Challenges in the preservation and Applications of IKS

A key concern in the contemporary world is the commercialization of traditional knowledge. While India has made efforts to protect its intellectual property rights through legislation like the Traditional Knowledge Digital Library (TKDL), there remains a significant challenge in ensuring that the benefits of IKS are equitably shared. The global market for herbal products, for example, has led to concerns about the exploitation of indigenous knowledge without adequate compensation or recognition for the communities that have safeguarded this knowledge for generations. Educational Integration and Curriculum Development Another issue is the integration of IKS into mainstream education. While there are efforts to include elements of traditional knowledge in Indian curricula, the approach remains fragmented and, in many cases, superficial. The existing education system, largely influenced by Western models, does not fully incorporate the diverse intellectual traditions of India, nor does it encourage students to critically engage with IKS. A comprehensive approach to the curriculum, which includes not just the preservation but also the critical evaluation of traditional knowledge in the context of contemporary issues, is needed.

IKS for Tradition and Modern Thinking

Interdisciplinary Research and Collaboration To overcome the challenges facing IKS, there is a need for interdisciplinary research that brings together traditional scholars, scientists, and practitioners. This collaboration can help in the systematic study, documentation, and preservation of IKS while also facilitating its integration with modern scientific practices. Revitalization of Traditional Education Systems The revival of traditional knowledge in a modern context requires a rethinking of the educational system. Institutions should focus on fostering critical thinking while incorporating indigenous knowledge systems into the curricula. The promotion of indigenous languages, oral traditions, and local knowledge would also play a key role in reviving IKS. Policy Initiatives Government initiatives should prioritize the protection of traditional knowledge and its equitable use. The role of policymakers in promoting the rights of indigenous communities, establishing proper channels for intellectual property protection, and fostering global dialogue on traditional knowledge is critical for the future of IKS.

Conclusion

From the above discussion it is clear that the Indian Knowledge System is a rich and diverse body of intellectual traditions that has much to offer in addressing contemporary global challenges. However, it faces significant challenges in terms of preservation, commercialization, and integration into modern science. We can ensure that the wisdom of IKS is preserved for future generations and integrated meaningfully into the global knowledge ecosystem. By addressing these issues, India can ensure that its rich intellectual heritage contributes to global knowledge systems, benefiting not only India but the world at large.

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Naturalistic Beliefs And Practices of The Tiwa People of Assam: A Philosophical Outlook

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Abstract

Assam, located in the northeastern region of India, is home to a rich tapestry of indigenous and tribal communities whose cultural and spiritual identities are deeply intertwined with nature. Among these, the Tiwa community exemplifies how natural elements are not merely environmental entities but are perceived as sacred and integral to their faith and worldview. This paper explores the profound influence of nature on the indigenous and tribal faiths of Assam, focusing particularly on the Tiwa tribe. Their animistic beliefs emphasize the interconnectedness of all living beings and the divine manifestation in natural objects such as hills, rivers, rocks, forests, and celestial bodies. Deities like Balakhangor, the stone deity, and Silikhangor, a sacred mountain, are central to their worship practices, symbolizing the Supreme Being's presence in natural forms. These deities are honored through rituals, sacrifices, and mantras that aim to maintain harmony between humans and nature. Additionally, various regional natural landmarks are revered as protectors and providers, playing vital roles in community festivals, agricultural practices, and healing rituals. The Tiwa people's spiritual philosophy underscores the belief that disturbing the natural balance invites misfortune, thereby reinforcing the principles of ecological conservation and sustainability. Through a detailed examination of Tiwa religious practices, oral traditions, and community beliefs, the study illustrates how nature is not only a source of life but also a moral compass and divine presence in the indigenous worldview. This relationship highlights the importance of preserving such traditional knowledge systems, which offer valuable insights into sustainable living and environmental stewardship in an increasingly industrialized world.

Keywords: Tiwa tribe, nature worship, indigenous faith, animism, Balakhangor, Silikhangor, ecological balance, traditional knowledge, environmental stewardship.

1. INTRODUCTION

Assam, a northeastern state in India, is home to a diverse array of indigenous and tribal communities, each with their unique cultural, spiritual and traditional practices. The state has rich biodiversity and natural beauty have profoundly shaped the spiritual beliefs and practices of these communities, fostering a deep connection with the land and its resources. For centuries, indigenous and tribal faiths in Assam have revered nature as a sacred, recognizing the intricate web of relationship between humans, animals and plants and the environment. This symbolic relationship has not only influenced their worldview but also informed their sustainable practices, cultural rituals and daily lives. By exploring the influence of nature on indigenous and tribal faiths in Assam, we can gain a deeper understanding of the complex interplay between human culture and natural world, and the importance of preserving traditional knowledge and environmental stewardship. The Tiwas otherwise known as Lalungs, the name as they believed was given by the non-lalungs. 'Tibet' region is said to be the original home of the Lalungs or Tiwas, yet their migration to the plain is shrouded in mystery. Barua (1962) in his book, *Red River and the Blue Hills* wrote, that these Mongolians in general belong to the Tibeto-Burman family of the Indio-Chinese group. The Kacharis, the Rabhas, the Miris, the Lalungs, the Nagas, and the Kukis, are the

members of the Mongolia group that migrate into the land. Bordoloi (1984) in his book *The DimasaKacharis of Assam,* mentioned

"Besides the Dimasa, includes the Boros, Kacharis, Rabhas, Lalungs, Tipperas, Mechs, Kochs, Chutiyas and Morans. All are from the Tibeto-Burman family. originally all these groups of people belonged to the Tibeto-Burman group" (Thakur,1985, p.1).

Again, another Scholar in his opinion is that the Tiwas or Lalungs are one of the offshoots of the Mongolian race of the Tibeto-Burman group of Sino-Tibetan speech family who had their migration to this land in the pre-historic period (Borpujari, 1990). There are some records on the Tiwas in Hunter's (1879) *Statistical Account of Assam* that give us a description of who the Tiwas are. Allen (1902) mentioned the name Lalung in the *Assam District Gazetteers* census. Some monographs prepared by the officials in the British time are available in various archives. A few books, monographs, and papers, (Robinson,1841; Michell, 1883; Waddell, 1901; M' Cosh, 1957; Thakur,1976) also mentioned the Tiwa in their works. They have multifarious characteristics born out of their history, culture, language, religion, and distinct social, cultural, and religious activities of their own.

The Tiwa tribe, besides various deities also worship various natural objects and the reasons for worshipping some of such natural objects found in their culture and religion can be mentioned as follows

DATA ANALYSIS AND INTERPRETAION

The Tiwa people preferred to dwell in dense forests from ancient times and in some hill areas they used to utter mantras or hymns in the name of the valley as well as a hill, everything like small or big hills, rivers, wetlands, streams, trees, stone, animals, birds, etc. have their worth. TheTiwa people's nature worship is grounded in a deep philosophical belief that the Supreme God manifests through all aspects of nature, making the nature not only a sacred space but an integral part of their spiritual existence. This worldview emphasizes the interconnectedness between humanity and the natural world, asserting that every element of nature, from hills and rivers to trees and forests, embodies divine presence.

For the Tiwa, the physical world is not separate from the divine; rather, it is an expression of the omnipresent, omniscient, and omnipotent God. Their religious practices are therefore an acknowledgment of this divinity within nature, and their rituals such as the offering of sacrifices and *Zu* are means of honoring and maintaining harmony with the gods represented by natural phenomena. The philosophical foundation of their belief system stresses the importance of ecological balance and environmental stewardship, with the understanding that the well-being of the community is directly tied to the health and protection of nature. This holistic view underscores Tiwa's conviction that humanity's survival and prosperity depend on sustaining a respectful, eco-friendly relationship with the earth and all its resources.

Thus, nature worship of Tiwa is deeply rooted in a philosophical framework that emphasizes the interconnectedness between the divine and the natural world. Their belief system is the understanding that nature is not merely a backdrop for human life but a sacred expression of the Supreme Being (*Faa-Mahadeo)*. The Tiwa sees the divine as manifesting through various natural elements such as hills, rivers, stones, trees, and animals. These elements are not just physical entities, but spiritual beings imbued with divine presence and power. Here is a detailed explanation of Tiwa nature worship.

Balakhangor the Stone Deity

It conveys the meaning that the Supreme Being is manifested in the form of nature. It signifies that nature exists, so the Supreme Being also exists. It is the only truth that the Supreme Being manifested Himself in the form of nature; He has no form or shape. These are the elements of philosophy hidden behind the mantras or hymns while at the time of worshiping which binds and constructs the philosophical insights of the Tiwa's beliefs system.

Amongst the Tiwa people, *Balakhangor* is one of the important deities, particularly in the Hill areas. One of the Respondents, namely PhulsangKholar, aged about 54 said that *Balakhangor*, the stone Deity is the agent of the *Faa-Mahadeo*. *Balakhangor*is a huge

rock at the top of the hill in west KarbiAnglong and people worship the stone Deity most. *Balakhangor* is the protector of the AmsaiPinung village, and as per their belief that *Moramuji* and *Sharipahi* were his parents. (The son and daughter of the *Balakhangor Thiris Thongai, Barmon Khongor* are his sons, *LaisariKhunguri,* and *Rungshu Khungur* are his daughters)**.** They believe that *Balakhangor* is like a human being. During the field survey, it was stated by Respondents that before coming to the first King of the Tiwas *Sodonga Raja* to *Amsai* village from *Tinowflong* (Jaintia hills) there were no clothes to wear and residing at the *Balakhangor*the hillock *(*Amsai) they got clothes to wear. And after that, they considered the Hill as one of their famous Deity.

Their faith is that *Balakhangor* has the power to fulfil the dreams of the people if they worship or pray with deeper affection. Their traditional belief is that all the festivals, rituals, and dances of the village were the gift from the God *Balakhangor.* Some of the rituals and festivals which are obtained by the *Balakhangor* in the areas of *Amkha, Amsai, Bormarjong*, and other related areas which are collected at the time of inquiry are

1. *Bor-Changkhang*
2. *PhidriJongkhong*
3. *Sagra*
4. *Yangli*
5. *Muthi Lowa*
6. *Langkhoon Phuja*
7. *Thurlu puja*.

It has been narrated by the respondent that in ancient times there was a tradition to offer human sacrifice to *Balakhangor* near the stone at *Changkhang Saal*: the priest had sacrificed humans yearly in *Phidri Chanhgkhang* near the *Balakhangor*. During the early British period, three Britishers were reported to have been sacrificed at the *Changkhang Saal*. The reason for sacrificing humans is that it brings security and fortune to the villagers from the evil spirits. Presently a black goat is sacrificed instead of a human being. In these areas, various spirits protect them from evil spirits: they believe that spirits are here in caves, forests, rocks, and water bodies, and these natural things are big and potentially dangerous and are supposed to have a life that is not generally visible to humans (Respondent: Phulsong Kholar).

Silikhangor the Highest Mountain

In the Thara Khunchi of Rangkhoi area, it was observed during the research that they worshipped the hill or mountain *Silikhangor* and they believed that *Silikhangor* was the representative of the Supreme God '*Faa-Mahadeo'* like the stone Deity *Balakhangor* of the Umsuwai area. It has been narrated by the Respondent Pirlu Amsi, aged about 57, of Tharaunchi that the faith and reason behind worshiping *Silikhangor* was to please Nature and if Nature is not pleased or if Nature is dissatisfied then so many unusual happenings or circumstances may occur therefore, they worshipped and prayed to *Silikhangor* by sacrificing a black male goat. They used the term *Rakhandwa* for the Deity *Silikhangor*. During the time of worshiping of *Silikhangor,* they uttered the following mantras or prayers which had been narrated by the respondents or living libraries of that area. To protect man, animals, cultivation, and birds they utter mantras and pray to the God *Silikhangor*, and this has been narrated by the respondents,

O, Rakhandwa Cho Rakhane
Ma Rakhane, Pagane, Pahahi, KabiRakhane
Labi, SawaiRakane
Kheti – PatiRakhane
Pitan, BramharaRakane, TumharRakhane

Again, to protect the vegetables, forest, and wood they utter mantras to satisfy the *Silikhangor*

Habi Khadar Gai
Sarang Khadar Gai
MajaRadhaeu, ThapaRadhaeu
NaiLigaai, O Ligaai
Pol HaneLigaai
Lai HaneLigaai
Pol Ligaai, Khupale Pale Ligaai

They pray to *Silikhangor*by chanting mantras when they travel to some other places or at the time of setting out for travel to get rid of accidents:

Tholkadar Gaai, Nakar Gadar Gaai
Madror Dugai, TeneMajar
Hare Maj Nai Liggai, Koi Liggai
Rane Maj, Fate Maj Lanhkhaiune Ma
PareneMaj, Hare Maj, Tine Maj,
Nai Liggai Koi Liggai
Tir Rakhane, Thom Rakhane

They also used the following mantras or prayers to their God *Silikhangor* at the time of suffering or ailments or to recover from ailments:

Sari bhaine, Sari Mukane
ParoKhandew, AatharKhandew
Kila bar Phikai, Lathim Bar phikai
Tunga Bar Phikai, Sona Bar Phikai
Hayea Bar Phikai, Paya Bar Phikai
Mukuja Bar Phikai
Kang GujaPhikai,TukaPhikai
KhakPhikai,SikamPhikai
KorLomPhikai,Nal Siki Khala,
Puji Khala (Respondent PirluAmsi).

Thus, we have seen that the Tiwa have their faith in hills or mountains, stones or natural objects such as *Mindai*and they considered such things or these natural entities as souls of spiritual beings, and by *Rakhwanda* it means that He is their preserver and sustainer.

Besides these they also believe the following natural objects are treated as God

2.2.1. Bagh-Dew

In the Tiwa *Toh'rom, Bagh-Dew* is considered as the owner of the forest or land, domestic animals and therefore He is worshiped by them so that such things can be protected. The land included domestic animals like goats, buffalo, and other domestic animals. They prayed to Him because such animals may be protected from tigers and other animals in the forest.

2.2.2.Phurimasor

In Tiwa*Toh'rom* He is considered as Dew or Deity of all successful acts and therefore to achieve all great works or at the outset of every work pray to the Deity *Phurimasor* for the successful outcome of their work. The Sun according to them is considered a *Phurimasor*.

2.2.3.Posmoda

The Tiwa people worship the earth which they believe is the gift of the Supreme God. The term *Posmoda* means earth and again they called it *Ha*, the *Ha* meaning soil and it is regarded as Mother Earth. They believed that *Posmoda* is the gift of the Supreme God to human beings or that *Posmoda* is one of the properties of God given to all mankind. Therefore, the Tiwa people worship Posmoda to receive blessings, and different Phujas like *Changkhang, Yangli,* and *Thol* Phuja are performed by them. They offered and sacrificed various animals as well as birds and they sprinkled the blood so that they hoped that they may have favors of wealth, fortune, and blessings from the earth while living on the earth. They used to offer worship and prayer when they wanted to construct new houses and at the time of site selection for the boundary, and they also used to purify the earth with holy water at the time of the inauguration of new houses. In their belief, Earth is one of the Gods which are accepted by their different clans. Since the Tiwa people believed *Posmoda* was the gift of God to mankind, they had restrictions to selling land because they thought that it belonged to the Supreme God. Thus, according to the Tiwa religious philosophy the union between the God of Land (earth) and community is unbreakable embracing the whole of creation and without the land (earth) the people will be lost and without the people, the land is lost.

2.2.4. Tohorom Raja

The Tiwa people call the God Moon as *Tohorom Raja*, and they believe in Him as the God of peace and righteousness. In some hill areas, there is a tradition to practice rituals carried out by the family members at the time of illness, and generally, this ritual is done at night time and a white cock is offered and sacrificed in the ritual. After sacrificing the bird, it is cooked and thus they prepare a meal.

2.3. Other Natural Objects Use to Worship in Tiwa Belief System

The use and offering of *Zu*or *Lau-pani*at the time of worship and sacrifices of different animals, and birds, is a unique feature of their belief system. The

Tiwa people offer *Lau pani*or *Zu*and sacrifice different animals to satisfy different Gods and Goddess and there are no worship, rituals, and festivals where *Zu* and sacrifice of animals like chickens, goats, pigs, and eggs are performed. Every ritual and worship are performed with sacrifice in the name of different Deities along with oral hymns or mantras. As per their belief, they worship different Deities as per their capacity or ability at a particular time of the year to avoid misfortune, hindrances, and hurdles to the family, village, community, and well-being of people. In some areas in the month of *Phagun*or*Saut* (February or March), they prayed to their Deities or *Devota* in the various *Thaan*or *saal t*o avoid ill-omen, misfortune, and hurdles prayed with the offering of *Lau -Pani,* the sacrifice of a chicken or goat is done.

They believed that there was a Lord of hills, rivers, trees, ponds, forests, water, Land, or every part of nature and their traditional view is that if they did not worship and pray to them properly through offering *Zu* and other animals, birds they would be dissatisfied, misfortune and bad omen may happen. Zuis taken to be an integral part of their worship or prayer. *Zu*is widely used in the various individual, social, and religious life processes of the Tribal people. Even at the various traditional practices at the time of cultivation like *DhanarMuthiLowa, Nara SigaKhowa,* at the time of the birth ceremony, *Manshwa,* in the various forms of *Phadewa*or marriage, in the death ceremony like *Karam,* ancestor worship, *DeoSewa, BhakatSewa* and different festivals the *Zu* is used extensively. Generally, at the time of offering *Zu* to God, they used the following mantras:

Hey Sari bhaiIshor
Tumaloi Sewajonaisu.'
Puja korisu. Bosormah arise
Tumaloi Ahar Ag bohisu, Tumi Grohon Kari bolagibo
Ami pradan Korisu, kunu dig darinologaba
Bey Napaba Prabhu (Dewri, 2013, p.17).

The Tiwa were not the followers of the Hindu culture of worship. They had no idol worship. Instead, they have Divine pillars like *Mindai Thuna* and *Thunaphang* at the *Bor-ghor* and Shamadi respectively which are the symbols of deities. Again, they have stone Deities like *Balakhangor*and high mountain *Silikhangor* which they believed as the representative of the Supreme God. They believed that the entire nature is the manifestation of the Supreme God. They believed that God had no definite shape. He may take the form of any object. He is the only truth that is omnipresent, omniscient, and omnipotent. In many religious practices, *Mindai Thuna* and *Thunaphang* are worshipped as the symbol of the Supreme God by the Tiwasociety.They worship their deity by offering the first grains of the season, areca nuts, rice powder and other objects of sacrifice along with the meat of goat, chicken, pig, tortoise, etc., and rice beer. There is some restriction to worshiping during the time of birth and death process and till the community purification has taken place; one is restricted from entering the *Na-baro*or *Bor-ghor*. They use basil leaves, particularly grass or Dubra which has some similarities with Hindu worship.

The Tiwa are very conscious about purity. For example, they never allow anyone to enter *Shamadi*or *Na-baro* or a place of celebrating traditional Misewa or Fesrival with shoes, and such practices may be due to the idea of pure devotion, health, and good life. The mere idea of devotion, good health, and good life are the reasons for the practice of purification. In the Tiwa religious belief nature occupies an important place and they have their public religious place of worshipping in the forest which is known as *Thaan*orSaal. They believe that if somebody destroys the forest, their deities will be dissatisfied and thereby shower hurdles and trouble upon them. So, they must protect the forest. In their belief, the Supreme God created the world and nature, and they believed that they are part of nature and therefore they must pay respect to the Almighty by protecting forest or nature. The reason behind this is that they have to establish an eco-friendly relationship with nature. Therefore, they believed that there is a close connection and relation between human society and nature. In their religious belief, God manifested Himself through different natural objects to help us to sustain the world. According to them, everyone should offer respect to nature as nature is the source of life

and sustenance for the community. As everything is the manifestation of the Supreme God, nature, and natural phenomena occupy a significant place in the Tiwa worldview and beliefs. Natural production and resources are somehow related to their belief and practices (Senapati, 1980).

2.4. PHILOSOPHICAL OUTLOOK

The Tiwa's naturalistic beliefs system offers a deep philosophical insight into the interconnectedness of humanity, nature, and the divine. The Tiwa belief system recognizes nature not as a mere backdrop to human life, but as a living manifestation of the Supreme God. Their reverence for natural elements, hills, rivers, forests, and land illustrates a worldview where the divine is not confined to abstract spiritual realms or idol representations but is embodied in every facet of the natural world. This belief fosters a profound sense of responsibility and ecological stewardship, where humans are seen as integral participants in the cyclical processes of life, ensuring harmony through rituals that honour and protect nature. The act of offering *Zu* or *Lau-Pani*, along with animal sacrifices, becomes a sacred transaction between the material and spiritual worlds, aimed at maintaining balance and averting misfortune. Tiwa's sacred practices, rooted in purity and devotion, reflect a broader philosophical understanding that purity, respect for nature, and the divine are inextricably linked, and that human well-being depends on the careful preservation of the natural world. Thus, the Tiwa religion offers a holistic perspective where spirituality is not detached from daily life, but is a lived experience deeply intertwined with the cycles of nature and the community's survival.

Thus, from the above analysis and discussion we may interpret the influence of nature in Tiwa's beliefs and practices and its philosophical outlook under following heads

2.4.1. The Supreme Being's Manifestation in Nature

The Tiwa religious belief is grounded in a monotheistic belief that the Supreme Being manifests Himself through nature. The concept that the Supreme Being is formless and beyond human comprehension is crucial to understanding their nature worship. They perceive nature itself be it a hill, a stone, a river, or a tree as an expression of the Supreme Being's presence. The idea that *Faa-Mahadeo* has no form, or shape is foundational to the Tiwa's spiritual philosophy. Thus, nature is not just a passive entity but an active participant in the divine plan. Nature, in its various forms, becomes a mirror or conduit for the divine, a way for the Tiwa people to engage with the Supreme Being. This view emphasizes a pantheistic philosophy where the divine is inherent in all aspects of the natural world.

In the case of *Balakhangor*, the stone deity, the worship of the stone signifies that the divine is present in physical objects. The stone is considered not merely an inert rock but a sacred being with power and influence over the lives of the worshipers. By venerating *Balakhangor*, the Tiwa acknowledge the inherent divinity in the physical world.

2.4.2. The Interconnectedness Between Humanity and Nature

The Tiwa tribe's nature worship underscores a philosophical commitment to the interconnectedness between humans and nature. This worldview suggests that all forms of life, whether human, animal, or plant, are interdependent and share a divine essence. This is particularly evident in the worship of *Silikhangor*, the highest mountain, where the Tiwa believe that maintaining harmony with nature by honouring *Silikhangor* ensures the prosperity and well-being of their community. The act of offering sacrifices, chanting mantras, and making prayers is not merely a religious ritual but a means of nurturing and sustaining this interconnection with nature.

The act of worship is also a form of dialogue with nature, where the Tiwa people acknowledge their dependence on the natural world. For example, when they pray to *Silikhangor* for protection during travel or for good harvests, they are reinforcing the idea that nature's forces must be respected and honoured to ensure positive outcomes in their lives. The understanding is that nature, in its many forms, has a life force that can either aid or harm human existence depending on whether it is appeased and respected.

2.4.3. Nature as a Protector and Sustainer

In Tiwa philosophy, nature is seen as both a protector and Sustainer of human life. The natural world, embodied in deities such as *Balakhangor* and *Silikhangor*, is viewed as having the power to safeguard the community from evil spirits, misfortune, and other threats. This protection extends beyond physical safety to include the well-being of the community's livelihoods, health, and prosperity. Rituals and sacrifices are ways to ensure that nature, through these deities, remains favourably disposed toward the people.

The worship of hills, mountains, and rivers reflects the belief that natural elements are not just material phenomena but possess spiritual significance. The Tiwa people view these natural entities as living beings with their own consciousness and influence over human affairs. They believe that evil spirits and negative forces can inhabit natural spaces like caves, forests, and stones, and it is essential to maintain harmony with these elements to ensure the protection of the community. In ancient times, even human sacrifices were believed to be necessary to appease these powerful natural spirits and maintain the community's security. While such practices have been replaced by animal sacrifices in modern times, the belief in the protective power of nature remains strong.

2.4.4. Rituals as Means of Maintaining Harmony

The rituals performed by the Tiwa are not just acts of devotion; they are philosophical expressions of maintaining balance and harmony between the human and natural worlds. The use of mantras, prayers, and sacrifices is seen to communicate with the divine presence in nature and ensure its favour. For instance, the mantras uttered during the worship of *Silikhangor* reflect the Tiwa's desire to please nature and avoid the consequences of nature's dissatisfaction, such as accidents or misfortune.

The philosophy behind these rituals is that human actions must align with the rhythms and forces of nature. The Tiwa tribe believes that nature's balance must be maintained through these practices, and that any disruption in this harmony can result in negative consequences for the community. For example, sacrificing a black male goat during the worship of *Silikhangor* is not merely a symbolic act but an essential offering to keep the divine forces of nature satisfied and protect the people from harm.

2.4.5. Ecological Stewardship and Environmental Balance

An important aspect of Tiwa nature worship is the emphasis on ecological balance and environmental stewardship. Their belief system highlights the understanding that the survival and prosperity of the community are directly tied to the health and protection of nature. The Tiwa people acknowledge that they are part of a larger ecological system and that their actions have a direct impact on the natural world.

The Tiwa's practices of offering sacrifices, chanting mantras, and performing rituals can beviewed as early forms of ecological awareness. They seek to preserve the environment and ensure that nature's resources such as forests, rivers, and animals are not depleted or abused. The philosophical foundation of their religion encourages a respectful and eco-friendly relationship with the earth, one that promotes sustainability and harmony. This understanding aligns with modern environmental concerns, where the well-being of humanity is increasingly seen as dependent on the health of the planet.

2.4.6. The Physical World as an Expression of the Divine

The Tiwa philosophy underscores the idea that the physical world is not separate from the divine but is an expression of it. In this worldview, the mountains, rivers, stones, and forests are not simply placing to live or things to use; they are sacred spaces where the divine is directly present. By worshiping these natural entities, the Tiwa people honour the divine essence that permeates the physical world.

This belief system leads to a holistic worldview, where every element of nature is seen as part of a larger spiritual ecosystem. The Tiwa people do not view the physical world as a domain to be conquered or exploited but as a sacred space to be protected, nurtured, and respected. The Tiwa tribe's nature worship

is a profound philosophical system that ties together spirituality, ecology, and community. By venerating natural objects and forces, they express their belief in the omnipresence of the divine and their deep interconnectedness with the natural world. Through rituals and sacrifices, the Tiwa maintain harmony with nature, acknowledging that the well-being of the community is intrinsically linked to the health of the environment. Their belief system reflects a pantheistic philosophy, where nature is not separate from the divine but is, in fact, an expression of the divine presence itself.

2.5. CONCLUSION

The influence of nature on indigenous and tribal faith in Assam particularly Tiwa is profound with natural world playing a central role in shaping their spiritual beliefs and practices. The community perceive nature as sacred, believing that every element from rivers, forests to animals, plants hold spiritual significance and is imbued with Divine power. Their faiths are often animistic, recognising the inherent value and interconnectedness of all living beings. This deep connection with nature informs their cultural practices, rituals and daily lives, promoting a harmonious relationship with environment and fostering a sense of stewardship and responsibility toward land and its resources. Through their reverence for nature, indigenous and tribal communities in Assam embody a holistic worldview that underscores the importance of living in balance with natural world.

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Informant: Phulsang Kholar, aged about 54 of Umsuwai of West Karbianglong

Informant: Pirlu Amsi, aged about 57 of Rangkhoi area of Karbianglong

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Economic Consequences of the Iran-Israel-US Conflict on Emerging Economies

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Abstract

The Iran–Israel–US conflict has significantly affected the emerging economies, particularly whichare dependent on imported energy and external trade. Based on secondary data and a descriptive research technique, this study examines the major channels via which the conflict affects these economies. The findings reveal that rise in oil prices, inflationary pressures, disruptions in trade, exchange-rate depreciation, volatility in financial markets, and slower economic growth are the key impacts. The conflict also raises fiscal stress, poverty, and energy security concerns. The study highlights the need for diversification in energy and stronger macroeconomic policies to enhance their resistance against the geopolitical shocks.

Keywords: Iran–Israel–US conflict, emerging economies, oil prices, inflation, economic growth.

Introduction

The most immediate and tragic cost of the Iran-Israel-US conflict is measured in lives lost. But economists are concerned about the other dimensions this conflict has on the economy. The economic consequences across the world will be uneven. Substantial costs will be borne by some countries, while others will have minimal impact on their economies. A number of concerns have intensified, starting from energy security, global trade, macroeconomic stability, etc., as a result of the Iran-Israel-US conflict. Since the emerging economies are heavily dependent on imported energy, external trade, international capital flows, etc., they are more susceptible to the consequences of the war. The Iran-Israel-US conflict will have anincreaseduncertainty in the financial market, leading to higher commodity prices and slower economic growth. A substantial share of global oil trade passes through the Strait of Hormuz, and the potential disruption has led to significant risks. The recent evidence of rising inflation and weakening growth prospects in a number of developing countries indicates the disruptionsin the energy market. The present study tries to highlight the economic impacts of the Iran-Israel-US conflict on the emerging economies.

Review of Literature

The Iran-Israel-US conflict has significant implications for the emerging economies. In the energy-importing countries, the rising geopolitical tensions in the Middle East have increased the crude oil prices, shipping costs, and insurance premiums, leading to inflationary pressures and slower economic growth **(Koiri, 2026; Navale, 2026).** In emerging economies, due to geopolitical shocks, there is an increase in systemic financial risks, reducinginvestors' confidence and destabilising the banking system **(Wang, 2025).** The Iran-Israel-US conflict is having a negative effect on production and economic activity by disruptions in trade routes and global supply chains by raising costs of transportation and global supply chains by raising costs of transportation and reducing trade efficiency **(Onwioduokit&Ekong, 2025).**

Data and Methodology

This study is based on data collected from secondary sources such as government records and

reports, journals, books, newspapers, etc. The study is descriptive in nature.

Findings and Discussions

Economic Consequences of the Iran–Israel–US Conflict on Emerging Economies

Emerging market economies are exposed to the Iran–Israel–America dispute through a combination of several interconnected channels. The key consequences are listed below with some elaboration in prose.

Rise in Oil Prices

The most immediate economic effect of the conflict is the spike in price of crude oil around the world. Being one of the largest oil production regions, the military escalation would increase worries about an oil supply disruption through the Strait of Hormuz, one of the world's most critical oil transit routes. Higher oil prices increase production and transportation costs, rippling through the economy.Due to the heavy dependence on other nations for crucial oil supplies, growing import bills in ceaseless rise weakness are hampering domestic economies of some developing lands like India, Pakistan, Bangladesh and several African states.

Inflationary Pressures

Higher energy costs feeds straight back into inflation. Higher fuel costs increases transportation cost, electricity price and the prices of goods and services. As a result, businesses pass those increased costs on to consumers and we have cost-push inflation. In the case of developing economies, as a significant portion of household income is spent on basic goods, inflation eats away disposable income and leads to lower living standards.

Slower Economic Growth

When inflation takes place in an economy, production costs increase which eventually reduces growth. As real income of the consumers gets reduced, the demand for firm products declines and firms face higher operating costs. Governments may also be forced to reduce development expenditure to manage rising fiscal pressures. Simultaneously, investment, production, and consumption may decline. These slow down GDP growth in emerging economies. Recent analyses suggest that prolonged conflict could weaken global and emerging-market growth prospects.

Deterioration of Trade Balance

Most emerging economies import large quantities of crude oil and petroleum products. Due to the rise of oil prices, the value of imports rises which leads to the deterioration of trade balance. So, countries must spend more foreign exchange reserves to purchase the similar quantity of oil which increases current account deficits. Further, this put pressure in external finances. For the countries whose import earning is limited, this problem is particularly acute for them.

Exchange Rate Depreciation

When import bills goes up, it increases the demand for foreign currencies, particularly US dollar. As a consequence, domestic currencies seems to be depreciating against key international currencies. As a result of currency depreciation, the cost of imports increasesalong with external debt servicing which creates additional inflationary pressures. Recent market developments have shown increased pressure on emerging-market currencies as a result of the conflict-related uncertainty and rising prices of oil.

Financial Market Volatility

As a result of geopolitical conflicts, uncertainty in global market increases. Investors tend to withdraw funds from riskier emerging markets and shift investments toward safe-haven assets such as gold and US government securities. This can lead to stock market declines, capital outflows, and reduced access to foreign investment. Financial market instability may also increase borrowing costs for governments and businesses in emerging economies.

Supply Chain and Trade Disruptions

Major international maritime routes may be disrupted by the war and as a result of which, freight and insurance costs may rise. The flow of raw materials, intermediary items, and final products is impacted by transportation delays and increased logistics costs. As a result of being in the global value chains, the emerging

economies may face production interruptions and decreased export competitiveness**.**

Fiscal Stress on Governments

When there is a rise in energy prices, government comes under rising financial stress.To safeguard the consumers, many governments raise welfare spending and offer gasoline subsidies for the protection of the consumers. As a result of decreased tax receipts, economic growth slows down. Long-term difficulties for economic stability may result from this combination, which might increase public debt and budget deficits**.**

Increase in Poverty and Inequality

The low-income households often affected by inflation and slower economic growth. The real income of people goes down with rise in the cost of food items. This raises the cost of living. As poorer households spend a larger share of their income on necessities, they are more severely affected by conflict led inflation. Consequently, poverty and income inequality may increase in many emerging economies.

Energy Security Concerns

Those countries which heavily depends on fossils fuels becomes highly vulnerable. The energy security may be threatened by frequent disruptions and economic instability. As result, we can see many emerging economies accelerating their investments on renewable energy and alternative energy sources to reduce their dependence on fossil fuels.

Increased Defence Expenditure

When geo-political tensions emerge, the governments are encouraged to increase defence expenditure and security expenditure. While necessary for national security, higher military expenditure can divert resources away from infrastructure, education, healthcare, and development projects. This can negatively affect long-term economic development in emerging economies.

Long-Term Structural Changes

The conflict may lead to long-term changes in global trade patterns, energy markets, and investment flows. Countries may change their energy suppliers by establishing new partnerships and redesign supply chains to reduce dependence on conflict-prone regions. These structural adjustments could reshape the economic landscape of emerging economies over the coming decade.

Conclusion

Higher oil prices, inflation, trade disruptions, exchange-rate instability, financial market volatility, and slower economic growth are the main ways that the Iran–Israel–US war impacts emerging countries. The energy price shock is the most important of these channels since it sets off a series of events that impact trade balances, inflation, fiscal stability, and overall economic performance. Energy diversification and macroeconomic resilience are crucial policy concerns because nations that rely significantly on imported energy are likely to incur the highest economic costs.

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Heritage Tapestry of Dima Hasao: A Historical Appraisal of the Dimasa Kingdom and Maibong as a Foundation for Tourism led Economic Diversification in Assam

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Abstract

Dima Hasao, formerly known as the North Cachar Hills district in Assam, holds within its terrain one of the most extensive yet underexplored narratives of state formation in Northeast India: the story of the DimasaKachari kingdom. This kingdom, with its medieval capital at Maibong (1540-1700 CE), has left behind significant historical remnants such as the rock-carved Ramchandi temple, the treaty stones inscribed by King Naranarayan, and a vast megalithic landscape now under the protection of the Archaeological Survey of India. This paper conducts a historical evaluation of the Dimasa kingdom, focusing on Maibong as its central hub, and examines how this rich heritage, both tangible and intangible, can support tourism-driven economic diversification in a district whose economy is currently limited, extraction-based, and susceptible to risks. Utilizing qualitative analysis of secondary sources-including colonial historiography, archaeological records, government tourism data, scheme documents, and recent academic work, the study traces the kingdom's progression from Dimapur to Maibong and then to Khaspur, compiles a list of heritage assets, and evaluates tourism potential using a SWOT analysis. The results indicate that Dima Hasao has a heritage of true national importance, which is largely missing from Assam's tourism landscape. Heritage tourism presents a viable diversification opportunity that aligns well with the district's Sixth Schedule governance framework. Additionally, aligning with national initiatives like SwadeshDarshan 2.0 and tribal homestay programs could transform this latent heritage into sustainable livelihoods. The paper suggests establishing a heritage circuit centeredaroundMaibong, implementing community-based benefit-sharing models, and prioritizing conservation in development efforts, while also recognizing the limitations of relying solely on secondary data and advocating for empirical field research.

Keywords : Dimasa kingdom; Maibong; heritage tourism; economic diversification; Dima Hasao

I. Introduction

Dima Hasao is one of Assam's two hill districts, covering approximately 4,890 square kilometers of the Barail range and nearby areas in the state's southern region. It is bordered by Nagaland and Manipur to the east, Cachar to the south, Meghalaya and KarbiAnglong to the west, and Hojai and KarbiAnglong to the north. Previously known as the North Cachar Hills until 2010, the district is governed under the Sixth Schedule of the Constitution by an Autonomous Council based in Haflong, which is often referred to as the "Switzerland of the East" (Baro, 2017; Sajem&Gosai, 2006). The district's population is notably diverse, with the predominant DimasaKachari coexisting with groups such as the ZemeNagas, Hmars, Kukis, Biates, Hrangkhols, Khasis, Jaintias, Karbis, and others, making it a vibrant repository of hill cultures.

Maibong, a modest sub-divisional town located along the Mahurriver, was the capital of the DimasaKachari kingdom from around 1540 until the early 1700s. This kingdom was a significant pre-colonial entity in the Brahmaputra and Barak basins. In southern Assam, the most notable medieval heritage sites include the stone-carved Ramchandi temple, the treaty-stones

inscribed by King Naranarayan, and the nearby monolith fields. Despite their historical importance, these sites receive little attention from scholars and tourists alike.

Heritage holds significance both economically and culturally. According to UN Tourism, the interaction between tourism and culture is one of the most influential factors enhancing the appeal of destinations, creating jobs, and fostering local identity, especially in developing economies aiming for diversification (UNWTO, 2018). In the case of DimaHasao, Rajiyung (2024) highlights that maintaining historic and heritage sites plays a vital role in advancing tourism and improving the socio-economic conditions of local residents, while also elevating the district's status on national and international stages. Consequently, heritage tourism simultaneously addresses three policy areas: conservation, identity, and livelihoods.

This paper aims to achieve two main goals: first, to explore the historical and cultural development of the Dimasa kingdom, with a focus on Maibong's significance as its medieval capital; and second, to evaluate the potential of this heritage for promoting economic diversification through tourism in Dima Hasao. The research is intentionally limited to secondary sources, including historical texts, archaeological records, government statistics and policy documents, and existing academic work. It is also geographically restricted to the Dima Hasao district, concentrating on heritage tourism rather than nature or adventure tourism.

II. Objectives

The first goal, tracing the historical and cultural development of the Dimasa kingdom, is explored using colonial historiography (Gait, 1933), modern historical research (Barpujari, 1997; Bhattacharjee, 1987), folk-historical reconstructions (Panday, 2024), and archaeological records from the Archaeological Survey of India (ASI, 2023). The second goal, evaluating the potential for heritage tourism, is pursued through regional tourism literature on Assam and the Northeast (Borthakur, 2024; Gaonkhowa, 2023; Gupta, 2026), national tourism statistics (Ministry of Tourism, 2025a), and UN Tourism literature on culture-tourism connections (UNWTO, 2015, 2018). A third related issue, how tourism can diversify the district economy, is examined through the economics of tourism multipliers and the institutional framework of the Sixth Schedule. This involves looking at how job creation in hospitality, handicrafts, and guiding can expand a livelihood base currently dominated by jhum cultivation and mineral extraction.

III. Literature Review

Dimasa Kingdom and Maibong. Gait's History of Assam (1933) remains the foundational account, establishing the antiquity of the Bodo-Kachari presence in the Brahmaputra valley through river name etymology *(the di/ti prefix)* and narrating the AhomKachari wars that pushed the kingdom from Dimapur into the hills. Barpujari (1997) and Bhattacharjee (1987) reconstruct the political economy of Dimasa state formation, while Panday (2024) reads the sequence of royal capitals (Rajbaris)-Sadiya, Dimapur, Maibang, Khaspur-through folk narratives, showing how oral tradition and archaeology converge. Ethnographic work on Dimasa material culture, notably the study of cowrie shells as media of exchange, amulets, and medicine (Somenath et al., 2025), documents a rich intangible heritage now at risk of intergenerational erosion.

Heritage tourism in Northeast India. Rajiyung (2024) provides the most geographically specific study, arguing through field survey and secondary data that heritage preservation in Dima Hasao directly enables tourism development and socio-economic gain. Borthakur (2024) applies a SWOT framework to Assam tourism, identifying rich cultural endowments as a strength but flagging weak stakeholder coordination and low local awareness of tourism's benefits.

Tourism's economic role in Assam. Gupta (2026) finds Assam's tourism sector largely underdeveloped-constrained by poor connectivity, limited accommodation, and inadequate transport-while offering substantial opportunities for revenue, employment, and entrepreneurship. Gaonkhowa (2023)

situates Assam among the fast-growing tourism markets of India, anchored in wildlife, tea, shrines, and festivals, and emphasises the industry's capacity to generate direct and indirect employment at scale. Nationally, tourism contributed 5.22 per cent of GDP and supported roughly 84.63 million direct and indirect jobs in 2023-24 (Ministry of Tourism, 2025a), underscoring the macroeconomic stakes.

Conservation and community involvement. UNWTO (2015, 2018) codifies global best practice on managing tourism at heritage sites: interpretation, visitor management, and crucially community participation in both stewardship and benefit sharing. Borgohain (2026), writing on river tourism in Assam, similarly concludes that responsible development requires community participation and ecological safeguards. The CAG's performance audit of the SwadeshDarshan scheme (CAG, 2023) is a cautionary complement: infrastructure schemes launched without feasibility studies, perspective plans, or impact monitoring deliver assets but not necessarily outcomes.

Research gap. Across these literatures, no study has yet treated Maibong's Dimasa heritage explicitly as an economic diversification strategy for Dima Hasao. Historical scholarship rarely engages tourism economics; the Assam tourism literature rarely disaggregates to the district or to heritage assets. This paper occupies that intersection.

IV. Historical and Cultural Evolution of the Dimasa Kingdom with Focus on Maibong

Origins and timeline. The Bodo belong to the Kacharis family whose dominance over the Brahmaputra valley long pre dates the Ahoms- Gait (1933) inferred its "wide extent and long duration" from the ubiquity of the Bodo water-prefix di in river names such as Dibru, Dikhu, and Dihing. The Dimasa ("children of the great river") trace their lineage in oral tradition to Hidimba and Ghatotkacha of the Mahabharata, and the kingdom was long styled Heramba, its kings Hidimbesvar (Panday, 2024). The first historically secure capital was Dimapur on the Dhansiri, whose brick gateway and carved monolithic pillars attest to a sophisticated urban culture flourishing before the Ahom advance. Repeated Ahom-Kachari wars culminated in 1536, when Suhungmung sacked Dimapur and killed King Detsung; the surviving aristocracy withdrew south into the Barail hills and, under Detsung's son-who took the Sanskritic name Nirbhay Narayan-re-established the capital at Maibang ("abundant paddy") on the Mahur river around 1540 (Gait, 1933; Panday, 2024).

The Maibong phase (c. 1540-1700/1750). Maibong was the crucible in which the Dimasa polity matured into a structured, Hindu-influenced kingship. Nirbhay Narayan installed his Brahmin preceptor as Dharmadhi, an enduring institution of state, and the tutelary deity shifted from the war-goddess KechaiKhaiti to Ranachandi (Panday, 2024). Sanskritic royal names-Naranarayan, Yashanarayan, Pratapnarayan, Satrudaman-appear on coins and inscriptions. The phase also produced the kingdom's finest military hour: during the Mughal campaign of 1612-14 under the Bengal Subahdar, King Satrudaman combined frontier fortifications at Asuratekar and Pratapgarh with hill terrain and guerrilla tactics to halt the imperial advance-one of the few recorded instances of a hill kingdom on the eastern frontier successfully resisting a Subah-level invasion (Barpujari, 1997).

Architecture and archaeology. Six monuments in Dima Hasao are centrally protected as Monuments of National Importance (ASI entries N-AS-12 to N-AS-17): the rock-cut temple at Maibang-locally the Ramchandi temple or "Stone House," hewn from a single rock; the two inscribed stones recording a treaty of King Naranarayan, also at Maibang; and the Derebara, Khartong, Kobak, and Bolosaon groups of monoliths scattered across the district (ASI, 2023). The district also contains Daojali Hading, the first excavated Neolithic settlement reported from Northeast India, and additional stone-jar and monolith sites documented by the district archaeology department at Dimram and Boloson. Together these constitute a layered archaeological landscape stretching from the Neolithic through the megalithic to the medieval Dimasa state.

Cultural traditions. The intangible heritage is equally dense. Bushu Dima, the principal post-harvest festival celebrated after jhum cultivation, takes three recognised forms-Jidaap, Surem Baino, and

HangshuBusu-and features the Baidima dance performed to the Kharam drum and Muri fife (Ministry of Culture, 2025). Dimasa women sustain a distinctive eri silk weaving tradition; judima rice wine carries a Geographical-Indication-worthy craft knowledge; clan exogamy is structured through paired male (sengphong) and female (julu) clans; and cowrie shells historically served as currency, amulet, and medicine, surrounded by rich mythological narrative (Somenath et al., 2025). Oral migration accounts tracing the people from Kamarupa through Dimapur to Maibang remain alive in the community (Panday, 2024).

Regional politics, economy, and afterlife. Maibong commanded the routes linking the Brahmaputra valley, the Barak plains, and the Manipur-Burma frontier, making it a node of inter-hill trade and diplomacy. In the mid-eighteenth century the court shifted to Khaspur in the Cachar plains, where Brahmanical kingship reached its fullest expression; the British annexed the plains in 1832 and the hills in 1834, ending the polity and bequeathing its name to the undivided Cachar district (Gait, 1933). Today, conservation rests jointly on ASI protection of the six national monuments, the district archaeology wing of the Autonomous Council, and community custodianship of festivals and crafts-efforts that Rajiyung (2024) identifies as pivotal but under-resourced.

V. Appraisal of Heritage Tourism Potential in Dima Hasao

Inventory of heritage assets. The stock relevant to tourism includes:

(i) The Maibong cluster, which features the rock-cut Ramchandi temple, Naranarayan treaty-stones, and the remnants of Rajbari;

(ii) The megalithic fields located at Derebara, Khartong, Kobak, and Bolosaon, along with the DaojaliHading Neolithic site;

(iii) living heritage elements such as BushuDima, Baidima dance, eri weaving, and judima; and

(iv) Additional natural attractions that can be combined into a circuit, including Jatinga with its unique bird phenomenon, Panimoor falls, the Hajong oxbow lake near Maibang, and Umrangso, known for its annual Falcon Festival. The combination is crucial: in the Northeast, heritage alone seldom attracts visitors, but a package of heritage, nature, and festivals increases both the duration and expenditure of stays.

Infrastructure and accessibility. National Highway 54(E) and the Lumding - Silcharbroadgauge railway run through the district, with Maibang serving as a railhead an often overlooked locational benefit. However, lodging options are sparse and mainly found in Haflong, there are no interpretation facilities at the monuments, signage is scarce, and the roads leading to the monolith sites are in poor condition. These shortcomings reflect Gupta's (2026) state level analysis, which identifies potential hindered primarily by issues in connectivity, accommodation, and transportation.

Stakeholders. Key actors include the Ministry of Tourism and Assam Tourism (funding and promotion), the ASI (monument custody), the Dima Hasao Autonomous Council (land, licensing, and local development under the Sixth Schedule), village authorities and traditional institutions, NGOs and cultural societies organising festivals, and the (largely domestic) tourist segment drawn from Guwahati, Silchar, and increasingly from heritage interest travellers nationally.

SWOT.

Strengths: nationally protected monuments, a distinctive royal history, vibrant living culture, rail connectivity, and scenic setting.

Weaknesses: negligible visitor facilities, low destination awareness, weak stakeholder coordination, and limited trained manpower (Borthakur, 2024; Gupta, 2026).

Opportunities: SwadeshDarshan 2.0 and its Challenge-Based Destination Development window, the Special Assistance to States for Capital Investment (SASCI) iconic-destination scheme, and the tribal homestay sub-scheme under **Pradhan Mantri Janjatiya Unnat Gram Abhiyan**(PMJUGA)-none of which yet includes a Dima Hasao heritage project, leaving headroom for proposals (Ministry of Tourism, 2025b; PIB, 2025).

Threats: funding uncertainty, perception lags from the district's earlier insurgency period, environmental fragility, and the documented risk that scheme driven infrastructure outruns planning and maintenance (CAG, 2023).

Sustainability prospects. A conservation first, community anchored model small-scale homestays, festival linked visitation, interpreted monument trails-fits both the carrying capacity of the sites and the responsible tourism orientation that Borgohain (2026) and UNWTO (2018) advocate, avoiding the enclave resorts that displace rather than employ local people.

VI. Economic Diversification through Heritage Tourism in Dima Hasao

Current economic profile. Dima Hasao's economy rests on a narrow base: jhum (shifting) cultivation remains the dominant livelihood across hill villages, supplemented by horticulture and forest produce, while the district's monetised economy is led by extraction coal around Umrangso, limestone feeding cement manufacture, and hydropower from the Kopili project. Such an extraction led structure has weak forward linkages, volatile employment, and environmental costs, exhibiting in miniature the "resource-dependence" vulnerabilities familiar from the regional economics literature.

Potential for tourism-led growth. Tourism's appeal as a diversifier lies in its labour intensity and its multiplier. Assam recorded about 7.61 million domestic tourist visits and 27,000 foreign visits in 2024, with foreign visits growing over 14 per cent year-on-year (Ministry of Tourism, 2025a)-yet virtually none of this flow reaches DimaHasao's monuments. Capturing even a small share would generate employment in homestays and food services, guiding and interpretation, transport, eri-textile and handicraft sales, and festival management, with second-round spending circulating through local agriculture and retail (Gaonkhowa, 2023; Gupta, 2026). For a district where formal-sector jobs are scarce, these are precisely the micro-enterprise opportunities accessible to households without large capital.

Conservation as economic strategy. Authenticity is the asset. The rock-cut temple, the treaty-stones, and BushuDima draw visitors only insofar as they remain credible and well interpreted; over restoration or staged culture would erode the very rent the district seeks. Conservation expenditure should therefore be understood as productive investment, not heritage charity (Rajiyung, 2024; UNWTO, 2015).

Challenges. The binding constraints are infrastructure deficits, low awareness among potential visitors and among residents of tourism's benefits (Borthakur, 2024), limited institutional experience in hospitality, environmental sensitivity of hill sites, and the governance riskevidenced by the CAG (2023) audit-of building assets without operation and maintenance plans.

Policy and strategic recommendations. Five measures follow. First, a Maibongcentred heritage circuit (Maibang-Jatinga-Haflong-Panimoor-Umrangso) should be formulated as a SwadeshDarshan 2.0 / SASCI proposal, with interpretation centres at Maibang and signage across the monolith sites. Second, the PMJUGA tribal homestay sub-scheme should be operationalised in villages adjoining the monuments, placing accommodation revenue directly in household hands (PIB, 2025). Third, capacity building-guide certification in Dimasa history, hospitality training, digital marketing of BushuDima-should precede hard infrastructure. Fourth, the Autonomous Council should institutionalise benefit-sharing: festival entry and parking revenues earmarked for village development funds, craft cooperatives for eri weavers and judima producers, and local-first employment clauses in any concession. Fifth, every project must carry a financed maintenance and monitoring plan, learning directly from the SwadeshDarshan audit findings (CAG, 2023).

Community based benefit models. Because land in the district is governed under Sixth Schedule provisions, large private acquisition is neither easy nor desirable; community based tourism is institutionally the better fit. Village managed homestay clusters, council licensed guide associations, and cooperative craft outlets allow the Dima Hasao Autonomous Council to act as regulator and revenue sharer rather than passive host, ensuring that heritage rents accrue to the heritage's custodians (Baro, 2017; UNWTO, 2018).

VII. Methodology

The study employs a qualitative, interpretive research design based wholly on secondary sources. Data were gathered from

(i) Historical texts and gazetteers (Gait, 1933; district gazetteers of the North Cachar Hills);

(ii) Archaeological inventories of the ASI and the district archaeology department;

(iii) Official tourism statistics and scheme documents of the Ministry of Tourism, including the India Tourism Data Compendium 2025, sanctioned-project lists of SwadeshDarshan, SD 2.0, CBDD, and SASCI, and the CAG performance audit; and

(iv) Published academic literature on Dimasa history, Assam tourism, and heritage conservation. Analysis proceeded through thematic and content analysis: historical materials were coded for the evolution and significance of Maibong; tourism materials for asset inventories, infrastructure gaps, and economic-impact parameters; and the two streams were synthesised within a SWOT and diversification framework. The principal limitation is the absence of primary fieldwork, no visitor surveys, stakeholder interviews, or site condition assessments were undertaken, so findings on tourism demand and community willingness are indicative rather than measured, and some district level economic magnitudes could only be characterised qualitatively.

VIII. Discussion

The synthesis of the historical and tourism analyses yields a clear proposition: DimaHasao's comparative advantage is its story. The district holds the only place in Assam where a single short journey connects a Neolithic excavation, megalithic monolith fields, and the rock-cut capital of a medieval kingdom that withstood the Mughals, yet Assam's flagship heritage circuits (Tezpur-Majuli-Sivasagar under SwadeshDarshan, Rang Ghar under SASCI) bypass it entirely (Ministry of Tourism, 2025b; PIB, 2025). The implication for heritage and economy is twofold. Culturally, tourism recognition would strengthen Dimasa identity and incentivise intergenerational transmission of traditions that ethnographic evidence shows to be eroding (Somenath et al., 2025). Economically, heritage tourism offers the district a non-extractive growth pole whose returns flow disproportionately to labour and to micro-enterprise, diluting dependence on coal, cement, and hydropower.

The practical requirements are equally clear: sustained government support through existing scheme windows, sequenced infrastructure (access, interpretation, accommodation) preceded by planning and capacity building, and community engagement embedded in project design rather than appended to it. The CAG (2023) findings warn that funds without feasibility studies and maintenance plans produce stranded assets; the Sixth Schedule framework, conversely, gives Dima Hasao an unusual institutional capacity to mandate community benefit sharing if the Council chooses to use it.

The study's limitations point to a research agenda. Field based work should establish baseline visitor numbers and profiles, willingness-to-pay for heritage experiences, household-level employment and income effects of festival tourism, and site carrying capacities. Longitudinal studies tracking the socio-economic impact of any sanctioned circuit would discipline future policy in a way the present secondary appraisal cannot.

IX. Conclusion

The Dimasa kingdom is among the oldest political traditions of Northeast India, and Maibong-its hill capital, fortress, and temple town is the most tangible surviving expression of that tradition. This paper has argued that the district's heritage tapestry, woven from nationally protected monuments, a resilient festival culture, and living craft traditions, constitutes an under-utilised economic asset of the first order. Properly conserved, interpreted, and marketed, and channelled through community based models compatible with the Sixth Schedule, heritage tourism can diversify DimaHasao's narrow economic base, create dignified local livelihoods, and finance the very conservation on which it depends. What is required is strategic intent: a Maibongcentred

circuit proposal, convergence with national tourism schemes, investment in people before concrete, and an unwavering commitment that development must serve both the heritage and its custodians. The hills that once sheltered a kingdom from empires can, with such intent, shelter its people from economic vulnerability.

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Reconstructing Disability and Gender: A Study of Ama Ata Aidoo's "The Girl Who Can" and Mahasweta Devi's "Breast-Giver"

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Abstract

The intersection of disability and gender is an emerging area in the contemporary literary studies. Disabililty is not only a biological condition but it is a social and cultural construct. Ama Ata Aidoo is one of the renowed author and an African feminist from Ghana. The role and status of women is a dominant aspect of Aidoo's writings. Similarly, Mahasweta Devi is also known for her prolific writings from Bengal. As an activist and writer, Devi's focus is on the marginalized section of the society. This paper examines the reconstruction of disability and gender in Aidoo's "The Girl Who Can" and Devi's "Breast-Giver.Through a comparative reading of the two texts, the study explores how both authors challenges the assumptions made by the patriarchal society regarding the female body and its social value. Though the narratives belongs to different cultural contexts, but they portray how women are judged according to their bodily functionality and reproductive expectations. The study of disability and gender proposes an alternative understanding of female body. It gives importance to female's individuality and agency. The paper also argues that Aidoo and Devi not only exposes the patriarchal dominance but moves beyond the restricted societal norms to understand women's bodies.

Keywords: Disability, gender, female body, patriarchy, marginalized

Introduction

The study of disability and gender is considered one of the crucial aspect in the contemporary literature. It is deeply influenced by societal norms and cultural expectations. Disability studies emerged as a field of study which examines disability through social, cultural and political lens. It does not study disability merely as a physical or mental issue. Feminist scholarship examines the issues of marginalized women due to societal pressure and bodily perfection. The convergence of these two fields has given rise to feminist disability studies, which investigates how gender and disability intersect to shape individual experiences.

Through Ama Ata Aidoos' "The Girl Who Can" and Mahasweta Devi's "Breast-Giver" one can investigate the intersections of gender and disability. Both the texts depict how women's bodies becomes a site of social judgement and regulation. "The Girl Who Can" is a short story from Aidoo's book *The Girl Who Can and Other Stories* published in 1997 Most of the stories in the book deal with maternity and reproductive issues, feminism, misogyny, influence of postcolonialism etc.The present story is about a seven year old girl named as Adjoa who lives with her mother whom she calls Maami and her grandmother whom she calls Nana. It touches upon significant issues such as gender roles, women's freedom, tradition versus modernity, etc. Apart from these themes, the aspect of socially constructed disability is of vital importance. Devi's "Breast-Giver" is a short story from the book, *Breast Stories* published in 1997 and translated into English by Gayatri Chakravorty Spivak. The stories in the book revolve around themes of patriarchal oppression, violence, classor caste domination, etc. The present story is about Jashoda's motherhood journey.

It is more of the commodification of her body. Her identity is merely reduced to a biological function.

These narratives exposes instances which is more than domination. Adjoa's success changes the perceptions of her body, while Jashoda's tragic experience reveals the inability of defining women solely through motherhood and caregiving. Through these stories, Aidoo and Devi advocate alternative understandings of womanhood that value individuality and agency rather than conformity to patriarchal expectations. This paper reconstructs disability and gender by challenging the social processes that label certain female bodies as inadequate or valuable and by offering more inclusive visions of female identity.

Theoritical Framework

Traditionally, disability is viewed as a medical illness be it physically or mentally which requires medical attention. On the other hand, social model of disability defines disability as a result of societal barriers, prejudices and institutional structures but not individual impairments.

Rosemarie Garland- Thomson, a pioneer in feminist disabilitystudies coined the term "normate" which means a culturally constructed ideal of bodily appearance and function. Thomson argues that disability and gender are deeply connected. They are socially constructed systems of power. The society measure the bodies within a standard societal norm. Those who deviate from these certain standard are often dominated. Women, in particular, are expected to adhere to these standards such as reproduction, domesticity, appearance, or caregiving.

Another scholar in this domain, Susan Wendell similarly contends that disability is shaped by cultural attitudes that privilege certain forms of embodiment while devaluing others. Feminist disability theory therefore argues that women may experience forms of social disablement even in the absence of physical impairments. Social expectations surrounding appearance, fertility, and productivity often determine whether a woman's body is considered acceptable or deficient.

These theoretical insights are particularly relevant to "*The Girl Who Can"*and"*Breast-Giver*". In both stories, the protagonists' bodies are evaluated according to societal expectations rather than actual abilities. Their experiences demonstrate how disability can be socially constructed through gendered norms and how alternative understandings of embodiment can challenge such constructions.

Discussion

In the short story, "The Girl Who Can" Aidoo depicts the main protagonist of the story, Adjoa. Adjoa is a seven years old girl. She lives in Hasodzi with her mother who she calls as Maami and her maternal grandmother whom she calls as Nana. It is a big village in the central region of the country Ghana. In the beginning of the story, Adjoa shares that there are many things that comes into her head, sometimes she wants to speak it out but at the end she decides to remain silent. She considers it as a serious issue. She is very skeptical about her grandmother as it is difficult to catch her attention. Because of this behavior she does not want to express her thoughts and feelings.

Adjoa's concern is centeredparticularlyroundher grandmother's views regarding her legs. She thinks that her legs are a topic of discussion for her mother and grandmother since her birth. Sometimes Adjoa's mother would interrupt her grandmother by saying that she has been always complaining about Adjoa's legs and that there are people who even don't have legs. The grandmother believes that a woman's legs should be strong and substantial because they must support childbirth and motherhood: "As I keep saying, if any woman decides to come into this world with all of her two legs, then she should select legs that have meat on them: with good calves. Because you are sure such legs would support solid hips. And a woman must have solid hips to be able to have children." (Aidoo 13) Nana imposes a normative expectation: strong legs equals to womanly value"with spindly legs that are too long for a woman, and too thin to be of any use." (Aidoo 13) Adjoa's slender legs are therefore viewed as signs of inadequacy and potential failure.

Adjoa is not physically disabled. She is capable and healthy. But the society imposes on her a perceived deficiency. The grandmother's criticism depicts how

the patriarchal society defines a woman's ability in terms of reproduction. Her legs become a metaphorical disability within her cultural context. There lies a gap between perception and reality in Adjoa's story. As her body is judged not on the basis of present abilities but on speculative assumptions regarding her future role as a mother. In this sense, disability becomes a social label imposed by societal beliefs rather than an objective condition. The story reveals how patriarchal societies often define female worth through biological functions while ignoring individual capabilities.

As a young girl, Adjoa wanders why her grandmother links her thin legs to bearing children. She even wishes to see the legs of women who had children. Interestingly, she gets selected to run for the junior section of her school in the district games. She wins every race for her school and even earns the title of best all-round junior athlete. Thus, Adjoa uses the same thin legs to win a race. Her physical ability is redefined. "thin legs can also be useful….thin legs can also be useful…..they can run." (Aidoo 17) By highlighting her capability and confidence, Aidoo demonstrates that bodily difference need not be interpreted as deficiency.It is a disruption of soceital perception where "useless" legs become celebrated limbs "She carried the gleaming cup on her back….she entered our compound to show the cup to my mother…" (Aidoo 16) Thus, it challenges the notion of one functional standard.

There is a generational divide in bodily expectations between Nana and Adjoa. As Adjoa says, "I have always wanted to tell them not to worry…..So I wished that one day I would see, for myself, the legs of any woman who had had children… In my eyes, all my friends have got legs that look like legs:" (Aidoo 12,14) The female body is policed based on its future reproductive function. The story also critiques how girls internalize shame over their physical form: "Running with our classmates on our small sports field and winning first place each time never seemed to me to be anything about which to tell anyone at home." (Aidoo 15) Adjoa's experience shows how to reconsider assumptions about normality and to recognize the diversity of human abilities.

"Breast-Giver" by Devi is an interesting story about Jashoda. Jashoda chooses motherhood as her profession. As her husband meets with an accident and becomes crippled, she becomes the bread winner of her family. Jashoda's body is considered as an industrial enterprise. One can read through these lines: "You'll have milk in your breasts only if you have a child in your belly. Now you'll have to think of that and suffer. You are a faithful wife, a goddess. You will yourself be pregnant, be filled with a child, rear it at your breast, isn't this why Mother came to you as a midwife?" (Devi 1076) Jashoda serves as a milk-feeding mother in the Haldar household. She becomes the mouthpiece of the Haldars who is considered above the Mother Cows. The glorification of Jashoda is immense as people's devotion towards her grows deep and she is given the position of a chief fruitful woman in any social functions being invited.

Initially, Jashoda occupies a position of social respect. However, Devi gradually reveals that this respect is conditional and exploitative. Jashoda's value derives entirely from her ability to provide nourishment to others. Her identity is reduced to a biological function, transforming her body into a commodity. "Whether it suckled or not, it's hard to sleep without a child at the breast. Motherhood is a great addiction. The addiction doesn't break even when the milk is dry," (Devi 1081) As the Halder family's demand for a wet nurse declines, she feels rejected by them. The people who would wash her feet and drink the water now treats her as their servant.

A turning point comes into her life when her breast cancer is detected. She refuses to show her body to a male doctor and even go to hospital. Even after applying some herbal ointment the sores appeared. She stops eating, lost all her energy and finally took to her bed. As her body loses its usefulness, society abandons her. The same people who benefited from her labor refuse to support her during her suffering. The question raises, "Why did those breasts betray her in the end? (Devi 1084) Nabin gets angry and says, "Are these people human? She reared all the boys with her milk and they don't call a doctor?" (Devi 1085) In the last part of the story, Jashoda mutters with hurt

feelings, "You grew so big on my milk, and now you're hurting me so?" (Devi 1087) This shows how she imagines her milk-feeding sons all around who didn't value her in her worst days. If a woman's value depends solely on reproductive function, then illness or disability can result in social exclusion. The story challenges the reduction of women to reproductive bodies and advocates a more holistic understanding of female identity.

Conclusion

Thus, Aidoo's "The Girl Who Can" and Devi's "Breast-Giver" offers an insightful view of the themes such as disability, gender and politics of a women's body. Through the characters Adjoa and Jashoda it can be analyzed how women bodies are measured by their bodily functions and reproduction. As a consequence, it creates social disablement and women lost their identity and opportunities. The narratives reconstruct disability and gender in their own ways. Adjoa's success redefines her ability and challenges the societal expectations about her body, while Jashoda's tragic experience reveals the brutalizing consequences of reducing women to reproductive functions. Together, the stories advocate alternative understandings of embodiment that emphasize agency, individuality, and human dignity. Their works remain relevant not only as literary achievements but also as contributions to ongoing discussions about equality, identity, and social justice.

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Dologuridol, Kalabari In Biswanath District of Assam, India: A Critical Study

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Abstract:

The Ahoms ruled the Brahmaputra Valley for nearly six centuries during the medieval period and played a significant role in shaping the political, social, and cultural landscape of the region. Their contribution is reflected not only in the political integration of the valley but also in the process of cultural assimilation that characterized Assamese society. A largenumber of monuments including religious structures established during the Ahom period are scattered across Assam, bearing testimony to the prosperity and cultural achievements of the Ahom kingdom.The present study examines the historical Dologuri Dol, situated at Dologuri in Kalabari, Biswanath district of Assam. It explores the historical background of the temple and critically analyzes its architectural layout, sculptural features, and artistic elements. Based on field observations and available historical evidence, the study also investigates prevailing misconceptions regarding the origin and construction of the temple. The findings contribute to a better understanding of the historical significance and architectural heritage of Dologuri Dol within the broader context of Assam's cultural history.

Keywords: Architecture, culture, heritage, sculpture, temple.

Introduction:

Temples have historically played a vital role in the process of state formation and consolidation. Beyond serving as places of worship, they functioned as important centres of religious, social, and cultural activities, fostering a sense of community and collective identity. Temples also acted as repositories of cultural traditions, myths, and historical narratives, thereby contributing to the preservation and transmission of cultural heritage. Furthermore, they often served as centres of religious authority and played a crucial role in legitimizing the power of rulers and dynasties. Through the patronage of temples and other sacred structures, rulers sought not only divine sanction and blessings but also strengthened their political authority and public image among their subjects. Such patronage was manifested through grants of land, endowments, manpower, and protection.

Assam, situated in the north-eastern region of the Indian subcontinent, possesses a rich cultural and architectural heritage. During the medieval period, a major part of the Brahmaputra Valley came under the rule of the Ahoms, who governed the region from the thirteenth century until the early nineteenth century. The Ahoms belonged to the Tai ethnic group and migrated into the Brahmaputra Valley from the eastern regions of Southeast Asia. Over the centuries, they established a powerful kingdom and left an enduring imprint on the history, culture, and identity of Assam. Their legacy is reflected in numerous monuments, temples, and archaeological remains scattered across the Brahmaputra Valley, which continue to bear testimony to the political stability, artistic achievements, and cultural vibrancy of the Ahom period.

In the Ahom kingdom, temples were commonly referred to as *Dol* and *Devalaya*. The earliest historical

reference to temple construction in the Ahom kingdom dates back to the reign of Susenpha (1439-1488 CE). He is credited with constructing the Nagshankar Devalaya in 1480 CE (Bhuyan, 1930/1990), which is regarded as one of the earliest temples built under Ahom patronage. Temple-building activities continued throughout the Ahom period and remained an important aspect of the kingdom's religious and cultural life. The earlier temples were generally simple in plan and modest in ornamentation. However, with the gradual development of architectural knowledge and artistic skills, Ahom temples evolved into more elaborate structures, characterized by broader plans, improved execution, and richer decorative embellishments.

Methodology:

The present study is based on both primary and secondary sources of data. Primary data were collected through extensive field surveys conducted at the study site, supplemented by personal interviews with local residents, elderly informants, and other knowledgeable individuals associated with the history and traditions of the temple. Direct observation of the architectural features, sculptural elements, and present condition of the monument also formed an important part of the primary investigation.Secondary data were gathered from a wide range of published and unpublished sources, including books, journal articles, conference proceedings, and relevant government publications. The collected data were critically analyzed and interpreted to reconstruct the historical background of the temple and to assess its architectural and cultural significance.

Location:

The Dologuri Dol is located in Dologuri under Kalabari in the Biswanath district of Assam.The temple site lies in the northern part of the Brahmaputra Valley and is well connected by road. It can be approached from National Highway 15 to Kalabari through a gravel road.The monument is situatedat approximately26° 512 463 Northlatitude and 93° 452 153 East longitude.It is located about 20 kilometers from Gohpur.

Historicity:

Kalabari, historically known as Rambhabari (Gogoi, 2016),occupies an important place in the religious and cultural history of Assam. It is renowned as the birthplace of Banamalideva (1576-1683 CE), the founder of the Dakhinpat *Satra*. Banamalideva was a disciple of Vansigopaldeva, the Satradhikar of Kuruwabahi *Satra*. His spiritual eminence earned the patronage of the Ahom king Sutamla or Jayadhvaj Singha (1648-1663 CE),under whose support Banamalideva and Dakhinpat *Satra* flourished (Rajkumar, 2020/2013). Several Ahom rulers, including Jayadhvaj Singha, Supungmung or Chakradhvaj Singha (1663-1670 CE), Sunyatpha or Udayaditya Singha (1670-1672 CE),and Sulikpha or Ratnadhvaj Singha(1679-1681 CE), are disciples of Banamalideva, reflecting his considerable influence on the Ahom court.

The historical significance of Dakhinpat Kalabari *Satra* is further corroborated by references found in the*Tungkhuniya Buranji*. The chronicle records that Gadapani, the son of Gobar Raja of Tungkhungia royal lineage and a suitable prince eligible to be king, sought refuge in various placeswhile evading persecution during the reign ofAhom king Sulikpha or Lora Raja.The episode is closely associated with the legendary sacrifice of Joymoti Konwari, whose courage and steadfastness ensured the survival of her husband and the future stability of the Ahom kingdom.During his period of absconding, Gadapani stayed for a short period at the Dakhinpat *Satra* of Banamali Bapu situated in Kalabari. However, the *Satradhikar* refrained from offering active support to Gadapani against the reigning king Lora Raja, who was also among his disciples. While moving through different *satras*and religious establishments including the Dakhinpat *Satra*, Gadapani observed the immense wealth, influence, and authority enjoyed by many of these institutions (Bhuyan, 1932/ 2010).These experiences profoundly shaped his outlook and policies after his accession to the throne as Gadadhar Singha. Consequently, during his reign, Gadadhar Singha (1681-1696) adopted stringent measures to curtail the power of the various *satras* and the *satradhikars*within the Ahom kingdom (Baruah, 1985/2010).

According to local tradition, the Dologuri Dol and the tank associated with it were constructed during the reign of the Ahom king Sulikpha, also known as

Ratnadhvaj Singha or better known as Lora Raja (1679-1681 CE) (Sarma, 2005/2012). The plate installed by the Directorate of Archaeology, Assam at the site likewise attributes the construction of the temple to Sulikpha, stating that it was built and dedicated to his spiritual preceptor, the *Satradhikar* of Dakhinpat Kalabari *Satra*. The king donated a large grant of revenue-free land for the management of the temple. It is also said that Lora Raja established a *nagar*(town) in Rajbari of the Kalabari area. However, the attribution of the temple to Lora Raja remains open to question. Lora Raja's reign lasted for a very short period of less than two years, a period marked by intense political instability and factional struggle within the Ahom kingdom. Historical accounts suggest that much of his reign was devoted to consolidating his authority under the influence of Laluk Sola Borphukan and eliminating potential rivals from the Ahom royal family through executions and mutilations (Baruah, 1985/2012).Given these circumstances and the limited duration of his rule, it appears unlikely that the templecould have been planned and completed during his reign.

On the basis of the architectural characteristics of the Dologuri Dol, the noted historian Pradip Sarma suggested that the temple was constructed between the reigns of Siva Singha (1714-1744 CE) and Lakshmi Singha (1769-1780 CE) (Sarma, 2005/2012).Additional evidence is found in the *Changrung Phukanar Buranji*, where the structure is referred to as DakshinpatarDol. According to the document, the temple was constructed in 1750 CE (1672 *Saka*) (Handique, 1961).On the basis of it, the construction of the temple can be placed during the reign of the Ahom king Pramatta Singha (1744-1751 CE). Some of the scholars, however, attribute its construction to the subsequent reign ofSurampha alias Rajeswar Singha (1751-1769 CE).The Assam District Gazetterrs, Darrang VolumeV, datesit to 1758 CEfurther supporting an eighteenth-century origin rather than a late seventeenth-century one(Allen, 1906).

The Assam District Gazetterrs, Darrang Volume V also records the temple as a property of Dakhinpat Gossain (Allen, 1906).During the Colonial period, owing to the deteriorating condition of the structure, the *Satradhikar* of Dakhinpat Kalabari *Satra*entrusted its management to the British administration. Recognizing its historical and architectural significance, the government subsequently brought the monument under protection through the Monument Preservation Act in 1936(Neog, 1960).

A controversy exits regarding the principal deity of the Dologuri Dol. Although the temple is popularly known as Basudev Dol, suggesting its association with the worship of Lord Vishnu, several scholars have questioned its original religious affiliation. Based on certain architectural and isographic features,they argue thatthe templewas initiallydedicated to Lord Shiva (Buragohain, 2021). According to historian Pradip Sarma, the temple was originally constructed as a Shiva temple and was subsequently converted into a Vaishnavite place of worship (Sarma, 2005/2012).

Architectural features:

The DologuriDol is a brick-built temple distinguished by its simplicity of design and structural composition. The templefacesthe south.Its architectural plan and elevation are comparatively simple yet aesthetically balanced.The temple comprisesthree principal components arranged along a single axis: the*mandapa* or *jagmohan* (assembly hall), the *antarala*(vestibule), and the*garbhagriha*(*sanctum sanctorum*).

According to the Assam District Gazetterrs, Darrang, the Dologuri Dol stands on a base measuring approximately 26 feet in diameter and rises to a height of about 62 feet (Allen, 1906).The *sikhara* is curvilinear in form and is crowned by a four-tiered *mastaka*surmounted by a *kalasha*. Four subsidiary *anga-sikharas,*placed on the cardinal sides of the main tower, closelyresemble the principal*sikhara*and contribute to the architectural symmetry of the monument. While the ground plan of the main shrine is square, the exterior has as many as five projections made in each of the four sides,giving the temple the appearance of a*pancharatha*type.

The *mandapa*or *jagmohan* is a rectangular hall provided with entrance on all sides. It measures approximately 4.8 meters x 5.7 meters in floor area.

Theprincipal entrance is located on the southern side and measures about 2.25 meters x 1.25 meters.On either side of this entrance, the outer wall containsa *devakostha* (rectangular niche), though these niches are devoid of decorative carvings and remain plain.Additional entrances are provided on the eastern and western side, while northern opening leads to the *garbhagriha*through the *antarala*. The roof of the *jagmohan*is designed in imitation of the traditional Assamese hut form, reflecting the incorporation of indigenous architectural elements into temple construction.

The *garbhagriha* is situated to the north of the *jagmohan*.The northern wall of the *jagmohan* and the southern wall of the *garbhagriha*are common and have a narrow passage as the *antarala*. Although structurally connected to the sanctum, the *antarala*forms a distinct transitional space between the *jagmohan* and the *garbhagriha*.

The *garbhagriha* is octagonal in plan. Each sidewall measures about 2.8 meters. At present, the sanctum does not contain the original deity. According to Allen (1905), the idol has been removed during a period when the temple was in a dilapidated state.

The temple was constructed using *koral,* a traditional bonding materialwidely employed in Ahom period monuments. This mortar was prepared froma mixture of ingredients such as black gram,*bora* rice, brick powder, duck egg, fish oil, *hon*, molasses, mustered oil, shell lime, and stone lime.Although bricks of varying sizes were used in the construction, they exhibita general uniformity in shape and possess smooth surfaces. The color of the bricks used is pale reddish and are of good quality.

Originally,the temple complex was enclosed by an earthen rampart that surrounded both the shrine and the adjacent tank. Though much of the structure has deteriorated over time, traces of this defensive or boundary embarkment are still visible, providing valuable evidence regarding the original layout and extent of the temple complex.

Sculptural features:

The sculptures found on the outer walls of the Dologuri Dol are primarily religious in character. The sculpturesare carved on stone slabs and installed within niches on the exterior walls. However, the majority of these sculptures are no longer in their original condition. Prolonged exposure to natural weathering, climatic factors, and neglect has resulted in varying degrees of deterioration. Several sculptural panels have also disappeared altogether.

A total ofthirty-three*devakosthas*are found on the outer walls of the main shrine. These rectangular niches were originally embellished with stone sculptures. The figures are generally frontal in orientation and display relatively simple decorative treatment. Most of the surviving sculptures portray anthropomorphic representations of deities belonging to both the Vaishnavite and Saivite traditions. However,despite their artistic and historical significance, many of the sculptures have suffered extensive damage over time.

Lord Vishnu, one of the principal deities of Hinduism, is believed to have incarnated on earth in various forms, known as *avataras*, to protect the world from evil forces and restore righteousness. According to Hindu tradition, he has ten major incarnations (*Dashavatara*), namely Matsya, Kurma, Varaha, Narasimha,Vamana, Parashurama, Rama, Krishna, Buddha, and Kalki. Several of these incarnations are represented in the sculptural art of the outer walls of the Dologuri Dol.

In one of the sculptures, Lord Vishnu is curved in his *Chaturbhuja*form.The deity appears to be depicted frontally, occupying the central portion of the niche. The upper part of the sculpture exhibits traces of a curved canopy-like motif, which may represent the hoods of *Sheshanaga* (the cosmic serpent), a common attribute associated with Vishnu. The facial features, ornaments, and attributes held in the hands have largely disappeared owing to deterioration of the stone surface.

Vishnu in his Varaha *avatara,* a composite form of man and boar, is represented with four arms. Although the sculpture has suffered severe erosion, the distinctive boar-like head is still discernible and serves as the principal basis for its identification. The

four hands holding the traditional attributes of Vishnu, namely the*Chakra*, *Sankha*, *Padma*, and *Gada*arranged from left to right. He is depicted being in the*samabhanga* posture.

Vishnu in his Vamana form is depicted in one of the sculptures in a standing posture.He is shown holding an umbrella in his right hand, while the object in his left hand appears to be a *kamandalu*(water pot).

In a sculpture, the figure of Parasurama is represented in a standing posture with the entire body facing towards the left. The most significant surviving iconographic feature of the sculpture is the *parasu* (battle-axe), visible near the shoulder of the figure. However, extensive weathering and erosion have obscured many details, including the facial features, ornaments, and other sculptural elements.

A sculpture depicts Rama in standing posture. The most distinctive iconographic features of the sculpture are the bow held in one hand and the quiver of arrows visible behind the shoulder. He is adorned with a crown, ear ornaments and a richly decorated neckpiece. The necklace is embellished with a prominent pendant studded with jewels, which rests gracefully on the chest.

Buddha is depicted in sculpture with his hands folded before the chest in *namaskara mudra*. He is shown seated in a *padmasana* posture upon a pedestal.

Kalki, the last incarnation of Lord Vishnu, is found riding a horse.

Lord Shiva is another major deity in Hinduism. He is associated with many aspects of life, including creation, destruction, meditation, and fertility. A sculpture on the outer wall of the Dologuri Dol represents Shiva mounted onNandi, his sacred vehicle. A serpent is shown coiling around his neck, with its hood rising above his head in a protective manner. The deity is adorned witha pair of *kundalas* and is depicted with mattedhair arranged in a coiled *jata.* Nandi is depicted in a standing posture facing towards the right. The animal's head, body, and legs are still visible, although many details have become worn.

Kartikeya, also known as Skandais the son of Lord Shiva and Parvati. He is the god of war, victory, and wisdom. He is often depicted as a youthful warrior, riding a peacock. In the Dologuri Dol, one of the sculptures in the *devakosthas*represents Kartikeya riding his *vahana*, the peacock. He is depicted with four heads and four arms holding different objects. A *kanthahara* with beaded pendant resting on his chest is clearly visible. He holds a *pasa* in his lower left hand while the objects in his other hands including the *Shakti Ve*la or spear were broken.

Brahma is one of the Hindu Trimurti. He is known as the creator of the universe and is associated with knowledge, wisdom, and creativity. The deity is depicted seated upon a *hamsa* (swan), his traditional vehicle. He is depicted with four arms. He isholding a *pasa*in his lower left hand, while the other objects he holds were broken. The deity is adorned with a crown, ear ornaments and a neckpiece.

Among the minor deities, Shani is depicted seated upon a crow. Although the facial features have become indistinct due to weathering, traces of a crown, ear ornaments and other decorative elements remain visible. One of the hands of the deity appears to be raised towards the chest, while the details of the attribute on his other hand is no longer clearly discernible.

Nirrti or Nirruti, one of the *Asta dikpalakas* (Guardians of the directions)who presides over the south-west direction, is shown with a human figure held across the body of the deity. The deity is adorned with an ornate crown, circular floral ear ornaments, and a draped garment. He is holding a *pasa* (a looped coil of rope) on his raised right hand. His left hand is shown holding the head of the man. The man he rides is depicted wearing a turban besides a pair of *earrings* and bracelets on his wrists. The folds of the dhoti that he is shown wearing are clearly visible.

The *devakosthas* located on either side of the principal entrance of the *jagmohan*aredevoid of any sculptural decoration. It is believed that the temple originally enshrines a copper idol of Vasudeva. Due to the dilapidated condition of the temple during the British period, the idol was reportedlyrelocated to a nearby site for safekeeping. However, it'ssubsequent whereabouts remain unknown.

Conclusion:

The Dologuri Doloccupies an important place in the architectural history of Assam and serves as a significant landmark in the evolution of temple architecture on the north bank of the Brahmaputra Valley. Owing to its historical, architectural and cultural significance, the monument has been declared as a protected site under the Directorate of Archaeology, Assam. Recognizing the deteriorating condition of the structure, theDirectorate of Archaeology, Assam undertook restoration work on the damaged*jagmohan* in the year 2005.

Despite these conservation efforts, the temple continues to face serious challenges. Prolonged exposure to adverse climatic conditions, coupled with inadequate maintenance and natural weathering, has resulted in partial or complete erosion of many of its sculptural and decorative elements.The gradual loss of these artistic features poses a threat to the historical integrity and aesthetic value of the monument.Another major problem faced by the temple is the gradual subsidence of the structure into the ground, which poses a serious threat to its stability and long-term preservation. It is estimated that the structure has subsided by approximately 6 to 7 feet over time (Buragohain, 2021).

The Ahom period temples are an integral part of our cultural heritage. The preservation of these monuments including the Dologuri Dol is essential not only for safeguarding tangible remains of the past but also for promoting historical awareness,cultural continuity and regional identity. Concrete efforts by government agencies, scholars, and local communities are necessary to ensure their proper conservation and sustainable management.

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Tiny Forest at Home: Acting Towards Environment Protection

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Abstract

Everyday an adult person breathes around 378 to 550 liters are oxygen.An average tree can produce nearly 274 liters of oxygen per day. It means on an average a person need two trees for his/her daily survival. Besides providing oxygen, trees provide medicinal and economic value. It maintains ecosystem balance by ensuring fertility of soil and purifying air and water. Since the forest coverage across the globe has been shrinking drastically in the name of development in recent decades, it raises concern over the future survival of animal kingdom including mankind. So, it becomes imperative for every individual to plant at least two trees. The religious and traditional beliefs also mandate duty on everybody towards environmental protection. Surveying the IKS, it could be found that scriptures like the *Rigveda,Atharva Veda*, *Manusmriti,* Kautilya's *Arthasastra* etc. dealt withindividual responsibility towards tree plantation, maintenance of forest resources and fines for damaging forests. Similarly, the traditional knowledges from different tribes emphasizes on protection of forests and rational utilization of forest resources. In brief forest is not only a concept of public good, it is the responsibility of every individual. Everybody must act towards restoring and maintaining of forests. This paper tries to find out the traditional Assamese model of forest at home. Further it tries to develop few feasible rules and regulations to grow a tiny forest at home in urban areas in particular.

Key Words: Forest, Tree, Act, Survival, Tradition

1.0: Introduction

The estimate done by American Lung Association reveals that an adult person breathes around 11,000 litres of air per day. Out of it 378 to 550 liters are oxygen which is 20% of total air breathes. On the other hand, an average tree can produce nearly 274 liters of oxygen per day. It means on an average a person need two trees for his/her daily survival. However, a mature tree can produce enough oxygen to provide up to 4 persons daily requirement. The oxygen production capacity of a tree depends on factors like size, age, species and environmental condition like seasonal change. Besides sustenance, trees provide medicinal and economic value. It maintains ecosystem balance by ensuring fertility of soil and purifying air and water. Since the forest coverage across the globe has been shrinking drastically in the name of development in recent decades, it raises concern over the future survival of animal kingdom including mankind. So, it becomes imperative for every individual to plant at least two trees. The religious and traditional beliefs also mandate duty on everybody towards environmental protection. Surveying the IKS, it could be found that scriptures like the *Rigveda,Atharva Veda*, *Manusmriti,* Kautilya's *Arthasastra* etc. dealt withindividual responsibility towards tree plantation, maintenance of forest resources and fines for damaging forests. The *Rigveda* mentions that vegetations are key to man's power. The *Atharva Veda* says God dwells in trees. They destroy the demons of pollution. Trees are our friends. The Vedic concept of Znm directs men that by birth they owe to nature (Prak°ty [nm) and to repay that debt everybody should plant trees. *Manusmriti* regardedcutting of trees as sin and punishable offence.

Kautilya's *Arthasastra* discusses how to maintain forest resources and also prescribes different types of fine for its violation. Similarly, the traditional knowledges from different tribes emphasizes on protection of forests and rational utilization of forest resources. For ages they regard the forest as sacred and avoid from damaging it. At the same time, traditionally the Assamese people practice certain norms and rituals regarding plantation and conservation of trees. Example of such practices are planting a tree by the father when a child is born, planting tree on the day of *bihu*, planting mango and other fruits tree roadside to feed future generations, planting tree in the middle of paddy field for shadow, refrain from cutting bamboo and tree on Thursday and Saturdays, restricted oneself from cutting big trees belonging to common grove etc. Trees are also grown for demarcation of villages. In brief forest is not only a concept of public good, it is the responsibility of every individual.

2.0: Review of Literature

A lot of studies have been conducted on the importance of trees ranging from mythology to botanical science. Lal and et.al (2014) opined that in India, tree worshipping became quite common in the third or fourth millennium B.C., when there was a highly evolved Harappan culture. The Vedas also continue tree worshipping. These scriptures illustrates the importance of trees in many hymns. Sheshadri (2015) discusses about the tree welfare as envisaged in Ancient Indian Literatures. This knowledge is important for rational utilization of resources of trees. Future generations need to imbibe this ancient essence of harmonious care and welfare of trees and also axing them harmoniously even if needed. Talukdar and et.al (2023) discusses nature conservation in the context of folklore in Assam. They found that tree worshipping is based on the tree centered folk beliefs in the society. Konijnendijk and et.al (2005) discusses about the urban forestry approach. Today more people prefer to live in urban areas, thereby affecting the urban greenery. The urban forestry approach embodies a multidisciplinary approach to the planning and management of all forest and tree resources—ranging from street trees to peri-urban woodlands - in and near urban areas.

However, very limited study is available on emphasizing the individual responsibility of planting trees. So, the present study is important.

3.0: Statement of Problem

Tree coverage in Assam is 1564 sq km which is 1.99% of total geographical area of the state and forest cover area is 35.28% (27,673 sq km) as per India State of Forest Report 2011, Forest Survey of India. In 2018 the forest cover area increased to 36.11%. But the tree cover area shrinks to 1408 sq km during the same period. Again, the India State of Forest Report 2023 reveals that the forest cover area decreases to 36.10 % and tree cover area decreases by 83.92 sq km during the period 2021 to 2023. Similarly, the data revealed by Global Forest Watch shows that Assam lost the highest number of trees in the country in the period 2001-2023. The tree cover loss in the state during the said period is 3240 sq km (Das, 2024). Although the forest cover area decreases marginally but the biggest challenge is the loss of density in the forests. The forest resources are extracted mercilessly. Similarly, the main reason behind the felling down of trees both at public place and private property are implementation of development projects, industrialization, construction of houses and encroachment. Since, the development activities are unavoidable for progression of mankind but at the same time environmental issues must be taken into consideration. Efforts should be made to increase the number of trees. Who will take the responsibility? Whether the government or individual? At individual level how we could perform the responsibility of tree plantation at own residence or neighbourhood need to be discussed.

4.0: Objectives

This paper tries—

(a) To find out the traditional Assamese model of forest at home.

(b) To develop few feasible rules and regulations to grow a forest at home in urban areas of Assam.

5.0: Methodology

The paper is basically a conceptual paper. Observation method is followed to collect information. The secondary data are used for analysis.

6.0: Discussion

Tiny forest is a concept to grow miniature native trees in a very small area. It is suitable to grow in urban households to enhance bio-diversity. Forests at home could be a fruit forests, flower gardens or vegetable gardens.

6.0.1:Devastating Effect of Reducing Tree Cover:

Assam has witnessed several undesired effects of losing trees—

Decreasing Groundwater: Trees help in recharging groundwater. The roots of the tree loosen the soil thereby making possible to percolate more water into ground when it rains. It reduces rainwater runoffs. Similarly, trees keep the soil wet which lowers evaporation. The groundwater level in Assam is at a decreasing trend. The depletion rate is more acute in urban areas, particularly in Kamrup Metropolitan District. The groundwater level in Guwahati has remained in 'semi-critical' stage since 2022 and may slip to critical stage with the current trend of extraction as cautioned by Central Ground Water Board (Malakar, 2024). The study conducted by Goswami & Rabha (2020) shows that the reducing availability of groundwater in winter might have been the impact of the reducing rainfall in monsoon, and is highly important for sustainable living of the habitants of the Kamrup Metropolitan District.

The Global Forest Watch estimated that Guwahati's tree cover decreases by 12 sq km in the period 2001 to 2023. In Guwahati over 2500 trees were cut down in 2022 for expansion of NH-37. In 2023 around 7000 trees were cut across Guwahati for the expansion of roads, construction of flyovers, construction of houses and expansion of office spaces (Khaiyam, 2023). It clearly indicates that there is positive correlation between tree cover and groundwater level.

Decrease in Rainfall: The data released by the Govt. of Assam indicates drastic change in rainfall in Assam. During the period 1990 to 2019, the average rainfall in the state decreases by over 10 mm and has adversely affected sectors like agriculture, water resource, environment, health and biodiversity (Das, 2024).

Increasing Average Temperature: The maximum and minimum temperature in the state has also risen leading to shorter winter season. The maximum temperature rises by 0.049 degree Celsius every year on average and the minimum temperature by 0.012 degree Celsius (Das, 2024).

Man-Animal Conflict: Assam witnesses increasing number of man-animal conflicts resulting loss of life, property and livestock. Conflicts with elephants, tigers, rhinoceros and monkey are becoming more acute since 2004. In 2022-23, 4139 number of wild elephant attacks were recorded. At the same time 80 elephants were died during the period 2019-2024 due to man-made causes.

6.0.2: Assamese Model of Forest at Home

Since time immemorial the Assamese people pay respect to trees. There are various rituals where trees are either worship or regard as integral part in worship. Trees like bamboo, mango, banana, beel, neem, peepal, banyan, coconut, palm, tulsi, sijugach, samindh, cotton etc. of great importance in Assamese society. Accordingly, people try to plant all these trees either at their own home or at nearby common places. In Assam usually two models of forest at home are witnessed—

The Tribal Model: Assam is the home of 29 notified tribes. One main characteristic of tribal people is that they prefer to live amidst nature. They depend on the forests and rivers for their livelihood and in return pay huge respect to nature. By traditional customs refrain from damaging the forests or rivers. While building houses the tribal people usually coexist with trees. Instead of cutting down the trees, they utilize the tree to build the house. Their houses are surrounded with trees which keep the environment cool besides providing food and resources.

Sankaradeva's Model: Sankaradeva (1449-1568), the reformist leader of Assam developed the model of forest at home for the *Than* where he stayed. Later on, his model became popular among the Assamese households and everybody followed his model in their home. His legacy still continued in the rural areas of Assam as well as in the *Satras*. He planned the *Than* premise in such a manner that there

is a flower garden in front, a garden for vegetable, garden for fruits, *bari* (plantation area) for beetle and beetle-vine, a pond for water and fish requirement, a grove in backyard for wood and bamboo requirement besides having a medicinal plants garden. The model aimed to achieve self-sustenance and preservation of bio-diversity. Due to his farsightedness the Assamese households not only able to achieve economic independence but also contribute a lot towards preservation of nature for centuries. He also taught the people about the importance of trees through his compositions. Later on, Sankaradeva's Model was executed with royal order by Momai Tamuli Barbaruah while he established villages plan fully in Ahom Kingdom.

6.0.3:Rules and Regulations for Forest at Home

Since in the urban areas the rate of tree felling down is more acute it becomes imperative to frame certain rules and regulations to be followed at individual level. Before construction of a house or development of housing complex the norms should be followed strictly.

Individual Responsibility: Although tree is a public good in the sense that the oxygen produced by it is non-excludable, yet it is the responsibility of all individuals to plant tree. Ancient Indian Texts Veda and Purana assigned the duty (dharma) of plantation on each individual. The literatures describe by planting a tree one contributes to *Prithvi Sewa* (Service to Mother Earth). It is recommended that one must plant a minimum of one of each beel, neem, peepal, banyan, amla and kaith along with at least five mango and ten tamarind trees (Sastry & Ghanapaathi, 2024).

Plant tree around the Boundary: Tiny forests could be grown in the backyard or in front of the house or around the boundary. Trees like mango, jackfruit, pomegranate, guava, neem, narasingha, beel, coconut, betel, banana, lemon which are native tree in Assam could be easily grown. Existing rules should be re-framed so that at least five feet on each side around the boundary are available for plantation.

Keep one-fourth of Land Free: Regulations should make mandatory to each household to keep one-fourth of total land free with no construction. If there is open soil, it could absorb rain-water, could decompose the degradable wastes easily, could grow greenery to contribute to the environment.

Man-Tree Audit: For the betterment of future strict rule at present is needed. The local bodies should develop the mechanism to conduct man-tree audit periodically. The number of persons residing in a housing complex should be represented by the proportionate ratio of tree (2 small tree: 1 person or 1 big tree: 4 person). One alternative to those housing complexes where land is scarce for plantation is purchase land outskirt only for plantation.

6.0.4:Benefits of Forest at Home

Growing a tiny forest at home helps in accruing following benefits—

Commitment to Future Generation: By developing a tiny forest at home one is able to fulfil his/her responsibility towards environment. One is doing the duty of *Prithvi Sewa* or repaying debt to nature (*Prak°ty [nm*). This act would enable the future generation to access a clean and liveable world.

Physical Fitness: For maintaining tiny forests at home, the family members need to work for some time. Preparing the soil with spade, cleaning the dry leaves, hedging etc. are good physical work. It contributes to physical fitness.

Mental Health: Real happiness comes from production not from consumption. The fruit grown at home, the flower blooms, the vegetables grown in own garden, the singing of birds in backyard etc. provide peace to person. This peace is booster for mental health.

Waste Management: The degradable wastes are the food of trees. If tiny forest is grown the household wastes could easily be utilized. There would be no need to throw the wastes on roadside or in drains or in rivulets or in wetlands.

Self Sufficiency in Food: Vegetable gardens in an area of 12x12 feet could easily feed a family of four members. Self-sufficiency in organic vegetable is the greatest achievement at present time. Tiny forest at home provides organic fruits. It also helps in saving money.

Bio-diversity Protection: Development of tiny forest at home provides birds and animal shelter and food. It would contribute to the protection of local species. If wildlife gets food and shelter easily, there would be less man-animal conflict.

7.0: Findings

- Tree is a public good, but it is the responsibility of each individual to plant tree.
- There is a declining trend of tree coverages in Assam.
- There is positive relationship between declining number of trees and reducing ground water level in Assam, particularly in urban areas.
- Traditionally Assam has the concept of forest at home.
- Strict rules and regulations are needed in urban areas for forest at home.
- Forest at home provides a number of benefits.

8.0: Conclusion

From the above discussion it is clear that planting trees at home is the single solution to many problems including global warming, ground water depletion, bio-diversity degradation, environmental pollution and man-animal conflicts. Although the contribution at the individual level in tree plantation at home seems to be very small as the problems are giants, but the combined effort of all households would definitely bring significant changes. It is needed to make aware the people about what our tradition and sacred books bestowed duty towards nature through plantation of trees. The mindset of the people needs to be change regarding their perception of looking at buildings. A building or housing complex need to be judge by the number of trees it has not by the concrete structure. Act is required to make everybody self-sufficient in oxygen.

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Space Agriculture: Role of Plants in Food Security

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Abstract

Long term manned missions to space requires a proper and reliable in build system that can fulfill the requirement of food and nutrition in space, since, procedures involved in supplying of resources from earth comes with high expenditure as well as risk of failure. Growing plant in space using an artificial controlled environmental setup has emerged as a fruitful strategy for fulfilling the needs of crew in long term missions. The strategy has also minimized the problems like storage of food for long duration, degradation of food quality and reduced shelf life etc., common in packaged food items. Plants contribute by providing edible biomass, regenerating O_2, removing CO_2, recycling of water and also dealing with both organic and inorganic wastes. Various crop plants have been selected based on experimental results of parameters like rapid growth, high yield, high nutritional value, adaptability to harsh space conditions and allopathy or medicinal values. NASA's Veggie, LED based lightning systems, hydroponic cultivations etc. are some technological advancements that has improved the chances of farming in space. Bio-generative life support systems (BLSS) have been designed to mimic an ecosystem suitable for crop production which can contribute to long term lunar and mars missions. In India, programmes such as ISRO's Crop Research for Orbital Plant Studies (CROPS) has been undergoing for astrobiology experiments supporting sustainable space agricultural practices which can help in future manned space missions. However, issues related to microgravity, radiation exposure and limitations in reproductions are the main challenges that can hinder plant growth and crop yield and therefore needs to be mitigated.

Key words: Space farming, Candidate crops, Veggie, Bio-generative life support system

1. Introduction

Human space exploration is rapidly transitioning from short-duration orbital missions toward long-duration habitation on the Moon and future crewed missions to Mars. Ensuring a reliable supply of safe, nutritious, and psychologically acceptable food is one of the greatest challenges associated with sustaining human life beyond Earth (Wheeler, 2017; Perchonok *et al.,* 2012). Traditional reliance on pre-packaged foods transported from Earth has supported missions aboard spacecraft and the International Space Station (ISS), but such systems become increasingly inefficient as mission duration increases (Cooper *et al.,* 2017; Douglas *et al.,* 2020). Food influences not only physiological health but also cognitive performance, immune function, behavioral stability, and crew morale. Exposure to microgravity, ionizing radiation, confinement, and altered circadian rhythms can affect nutritional requirements and metabolic processes (Smith & Zwart, 2018; Johnson *et al.,* 2021). Consequently, future exploration missions require food production strategies that are regenerative, sustainable, and capable of supporting closed-loop life-support systems. Plants have emerged as promising biological partners for future space missions because they can provide fresh food while simultaneously contributing to oxygen

production, carbon dioxide removal, water recycling, and psychological well-being (Zabel *et al.,* 2016; Wheeler, 2017). Research conducted through NASA, ESA, JAXA, and other space agencies has demonstrated the feasibility of growing crops under controlled environmental conditions in space. These developments have led to the emergence of space agriculture as a critical component of future extraterrestrial habitation systems (Massa *et al.,* 2020; Johnson *et al.,* 2021).

2. Concept of Space Agriculture

Space agriculture refers to the cultivation of plants within spacecraft, orbital stations, lunar habitats, Martian settlements, or other extraterrestrial environments using highly controlled cultivation systems (Zabel *et al.,* 2016). The concept extends principles of Controlled Environment Agriculture (CEA), including hydroponics, aeroponics, vertical farming, LED-based illumination, automated nutrient delivery, and environmental monitoring technologies (Nguyen *et al.,* 2023). Unlike terrestrial agriculture, space farming must operate under unique constraints such as microgravity, limited growing area, restricted water availability, radiation exposure, and dependence on artificial environmental control systems (Paul *et al.,* 2013; Wheeler, 2017). Therefore, crop selection, resource recycling, and system reliability become central considerations.

Space agriculture is closely associated with Bioregenerative Life Support Systems (BLSS), in which plants recycle carbon dioxide into oxygen through photosynthesis, contribute to water purification through transpiration, and generate edible biomass for human consumption (Hendrickx *et al.,* 2006; Zabel *et al.,* 2016). These systems reduce dependence on Earth-based resupply missions and enhance mission autonomy. The NASA Veggie system and Advanced Plant Habitat have successfully demonstrated the cultivation of lettuce, kale, mustard greens, zinnia flowers, and chili peppers aboard the ISS (Massa *et al.,* 2020; Johnson *et al.,* 2021). Such achievements provide evidence that plants can become operational components of future lunar and Martian habitats rather than merely experimental organisms. Consequently, space agriculture is increasingly viewed as an essential technology for sustainable human expansion beyond Earth.

3. Limitations of Packaged Space Food

Packaged food systems currently constitute the primary nutritional resource for astronauts. Preservation methods such as freeze-drying, irradiation, thermal stabilization, and dehydration allow foods to remain safe during transport and storage (Perchonok *et al.,* 2012). Nevertheless, significant limitations emerge when these systems are evaluated for long-duration exploration missions. One major concern is shelf-life stability. Most current space foods are designed to maintain acceptable quality for approximately 18–24 months, whereas Mars missions may require food stability for five years or longer (Cooper *et al.,* 2017). Prolonged storage can lead to deterioration in of the food, flavor of the food and also the nutritional composition.

Nutrient degradation represents another critical challenge. Studies have reported substantial losses of vitamins A, C, B1, and B6 during extended storage, potentially compromising astronaut health during prolonged missions (Cooper *et al.,* 2017; Douglas *et al.,* 2020). Micronutrient deficiencies may impair immune function, bone health, antioxidant defenses, and cognitive performance (Smith & Zwart, 2018). Psychological factors also play an important role. Repetitive menus and sensory deterioration contribute to menu fatigue, reducing food intake and overall dietary satisfaction (Perchonok *et al.,* 2012). Fresh vegetables and fruits can provide sensory diversity and improve crew morale during extended confinement (Massa *et al.,* 2020).

Furthermore, packaged foods do not participate in environmental regeneration. Unlike living plants, stored food cannot recycle atmospheric gases, recover water, or contribute to waste processing. As a result, exclusive reliance on packaged food increases launch mass and reduces sustainability (Hendrickx *et al.,* 2006; Zabel *et al.,* 2016). These limitations strongly support the integration of plant-based food production systems into future space exploration architectures.

4. Plant Growth under Microgravity and Space Stress

Microgravity is the reduced gravitational pull felt by objects in low Earth orbit. This condition stresses plants, altering their physiology and impairing their immune defenses to varying degrees (Guha *et al.,* 2025).Plants grown beyond Earth face a suite of unfamiliar physical and environmental pressures that reshape their form and function.

4.1 Morphology and gene expression

In microgravity, the usual downward pull that guides root and shoot orientation is absent, so plants lose a primary spatial cue; this leads to changes in auxin distribution, atypical root angles, and changes in root hair development that together influence water and nutrient uptake (Kiss, 2015; Paul *et al.,* 2013). Spaceflight alters the morphology and gene activity of plants. These morphological shifts are accompanied by broad transcriptional changes in hormone signaling and stress pathways and therefore selecting or breeding cultivars with flexible architecture and robust hormonal regulation helps plants adapt without losing yield. (Ferl & Paul, 2019; Massa & Wheeler, 2019).

4.2 Fluid dynamics

In microgravity, the fluidity is regulated by capillarity and surface tension rather than by gravity. As a result, irrigation systems must be engineered to maintain consistent rhizosphere wetting avoiding free-floating liquid that can suffocate roots or create microbial hotspots. Systems that combine porous substrates, hydrophilic wicks, and controlled low pressure pumping have proven effective to keep the rhizosphere evenly wet and maintaining root hydration and nutrient access (Zabel *et al.,* 2016; Morrow, 2008). Because bulk flow is limited, nutrient distribution becomes spatially heterogeneous unless actively managed, so closed loop monitoring of solution concentration and delivery timing is essential to avoid localized salinity or nutrient depletion (Kozai, 2013).

4.3 Radiation effects

Radiation exposure in low Earth orbit and on deep space missions increases DNA damage and oxidative stress, prompting plants to upregulate DNA repair and antioxidant systems.Persistent exposure, however, can slow growth and harm reproductive success unless mitigated by shielding, antioxidant priming, or selecting resilient genotypes (Horneck *et al.,* 2010; De Micco *et al.,* 2023). Radiation can also change secondary metabolism, which can change phytochemical profiles important for nutrition and flavor (Maffei *et al.,* 2024).

4.4 Reproduction and propagation of plants

In space, the reproduction is particularly vulnerable: pollen development, pollen tube growth, and fertilization can be disrupted by altered gravity and radiation, producing inconsistent seed set (Herranz *et al.,* 2013; Monje & Stutte, 2013). Operational programs therefore often rely on vegetative propagation, manual pollination, or self compatible cultivars to maintain continuous production cycles (Wheeler, 2017). To sustain plant growth in space, it demands an integrated approach that couples engineered fluidics and lighting with biological strategies cultivar selection, priming, and targeted breeding. This would help to manage altered gravity, constrained water dynamics, radiation, and limited volume. Continued iterative testing from ground analogues, tracking plant performance to flight experiments is essential to refine these solutions and ensure reliable results in future missions (Massa *et al.,* 2016; De Micco *et al.,* 2023).

4.5 Nutritional and Microbiological Safety

Operational experience on the International Space Station (ISS)shows that fresh, edible plants can be grown safely for crew consumption when cultivation and handling follow validated protocols. Trials with the Veggie system especially with lettuce and other ready to harvest crops demonstrate that, with controlled harvest and handling, leaf microbial counts stay within acceptable limits and common human pathogens are not routinely found(Khodadad *et al.,* 2020; Khodadad *et al.,* 2024).Researchers used both **culture methods** and **molecular sequencing** to measure total bioburden and community composition. Those analyses reveal that the **phyllosphere** of space grown plants is different from Earth controls, but these differences do not

automatically mean greater risk when strict hygiene and monitoring are in place(Hummerick *et al.,* 2021).

When light spectra, intensity and nutrient solutions are optimized for the environment, lettuce grown on the ISS can match Earth grown plants for vitamins, antioxidant activity, and many minerals(Massa *et al.,* 2016; Monje & Stutte, 2013). Space conditions do cause shifts in elementalcomposition and secondary metabolites likely from different light regimes, CO, levels, and stress signaling but these changes have not prevented the crops from serving as valuable fresh dietary supplements that improve crew morale and micronutrients(Wheeler, 2017; De Micco *et al.,* 2023).

Keeping produce safe is important and depends on fast, careful handling after harvest: rapid cooling, minimal handling, validated sanitization steps, and routine microbial surveillance reduce the risk of proliferation within the closed cabin (Khodadad *et al.,* 2020; NASA OSDR datasets). These steps reduce the chance that microbes will grow inside the closed cabin. Microbial communities can change in space conditions, so routine molecular monitoring (qPCR, sequencing) and environmental surveillance are recommended to detect deviations early andlet teams to adapt hygiene workflows and handling procedures before problems arise(Hummerick *et al.,* 2021; Bubenheim, 2016).

5. Candidate Crops for Space Farming

Selecting crops for space farming is a multidimensional systems challenge that weighs nutritional completeness, resource efficiency, growth cycle duration, edible biomass yield, food safety, and crew acceptability in equal measure. No single species can satisfy all mission requirements simultaneously, which is why crop selection research has progressively shifted from evaluating individual plants to assembling nutritionally complementary, mission-appropriate portfolios. Modern crop-ranking frameworks, including EDEN ISS scoring criteria and NASA multi-criteria evaluation, combine productivity, reliability, resource efficiency, microbial safety, and psychological value to guide transparent species selection, reflecting a shift from qualitative preference toward reproducible, system-level decision-making (Fazayeli *et al.,* 2025). NASA formalised this through the Crop Readiness Level (CRL) concept, a maturation scale analogous where desirable selection traits include short or dwarf growth habit, high harvest index, high yield, organoleptic acceptability, good nutrient content, and the ability to control microbial contaminants (Johnson *et al.,* 2021). A balanced space diet meeting the WHO minimum daily requirement of 15% protein, 30% lipids, and 55% carbohydrates can be achieved by combining starchy staples such as wheat, potato, sweet potato, and rice with protein-rich legumes such as peanut and soybean, supplemented by salad crops including tomato, lettuce, spinach, and radish for vitamins and minerals (Kamran *et al.,* 2023).

The earliest investigations into space agriculture were dominated by interest in algae, largely because of their capacity for gas exchange replenishing oxygen while scrubbing carbon dioxide from enclosed environments (Sorokin and Myers, 1953). Despite this physiological utility, algae proved insufficient as a standalone food source. Their nutritional composition is uneven across essential macronutrients and micronutrients, and their conversion into food that astronauts could regularly and willingly consume presented considerable practical difficulties (Krauss, 1962). These limitations redirected the field toward higher plants, which offer a far more complete and versatile nutritional profile, as well as greater compatibility with the culinary expectations of long-duration crews.

For caloric density, tuber crops are indispensable. Potato (*Solanum tuberosum* L.) is considered one of the top contenders for space agriculture owing to its high harvest index, carbohydrate-rich tubers that supply large amounts of energy, simple processing requirements, and stress tolerance (Liu *et al.,* 2021). Liu et al. (2021) further proposed the Whole-Body Edible and Elite Plant (WBEEP) biotechnology strategy to develop space crops with more edible parts, richer nutrient content, and higher mineral use efficiencies. For cereal crops, dwarf wheat cultivar 'Apogee' has been extensively tested. The Advanced Plant Habitat on the ISS validated canopy photosynthesis of Apogee wheat under reduced gravity, confirming system control

over light, CO, , humidity, temperature, and root zone moisture (Monje *et al.,* 2020). Recent NASA testing advanced the Crop Readiness Level of peas (*Pisum sativum*) and beans (*Phaseolus vulgaris*) under ISS-simulated conditions (Spencer *et al.,* 2023).

The collective evidence points towards a phase integration logic rather than a search for single universal crop. Leafy vegetables, with their short growth cycles and minimal spatial requirements, are well suited to early missions operating under tight volume and resource constraints. Calorie-dense tubers bridge the transition to mid-duration habitats where energy sufficiency becomes the primary concern. Grains and legumes, demanding greater infrastructure and cultivation expertise, complete the macronutrient balance for mature, long-duration surface missions (Wheeler, 2022). Space farming, in this sense, is fundamentally a systems design problem that requires assembling a sequenced, nutritionally complementary, and operationally scalable biological system capable of sustaining human life beyond Earth.

6. Technologies Used for Growing Plants in Space

Growing plants beyond Earth demands a fundamentally different technological approach from anything practiced in conventional agriculture. The absence of gravity, the unavailability of natural sunlight, the closure of water and nutrient cycles, and the extreme constraints on mass, volume, and crew time combine to make space plant cultivation one of the most technically demanding challenges in life sciences engineering. Over several decades, a layered suite of technologies has emerged to address these challenges including spanning growth hardware, lighting systems, nutrient delivery, soilless cultivation, microbial monitoring, and emerging biotechnological tools.

6.1 Plant Growth Hardware

The most direct technological interface between plants and the space environment is the growth chamber itself. On the International Space Station, two systems have defined the modern era of space plant research. The Vegetable Production System known as **Veggie** is a lightweight, low-power, open growth chamber that uses LED lighting, a passive capillary mat watering system, and ambient ISS air circulation to support crop production. Veggie uses LED lights, a passive watering system, and minimal environmental control consisting of a fan to circulate ISS air through the plant growth volume (Monje *et al.,* 2020). While operationally simple, Veggie's open architecture makes it unsuitable for precise scientific control. The Advanced Plant Habitat (APH) addresses this limitation. The APH is the largest research plant growth facility deployed on the ISS, a fully enclosed, closed-loop plant life support system with an environmentally controlled growth chamber designed for conducting both fundamental and applied plant research during experiments extending as long as 135 days (Morrow *et al.,* 2016). The APH autonomously monitors and regulates environmental parameters like CO, concentration, humidity, temperature, light spectrum, and root zone moisture, reducing the burden on crew time considerably.

6.2 Soilless Cultivation and Nutrient Delivery

A defining technological requirement for space plant growth is the complete elimination of conventional soil. Soil introduces unacceptable levels of mass, microbial contamination risk, and fluid management complexity in microgravity. Hydroponics and aeroponics fill this gap. Hydroponics offers precise nutrient control and high space efficiency, crucial for resource-limited environments, and has been applied in space in the cultivation of *Glycine max* within the Micro Ecological Life Support System Alternative (MELiSSA) (Paradiso *et al.,* 2020). Further, the yield and nutrient management can be improved with innovations such as automated nutrient estimators and ion-detection algorithms (Rajendran *et al.,* 2024; Sangeetha and Periyathambi, 2024). However, fluid behavior in microgravity introduces serious complications. Without gravity, water and dissolved nutrients behave unpredictably, leading to nutrient stratification, localized salt accumulation, or impaired root oxygenation, and delivery systems must rely on capillarity, diffusion, or controlled misting, all of which are strongly influenced by humidity and transpiration rates (Hoehn *et al.,* 2000, Komatsu *et al.,* 2025, Or *et al.,* 2009). To scale beyond current small-volume systems, Sierra Space developed

the Xposed Root On-Orbit Test System (XROOTS), launched to the ISS in February 2022. XROOTS tests both hydroponic and aeroponic nutrient delivery in independent growth chambers, capturing the full plant life cycle from germination to maturity through video imaging. This makes it a critical step toward validating substrate-free large-scale crop production for future lunar and Martian habitats.

6.3 Artificial Lighting

Because natural sunlight is unavailable or unreliable in spacecraft and planetary habitats, artificial lighting is the sole driver of photosynthesis. Light-emitting diodes (LED) have become the universal standard. LED technology enables precise spectral control in controlled environment agriculture, enhancing crop productivity, quality, and energy efficiency, and the red-to-far-red ratio governs stem elongation, leaf expansion, and flowering, while blue light is essential for stomatal regulation and chlorophyll biosynthesis (Azizi *et al.,* 2025). Blue and red LEDs have higher energy efficacy than white and green LEDs, and LEDs can have a narrow spectrum and great controllability, providing unprecedented opportunities to fine-tune light spectra and photosynthetic photon flux density to manipulate crop growth and development (Liu and Van Iersel, 2021). The APH uses a multiband LED array delivering red, blue, green, and white wavelengths independently.

7. Bio-generative life support system

A bio-regenerative life support system (BLSS) is a well-planned and closed-loop artificial ecosystem that includes plants as producers, animals/humans as consumers, and microorganisms as decomposers. This artificial life support system is based on the principle of a natural ecosystem with a combination of biotechnology (Liu *et al.,* 2021). Many space research organizations have realized the need for a BLSS for long-term deep space missions, which can satisfy the physiological requirements of the crew members. To resolve the issues of limited food and limited oxygen supply and to prohibit the expenses of resupplying them, organizations are trying to integrate the life support system within the spacecraft. Many ongoing system integration-orientated projects like MELiSSA (Micro-ecological Life Support System Alternative) in Europe and testing of BLSS like BIOS-3 in Russia, Biosphere 2 in the USA, CEEF in Japan, and Lunar Palace in China have achieved a certain degree of success and stability.

7.1 Moon farming

For many years, the prime goal of almost all space agencies has been to establish a lunar base. BLSS, which provides an artificial Earth-like ecosystem within a closed system, can sustainably supply food, oxygen and water to make a self-sufficient lunar base. The first biological experiment on the lunar surface was conducted, consisting of a microecosystem called Biological Experiment Payload (BEP) carried by the Chinese Chang'e 4 lunar lander (Xie *et al.,* 2024). The BEP consisted of seeds of cotton, potato, Arabidopsis, etc., and water. The BEP was exposed to sunlight at the lunar surface, and the experiment lasted for almost 9 days. It was revealed that germination of cotton seedlings on the lunar surface showed a faster rate than the same experiments on the ground (Xie *et al.,* 2024). An official podcast of the NASA Johnson Space Centre, episode no. 258, "Moon Farming" featuring Dr Anna-Lisa Paul and Dr Rob Ferl, revealed the experiment of successfully growing plants like Arabidopsis in the lunar regoliths.

7.2 ISRO's CROPS Mission

The CROPS (Compact Research Module for Orbital Plant Studies) mission is ISRO's first biological experiment to grow crops in space under the condition of microgravity. The mission has utilized the PSLV orbital experiment module to cultivate cowpea seeds in an earth-like environment. The main significance of the mission is to attain a proper understanding of the effect of microgravity on plants, exploring the development of life support systems for Mars expeditions or long-duration missions and, most importantly, ensuring food security in space.

8. Space Agriculture for Earth Food Security

Extreme constrains on available space, limited water sources, nutrients, labour and energy forces to develop efficient food production systems in space

agriculture practices. Such techniques and technologies can be directly applied in arid drought prone regions, urban areas, reclaiming degraded landscapes and climate sensitive regions of earth where conventional agriculture practices struggle to produce desired yields (Aryan *et al.,* 2025). Some technologies that can prove to be helpful for such cause are controlled-environment agriculture, closed-loop water recovery, precision nutrient delivery and sensor-based crop monitoring etc. Fazayeli et al. (2025) reported that closed-loop water technologies have demonstrated the capacity to efficiently recover water to approximately 93-94%. Similarly, hybrid biological and reverse osmosis systems have simulated the recovery of about 90% of water. These innovations can be applied in water-scarce regions to support crop production. Advanced controlled environment for crop productions such as automated climate control, LED lighting systems, guided irrigation systems and fertilizer application can help crops to grow throughout the year with reduced dependence on seasonal rainfall and fertile land on earth (Fazayeli *et al.,* 2025).

Remote sensing and satellite navigation can help to provide timely information on crop condition, soil moisture, use of land, evaporation, transpiration and forecasts on yield. Such information can help farmers and policymakers in improving irrigation practices, fertilizer and pesticide applications, thereby increasing productivity while reducing costs and pressure on the environmental (UNOOSA, 2013). The World Economic Forum (2023) estimated that satellite data can help to reduce agricultural water usage by up to 5-10%, remote sensing-based optimization can help to reduce fertilizer and pesticide use by 4-6% and by forecasting crop yield, food waste can also be reduced to 20%.

9. Future Research and Challenges

Space agriculture faces several scientific, technological and practical challenges despite its promises. Plants grown in space are exposed to conditions very much different from that on earth surface, such as microgravity or partial gravity, high radiation, limited solar irradiance, extreme temperature variation, restricted space, limited water and nutrient availability, and the absence of natural soil systems. These factors can affect seed germination, root orientation, photosynthesis, flowering, fruiting, nutrient uptake and overall crop yield (Monje *et al.,* 2003). Developing and setting up a reliable system where water, nutrients, air and organic waste is continuously recycled without failure is cumbersome. Even small disruptions in irrigation, lighting, temperature control or microbial balance may affect plant growth and development resulting in loss of the whole crop. Selection of crop is another challenge as these crops must be compact, fast growing, nutritious, high yielding and capable of performing well under artificial conditions. Food safety is also critical, as closed habitats may favour microbial contamination in water lines, root zones and plant surfaces.

Future research must therefore focus on long-duration and multigenerational plant-growth studies that can withstand microgravity and artificial climatic conditions. Studies are also required to understand how space conditions affect plant development and growth. Genetic studies related to crops grown in space is another field that requires advance research. The development of resilient crop varieties through biotechnology and plant breeding techniques will be important for future space missions. Research should also focus on improved bioregenerative life-support systems, especially efficient recycling of water, nutrients and organic waste for long duration utilizations. The future of space agriculture not only depends on growing plants in space, but also on utilizing more of these innovations into practical solutions for sustainable food production on Earth as well.

10. Conclusion

Space agriculture represents an advance emerging field where research in biology, space science, engineering and food-security comes together. The role of plants in space is not only limited to food production but can also contributes to oxygen generation, carbon sequestration, water recycling, waste utilization and psychological well-being of astronauts long during deep space explorations. Recent advances have shown that crops can be grown under space conditions, although complete self-sustaining food production beyond Earth is still a major challenge. But

the successful largescale space farming will depend upon the ability to solve biological and technological problems, including plant growth under microgravity, radiation stress, limited water and nutrients, crop selection, microbial safety, energy demand and the reliability of closed-loop life-support systems. The importance of space agriculture extends beyond future Moon or Mars missions since technologies developed for growing plants in resource-limited space environments can also be used to support crop production on Earth. Thus, space agriculture should be viewed as a dual-purpose scientific frontier, while it will support human survival beyond Earth, it can also offer practical solutions for sustainable agricultural practice on our own planet.

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India's Act East Policy and Northeast India's Role as a gateway to Southeast Asia

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Abstract

In 2014, India changed its 1991, Look East Policy into the Act East Policy, and this change marked a huge turn in how the country sees it place in the world. The earlier policy mostly relied on sea trade, but the new one focus for a strong overland connects with Southeast Asia. Northeast India located right in the middle of this shift. Bordered by five different countries, the region has moved from being treated as backward and sensitive frontier to becoming India's main land route into the ASEAN group of nations. This paper looks at how important Northeast India is to policy. It studies major connectivity projects such as the Kaladan Multi-Model Transit Transport Project and the India-Myanmar-Thailand trilateral Highway, and it also looks at the serious problems showing these projects down, including the civil war in Myanmar, ethnic tensions inside the Northeast itself, and the rough terrain of the hills. Lastly, the paper discuss that regional grouping such as BIMSTEC, along with local economic projects, can help the Northeast became more than just a passage for goods, it can become a production hub its own, which would bring stability and growth to the wider Indo-Pacific area.

Keywords : Act East policy, Northeast India, ASEAN, connectivity, Geopolitics, BIMSTEC.

1. Introduction

In 1947 India was divided and gained independence since that time, New Delhi saw Northeast India as backward and risky region. The states in the region: Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura impacted badly due to new borders creation of partition. In overnight, the traditional trade route which ran through East Bengal was closed. The whole area was left connected to the rest of the country through a narrow, 22 kilometer strip of land known as the Siliguri Corridor, often called the 'Chicken's Neck'. This sort of isolation led to years of slow economic growth and was often left out of national plans (Das, 2012). To address this sort of long standing problem, New Delhi started the Look East Policy in 1991 under Prime Minister P.V. Narasimha Rao. At that time India was facing other several problem including economic crisis inside country, and the collapsed of Soviet Union, thus the country needed to open up its economy and build links with the fast growing markets of Southeast Asia. But for almost twenty years, this policy was focus on around sea routes. Trade and diplomacy largely ignored the land borders of the Northeast, and goods instead travelled by ship from India's eastern ports to places like Singapore, Malaysia, and Indonesia (Muni, 2011). The changing point came when Prime Minister Narendra Modi at the 12th ASEAN-India Summit held in Myanmar in November 2014, upgraded the policy, and renamed it the Act East Policy.

The change from 'Look' to 'Act' was meant to send a clear message that India would now focus on actually building infrastructure inside the Northeast, finishing cross-border projects on time, and strengthening security and cultural ties across the region (De, 2020). Today, the Northeast is no longer treated as a forgotten and closed-off border zone. Instead, it is presented as India's direct land gateway to the ASEAN countries. Even so, turning a region with a long history of ethnic conflict, ongoing insurgencies,

and very difficult terrain into a smooth trade corridor is not an easy task. This paper looks closely at how important the Northeast is under the Act East Policy, what is being built, what is holding things back, and what could be done better.

2. Geopolitical and Strategic Foundations of the Act East Policy

2.1 From Look East to Act East

The Look East Policy was a practical, it mainly trade focused response to the world after the cold war. Its main aims were straightforward to widen India's trading partners, sign trade deals, and bring the country into the fast-moving manufacturing networks of Southeast Asia. This approach did lead to the ASEAN-India Free Trade Area agreement on goods in 2009, but it did not have a wider political or security plan behind it (Bajpai & Pant, 2013).

The Act East Policy expanded this old plan in two main ways. First, in terms of geography, it widened India's outlook beyond the ten ASEAN countries to include other major democracies in the Indo-Pacific region, such as Japan, South Korea, Australia, and several Pacific Island nations (Sajjanhar, 2016). Second, in terms of structure, it moved beyond simple trade to cover defense cooperation, space research, maritime safety, fighting terrorism, and deeper cultural exchange. Most importantly, it directly tied India's foreign policy goals to development at home, making the growth of Northeast India one of the key markers of how well this foreign policy was working (De, 2020).

2.2 The Indo-Pacific Power Balance and China's Shadow

The rise of the Act East Policy cannot be separated from the changing balance of power across Asia. China's fast economic growth, its assertive moves in the South China Sea, and its huge infrastructure spending through the Belt and Road Initiative has all reshaped the region's security picture. Through projects such as the China-Pakistan Economic Corridor and large port-building work in Myanmar and Bangladesh, India has increasingly felt that it is being surrounded by China's so-called 'String of Pearls' strategy (Pant, 2019).

Within this scenario, the Act East Policy works as India's own alternative model for regional growth. Rather than offering heavy loans that can leave smaller countries in debt, India tries to promote development that is more open and respects the sovereignty of its neighbors. In this picture, Northeast India acts almost like a shield. A Northeast that is secure, economically strong, and politically stable makes it harder for outside powers to take advantage of local ethnic tensions along India's sensitive Himalayan and sub-Himalayan borders (Sajjanhar, 2016).

3. Northeast India: A Critical Geographic and Cultural Hub

3.1 The Land Bridge to ASEAN

Northeast India shares more than 5,300 kilometers of international border, which means over 99 percent of its outer boundary touches a foreign country, while its link to the rest of India runs through the narrow Siliguri Corridor. Among its neighbors, Myanmar matters the most for the land-based version of the Act East Policy. It shares a 1,643 kilometre border with four Northeastern states Arunachal Pradesh, Nagaland, Manipur, and Mizoram and is therefore the physical doorway to Southeast Asia (Singh, 2019). Any truck, train line, or power cable travelling overland from India towards Thailand, Laos, or Cambodia has to pass through Myanmar.

Bangladesh is also extremely important, sharing a long, 1,880 kilometre border with the Northeast. Access to Bangladesh's roads, rivers, and ports crucial because it offers a shortcut around the long detour through the Siliguri Corridor, allowing goods from landlocked states such as Tripura and Assam to reach the Bay of Bengal much faster (ThongkholalHaokip, 2015).

3.2 Complex Cross-Border Ethnic Identities

The Northeast is diverse region, home to more than 200 different tribal and ethnic groups, each with its own culture. Long before national borders were drawn in the middle of the twentieth century, these communities had open and easy social and trading links with people in Upper Myanmar, Tibet, and the Chittagong Hill Tracts. For a long time, this reality was respected through the Free Movement Regime, an

arrangement that allowed people living near the India-Myanmar border to cross up to sixteen kilometers on either side without a passport or visa, mainly to visit relatives and trade in local markets (Singh, 2019).

However, when international borders were drawn, many closely connected communities found them divide between different countries and it has fuelled many armed movements, separatist demands, and ethnic conflicts in states such as Nagaland, Manipur, and Mizoram over the decades. When New Delhi designs policy under the Act East framework, it needs to remember that the Northeast is not one single, uniform area. Any move towards cross-border trade has to be discussed with local communities, so that increased openness does not end up threatening tribal land rights or weakening unique local cultures (Thongkholal Haokip, 2015).

4. Key Cross-Border Infrastructure and Connectivity Projects

4.1 The Kaladan Multi-Modal Transit Transport Project

The Kaladan Project is one of India's most ambitious cross-border transport efforts. Its main goal is to connect India's eastern ports to Northeast India through Myanmar, giving an alternative route that completely avoids the crowded Siliguri Corridor (Gateway House, 2022). The route has three separate parts. First, the sea leg, where cargo is loaded at the Port of Kolkata and shipped roughly 539 kilometers across the Bay of Bengal to the newly built, India-operated deep-water port at Sittwe in Myanmar's Rakhine State. Second, the river leg, where the cargo is shifted onto barges and carried about 158 kilometres upstream along the Kaladan River to an inland terminal at Paletwa. Third, the road leg, where a newly built 110-kilometre highway runs through thick mountain terrain from Paletwa to Zorinpui on the India-Myanmar border, connects to Mizoram's state highway network. This route is expected to cut shipping time from Kolkata to Mizoram by several days and reduce the distance travelled by more than 1,000 kilometers.

4.2 The India-Myanmar-Thailand Trilateral Highway

The India-Myanmar-Thailand Trilateral Highway is a massive 1,360-kilometre road project meant to create a direct land link between India and the heart of Southeast Asia. It starts at Moreh in Manipur, crosses Myanmar from west to east, and ends at Mae Sot in Thailand (De, 2020). India has taken on much of the financial and technical work needed to upgrade large parts of this road inside Myanmar, including rebuilding more than a hundred bridges left over from the Second World War and constructing missing road sections through difficult stretches such as the Kalewa-Yagyi area. There are long-term plans to push this highway further east into Laos, Cambodia, and Vietnam, which would create one continuous economic corridor stretching from the Indian Ocean to the South China Sea. To make sure trucks can move smoothly once the road is finished, India, Myanmar, and Thailand are working on a Motor Vehicles Agreement that would standardise customs checks, container sizes, and driver licences across the three countries (De, 2020).

4.3 River Networks and Air Connectivity

Moving goods by river is much cheaper and cleaner than building highways through mountains. Under the Protocol on Inland Water Transit and Trade signed between India and Bangladesh, cargo ships can travel from the Brahmaputra River, known as National Waterway 2, in Assam, down through Bangladesh's river channels, either reaching Indian ports in West Bengal or connecting to international shipping routes through the Bangladeshi ports of Chittagong and Mongla (Gateway House, 2022). This gives the landlocked Northeast a low-cost way to transport bulky goods such as timber, tea, coal, and stone. At the same time, air connectivity is being improved to support business travel and high-value trade. Under the international arm of the UDAN regional connectivity scheme, airports in Guwahati and Imphal are being upgraded so they can offer direct flights to cities such as Bangkok, Dhaka, and Yangon.

5. Economic Strategies and Border Trade Development

5.1 Moving Towards Formal Trade: ICPs and Border Haats

For many years, border trade in the Northeast was mostly informal. To bring this trade into the formal system, India has built modern Integrated Check Posts

at major crossing points, such as Moreh in Manipur and Agartala in Tripura. These posts start immigration checks, customs clearance, health screening, and large cargo storage together under one roof (Das, 2012). At the same time, the government has not ignored small-scale local trade. Special once or twice market held along with border with Bangladesh and Myanmar which is called 'border haats', allow people living near the border to buy and sell local produce such as vegetables, fruits, handlooms, and spices. These markets kind of helping build peaceful ties between communities and reducing illegal smuggling at the local level (Das, 2012).

5.2 Making the Most of Regional Strengths: Organic Farming and Ecotourism

The Northeast has rich, unspoiled soil and varied climate make it ideal for farming. For example Sikkim, which became a fully organic state, other parts of the Northeast are now focusing on growing premium spices, exotic fruits, tea, and bamboo products aimed at health-conscious city buyers across ASEAN countries (ThongkholalHaokip, 2015). The region also has huge potential for ecotourism. The untouched landscapes, wildlife reserves, and rich cultural traditions of states like Meghalaya, Nagaland, and Arunachal Pradesh could attract adventure and cultural tourists from across the world. Building a connected 'Buddhist Circuit' that links old monasteries in Sikkim and Assam with Buddhist communities in Thailand and Myanmar could open up many jobs in tourism and hospitality at the local level (Das, 2012).

6. Major Challenges

Despite all of this making successful of the Act East Policy is a critical challenge.

6.1 The Ongoing War in Myanmar

The main challenge is ongoing war in Myanmar. After the military takeover in February 2021, the country fell into a violent civil war. The military government has been facing strong resistance from the National Unity Government, local People's Defence Forces, and several established ethnic armed groups across the country (Singh, 2019). Work on the Trilateral Highway has stopped many times because large sections of it run through active conflict zones in Myanmar's Sagaing region. The river and road routes used for the Kaladan Project pass through territory that is heavily contested by the Arakan Army.

6.2 Domestic Ethnic Fault Lines and Local Concerns

Internal security within the Northeast itself remains a sensitive issue. Although long peace talks have led to successful agreements with major historic insurgent groups in Assam and Nagaland, peace between communities is still fragile. Recent outbreaks of serious ethnic violence in parts of the region have shown how quickly old rivalries can flare up again, damaging local infrastructure and putting off potential investors (Das, 2012), and many tribal councils and civil society groups worry that opening the region up to large highways and outside investment could bring in large numbers of outside workers, lead to loss of land, and weaken unique local cultures. For the Act East Policy to be accepted on the ground, infrastructure projects need to come with clear legal protections for tribal land rights and support for local self-governance (ThongkholalHaokip, 2015).

6.3 Topographical Challenges and Climate Vulnerability

The region is prone to major earthquakes, heavy monsoon rains, sudden floods, and large landslides that can wash away newly built roads and rail lines within hours. Because of this difficult weather, construction crews often have only a few dry winter months each year to work, which leads to repeated delays and rising costs (Das, 2012). On top of this, the Northeast is one of the world's biodiversity hotspots. Building multi-lane highways through untouched forests and putting up large hydroelectric dams require very careful planning so that development does not come at the cost of serious environmental damage.

7. Sub-Regional Frameworks: The Role of BIMSTEC and BBIN

7.1 BIMSTEC: Linking South and Southeast Asia

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation, known as

BIMSTEC, brings together five South Asian countries - India, Bangladesh, Bhutan, Nepal, and Sri Lanka along with two Southeast Asian countries, Myanmar and Thailand, creating an institutional link between South Asia and the ASEAN region (Pant, 2019). Northeast India sits right at the geographic centre of this group. BIMSTEC's Master Plan for Transport Connectivity aims to bring together different national road, rail, and shipping networks into one connected system. By working through a multi-country platform like BIMSTEC, India can push forward its cross-border infrastructure goals in a more cooperative setting, which reduces friction between any two countries and shares the responsibility for regional development more broadly (De, 2020).

7.2 The BBIN Motor Vehicles Agreement

The Bangladesh, Bhutan, India, Nepal grouping, known as BBIN, focuses on land connectivity within the eastern part of South Asia. The signing of the BBIN Motor Vehicles Agreement was a major step, permitting cargo trucks to cross member countries' borders (Gateway House, 2022). For the Northeast, this agreement is very beneficial because it allows trucks from states like Tripura and Mizoram to pass directly through Bangladesh to reach ports in West Bengal, cutting travel time drastically compared with the long route around the Siliguri Corridor. This kind of step gives the region an immediate economic boost and builds the logistics capacity needed to handle larger trade volumes under the wider Act East Policy (Gateway House, 2022).

8. Policy Recommendations for Future Integration

For India's Act East Policy to successful, India should focus on balance approach because it's crucial to connect national goals with local realities.

- India should improve how it implements connectivity projects. Many projects in the Northeast face delays due to funding shortages and administrative problems. The government can create a dedicated authority to monitor and coordinate cross-border projects from planning to completion. Sufficient funding and collaboration with international development partners can help ensure that projects are finished on time.
- India needs a flexible diplomatic approach toward Myanmar. Since political instability in Myanmar affects border regions, India should maintain relations with all relevant stakeholders to protect its connectivity projects and ensure the safety of trade routes. Local cooperation can help keep development activities separate from political conflicts.
- Local communities must benefit from regional integration. State governments, tribal institutions, and local businesses should take part in decision-making. Creating border economic zones, agro-processing industries, and skill development centers near key trade points can create jobs for local youth. This will help turn the Northeast from a transit corridor into a center of economic growth and regional cooperation.

10. Conclusion

The shift from the Look East Policy to the Act East Policy marks a major change in how India sees its place in the region. Northeast India has gone from being treated as an isolated, economically weak border zone to being seen as the country's main land bridge and gateway to the fast-growing economies of Southeast Asia and the wider Indo-Pacific. Making this vision real will need careful, long-term balance. India must keep pushing forward on major cross-border routes such as the Kaladan Project and the Trilateral Highway, while also staying highly protective of the fragile environment and the diverse ethnic communities of the Northeast. By continuing to strengthen regional relations through groups like BIMSTEC and BBIN, focusing more in local industries, and building on strong cultural connections, India can roots its foreign policy in common regional progress. If this balance is achieved, Northeast India will be able to fulfill its real potential not just as a route that goods pass through, but as a thriving, self-sustaining centre of international trade and a pillar of stability for the entire region.

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The Role of Imagination in Rorty's Pragmatism: Redescription, Self-Creation and Social Hope

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Abstract

It is examined through the study how imagination plays a vital role in Rorty's pragmatism defining the imagination as central principle that connects all his other concepts like knowledge,self-creation, ethics, and social progress..

Rejecting the traditional view of philosophy as search for absolute truth, Rorty emphasizes the creative process that develops new ways of speaking and understanding the world. Imagination helps this re-description and enables individuals to go against old beliefs and replacing them make possible to create new identify and a society of alternative possibilities.

We can understand the suffering of others and thus expand the solidarity by the act of imagination. Our society will be more inclusive once we can realize the suffering of others.

Imagination inspires us to envision for a better future that encourages social hope and democratic reform. In the end of the study it comes to the point that imagination is not a secondary concept, rather it is the principle that shapes personal development, ethical responsibility, and social change.

Keywords: Imagination; Richard Rorty; Re-description; Self-Creation; Solidarity

1.1 Background

In the late nineteenth century a new philosophical ideas emerged in USA in the hand of Charles Peirce, William James, and John Dewey. The ideas they developed focus mainly on usefulness. Instead of engaging to search the universal truth they believed the process of judgement of our ideas based on the usefulness and production of good result in real life. Knowledge, in their view, is not fixed but develops through experience, inquiry, and social interaction (Peirce, 1878; James, 1907; Dewey, 1929). It means knowledge cannot be considered as permanent or complete, rather it changes and grows through experiences, investigations and conversation with others.

In the philosophy of Pierce the meaning of any idea depends on its practical effect produced in our life. When we say a medicine is good it means that medicine actually works in patients' body and cures them. In James' view an idea if an idea proves itself to e useful in our life or experience then that idea is considered to be meaningful or true. Another thinker John Dewey developed his pragmatism by connecting to the aspect of society and education. He says to consider knowledge we should see its ability to solve people's problem as well as its capacity to make life better. We should not define knowledge as a practice to search the unchanging truths about reality.

The direction of pragmatism 'changed in the hand Richard Rorty in 19th century. In this time pragmatism is influenced by new ideas, language, logic, and society. This new form of pragmatism is called neo-pragmatism. This new ideas connects the old original pragmatic ideas to new ideas like language and culture. By this process of amalgamation of old ideas with the new post analytic trend Rorty makes the pragmatism more popular to people. . Drawing on classical pragmatism while engaging contemporary debates on language and culture, Rorty revitalized pragmatist thought and

introduced it to a broader audience (Malachowski, 2014).

If we see the main idea of Rorty's pragmatism we can see an opposite stance of traditional theories of knowledge and philosophy. In his masterpiece *Philosophy and the Mirror of Nature(1979)* Rorty argues that knowledge is not the perfect representation of the external world as it is. He says we can understand through our language and that is shaped by history, culture, and society. Our thinking and understanding is possible through the language and culture. So the focus of philosophy should not be the search for objective truths, rather on the discussion, interpretation and how people actually live and communicate.

Rorty says instead of searching eternal, unchanging truth, the main task of philosophy should be to engage in creative activity that helps to develop new ways of speaking , thinking, and understanding outside world. When we change our vocabularies we can change our understanding.

To understand an idea we can hear the language. In his book *Contingency, Irony, and Solidarity, Rorty explains how using new ways of thinking and describing help in process of intellectual and social progress. His new way of speaking, thinking, describing is called in re-description.*

To re-describe anything we need the power of imagination, though people often ignore it as a concept of philosophy. Through imagination we can think the possibility that is not available in our current beliefs and our style of doing works. For an example, if we want an equal society we first have to imagine a society that is different from the current society. So, it can be deduced that imagination helps us to find new meaning and ideas, to see a community where we can care the sufferers who may not belong to our community. This idea helps us to ourselves differently. Rorty' s idea of imagination connects rest of his ideas like knowledge, ethics, and democratic life. By imagination we can understand new idea, care others.

1.2. Literature Review

Rorty's philosophy is a movement against the traditional idea of knowledge. "In Philosophy and the Mirror of Nature (1979), he rejected the view that knowledge consists in accurately representing reality." He argues that knowledge is developed through the interaction, conversation and the language we use within our communities. Philosophy should deal with the real life issues and help to solve them by open discussion. This view is clearly reflected in his writing "In Consequences of Pragmatism (1982). Our aim should not be to search absolute certainty. Rorty applied his ideas of knowledge, truth in the areas like culture, morality, and politics. History and circumstances are the keys to shape language, personal identity, and social institutions.In his book*Contingency, Irony, and Solidarity*(1989) Rorty beautifully explains this idea. "Scholars like Voparil and Voparil (2022) explain in their writing that once we stop thinking knowledge as reflection of reality and turn to the activity of conversation, then our creativity starts to work. That moment our imagination plays its role and becomes the part of learning and understanding.

The idea of re-description helps us for our new creation.Re-description is one of the important ideas in Rorty's pragmatism. It replaces the old one by new if that loses its utility in our life. It enables us to see and speak in new ways and by this process we can see ourselves as well as the world differently. "McClelland (2006) argues that Rorty replaces the search for objective truth with a creative process of continual reinterpretation." The writer says we should keep rethinking and reinterpreting ideas in a creative ways, not to focus on final truth. In the writing of Ramberg (2014) there are the references of advancement of knowledge. It means when people develop new and imaginative ways of describing things then their knowledge progresses. Likewise the thinker Bartczak (2015) explains that through the literatures like stories, narratives people can imagine new possibilities. By presenting the stories differently we can find new perspective and ways of understanding life.

Rorty's liberal ironist believes that their values and ideas are not absolute truth, because they are varied in different circumstances. Thinker "Müller (2023) claims that imagination plays the major role in the process of creating ourselves in new version, This new one will be created through linguistic innovation.

Rorty says our identity is contingent and changing continuously, not dependent on fixed essence. It can be rewritten like a story. This view is presented by the thinker Aliya(2025) and says that rather than discovering a single true self, we create ourselves through imagination and reinterpretation.

In the area of ethics and politics imagination plays a vital role.Rorty says we should justify ethics on the basis of solidarity, sympathy and how our activities reduce cruelty. No ethical issue is dependent on universal foundation. Thinker"Fraser (1988)" argues that we can make our society morally better when we learn to care about more people. Moral progress flows when we increase our compassion and caring for others. "McClure (2001) explains how solidarity is a result of imagination, and this solidarity enlarges our sense of community. It extends our community and enables us to understand that we are in a broader human 'we'. Another writer Boffa (2023) argues how we develop moral imagination through literatures. Reading novel we can be more empathetic towards the people who are in suffering and pain. This analysis proves that imagination builds a bridge between our personal experience and social responsibility. Rorty's ideas are criticized by many scholar based on different perspective. Thinker Heller (1991) says absent of universal or objective truth makes our moral and political beliefs hard to justify. Another thinker Coombs (2013) questions on effective role of imagination to protect values like justice and human rights. "McClure (2001) further argues that for our long term moral responsibilities and community's empathy and imagination would not be enough.

It proves that imagination is an important idea in Rorty's pragmatism that connects all his remaining ideas. But this connection is not studied; rather all the ideas are separately discussed, so missing the connection is the research gap for my study.

1.3.Objectives of the Study

1. To understand the role of imagination in Rorty's philosophy is the main objective.
2. It seeks to examine how imagination influences his concepts of self, knowledge, social life.
3. It explores how imagination directs our creativity of new thinking, speaking and understanding the world.
4, It explores what are the connection between imagination and solidarity.

1.4. Methodology

For this study the qualitative philosophical method is used to understand the role of imagination in Rorty's philosophy. It analyses how imagination how imagination works in his entire philosophical concepts.

Going through Rorty's literatures it is tried to understand the 'meaning of knowledge' in proper philosophical context. Rorty's major works are examined here for this study. Besides the primary sources, some secondary sources are also counted for understanding and discuss different views on Rorty's ideas of imagination, re-description, self-creation, and solidarity.

Applied conceptual method it examines the relation among the sole ideas of Rorty's philosophy.

Comparing Rorty's ideas with the contemporary studies it seeks to find out that imagination connects all ideas like knowledge, morality, and politics.

2.1. Imagination as Redescription

The concept of re-description in Rorty's philosophy goes against the traditional philosophical search for final truth. We know and understand ourselves and the world through language, concept, and words we use. There is no perfect knowledge or ideas, and so our society grows with the creation of new ways of talking that we already know. "This process of creating alternative descriptions is what Rorty calls re-description, and imagination is its driving force (Rorty, 1989)." It says that re-description is possible when we start imagining as it helps us to think differently. Imagination is a creative ability, not just faculty of fantasy. This creative ability questions on old beliefs and assumption, sees things differently and emphasize

new meaning. Thus this leads us new ideas, solutions and ways of acting.

2.2 From Representation to Re-description

Rorty in his book "Philosophy and Mirror of Nature (1979)", argues against the common belief that mind and language function as mirror that copy or reflect reality. As there is no neutral or pure reality, so our mind or language cannot reflect them. Since language and ideas come from history and culture, so they shape reality. Therefore inquiry should concentrate to find better ways to deal with problems and create new possibilities. It should see whether knowledge or idea is helpful and useful for a particular situation. As there is no perfect description of any idea or knowledge, so the way of thinking newly paves the way for progress. Imagination makes the creative ability as an alternative. "Scientific revolutions, social reforms, and cultural transformations occur when new ways of speaking enable people to see familiar realities differently (Rorty, 1989)". So imagination is the source of innovation and change.

2.3 Metaphor and Linguistic Innovation

Rorty says that we can use creative language and metaphors to describe the thingsnewly. He is influenced by Davidson(1984) and says that metaphors help us to see new connections, ideas , and possibilities we never noticed before. Though new metaphors face challenges initially, but gradually people accept them and start to think the world newly.Metaphor comes through imagination that is built by the connection between things that people had never encountered. Forthe growthof society philosophers, writers, poets and reformers contribute by introducing new descriptions. When people found any new and convincing ways of talking about the equality, human rights, and social justice, then these ideas become powerful. New metaphors and narratives help people to change their thinking and understanding and thus helpsfor the growth of culture and society.

2.4 Philosophy as Cultural Politics

Philosophy for Rorty offers new ways of thinking and talking issues. These new ways help people to understand society better as well as inspire positive change. This thought relate philosophy to cultural politics, where people describe themselves, societies and their future. Our thought and actions are affected by our words and ideas, and so change of language means change of society and culture.

Challenging old beliefs and introduce new ways of understanding helps in progress of society. Rorty says philosophers should create new ideas to support the growth of cultural and changes of democracy. Through this imagination we can move beyond our inherited vocabularies and can actively reshape our culture. Changing our vocabularies we can produce in new identity for ourselves and for our society.

3.1 Imagination and Self-Creation

Rorty says our identity or self is not defined by any essence. It is defined by family, background, language, circumstances, cultures, history, and experiences and so changing. "The process of coming to see other human beings as 'one of us' rather than as 'them' is a matter of detailed description" (Rorty, 1989, p. xvi). It says when we learn more about others, particularly their lives, feelings, experiences then we can understand them very well and will not consider them as stranger or outsider rather takes them as part of our community. "Personal identity is formed through language, culture, social relationships, and experience rather than through an underlying essence (Rorty, 1989)." By this perspective, imagination helps us to rethink and create new possibilities for life. There is no predetermined destiny or instinct control or define our individuality.Rorty says people actively create their identities over time by telling their stories, words and ideas they used. As these factors are contingent, so our identity is not fixed, rather continually developing. Using imagination people can break their inherited self-understanding and create new identity.Imagination helps individuals to envision possibilities beyond their current understanding of themselves. As a result, the self becomes an on-going project of interpretation, re-description.

In the book *Contingency, Irony, and Solidarity* (1989), Rorty says that liberal ironists shapes and redefines themselves and also believe that their views

may be changed at any moment. In this regard imagination helps them to start with new narratives, aspirations, and identities. So selfhood is an act of self-creation and it is an on-going and unfinished task.

Rorty's idea of self-creation is influenced by thinkers likeFriedrich Nietzsche, Marcel Proust, and Vladimir Nabokov. Nietzsche supports the creation of one's own values, while Proust emphasis on self-interpretation. Nabokov contribution of linguistic creativity helps Rorty to claim identity is a product of imagination. Rorty says about poetic selfhood that means individuals is the author of their identities. It is an imaginative achievement.

3.2 Moral Imagination and Solidarity

Rorty argues that progression of morality depends on the sensitivity to the suffering of others.Ethics is grounded not in timeless truths but in human relationships, sympathy, and the capacity to expand our sense of community (Rorty, 1989). Imagination helps us to change our perspectives towards outsiders. Morality is justified how we recognize shared vulnerability and identify others. It can move us beyond narrow self-interest and to foster empathy, solidarity, and social responsibility.

3.3 Literature as Moral Education

In Rorty's ethics literature is treated as source of moral education. Instead of grounding ethics on abstract principles, Rortybelieves that novels, biographies, and narratives are often more effective in promoting moral growth (Rorty, 1989). Stories help us to be sympathetic to poverty, discrimination, oppression. They enable us to see the world and life from their perspectives. Reading the stories of Charles Dickens, George Orwell, and Harriet Beecher Stowe we can understand the social injustice and feel to extend our awareness to their suffering. We appreciate and respect to the marginalized people or group. This cultivates compassion and that grows solidarity

3.4 Expanding the Circle of "We"

Rorty's ethics is targeted to expand the sense of solidarity. We should expand the boundaries of 'we' to have moral progression. Different factors like race, religion, nationality, class etc produce exclusion and cruelty in our society. Imagination can remove our sense of outsiders and cruelty. It clears our understanding to treat outsiders as the members of our community. It extendsthe boundary of our community. Thinking about the hope, fear, suffering we can perceive shared humanity. Through the imagination when we can replace cruelty by empathy and compassion. This helps us to reduce cruelty towards stranger, unknown and pariahs. Thus it develops social responsibility.Fraser (1988) and Boffa (2023) note that Rorty offers an alternative to traditional moral universalism. He grounds morality in the imaginative recognition of shared vulnerability.

3.5 Social Hope and Democratic Progress

Rorty says imagination can be extended to ethics and politics. His political idea is related to social hope. Rather than searching for perfect political system people should imagine a better future and work towards gradual social improvement(Rorty 1998) In *Achieving Our Country*, Rorty argues that democratic societies require hopeto solve the issues of injustice and create reform. Our existing condition is not final; rather it can be changed and improved.

Imagination initiates political reforms, democratic innovations, and social movements. We should imagine more inclusive institutions and better alternative of current societies. Otherwise changes occurautomatically. Rorty prefers the gradual improvement through the democratic process. Within this framework, imagination functions as a source of political creativity. It helps citizens challenge out-dated assumptions, identify new solutions, and envision more just social arrangements. Democratic progress depends on the willingness to imagine possibilities beyond the status quo and to work collectively toward them.

Rorty says certainty is not the ground ofhope. Progress is neither inevitable nor guaranteed. Instead, hope helps us to be committed to pursuing improvement. Imagination supports this commitment by allowing individuals and communities to envision desirable futures and strive toward their realization.It becomes a key driver for moral progress and social change.

4.1 Critical Evaluation

Richard Rorty's emphasis on imagination has been widely praised for its creativity and openness,

yet it has also attracted criticism concerning its ethical and political adequacy. A balanced evaluation reveals both significant strengths and important limitations.

4.2 Strengths of Rorty's Conception of Imagination

1. Instead of searching for fixed ground and final truth, Rorty encounters the continual creation of new vocabularies and perspectives (Rorty, 1989). He challenges the established beliefs and prefers to generate new ideas and accept the changes. Concept of re-description makes his philosophy dynamic social and cultural context.
2. Since no individual or tradition possesses privileged access to truth, people are encouraged to remain open to alternative viewpoints (Rorty, 1979). His emphasis on contingency of all beliefs promotes intellectual humility. Imagination enable individual to think other perspectives. This anti-dogmatic stance is an important contribution to pluralistic and multicultural societies (Voparil & Voparil, 2022).
3. Imagination helps citizens understand others, expand solidarity, and envision more inclusive social arrangements (Rorty, 1998). His approach supports a democratic ethos based on shared hopes.

4.3 Limitations

1. Heller (1991) contends thatRorty's position lacks clear criteria for distinguishing better descriptions from worse ones. If all vocabularies contingent then we cannot justify the competing descriptions. This leads to relativism.

2. Coombs (2013) argues that stronger normative principles may be necessary to justify human rights, justice, and ethical responsibilities consistently. Rorty's approach of grounding ethics on solidarity and reduction of cruelty, will not work in the situation where empathy is absent. This leads to normative weakness.
3. Rorty's vision of democratic progress emphasizes imagination and social hope, but critics note that political life also depends on institutions, laws, and accountability mechanisms (McClure, 2001). History proves that imaginative political visions can be oppressive and liberating. So it is hard to say how imagination alone can build democratise justice and political stability.

5. Conclusion

This study has proved that in Rorty's pragmatism imagination takes a central place. Though in Rorty's pragmatism we see the focus on solidarity, contingency, liberal ironism separately but imagination connects all the ideas together. Imagination creates re-description, new vocabularies, extend our concern of morality and new social possibilities. Our task from searching objective truth to re-description is the result of Rorty's anti-representationalism stance. This task of re-description is possible due to the fostering intellectual and cultural innovation. Self-creation is justified by the contingent and revisableproperties of self and that is possible by imagination. This narrative creates new identity by changing old one.

Imagination has the role in political and ethical sphere. It supports solidarity by helping to realize the suffering and experience of other. Doing that, we expand our boundaries of moral community and cultivate greater social responsibility.Despite the challenges Rorty faced like relativism, moral justification, and political accountability, his philosophy carries strengths like promoting creativity, openness, and democratic pluralism.

Finally we can say by analysing the Rorty's concept of imagination that it is not a peripheral concept, but a principle or force that shapes his theory of knowledge, identity, ethics, and social progress.

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Trauma, Precarity and Subalternity in Northeast Indian English Literature: A Study on the plight of Internally Displaced Persons in Jahnavi Barua's *Undertow*

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Abstract

The contemporary literature from Northeast India increasingly engages with the issues of migration, displacement, identity crisis, ethnic conflict, insurgency, political instability and socio-economic marginalization These concerns have emerged as recurring motifs in the literary productions of the region that provide valuable insights into the complex socio-political forces that continue to shape its historical and cultural landscape. The region's prolonged experiences of ethnic tensions, armed conflicts, militarization, socio-political upheavals and contested claims over land and resources have resulted in the displacement of thousands of people who remain excluded from dominant national discourses. The traumatic plight and experiences of subaltern communities and Internally Displaced Persons (IDPs) find powerful expression in the fictions of Northeast India. This paper explores the intersection of trauma, precarity, subalternity and displacement in Jahnavi Barua's *Undertow* (2020) examining how literary narratives represent the lived experiences of communities uprooted by ethnic violence, political unrest, state intervention and social turmoil. The novel *Undertow* explores emotional exile, fractured familial relationships and the search for belonging in contemporary Assam. Drawing upon Cathy Caruth's theory of trauma, Judith Butler's concept of precarity and GayatriChakravortySpivak's notion of subalternity, this paper tries to unveil that the protagonists in the novel inhabit precarious social positions that render them vulnerable to political, cultural and emotional exclusion. Through memory, migration, and quest for identity, the novelist recovers silenced histories and challenge dominant narratives that erase the experiences of displaced communities. By foregrounding the voices of those situated at the margins of society, the narrative reveals the enduring consequences of forced migration and the struggle for recognition, dignity and social justice within a contested geopolitical space. The study contributes to broader discussions on the role of literature in recovering marginalized histories, preserving collective memory and fostering empathy for communities subjected to systemic exclusion, violence and erasure. It endeavours to underscore the significance of Northeast Indian fiction as a vital archive of resistance, remembrance and cultural survival.

Keywords: Identity, displacement, memory, precarity,trauma, subalternity,

Northeast Indian English novels frequently portray communities affected by ethnic conflict, migration, insurgency, state violence, marginalization, displacement, belonging, identity and historical violence. The literary narratives from the region reveal how internally displaced persons (IDPs) experience trauma through the loss of home and identity, personal bereavement, socio-political insecurity, precarious existence and subalternitythat remain exclusion from dominant historical and political discourses. The issue of internal displacement has become a significant reality in Northeast India- a region that has witnessed decades of ethnic conflicts, insurgency, political unrest and border disputes. The experiences of Internally Displaced Persons (IDPs) in the Northeast region can be understood through the interconnected concepts of trauma, precarity and subalternity. Displacement is not merely the loss of a home; it also involves the loss of

identity, belonging, security and social relationships. Many literary works from the Northeast portray how individuals and communities are forced to leave their ancestral lands and live with the painful memories of violence and uprooting. This experience often results in deep psychological trauma. The victims carry memories of fear, loss and uncertainty that continue to shape their lives long after the actual event of displacement. Many novels from the region depict how violence disrupts ordinary lives leaving lasting emotional scars on individuals and families.

Judith Butler's concept of precarity as expounded in her works like *Precarious Life* (2004) and *Frames of War* (2009)refers to the inherent vulnerability of human lives stemming from bodily dependence on others and on social, political and economic structures. The lives of displaced people are also marked by precarity that refers to the conditions of uncertainty, insecurity and vulnerability that shape the lives of individuals and communities. It highlights the unstable and fragile nature of existence particularly in relation to employment, living standards, social standing, emotional or psychological well-being. Precarity reflects situations in which people lack adequate security, support or control over their circumstances making them susceptible to various forms of hardship and exclusion. The literary works that engage with precarity often examine experiences of marginalization, disempowerment and the struggle for survival in environments marked by instability and limited opportunities. The characters living under precarious conditions frequently face unpredictable challenges and disruptions reflecting broader social anxieties surrounding insecurity and the erosion of stability in contemporary society. Such narratives draw attention to the structural inequalities and power relations that contribute to human vulnerability. In fictions, precarity is commonly associated with themes of displacement, social exclusion, identity crises, and existential uncertainty. These concerns become particularly significant in contexts characterized by political conflict, social transformation, ethnic tensions and cultural fragmentation. Through the portrayal of individuals navigating unstable and often hostile circumstances, the literary narratives reveal the profound effects of insecurity on personal and collective identities while highlighting the resilience and adaptability of those living under precarious conditions. After being uprooted from their homes, many IDPs struggle to access basic necessities such as shelter, employment, education and healthcare. Their future remains uncertain and they often live at the margins of society. This precarious existence is not accidental but is closely linked to political and social structures that fail to protect vulnerable populations. The Northeast Indian novels repeatedly highlight how displaced communities are forced to survive in difficult circumstances where they lack both economic stability and social recognition. Their lives become a continuous struggle for dignity and survival.

Cathy Caruth is one of the most influential trauma theorists. In her works *Unclaimed Experience: Trauma, Narrative and History* (1996) and *Trauma: Explorations in Memory* (1995), she argues that trauma is a psychological wound caused by an overwhelming event that cannot be fully understood at the moment it occurs. According to Caruth, trauma returns later through flashbacks, nightmares, repetitive memories and emotional disturbances. A key aspect of her theory is 'belatedness' which means that traumatic experiences are understood only after a delay. Trauma also resists direct representation making silence, fragmentation, and gaps as the memory important features of trauma narratives. In Northeast Indian English literature, Caruth's theory can be applied to several texts that portray violence, displacement, conflict and loss. *The Collector's Wife* (20050 by MitaPhukan depicts the psychological impact of insurgency in Assam. *The Legends of Pensam* (2006) and *The Black Hill* (2014) by Mamang Dai explore historical and collective trauma. *Makam* (2011) by Rita Chowdhury represents the trauma of displacement of the Assamese Chinese community during the Sino-Indian war who face identity crisis, separation and loss of homeland. Through the memories and sufferings of its characters, the novel reveals how historical violence continues to shape individual and communal identities long after the traumatic event has passed.

Trauma constitutes a significant dimension of precarity that serves as a recurring leitmotif in the literary writings from Northeast India. The region's socio-political history has been shaped by decades of conflict including post-Partition migrations, immigration, ethnic tensions, insurgencies, political upheavals and pervading militarization. These experiences have left profound psychological, cultural and social scars on individuals and communities making trauma an integral aspect of everyday life. Consequently, Northeast Indian English fiction frequently engages with the experiences of those who inhabit marginalized spaces facing insecurity, loss and vulnerability that shape their existence. TemsulaAo's*These Hills Called Home: Stories from a War Zone* (2005) offers a poignant portrayal of the collective trauma experienced by Naga communities living amidst prolonged conflict. The stories such as 'The Last Song' depict not only the suffering caused by violence but also the erosion of cultural traditions, communal bonds and indigenous ways of life. The narrative demonstrates how marginalized communities endure precarious conditions in which personal grief is intertwined with historical and cultural dislocation. Ao's work foregrounds the voices of those often excluded from dominant political and historical narratives exposing the long-term consequences of conflict on both individuals and communities. The question of identity further reflects the precarious condition of the Northeast's inhabitants. Situated at the geographical and political margins of the Indian nation-state, many communities in the region continue to negotiate complex issues of belonging and cultural recognition. The migration flows triggered by the Partition of India and the Bangladesh Liberation War intensified fears of demographic change and cultural displacement contributing to ethnic tensions and anxieties regarding indigenous identity. Anjum Hasan's *Lunatic in My Head* (2007) explores thes dilemmas through characters in Shillong who struggle to reconcile their Khasi heritage with broader national identities. Their experiences reveal the uncertainties associated with living between multiple cultural affiliations. Similarly Ao's narratives portray the Naga people's ongoing efforts to preserve their linguistic and cultural distinctiveness in the face of external pressures highlighting the precarious nature of identity and belonging in contested spaces.

Trauma and precarity also get manifestation in the socio-economic and cultural vulnerabilities that characterize life in the region. EasterineKire's*When the River Sleeps* (2014) presents a compelling account of indigenous existence in Nagaland where traditional communities confront the challenges posed by conflict, modernization and social transformation. Through the protagonist Vilie's journey, the novel illustrates the fragile position of tribal cultures that must constantly adapt to changing realities while striving to preserve ancestral knowledge and cultural memory. The text demonstrates how marginality and precarity operate together, threatening both material well-being and cultural survival. Similarly, MitraPhukan's *The Collector's Wife* (2005) captures the atmosphere of uncertainty and fear generated by political unrest and insurgency in Assam. Set against the backdrop of the ULFA movement and student agitations, the novel portrays characters whose lives are marked by emotional distress, economic insecurity, and social fragmentation. Their experiences underscore the pervasive effects of violence and instability on everyday life, revealing how trauma becomes embedded within the social fabric of the region. By depicting communities living under conditions of insecurity and exclusion, these literary works illuminate the interconnected realities of trauma, marginality, and precarity while also emphasizing resilience and the enduring search for identity, dignity and belonging. In Sanjay Hazarika's*Strangers of the Mist (1994),* trauma is intertwined with precarity that cause collective and individual affliction emerging from decades of violence and displacement in the Northeast.

Another important aspect of the experiences of IDPs is subalternity. As marginalized groups, displaced people often remain unheard in mainstream political and historical narratives. Their suffering receives little attention and their voices are frequently excluded from decision-making processes. In this sense, they occupy a subaltern position within society. Literature plays a crucial role in bringing these silenced voices to the

forefront. Through stories of displacement, memory and survival, Northeast Indian writers challenge dominant narratives and create space for the experiences of ordinary people who are often ignored by the dominant hegemonic traditions and the media. There are many Northeast Indian English fictions that not only document the hardships faced by displaced communities but also expose the larger systems of power that contribute to their marginalization. Therefore, the themes of trauma, precarity, and subalternity provide a useful framework for understanding the lives of IDPs in Northeast Indian English literature. By portraying the emotional, social and political consequences of displacement, these works offer valuable insights into the human cost of conflict and the resilience of those who continue to struggle for recognition, justice and a sense of belonging.

Aruni Kashyap's *The House with a Thousand Stories* is set against the backdrop of insurgency and political violence in Assam. The novel dwells upon conflict, fear, displacement, memory, trauma and survival. Kashyap's *His Father's Disease* (2019) examines the effects of insurgency, violence and social fragmentation in Assam. In it, the narrative focalization is concentrated upon marginalization, trauma, political conflict and identity. HansdaSowvendraShekhar's*The Mysterious Ailment of Rupi Baskey* is set among Santhal communities that portray social exclusion, marginalization and indigenous struggles. The narrative sheds penetrating insights into the themes of subalternity, trauma, indigeneity and social vulnerability. *Stupid Cupid* (2009) by Mamang Dai addresses migration from the Northeast to metropolitan India besides shedding light on alienation, identity crisis and cultural displacement. In *The Legends of Pensam* (2006), Mamang Dai focuses on memory, community and indigenous experiences, loss, identity and cultural survival. *Mari* (2010) by EasterineKire examines the effects of conflict and war on ordinary lives in Nagaland. The narrative traces the themes of violence, displacement, trauma and resilience. Kire's *A Terrible Matriarchy* (2007) highlights gendered marginalization and cultural oppression, subalternity, identity and resistance in the lives of the characters.

Trauma theory particularly Cathy Caruth's formulation of trauma as an experience that returns through memory and repetition, offers a useful framework for understanding the emotional wounds represented in the novel *Undertow* (2020). Similarly, Judith Butler's concept of precarity highlights how certain lives become politically vulnerable and socially unprotected. GayatriSpivak's notion of subalternity further illuminates how marginalized groups are denied representation within dominant historical narratives.In *Undertow*, trauma emerges through familial estrangement, cultural alienation and emotional displacement. It portrays personal and social trauma in contemporary Assam. The novel revolves around three generations of women- Usha, Rukmini, and Loya- whose lives are shaped by separation and emotional loss. Rukmini's marriage outside her community results in her exclusion from the family home producing trauma that extends across generations.

The novel *Undertow* (2020) is a powerful exploration of trauma that unfolds through the experiences of Rukmini, a woman who returns to Assam after years of living abroad. The novel portrays trauma not merely as a consequence of a single catastrophic event but as an accumulation of personal grief, fractured relationships and memories of violence embedded within the socio-political landscape of Assam. Rukmini carries the emotional burden of her failed marriage, the loss of intimacy and the persistent feeling of alienation from both her homeland and her adopted life overseas. Her return to Assam becomes a confrontation with unresolved memories that continue to shape her consciousness. The narrative also evokes the wider trauma experienced by ordinary people living amid insurgency and political unrest. Violence remains largely indirect in the narrative appearing through stories, silences, anxieties and recollections rather than graphic descriptions. This technique reflects the nature of trauma itself which often resists direct articulation. The landscape of Assam, with its rivers, forests and villages, becomes intertwined with memories of fear and loss, suggesting that trauma is inscribed not only in individuals but also in collective spaces. Through Rukmini's psychological journey, Barua demonstrates

how the past survives within the present and how traumatic experiences continue to influence identity, belonging and emotional well-being long after the original events have ended.

The novel also presents a profound sense of precarity revealing the vulnerability that characterizes everyday life in a region marked by existential susceptibility and social change. Drawing upon the idea of precarity as a condition of insecurity and instability, *Undertow* depicts characters whose lives are shaped by forces beyond their control. Rukmini's own existence is precarious because she occupies an in-between position, belonging neither fully to the South Indian world in Bangaluru she inhabited nor entirely to Assam she returns to. Her uncertainty mirrors the condition of many other characters who struggle to negotiate changing social realities. The rural communities portrayed in the novel experience economic fragility, limited opportunities and the constant threat of disruption caused by political conflict. Women, in particular, inhabit precarious social positions as they confront expectations imposed by family, marriage and community. Their choices are often constrained by patriarchal structures that limit autonomy while exposing them to emotional and material insecurity. Barua's narrative suggests that precarity is not confined to moments of crisis but constitutes an ongoing condition that shapes everyday existence. The metaphor of the 'undertow' itself signifies unseen currents pulling individuals toward uncertainty emphasizing how lives can be destabilized by hidden social, political and emotional forces. Thus, the novel highlights the fragile foundations upon which many personal and communal identities are constructed.

In *Undertow*, subalternity emerges through the representation of voices and experiences that remain marginalized within dominant national narratives. The people inhabiting remote areas of Assam rarely possess the power to shape political discourse or determine the conditions of their lives. Instead, they become subjects of decisions made by distant authorities reflecting the classic condition of the subaltern as described by postcolonial theorists. The novel foregrounds ordinary individuals whose struggles often remain invisible in mainstream accounts of the nation. Women occupy a particularly significant subaltern position. Although they sustain families and communities, their desires and perspectives are frequently overshadowed by patriarchal expectations. Rukmini's efforts to understand herself and her place in the world reveal the difficulties faced by women attempting to assert agency within restrictive social structures. Furthermore, the cultural and geographical marginalization of Northeast India itself contributes to the subaltern status of the region's inhabitants. Barua challenges this marginalization by bringing local histories, memories and experiences into literary visibility. Rather than presenting Assam as a peripheral space, she portrays it as a site of complex human experiences shaped by trauma, vulnerability and resilience. Through its attention to silenced voices and overlooked lives, *Undertow* becomes an important narrative of subaltern existence, exposing the unequal power relations that continue to structure both personal and collective realities.

Jahnavi Barua's *Undertow* offers powerful explorations of trauma, precarity, and subalternity in contemporary Northeast Indian literature. Through its portrayals of displaced individuals and marginalized communities, the novel exposes the emotional, social and political consequences of exclusion. While *Undertow* examines the intimate wounds of familial estrangement and identity crisis, Rita Chowdhury's *Makam*documents the historical suffering of a forgotten community subjected to state violence. These works reveal how displacement destabilizes identity, produces precarious lives and silences marginalized voices. At the same time, they demonstrate the transformative power of memory and narrative in resisting historical erasure and reclaiming subaltern histories.

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Building an AI-Ready Institution: A Holistic Framework for Policy, Ethical Governance and Strategic Action Planning

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Abstract

As artificial intelligence (AI) and generative models rapidly reshape sectors such as healthcare, higher education, and public administration, institutions face urgent challenges in aligning technological adoption with ethical and operational readiness. This paper presents a holistic framework for building AI-ready institutions by integrating policy design, ethical governance, and strategic action planning. We argue that readiness is multidimensional, requiring robust digital infrastructure, interoperable data ecosystems, skilled human capital, adaptive organizational culture, and continuous governance mechanisms. Policy frameworks should shift from reactive prohibitions to proactive enablers, centred on five pillars: transparency, integrity, skill development, equity, and adaptive governance. Ethical oversight must be operationalized through a three-tier governance model—strategy alignment, organizational AI hubs/ethics boards, and lifecycle management—coupled with an ethics-by-design ethos and risk-tiered regulation inspired by the EU AI Act. Practical decision criteria address PII handling, impacts on protected groups, and the need for interpretability in high-stakes contexts. Strategic action planning emphasizes data standardization and interoperability, infrastructure modernization, and creation of "AI translators" who bridge technical and policy domains. The paper highlight persistent challenges—energy consumption and environmental impact of large models, the opacity of black-box systems, the translational gap between ethical theory and practice, legacy IT fragmentation, and potential skill atrophy among learners—and propose targeted solutions such as energy-aware assessments, preference for interpretable models where necessary, embedded ethics in development teams, shared data standards, and AI-aware pedagogies. By advancing integrated policy, governance, and operational strategies, institutions can move beyond symbolic compliance to resilient, accountable AI integration that prioritizes human well-being and equitable access. The framework offers practical pathways for institutions seeking to lead responsibly in an AI-integrated future.

Keywords :- AI readiness, Ethical governance, Data interoperability, AI policy and accountability, Explainable AI, AI in higher education

1. Introduction

The rapid expansion of artificial intelligence (AI), particularly with the emergence of generative models such as GPT-4, has fundamentally reshaped global industries including healthcare, higher education, and public administration. These technologies offer unprecedented opportunities for innovation, large-scale data analysis, and enhanced service delivery. However, the integration of AI within institutional settings raises critical ethical concerns regarding data privacy, algorithmic bias, and the opaque "black-box" nature of complex decision-making systems.Current institutional responses often struggle with a governance vacuum, where the speed of technological adoption significantly outpaces the development of legal and ethical regulations. Many organizations remain hindered by fragmented data ecosystems and outdated legacy systems that lack the infrastructure necessary to support modern AI applications. Consequently, true institutional readiness must be viewed as a

multidimensional construct that requires the synergy of digital infrastructure, skilled human resources, an adaptive organizational culture, and comprehensive governance mechanisms.

2. Policy Frameworks: From Reactive to Proactive

A baseline AI policy is essential to safeguard ethical principles while harnessing AI's power. Effective policies must transition from reactive measures designed to deter misconduct to proactive strategies that foster meaningful innovation.

2.1. The Five Pillars of Institutional AI Policy

According to recent frameworks, a comprehensive policy should be built around five core themes:

1. **Transparency:** Requiring disclosure of AI use and ensuring its mechanisms can be explicitly described.
2. **Integrity:** Prohibiting the submission of AI-generated content as original work while maintaining academic or professional standards.
3. **Skill Development:** Emphasizing AI as a support tool to enhance, rather than substitute, critical thinking and learning.
4. **Equity:** Ensuring inclusive access and addressing the digital divide to prevent widening inequalities.
5. **Adaptive Governance:** Ensuring policies are regularly reviewed and refined in response to evolving technologies.

Example: In a university setting, an instructor might permit the use of AI for drafting initial essays to improve efficiency but prohibit its use during exams to ensure students can still perform foundational tasks manually, such as arithmetic or analytical writing.

3. Ethical Governance: Implementing Accountability

Governance refers to the structures and processes used to oversee the ethical use of technology. Institutional models, such as the NTT DATA approach, advocate for a three-tier structure: Strategy (aligning ethics with business goals), Organization (building "AI hubs" or ethics boards), and Lifecycle Management (ongoing monitoring and auditing).

3.1. Ethics-by-Design and Risk Management

Institutions should adopt **"**ethics-by-design**,"** incorporating fairness, transparency, and accountability from the outset of a project's life. The European Union's AI Act provides a model for this through a risk-tier system, categorizing AI applications from "minimal risk" to "unacceptable risk".

3.2. Decision-Making Criteria

A practical governance framework includes a decision-flow for AI elements:

- **PII and Secrecy:** Determine if the AI uses personally identifiable information (PII). If so, robust encryption and anonymization are mandatory.
- **Protected Parties:** Assess if the AI affects minority groups or individuals with disabilities. If so, high levels of interpretability and explainability are required to prevent discriminatory outcomes.

Example: A judicial system using an AI tool like COMPASS to assess recidivism risk must be audited for algorithmic bias to ensure it does not unfairly marginalize protected groups.

4. Strategic Action Planning for Readiness

Building an AI-ready institution requires addressing systemic barriers, such as legacy systems and human capital gaps.

4.1. Strengthening Infrastructure and Data

Many institutions struggle with fragmented data ecosystems and siloed databases. Strategic planning must prioritize data interoperability and shared standards to ensure AI systems function with accuracy and consistency.

Example: Alibaba's "smart warehouse" demonstrates successful readiness by orchestrating data, algorithms, and individuals to create operational efficiency.

4.2. Cultivating "AI Translators"

A persistent shortage of digitally skilled personnel hinders adoption. Institutions must invest in training programs that create **"**AI translators**"**—

individuals capable of bridging the gap between technical development and policy/ethical domains.

5. Challenges and Limitations with suitable solution :-

Institutional readiness faces several recurring hurdles:

1. Environmental Sustainability and Energy Efficiency

The Challenge: As AI models grow in complexity, particularly generative AI (GiA), the computational resources and energy required to train and run them increase exponentially. This surge in power consumption can conflict with institutional sustainability goals.

The Solution:

- **Energy-Efficient Algorithms:** Institutions should prioritize the development and use of algorithms that require less computational power for non-essential tasks.
- **Hardware Optimization:** Policy frameworks should mandate optimizing hardware utilization to reduce the environmental footprint of large-scale AI deployments.
- **Risk-Based Energy Assessment:** Incorporate energy considerations into the decision-making flow chart; if an AI application is computationally intensive, institutional council should be sought to evaluate the trade-off between the AI's benefits and its environmental cost.

2. Prioritizing Interpretability Over "Black Box" Models

The Challenge: Many advanced AI solutions, such as Deep Neural Networks (NNs), function as "black boxes" with millions of parameters, making it nearly impossible to understand how they arrive at specific predictions. This lack of transparency hinders trust, especially in high-stakes environments like healthcare or criminal justice.

The Solution:

- **Model Selection for High Stakes:** Where high levels of explainability are required, institutions should favor more transparent models like Ordinary Least Squares (OLS) or regression. These offer a clear mapping from input to effect size, allowing experts to explicitly describe and study the decision-making mechanism.
- **Establishment of Trust Pillars:** Policy must define Explainability (the ability to explicitly describe mechanisms) and Interpretability (the ability for results to have concrete physical meaning) as foundational requirements for any AI element used in institutional decision-making.

3. Bridging the "Translational Gap" through Embedded Ethics

The Challenge: A significant "translational gap" exists between high-level ethical concepts in academic literature and their actual application in industrial or institutional settings. Many institutions adopt "symbolic" policies that signal commitment without producing meaningful change in development routines.

The Solution:

- **Embedded Ethics Approach:** Instead of a late-stage review, institutions should adopt a collaborative framework where ethicists work directly with developers throughout the entire lifecycle—from planning to execution.
- **Ethics-by-Design (EbD-AI):** Integrate fundamental moral principles (liberty, privacy, justice) into the technical design of the AI system itself.
- **Centralized Governance Committees:** Establish dedicated AI hubs or ethics boards responsible for coordinating oversight across academic and administrative units to prevent the current trend of fragmented, inconsistent local guidelines.

4. Modernizing Data Governance and Interoperability

The Challenge: Institutional readiness is often blocked by legacy IT systems and fragmented data

ecosystems. Siloed databases prevent AI systems from functioning with the accuracy and consistency required for large-scale operations.

The Solution:

- **Shared Data Standards:** Departments must adopt consistent standards for data access, use, and protection to enable cross-agency collaboration.
- **Interoperability Early-Adoption:** Interoperability must be addressed at the start of any digital transformation strategy to prevent systemic inefficiencies and ensure AI tools can exchange data reliably.
- **Anonymization and Pseudonymization:** To mitigate privacy risks associated with Personally Identifiable Information (PII), institutions should prioritize the use of anonymized data where identifiers are replaced with unique codes before being used as inputs for AI models.

5. Mitigating "Skill Atrophy" in Education

The Challenge: In academic settings, over-reliance on AI for writing and analytical tasks may lead to **"**skill atrophy**"** among students, diluting their ability to perform foundational tasks manually.

The Solution:

- **AI-Aware Assignment Redesign:** Faculty should redesign assessments to be "learning-centric," distinguishing between tasks where AI is an acceptable support tool and tasks where it must be prohibited to ensure cognitive development.
- **Human-in-the-Loop Pedagogy:** Policies should emphasize that students are responsible for the accuracy and integrity of AI-generated drafts, requiring them to analyse and reflect on the output rather than submitting it as original work.
- **Mandatory Ethics Literacy:** Develop programs to enhance AI ethics literacy for both faculty and students, ensuring they have the conceptual tools to use technology responsibly

Conclusion:

Building an AI-ready institution is not a static destination but a dynamic state of adaptive governance that requires continuous evolution alongside technological shifts. Achieving this state necessitates a holistic integration of digital infrastructure, skilled human capital, and a proactive organizational culture, moving beyond mere technical adoption toward a state of comprehensive institutional resilience. The successful integration of AI depends on an institution's ability to bridge the "translational gap" between high-level ethical theory and practical, day-to-day application. By aligning innovation with democratic values and ensuring that technology prioritizes human well-being, institutions can move from a state of "symbolic compliance" to a position of global leadership in an AI-integrated future.

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Western Nationalism and Indian Nationalism: A Comparative Study

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Abstract

In a contemporary context, scholars regard the ideology of nationalism as one of the most groundbreaking subjects. It is generally agreed that nationalism has its origin in Europe. European scholars assert that nationalism originated in Europe and later on spread to non-European countries, including India. However, non-European scholars have questioned the Eurocentric perspective on the origin of nationalism, arguing that non-European countries have a deep historical trajectory of their own. They observe that indigenous traditions and shared identities are central to the emergence of nationalism in non-European countries. Therefore, specific contexts and historical experiences of both European and non-European countries appear as central in comprehending the trajectory of nationalism. On this background, the present study attempts to shed light on the vivid context of nationalism between European and non-European countries in general and India in particular. It is expected that a comparative study between European nationalism and Indian nationalism will clarify the differences between the Western model and the Indian model of nationalism. The present study will focus on Western nationalism as an instrument for state-building and the expansion of imperialism. On the other hand, in non-Western countries like India, nationalism serves as a "unifying force" to combat colonial power and promote cultural synthesis. The present study uses descriptive and analytical methods; no field survey is conducted to collect data. Data for the analysis and description are collected from speeches, the writings of scholars, already published books, and articles on nationalism.

Keywords: nationalism, Western nationalism, Indian nationalism, anti-colonialism.

Introduction

Anderson (2006), observing the significance to the ideology of nationalism, comprehends that "nationalism has proved to be an enduring and influential force in shaping the identities and destinies of peoples and states around the world, making its study essential for understanding modern history and politics" (p. 1). Anderson understands that reading nationalism in a contemporary context is pivotal to comprehending people's feelings towards their nation. He tries to note that the ideology of nationalism is instrumental in exploring the way the modern nation-state works. From this perspective, it can be argued that nationalism is an ideology that firmly stands for the protection of the interests, culture, and identity of a given nation. In this background Smith (2010) notes that "nationalism is an ideological movement for attaining and maintaining autonomy, unity, and identity for a population that some of its members deem to constitute an actual or potential 'nation'" (Smith, 2010, p. 9). The feeling of pride and loyalty for one's own nation constitutes the core of nationalism, and these feelings are generally expressed in terms of "us versus them" narratives. Thus, the narrative "us versus them" stands as fundamental for reading the discourse on nationalism. In this backdrop, Zmigrod (2016) notes that "political discourse … tends to portray participants in terms of 'us' versus 'them,' which makes 'us versus them' polarization one of the main distinguishing features of political discourse." However, conceptualizing nationalism on the basis of

an "us versus them" narrative is problematic and not straightforward. Some groups of scholars even question its contemporary relevance; they believe that the speed of globalization has diluted the 'us versus them' boundary in today's globalized world and eventually nationalism will lose its relevance. For instance, Held, D. (1999), argues that "globalization has contributed to the weakening of the nation-state's monopoly over identity and loyalty, leading to the erosion of traditional forms of nationalism" (p. 57). On the contrary, a group of scholars argues that with the spread of globalization, the discourse on "us versus them" in relation to nationalism has not declined but is instead resurging. In this context, Smith (1995) notes that "far from undermining nationalism, globalization has, in fact, intensified the search for national identity and made nationalist movements more pronounced in many parts of the world" (p. 3). There are many theoretical perspectives to comprehend the concept, origins, and evolution of nationalism. Among the diverse theoretical perspectives, three are considered central in understanding the discourse of nationalism: the instrumental perspective, the constructivist perspective, and the imagined community perspective. The core concern of the essentialist perspective is that nationalism is a historical phenomenon; it has roots in history. The instrumentalist argues that shared culture, ethnicity, and history are the core of apprehending the ideology of nationalism, and all these have roots in the history of a given nation. Therefore, the instrumentalist backs nationalism as an inherent quality of a nation—"National identity is the cultural and political aspect of a nation based on shared history, myths, symbols, and traditions" (Smith, 1993, p. 15). Contrary to essentialism, the modern constructivist argues that nationalism is a modern phenomenon, and they deny its historical roots by claiming that it evolved with modern sociological transformations and political changes. In their opinion, the emergence of modern institutions, particularly the state, is instrumental to the development of nationalism. In their observation, nationalism is a modern idea that emerged with modernization, particularly in Europe. Elie Kedourie (1960), in this context, opines that "nationalism is a doctrine invented in Europe at the beginning of the nineteenth century" (p. 1). The constructive perspective, on the other hand, emphasizes understanding the ideology of nationalism as a constructive event that can promote social cohesion, democratic participation, and a sense of common purpose. The constructive perspective highlights nationalism as a force that is civic and inclusive in its nature. Building on the idea that nationalism is a civic and inclusive ideology, the constructive perspective emphasizes that nationalism can foster collective action towards a common goal. In this background, Anderson observes that "Nationalism has enabled millions of people, who will never meet, to feel a deep, horizontal comradeship and shared destiny." (Anderson, 2006, p. 7).

With reference to its origin and trajectory, scholars believe that nationalism originated in Europe and subsequently spread to other regions. According to Elie Kedourie (1960), "Nationalism is a doctrine invented in Europe at the beginning of the nineteenth century" (Kedourie, 1960, p. 1). Scholars identify the decline of the papacy, the French Revolution (1789), and Enlightenment rationalism as central to the emergence of nationalism in Europe. Basically, the European ideas of nationalism concentrate on popular sovereignty, citizenship, and the nation-state, which characterize it as civic, liberal, and political in nature. It is entitled "civic nationalism" in the sense that it focuses on the citizenship of a nation being determined by the criteria of political involvement and loyalty to state institutions. Contrary to the idea of civic nationalism, Eastern nationalism is based on the assumption that ethnicity, language, and descent should be central in determining the citizenship of a nation. Western nationalists believe that people can become members of a nation by virtue of accepting the nation's political values. Again, Western nationalism is characterized as liberal nationalism on the grounds that it firmly believes in the "rights of man" and "democratic community." The central focus of Western nationalism on issues like individual liberty and constitutional government has entitled it to be called liberal nationalism. In this background Khon (1944) observed that "Western nationalism implied democratic growth

and a more cosmopolitan order rather than more exclusive or 'irrational' forms" (p. 432). Western liberalism is also called political nationalism; it focuses on the state as a political construct, not as a cultural construct. The European idea of nationalism, as a political ideology, was backed by the French Revolution (1789), which laid out the idea that a state is a political body. The Western idea of nationalism holds that nationalism in Asian countries, like India, is not inherent but rather derived from Europe. Consistent with the Eurocentric origin of nationalism, it is generally argued that the central focus of nationalist ideology is the nation-state and national self-determination, and these ideas originated in Europe. Scholars identify the American War of Independence, the French Revolution, and the decline of the papacy as the core of nationalism's emergence, all of which are European discourse. Kedourie (1993) backed the Eurocentric origin of nationalism by arguing that nationalism is an invented phenomenon, created in Europe and later spread globally. According to Encyclopedia Britannica (n.d.), "Nationalism emerged as a modern movement in the late 18th century, with the American Declaration of Independence and the French Revolution as its first powerful manifestations." The Wilson Center (2025) has applied the expression "replicate" to connect the European origin of nationalism and its trajectory from Europe to the Asian countries. According to this observation, nationalism in Asian, African, and Latin American countries emerges only as a replica of European models. Backing the notion of the Eurocentric origin of nationalism, some scholars argue that nationalism in non-European countries spread through the establishment of colonial regimes. The structural and educational transformation witnessed by the colonized countries as a result of colonization paved the way for the emergence of nationalism. In this context, scholars argue that colonialism fostered unity and a shared identity among non-European states. The European idea of nationhood, sovereignty, and self-determination immensely impacted the feelings of the colonized people. In the Indian context, it is argued that the colonial rule brought drastic change to society, economy, and governance and finally contributed to the emergence of the nationalist movement. The scholars who note Indian nationalism as a byproduct of British colonialism argue that it was the British colonial structure that introduced basic changes to the Indian socioeconomic landscape and the governmental system. Scholars frequently identify the establishment of a unified administrative structure to govern India as a central factor to the rise of nationalism. Many scholars also observe that the colonial regime's economic exploitation was a factor that contributed to the rise of nationalism, particularly economic nationalism in India. Under British colonialism, critical factors like the formation of the Indian National Congress (1885), the partition of Bengal (1905), the Rowlatt Act, and Jallianwala Bagh (1919) are all identified as motivating factors for Indian nationalism. On this backdrop, scholars like Partha Chatterjee observe Indian nationalism as a derivative of Europe—"Nationalist thought in the colonial world is often a derivative discourse, borrowing its essential concepts from the modern West" (Chatterjee, 1986, p. 5). However, a group of scholars, particularly native Indian scholars, argues that nationalism in India is inherent to India's long historical tradition and practices; "one cannot completely overlook the historical roots of Indian nationalism" (Nandy, 1983, p. 77). Underpinning the dichotomy between the European nationalism and the Eastern nationalism, Hans Khan's (1943) observation is pivotal; he tries to underscore the distinction between Eastern and Western nationalism, arguing that nationalism is not a uniform phenomenon but one that evolved and grew with the peculiar socio-political and historical contexts of particular nations. From his argument, the evolution of nationalism in Europe and Eastern countries differs in context, character, and nature. To comprehend the historical roots of Indian nationalism, the observation of Romila Thapar (2000) appears as crucial when she argues that ancient India developed "broad cultural zones with shared values and traditions" (p. 112). She attempts to connect the sense of collective identity to India's long historical experience, which predates the British colonial regime. The expression "cultural zone" symbolizes the civilization ethos of ancient India. In her observation the common

religious rituals, Sanskrit texts, and pan-Indian traditions contributed to the creation of a shared civilization in ancient India. Her observation suggests that Indian nationalism, rather than being a byproduct of British colonialism, is deeply rooted in Indian historical tradition. To back the historical roots of Indian nationalism, Basham, A.L. (1954), argues that "collective cultural consciousness" existed in India long before the British regime. In his observation, shared religious philosophies, languages like Sanskrit and Pali, and the pan-Indian tradition highlighted the "remarkable continuity of Indian civilization." According to Basham's observation, the "remarkable continuity of Indian civilization" later became a rallying point for Indians in their battle for freedom and provided the basis for subsequent nationalist movements. On this background, R.C. Majumdar (1971) referred to empires like the Mauryas and Guptas as having been contributory in shaping a common political and cultural identity in ancient India. He pointed out that, under the Mauryan Empire, particularly during the reign of Ashoka, the idea of a centralized administration for India began to flourish. According to Majumdar, the consolidation and integration of different empires provided early bases for an all-India consciousness. His observation is that modern Indian nationalism, though developed as an anti-colonial response, has roots in a common past. To comprehend the Indian nationalism trajectory, it is argued that socio-political reform movements initiated by some individuals are crucial and that they played a central role in the emergence of nationalism. In this connection the name of the social reformer Raja Ram Mohan Roy has greatly contributed to the growth of Indian nationalism. Ram Mohan Roy established the Brahmo Samaj (1828), which nurtured collective identity and consciousness among Indians. Bankim Chandra Chattopadhyay's "Anandamath" became a symbol of cultural resurrection via the celebration of India's heritage and patriotic spirit it inspired with the renowned song "Vande Mataram." Bal Gangadhar Tilak propagated a more aggressive, militant brand of nationalism, calling for mass mobilization and direct action against British authority. Mahatma Gandhi's "Hind Swaraj" (1909) criticized Western materialism and proposed non-violent resistance (satyagraha) inspired by Indian spiritual and ethical traditions. Gandhi's teachings changed the meaning of nationalism by stressing moral rebirth and involving the masses. In his "The Discovery of India," Jawaharlal Nehru propagated a vision of India as a syncretic, pluralistic, and secular nation, highlighting unity in diversity and the value of common history. V.D. Savarkar's "Hindutva" (1923) formulated a notion of nationalism founded on ethnic and cultural majoritarianism, emphasizing the significance of Hindu identity in Indian nationhood. In practice, all these examples indicate the heterogeneous and multidimensional nature of Indian nationalism. It shows that Indian nationalism is not a monolithic ideology; it covers within its fold different perspectives, like inclusive, reformist, and secular strands, to more exclusivist and identity-based understandings.

The discourse on Western nationalism and Indian nationalism constitutes a crucial topic for research; it needs elaborate and serious research to comprehend nuances related to both Western and Indian nationalism. It can indeed be argued that both Indian and European nationalisms are vibrant modern forces that have shaped and reshaped identity, politics, and state formation in different historical contexts. Indian nationalism is not entirely a derivative or identical to Western models. Indian nationalism is unique in itself; it reflects a process of engaging with Western ideas, emphasis on anti-colonial ethics, cultural synthesis, and pluralism. With its historical roots, Indian nationalism evolved primarily as an anti-colonial movement; by contrast, European nationalism is fundamentally tied to the homogeneous nation-state. In contemporary discussions, Indian nationalism faces challenges such as the tension between secularism and communalism, the rights of minorities versus the majoritarian narrative, and civic principles versus aggressive cultural nationalism; all of these issues require further analysis and understanding to fully grasp the complexities of Indian nationalism.

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The Altar And The Hearth: Food Culture And Spiritual Practice In North East India

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Abstract

North East part of India, popularly known as North East India, is a museum of diverse ethnic communities. It is a rich and profound tapestry culinary traditions and spiritual practices. The relationship between what is consumed and how the divine is perceived is both intricate and foundational to social identity. In North East India, food is rarely a mere commodity; it is a bridge between the physical and the metaphysical. There is a symbiotic relationship between indigenous spiritual practices and culinary habits across various ethnic communities, including the Meiteis of Manipur, the Buddhist tribes of Arunachal Pradesh and Sikkim, and the diverse indigenous faiths of the Assamese, and other various tribes of Assam including Karbi, Dimasa, Mising, Tiwa, Rabha and many more, Naga of Nagaland, Mizo of Mizoram, Twipra of Tripura, By analyzing the ritualistic use of fermented foods, rice beer, and animal sacrifice, this study highlights how food serves as a medium of communal cohesion and spiritual appeasement.

Traditionally, in the seven sister states and Sikkim, food serves as a primary interface between the human, the ancestral, and the environmental. This paper explores the profound intersection of culinary traditions and spiritual practices that are prevalent in North East India which is unique in India and how the divine and spirituality is perceived and attained with the serving of traditional food.

Keywords: culinary tradition, spiritual practice, food, identity, ethnic community.

Introduction

North East India is a biodiversity hotspot where the topography ranging from the Himalayan peaks to the Brahmaputra valley dictates both the ingredients available and the spirits worshipped. The kitchen (or the central hearth) is not merely a utility room; it is the spiritual nucleus of the home.For many indigenous communities, the forest and the field are inhabited by deities and ancestral spirits who must be honoured through specific food offerings. Food culture here is a "lived theology," where the preparation, distribution, and the consumption of meals are governed by sacred taboos and ritual calendars.Apatani of Arunachal Pradesh and various Naga sub tribes, the three stones supporting the cooking pot represent a trinity of protective spirits. The fire must never be completely extinguished, it is believed. It signifies the continuity of lineage. Food cooked over this 'eternal' flame is considered blessed by the ancestors. The practice of hanging meat (pork, buffalo, or beef) over the hearth to smoke is both a preservation technique and a spiritual one. The smoke carries the essence of the household's offerings to the rafters, where ancestral spirits are often believed to reside.

Rice is the primordial grain and the spirit of abundance. Rice is not just a staple; it is a sacred entity for all the ethnic tribes and communities of North East India. In many Tibeto-Burman and Tai-Ahom traditions, rice is believed to possess a soul. Rice fields are worshipped and offered ceremonial things before harvesting. In the traditional practices of Naga tribes, the Dimasa, and the Karbis, rice beer(known variously as Zutho, Judima, or Hor) is indispensable for spiritual communication. Before a single drop is consumed by humans, it is offered to the earth or the household deity. For the Dimasa people, the preparation of Judima is a

sacred craft. The biscuit like dry pie, known as Humao, is made from a specific combination of medicinal plants. During the Busu festival, the Pathri or the village elder performs the first tasting. This is not for intoxication but for communion. A specific portion of the brew is kept aside for the Sibrai (the supreme deity). If a batch of Judima fails to ferment correctly, it is often intyerpreted as a sign of spiritual disharmony within the family or a failure to observe taboos during the preparation phase. Similarly inMoatsu of the AoNagas, the beer acts as a purifying agent, bridging the gap between the mundane and the sacred. In the Manipur valley, the introduction of Vaishnavism created a unique synthesis. The use of Chahao (black rice) in offerings to Lord Krishna or during the Lai Haraoba (festival of the deities) reflects a transition where indigenous aromatic rice became a vehicle for Hindu devotionalism (Bhakti).

Fermentation is a hallmark of North Eastern cuisine, but it also carries spiritual weight. The transformation of fresh ingredients into pungent, preserved forms like Akhuni (fermented soybean) of Sema Naga, Naphlam (fermented fish) of the Dimasa, Tungtap (fermented fish chutney) of the Khasi, Iromba (fermented fish and vegetable mash)of the Meitei involve a biological transformation that many indigenous practitioners view as a gift from the 'unseen world.' In some Naga traditions, the fermentation of soybean must be done in a quiet, secluded corner. Loud noises or 'unclean' thoughts are believed to interfere with the microscopic spirits (bacteria) that transform the bean. In many communities the person preparing the fermented foods must observe specific purity rituals-avoiding certain meats or maintaining silence to ensure the 'spirits' of the fermentation process are not offended, which would result in a spoiled batch. In dimasa village tradition, if someone dies in the village, all the the entire amount of Judima (which is also prepared from fermented rice) in the village is thrown away and the village undergoes a process of purification before fresh Judima preparation.

While many parts India practice vegetarianism for spiritual reasons, the 'tribal' spirituality of the North East often views the sacrifice of animals (particularly the Mithun, pigs, and poultry) as the ultimate act of devotion. Among the Nyishi and Galo tribes of Arunachal Pradesh, the Mithun is the most prestigious sacrificial animal. Its blood is seen as a potent life force that can heal the sick or ensure a bountiful harvest during the Nyokum festival. The subsequent feast is a mandatory communal event, symbolizing that spiritual favor must be shared to be maintained. Animal sacrifice acts as a cornerstone of traditional Dimasa spirituality. These sacrifices are offered to appease benevolent or malevolent spirits (Madai) to ensure prosperity, good health, and to prevent natural calamities.Conversely, spiritual practice dictates what cannot be eaten. Certain clans may have totemic animals which are forbidden from consuming, believing that the spirit of that animal is a protective ancestor.

In the Monpa areas of Tawang and the Bhutia-Lepcha belts of Sikkim, Vajrayana Buddhism practices a different spiritual layer. Tormas- the ritual cakes made of barley flour and butter are crafted to represent deities and are later distributed as Prasad. While non violence is a core Buddhist tenet, the harsh high altitude climate often necessitates meat consumption. Spiritual practitioners balance this through 'merit making' rituals, such as offering prayers for the soul of the animal consumed.

The widespread adoption of Christianity in states like Mizoram, Nagaland, and Meghalaya has shifted the focus of food spirituality. The 'Feasts of Merit' have largely been replaced by Church-centric community feasts (Love Feasts). However, the underlying philosophy of communal eating as a spiritual act remains unchanged.

Literature Review

The study of food culture in North East India has transitioned from early colonial ethnographic surveys to complex, multi-disciplinary analyses involving Indigenous Knowledge System (IKS), post humanism, and digital subjectivity. This review tries to synthesize relationship between North Eastern culinary traditions and spiritual frameworks, emphasizing the region's theology of the hearth. Early scholarship such as Barua (1960), focused on the historical evolution of

Assamese culture, noting the shift from tribal "animistic" food offerings to the "sattvic" (pure) vegetarianism influenced by the Neo-Vaishnovite movement. In present context, scholars are increasingly applying posthumanist lenses to these traditions as well as a significant body of literature focuses on the ethnic tribes where food consumption is regulated by ancestral laws. Haraway (1991) says North East kitchen is viewed as a 'techno-ecology' where human, animal (sacrificial), and microbial (fermentation) agencies coexist. Atwood (2003) explores how indigenous diets rooted in forest foraging and ritual challenge modern industrial food systems by treating the environment as a sentient spiritual partner rather than a resource. Danda (1978) and Kachari (2020) argue that DimasaDaikho System (deity jurisdiction) acts as a traditional conservation model. Spiritual taboos against harvesting specific flora or fauna for communal feasts function as an indigenous mechanism for biodiversity management. Kikon (2019) notes the pungent aroma of Judima (Dimasa) and Akhuni (Naga) highlight fermentation as a sacred alchemy. These foods serve as markers of "sensory citizenship" asserting indigenous identity against the homogenizing "standard" palate.

Methodology

This study employs a Qualitative Descriptive and Analytical Design. Triangulation is used to cross-verify data from three distinct "texts": traditional rituals, contemporary literature, and digital manifestations. Ethnographic Documentation (The Physical Hearth) is done observing the Dimasa and Meitei community. Ritual feasts such as DimasaBusu the Meitei SajibuNongmaPanba are attended. Community engagement such as semi structured interviews with Jonthais (Dimasa priest) and village elders are done to document 'sacred recipes,' customary laws, and governing resource management (e.g. the Daikho system)

Some Textual & Literary Analysis have been done in preparing this paper. Some books on rituals and customary laws of ethnic tribes written by various writers are consultedMargaret Atwood's and Kazuo Ishiguro's theories are applied to identify food as a non-human agent with spiritual "will" as part of post anthropocentric reading. In this study, how people use modern machines (refrigerators, phones) to interact with ancestral food have been attempted to identify. Regional food blogs and social media narratives are studied to identify shifts in linguistic markers of "spirituality."

Aims and Objectives

The aims and objectives are prepared with a view to bridge the gap between material culinary traditions and the metaphysical or sacred beliefs of the region's communities. Thses aims and objectives are:

i. To document the intersections of culinary traditions and sacred rituals. It is to be investigate how specific indigenous food practices in North East India serve as a bridge between physical "hearth" (domestic life), examining the role of food as a primary medium for worship and communal bonding.

ii. To analyze the symbolism of indigenous ingredients in spiritual offerings. The objective is to identify key local flora, fauna and, fermented products used in religious ceremonies and evaluate their symbolic significance within the cosmological frameworks of various ethnic groups in the region.

iii. To examine the impact of modernization and globalization on traditional food-spirituality links. The study is to assess how shifting lifestyle patterns, urban migration, and the introduction of global food chains are altering the traditional relationship between ancestral diets and spiritual observances.

iv. To explore the gendered dimensions of the hearth and the altar. The role played by men and women are critically analyzed in the preparation of ritualistic meals and the maintenance of sacred kitchens.

v. To evaluate the role of "Communal Feasting" in maintaining social and spiritual harmony. It is also the objective of the paper to study the practice of community feasts (such as those following

harvests or rites of passage) to understand how shared consumption function as a mechanism for reinforcing tribal identity and maintaining cosmic balance.

Discussion

Food as Sacramental medium: In many indigenous belief systems of the North East, the separation between the sacred and the secular is fluid. The hearth is often considered the most sacred part of the home. Among communities like Apatanis or the Angamis, the fire is never truly extinguished. It represents the continuity of the lineage. Food prepared here is often shared with the spirits; a small portion of rice or a drop of rice beer is frequently offered to the fire or the earth before consumption. The hearth is a living entity here.

Rice beer (Apong/jutho/Judima) tradition: Beyond being a social beverage, traditional brews are central to spiritual communication. It is used in libations to invoke blessings from ancestors and deities, acting as a pure substance that facilitates dialogue with the divine.

Ritual slaughter and shared Merit: Spirituality in the North East often involves a "theology of abundance" where the slaughter of livestock serves a dual purpose: honoring a deity and feeding the collective. Historically, among various Naga tribes, wealthy individuals would host elaborate feasts. The consumption of meat (especially the Mithun) was not just a display of wealth but a spiritual transition, believed to secure a higher status for the host in the afterlife and bring prosperity to the entire village.The preparation of ritual meat follows strict protocols. Specific cuts are reserved for elders, priests, or specific family branches, turning the act of eating into a map of social and spiritual hierarchy.

Taboos and Totemic Food Systems: Spirituality is also defined by what is not eaten. Many clans across the region observe food taboos linked to their origin myths. Certain clans may abstain from eating a particular bird, animal, or plant because it is believed to have aided an ancestor in the past. To eat the totem is to consume a spiritual relative, which is seen as a grave spiritual transgression. During festivals like Wangala(Garo) or Bihu (Assamese), the consumption of the first fruits or specific grains is strictly regulated until the proper "thanks giving" rituals are performed at the altar.

The Geometry of the kitchen: The physical layout of the home reflects this "Altar- Hearth" synergy. The tripod or the stone stand represents the stability and the presents of the "House Spirit." The smoke shelf, used for drying meat, fish, and seeds is seen as a space where the essence of the food is purified by the sacred smoke. The threshold is often marked with ginger or chilli to ward off malevolent spirits from entering the cooking. In many tribes cooking place is banned for outsiders also to step in as it is considered sanctum sanctorum.

Modernity and the Shifting Hearth: As formal religions and urbanization change the landscape, the traditional "altar" is changing its shape and turning towards modernity using modern utensils and technologies. However, the "hearth" remains a resilient site of cultural preservation. In urban settings, the preparation of traditional fermented foods like (Axone or Khar) remains a ritualized link to the ancestral home. The smell and taste of these foods evoke a sensory spirituality; a feeling of belonging and protection that persists even when traditional animist rituals might no be practiced.

In North East India the hearth is the laboratory of the altar. By transforming raw elements of nature into cooked offerings, communities continuously negotiate their relationship with the unseen world, ensuring that every meal is an act of remembrance and every ritual is a feast.

Conclusion

The hearth is the convergence of taste and transcendence for the tribes of North East India. The relationship between the altar and the hearth in this region illustrates that food is never mere a commodity; it is a specialized language used to communicate with the divine. By examining this synergy, three primary conclusions can be drawn regarding the region's cultural landscape.

The kitchen is sacred space, the domestic hearth functions as a secondary altar. It is the site where the raw gifts of nature are transformed into cooked cultural artifacts, a process governed by ancestral protocols. This elevates the act of cooking from a chore to a ritual duty that maintains cosmic balance.

The hearth acts as a medium of social cohesion through sacred consumption. Whether through the distribution of sacrificial meat or the communal sipping of rice beer, food serves as a social glue. These spiritual practices ensure that resources are shared, hierarchies are respected, and the community remains a single, cohesive entity under the watchful eyes of the ancestors.

The hearth and the food ensure resilience of identity. In an era of rapid globalization, the spiritual attachment to traditional food ways acts as a powerful tool for cultural preservation. While external religious structures may change, the sensory experience of the hearth, the smell of smoke, the taste of fermentation, and the specific rules of the table continues to ground the individual in their indigenous heritage.

Ultimately, the "altar and the hearth" are not two separate entities but two sides of the same coin. To eat in the traditional North Eastern contexts is to remember one's origins, and to worship is to acknowledge the life sustaining power of the earth. The fire in the hearth does more than cook a meal; it illuminates the path between the seen and the unseen worlds.

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Women, Bodies and Becoming : A Posthuman Feminist Analysis of *The Vegetarian* and *The Edible Woman*

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Abstract:

This paper undertakes a comparative feminist-posthumanist reading of *Han Kang's The Vegetarian (2007) and Margaret Atwood's The Edible Woman (1969)* to explore how women's bodies become contested sites of power, resistance, and transformation. Drawing on the frameworks of Carol J. Adams's *The Sexual Politics of Meat* (1990), Judith Butler's *Gender Trouble* (1990), and Rosi Braidotti's *The Posthuman* (2013), the study examines how consumption and embodiment function as mechanisms of both patriarchal control and ethical rebellion. In Atwood's *The Edible Woman*, Marian's withdrawal from eating exposes the commodification of femininity under capitalist and heteronormative structures. In contrast, Kang's *The Vegetarian* portrays Yeong-hye's renunciation of meat and her eventual dissolution of the human form as an act of radical posthuman resistance that blurs the boundary between the human, the animal, and the vegetal. By reading both texts through intersecting lenses of feminism, ecofeminism, and posthuman ethics, this study argues that bodily refusal, whether through silence, hunger, or metamorphosis, emerges as a form of dissent that unsettles anthropocentrism and reimagines the possibilities of female subjectivity and agency.

Keywords: Body politics, consumption,embodiment, hunger, posthumanism

Introduction

In the contemporary critical landscape, the nexus between feminism and posthumanism offers a fertile ground for reevaluating literary representations of corporeal identity and the politics of the body. Feminist theory has consistently interrogated the female body as a site where power relations, consumerism, and cultural inscription converge, a body that is disciplined by social norms and rendered intelligible through the propagation of patriarchal discourse. Susan Bordo, in "The Body and the Reproduction of Femininity," argues that conceptualizing the human body solely as a biological entityis a reductionist way of perceiving it. "The body- what we eat, how we dress, the daily rituals through which we attend the body-is a medium of culture" (165). She contends thatthe female body should be perceived as a "metaphor of culture" (165). Extending this line of inquiry, the present study seeks to analyze the role that bodies play in the symbolization and dissemination of certain ideologies, thereby illustrating how the female body may function as a figurative textthat reflects the multiplicity of cultural practices within a society.As Bordo further explicates in *Unbearable Weight* (1993), the female body is "a text of culture" (22) upon which the anxieties and contradictions of gendered modernity are inscribed, thereby revealing how "the body becomes a metaphor for the social order" (23) itself. This feminist understanding of embodiment is further developed in posthumanist feminist thought, which questions the very assumptions about subjectivity on which classical humanism rests. Feminism has already demonstrated how the supposedly universal human subject is, in practice, gendered and exclusionary. Posthumanism takes this critique a step further by asking whether the category of "the human" itself can continue to function as a stable point of reference. Posthumanist feminism advances this critique by deconstructing the humanist ideal of an autonomous, rational, and self-contained

subject and insteadenvisions subjectivity as relational, affective, and materially intertwined with nonhuman forces.

Rosi Braidotti's *The Posthuman* (2013) and *Posthuman Feminism* (2021) advancea substantive ontology in which the Enlightenment conceptualization of the humanis deconstructed and reconceptualized as an assemblage of interconnections among organic and technological, human and nonhuman, and self and environment. This theoretical stance, offered by Braidotti, rejects the binary oppositions such as man/ woman, human/animal, nature/culture that have historically structured both patriarchal and anthropocentric hierarchies.When situated within this feminist-posthumanist framework, the female protagonists of Hang Kang's *The Vegetarian* and Margaret Atwood's *The Edible Woman* may be reinterpreted not simply as passive victims of madness or alienation but as posthuman subjects who forge resistance through embodied forms of nonconformity, emphasizing agency and resistance within complex relational networks. Their rejection of consumption, whether it is of food, flesh, or normative femininity, constitutes a radical reconfiguration of agency that exceeds the humanist paradigms of selfhood and rational control. In this context, Bordo's analysis of the "cultural production of the female body" intersects with Braidotti's conception of the posthuman subject as a "material assemblage of affects, forces, and flows." Bothframeworks elucidate the body as an active site of negotiation rather than a mere passive object. The protagonists' withdrawal from normative consumption practices can be interpreted as a posthuman feminist act that unearths the porous boundaries between the human, the animal, and the vegetal, thereby destabilizing the very categories that havesustained patriarchal and anthropocentric dominationforages.

When Bordo's insights into the cultural inscription of the female body are read alongside Braidotti's posthuman feminist framework, a more layered understanding of embodiment emerges. The body is no longer only a surface on which culture writes its meanings; it becomes an active participant in networks of material, technological, and ecological relations. This shift has important implications for questions of agency. Instead of locating resistance solely in individual autonomy, posthuman feminism encourages an understanding of agency as distributed and relational, shaped by affect, vulnerability, and interdependence. In literary analysis, such an approach allows for readings of the body that move beyond fixed identity categories and attend to processes of transformation and becoming. Far from displacing feminist concerns, the intersection of feminism and posthumanism deepens them, situating the politics of the female body within a broader ethical landscape marked by technological mediation, ecological crisis, and shifting conceptions of what it means to be human.

Coming back to the novels, Han Kang's *The Vegetarian* and Margaret Atwood's *The Edible Woman* both narrativize women who withdraw from the social order by refusing food. Despite originating from distinct cultural contexts, South Korea and Canada, both texts articulate a profound critique of biopolitical control over female subjectivity. Their refusal to eat becomes a refusal to partake in the systems of domination, whether they are patriarchal, capitalist, or speciesist, that seek to consume the body and its agency. Kang's Yeong-hye renounces meat after a visceral dream, declaring, "I had a dream… a terrible dream. And so, I don't eat meat" (Kang 12). What seems like a private dietary choice soon escalates into a social crisis, as her family and society view her withdrawal as a moral deviance. Similarly, Atwood's Marian in *The Edible Woman* experiences an existential crisis upon realizing that "she felt as if she were being eaten" (156). Her incapability to consume food reflects her refusal to be consumed by her fiancé, her job, and the capitalist order that objectifies women as edible commodities. Both narratives thus revolve around consumption, not merely as a physical act but as a metaphor for systemic control. Atwood's *The Edible Woman*, published at the cusp of second-wave feminism, satirizes consumer capitalism and the objectification of women through its protagonist Marian, whose loss of appetite mirrors her psychological alienation from patriarchal expectations. Han Kang's *The Vegetarian*, by contrast, is set in contemporary

South Korea, and it depicts Yeong-hye's journey from passivity to spiritual transformation through her refusal to eat meat. Her abstinence, initially dismissed as madness, becomes an act of profound defiance against human violence and masculine control. Despite their cultural and temporal differences, both novels employ food and the body as metaphors for autonomy and dissent, offering profound insights into the intersections of gender, consumption, and identity. In *The Edible Woman*, Atwood reveals how women are transformed into consumable commodities in a patriarchal capitalist economy. Marian MacAlpin's psychological crisis begins when she realizes her identity is shaped by consumer culture; her job at a market research firm symbolizes the commodification of self. As her engagement develops, she becomes alienated from food, unable to eat meat, eggs, or even vegetables without feeling sick. This physical aversion reflects Butler's idea that the body "acts" its politics (Butler 23); Marian's refusal to eat is a performative act of resistance against societal roles. Atwood's story turns appetite into a metaphor for personal agency. Marian's fiancé, Peter, wants a woman he can emotionally and socially consume within the boundaries of marriage and gender roles. Her body's rejection of food symbolizes a subconscious protest against this assimilation. The key scene in which she bakes a woman-shaped cake and offers it to Peter, with Marian saying, "You wanted to eat me; here, eat this instead" (Atwood 294), highlights a reversal of consumption and control. In the final scene, as she eats again, it signifies not submission but the reclaiming of her selfhood, a return to eating on her own terms.

Moreover, both texts interrogate the relationship between food, gender, and power in societies structured by patriarchal and capitalist ideologies. While Atwood uses irony and social satire to explore how women are commodified within a consumerist economy, Kang deploys surrealism and psychological intensity to examine how the body resists institutional domination. In both novels, women's eating or refusal to eat emerges as a symbolic act of rebellion against systems that define their bodies as consumable, reproductive, and subordinate. Carol J. Adams's *The Sexual Politics of Meat*(1990) delineates a conceptual framework for analyzing the symbolic and linguistic correlations between the oppression of women and that of non-human animals. Adams asserts that "meat consumption functions as a reaffirmation of male dominance at every meal" (Adams 48) and contends that the obscuration of the animal carcass serves to mirror the cultural erasure of female subjectivity. Rosi Braidotti, in *The Posthuman*, extends this critique beyond gender to challenge the human/animal divide, proposing a new ethics of interdependence and becoming. When read together, Atwood and Kang's novels form a continuum: Atwood exposes the socio-symbolic mechanisms of consumption, while Kang imagines the dissolution of the human itself as an act of liberation.

The Female Body as the Absent Referent: Patriarchal Consumption in Kang and Atwood

Literature has long been a site where the politics of the body, desire, and gender are inscribed and contested. Both Han Kang's *The Vegetarian* and Margaret Atwood's *The Edible Woman* foreground the female body as a contested terrain, a surface upon which social, cultural, and ideological inscriptions are made. The body becomes the primary language through which these women articulate resistance when conventional modes of speech fail them. The woman's body is both coveted and disciplined, praised and suppressed in patriarchal countries, as depicted by Atwood and Kang, whether in contemporary, capitalist Canada or traditional, South Korean society. By refusing food, the protagonists of both novels enact a subversive withdrawal from the circuits of consumption, reproduction, and conformity that define feminine identity.

In *The Sexual Politics of Meat*, Carol J. Adams contends that the domination of women and the exploitation of animals are deeply intertwined within patriarchal systems of power. She suggests that the same structures that justify the subjugation of women also sustain the practice of animal consumption, revealing a shared logic of control, ownership, and erasure. A key concept in Adams's argument is the "absent referent" (Adams 36), the mechanism by which the violence inherent in meat consumption is hidden.

By transforming a once-living being into an anonymous product called "meat," language and culture obliterate the animal's existence and suffering. This absence not only makes eating animals more palatable but also parallels the ways women's individuality and subjectivity are often erased or objectified under patriarchy. Adams further explains this dynamic through the cycle of objectification, fragmentation, and consumption. Both women and animals are first objectified, viewed not as beings but as things for use. Their bodies are then fragmented, literally or metaphorically, into parts that can be consumed, whether as food or as images of sexual pleasure. This cycle demonstrates how patriarchal culture commodifies both female and animal bodies, reducing them to objects of desire or nourishment. Another critical element of Adams's theory is the sexualization of meat imagery. Popular media and advertising frequently associate meat with masculinity, sexual potency, and dominance, while linking women to the role of the "edible" or the consumed. This conflation of sexual desire with carnivorous appetite reinforces patriarchal fantasies of control and possession, where to consume is to conquer.

On a further note, Adams highlights the language of meat as a subtle yet powerful tool that sustains gendered and speciesist hierarchies. Phrases like "beefcake" or "piece of meat" metaphorically fuse femininity with edibility and masculinity with strength or aggression. Such linguistic patterns naturalize domination, making it appear normal that men eat meat and that women or animals become objects of consumption.Through this intricate network of metaphors and cultural codes, Adams exposes how patriarchy sustains itself by linking gender oppression and species exploitation at the most basic levels of language and desire. When read through Adams's framework, *The Vegetarian* and *The Edible Woman* reveal not only the literal politics of eating but also the symbolic consumption of women as bodies, workers, and reproductive beings. Both Yeong-hye and Marian enact resistance by disrupting these symbolic economies through refusal, withdrawal, and transformation. Adams posits that patriarchal violence operates through a threefold process: first, a body is objectified (seen as a thing rather than a subject); second, it is fragmented (reduced to parts such as legs, breasts, and meat cuts); and finally, it is consumed (physically, sexually, or symbolically). In *The Edible Woman*, Marian's alienation begins in the hyper-commercial world of market research, where human desire is literally measured, tested, and packaged. She herself becomes part of that system, a "measurable" body among consumer statistics. At one point, she notes, "She felt as if she were being eaten herself, piece by piece*"* (Atwood 167). Adams's process becomes visible here: Marian is first objectified by her fiancé, Peter, then fragmented by capitalist advertising culture (which reduces women to mere image-sellers), and finallyconsumed symbolically as the "perfect wife" prototype. The famous cake scene brings the cycle to a close. Marian bakes a woman-shaped cake and offers it to Peter: "You can eat it if you like. It's a symbol" (Atwood 282). Her gesture exposes the grotesque symmetry between marital consumption and literal ingestion. By staging her own body in edible form, Marian reverses the power dynamic, transforming her objectification into a theatrical act of resistance. What was once passive meat becomes a site of feminist irony. Adams's theory clarifies this as a moment of re-subjectification: Marian forces the male consumer to confront the violence of consumption by presenting it as a metaphor made flesh.

Gender Performativity and the Politics of Eating

Judith Butler's concept of gender performativity in *Gender Trouble* (1990) asserts that gender is not an innate identity but a set of repeated acts that produce the illusion of stability. In both Atwood and Kang, the act of eatingor not eatingfunctions as a performance through which femininity is enacted or subverted. In *The Edible Woman*, Marian initially conforms to the rituals of femininity, including polite dinners, cooking for her fiancé, and participating in consumer culture. Her body becomes a stage upon which social expectations are rehearsed. However, as her relationship with Peter progresses, she begins to lose her appetite, first for meat and then for all food. This loss is not physiological but ideological: it signals her body's resistance to the performance of compliant

femininity. Butler's theory helps decode this bodily refusal as a de-naturalization of gender. By refusing to eat, Marian ceases to "perform womanhood" as prescribed by patriarchal codes of nurturance and submission. In *The Vegetarian*, Yeong-hye's transformation begins with a similar refusal but culminates in a total ontological breakdown. Her husband's disgust at her vegetarianism is framed through gender norms: "My wife is not normal. She doesn't even shave her armpits anymore" (Kang 20). Here, eating meat, shaving, and domestic obedience all belong to the same performative structure of femininity. Yeong-hye's abandonment of these rituals signals not only feminist resistance but a posthuman departure, a rejection of being human altogether.

Where Marian's refusal destabilizes her social identity within the sphere of bourgeois consumerism, Yeong-hye's refusal dismantles identity itself. Butler's notion that "gender is constituted through the stylized repetition of acts" (Butler 179) suggests that to stop performing those acts is to dissolve the identity they construct. Yeong-hye's retreat into vegetal silence and her dream of "leaves sprouting from her skin" (Kang 96) is a radical negation of the gendered body. Her desire to "become a tree" (97) is not metaphorical escapism; it is a form of posthuman agency, a literal *unperforming* of gender and species. Moreover, both protagonists' refusals expose how femininity is disciplined through appetite. The "good woman" eats delicately, serves others, and maintains a slim body; the "bad woman" eats greedily or not at all. By rejecting food altogether, Marian and Yeong-hye escape this binary and reveal the performative machinery of gender. Their bodies thus become texts of resistance, inscribed with refusal rather than compliance. Moreover, Butler's framework clarifies that neither Marian nor Yeong-hye's actions can be read as pure pathology. Their non-eating is not an illness but an act of disobedience. It is the body's language of protest, revealing that the social order itself is what requires healing.

Han Kang's *The Vegetarian* begins with the opposite movement; Yeong-hye's refusal of meat is not theatrical but traumatic. Her nightmare of slaughter triggers a total withdrawal from consumption. "I had a dream… I saw blood in my mouth. I can't eat meat anymore" (Kang 11). Her decision destabilizes the domestic hierarchy. Her husband, Mr. Cheong, narrates with disgust: "She's just being difficult" (Kang 18). His language marks Yeong-hye's ethical awakening as irrationality, reaffirming patriarchal normalcy. The more Yeong-hye resists, the more violently she is forced back into the cycle Adams describes. Her father's attempt to stuff meat into her mouth at the family dinner literalizes the coercive re-entry into consumption. Her gagging and vomiting, "she retched until she could breathe no more" (Kang 33), dramatize the refusal of the entire patriarchal apparatus that demands complicity. The act of vomiting interrupts the objectification-consumption circuit, making her body the site of moral refusal. Where Atwood exposes the absurdity of patriarchal consumption through satire, Kang's novel enacts it as horror, the body's revolt against its own fragmentation.

The Erotics of Consumption: The Gaze, the Body, and Symbolic Violence

Adams identifies a persistent cultural link between meat-eating, masculinity, and sexual domination. "Meat," she writes, "is symbolically aligned with virility and control; to eat meat is to confirm one's position in the patriarchal hierarchy" (Adams 40). Both Atwood and Kang dramatize this connection through scenes where appetite, sexuality, and ownership intersect. In *The Edible Woman*, Peter's gaze is predatory and consumerist. When he photographs Marian lying among dead animals after his hunting trip, she becomes visually aligned with the hunted. The scene, where Peter tells her to "lie down with the rabbits" (Atwood 147), blurs the boundary between erotic display and carcass imagery. Adams would interpret this as the pornographic logic of the meat image — where the woman, like the animal, is posed for visual consumption. Marian's later disgust toward meat stems from this moment; her psychological nausea is a protest against being rendered edible.

In *The Vegetarian*, the eroticization of the female body is rendered with greater brutality. Yeong-hye's brother-in-law paints flowers on her naked skin for his art project, turning her body into both a sexual

object and an aesthetic commodity. Adams notes that "the pornographic representation of animals and women depends on fragmentation: the removal of agency and individuality to make the body consumable" (Adams 73). The brother-in-law's camera lens repeats this fragmentation, focusing on parts, not the whole, therefore echoing Adams's "sexual politics of meat." His fascination with Yeong-hye's body as "plant-like" merges the erotic and the consumable; the artwork commodifies her resistance, transforming rebellion into spectacle. In both novels, the male gaze equates appetite with dominance. The link between the carnivorous appetite and sexual possession exposes the gendered nature of consumption: the man eats, the woman is eaten; the man desires, the woman becomes desire. However, both authors subvert this logic. Marian's act of feeding Peter the cake reverses erotic hierarchy; Yeong-hye's vegetal transformation abolishes sexuality altogether. There is a moment in the text where she declares, "I don't need to be touched anymore" (Kang 133). In Adams's terms, both gestures dismantle the erotic-eating nexus by withdrawing the female body from availability.

Language, Violence, and the Silencing of Resistance

Adams argues that language perpetuates the sexual politics of meat by hiding the violence of consumption behind euphemism. We say "beef" instead of "cow," "pork" instead of "pig"; the living subject is linguistically erased. This linguistic distancing also structures how women are discussed as "pieces," "cuts," or "meat." In The *Sexual Politics of Meat*, Adams states "Animals are made absent through language that renames dead bodies before consumers participate in eating them. Our culture further mystifies the term "meat" with gastronomic language, so we do not conjure dead, butchered animals, but cuisine" (45). Atwood captures this linguistic economy through the banality of advertising discourse. Marian's work in market research trains her to dehumanize both products and consumers.The phrases she uses daily, such as "target demographics" and "consumption potential," become metaphors for her own life. Peter's compliments on her body, describing her as "tender" and "sweet," extend the same logic: the woman is linguistically cooked into an appetizing metaphor.

Yeong-hye's story reveals the inverse process, the violence inherent in naming itself. Her husband narrates in possessive terms: "my wife," "my problem," "my burden." His vocabulary enacts ownership, transforming Yeong-hye into an object of discourse. The psychiatrists who later label her condition as "anorexia," "delusion," or "psychosis" repeat this violence in medical language. For Adams, the language of power converts resistance into pathology, silencing ethical dissent by rendering it pathological. Kang thus literalizes the linguistic consumption Adams critiques: Yeong-hye's voice is overwritten by others' terminologies. As she falls silent, language itself becomes the mechanism of erasure. Atwood, by contrast, allows Marian to reclaim language through irony, narration, and the symbolic act of feeding Peter his own metaphor.

Adams's feminist-vegetarian ethics insists on a continuity between all forms of violence against animals, women, and the earth. Refusal to consume meat becomes a refusal to participate in patriarchal domination. Yeong-hye's decision to stop eating meat begins as a personal moral awakening, a rejection of violence, but her husband and family immediately pathologize it. Adams writes that "once vegetables are viewed as women's food, they become viewed as 'feminine,' passive." In the novel, Yeong-hye's vegetarianism is indeed seen as feminine passivity, an irrational withdrawal from social participation. However, paradoxically, her act is profoundly active, a radical rejection of patriarchal consumption.Yeong-hye's family's violent attempt to force-feed her meat is a scene that literalizes Adams's notion of "making animals absent" through cultural language. Here, the family refuses to acknowledge the ethical violence of meat consumption; instead, Yeong-hye's moral stance is reinterpreted as madness. Patriarchal culture dismembers her, both metaphorically and institutionally, just as Adams describes: her vegetarianism is fragmented from its ethical context and turned into pathology.

On a further note, Yeong-hye's vegetarianism begins as an ethical decision but evolves into a posthuman transformation. Her wish to "become a tree" (Kang 149) expands Adams's feminist ethics into

a cosmic one: a desire to transcend the predator-prey hierarchy entirely. Rosi Braidotti's notion of "becoming-plant" as a mode of posthuman subjectivity, a state that "rejects the human as measure of all things" (*The Posthuman* 93), extends Adams's ethics beyond its human-centered moralism. Yeong-hye's metamorphosis dramatizes the extreme consequence of Adams's argument: when the system of consumption is total, the only ethical stance may be to abandon humanity as we know it. Atwood's Marian, meanwhile, offers a more pragmatic feminist alternative. Her resistance remains within the social world but reconfigures its terms. When she finally eats the cake herself, "It tasted good; she was hungry" (Atwood 285), she reclaims the body without surrendering to its commodification. Adams's framework helps us see this as an ethical reconciliation: Marian acknowledges appetite without endorsing domination. Eating becomes an act of autonomy rather than the consumption of others. Both endings, then, exemplify Adams's call for a reimagined ethics of relation: one that sees eating, desiring, and being as interconnected acts. Yeong-hye's annihilation and Marian's ironic empowerment represent two poles of feminist vegetarian politics: transcendence and reclamation.

Adams also insists that the normativity of meat-eating is a political problem. "The normalization of meat-eating," she writes, "is the normalization of violence itself" (Adams 51). This idea directly connects with Foucault's concept of biopolitics, which involves the management of life through normalization. Yeong-hye's forced feeding scenes are biopolitical spectacles: her body must be "saved" for its own good. The doctor who proclaims, "She must eat to live" (Kang 103), echoes the disciplinary logic that Foucault describes as the power to define what constitutes a healthy or moral life. Adams's critique reveals the hidden politics in such benevolence: "Compassion for the eater displaces compassion for the eaten." In *The Edible Woman*, Marian's refusal to eat is likewise framed as pathological. Her friends and fiancé interpret her abstinence as neurosis, not protest. Society must protect its normative appetite; a woman without hunger threatens the very foundation of capitalist reproduction. Both novels expose how appetite, under patriarchy, is a moral category to be disciplined, corrected, and policed.

Conclusion

Through the intersecting lenses of posthumanism, body politics, and feminism, *The Vegetarian* and *The Edible Woman* emerge as profound critiques of patriarchal consumption and the hierarchies that sustain it. Both novels reimagine the female body as a contested site where social, biological, and ideological forces converge, yet also as a locus of resistance that destabilizes the very systems seeking to control it. Atwood exposes the mechanisms of capitalist and patriarchal commodification through irony and bodily symbolism, showing how women's identities are consumed within the circuits of desire and market culture. In contrast, Kang's narrative radicalizes this critique by dissolving the boundaries between the human, the animal, and the vegetal, enacting what Rosi Braidotti terms a "posthuman becoming." Yeong-hye's withdrawal from food and language is not merely a negation but an ontological transformation—an act that defies the grammar of domination by embodying agency beyond speech, beyond species.

Adams's cycle of objectification, fragmentation, and consumption provides a critical framework for understanding how both protagonists confront and subvert patriarchal control. Marian symbolically reclaims her fragmented self through performative irony, while Yeong-hye transcends the very logic of consumption by rejecting participation in it altogether. Both acts represent distinct articulations of feminist resistance: one reclaiming the self through language, the other transcending the human condition through silence and transformation. Moreover, Atwood and Kang redefine the politics of the body as an ethics of coexistence and life itself. Their protagonists' refusals—to eat, to speak, to conform—become gestures of profound philosophical significance, challenging anthropocentrism and reimagining subjectivity in relational, ecological, and ethical terms. In uniting feminist, ecofeminist, and posthumanist perspectives, these texts demonstrate that the liberation of the body is inseparable from the liberation of all forms of life.

Both Kang and Atwood position their protagonists in confrontation with the social apparatus that defines womanhood through consumption. In *The Edible Woman*, the struggle unfolds within the context of capitalist modernity, where femininity is commodified through the lens of desire and domesticity. In *The Vegetarian*, it unfolds within biopolitical modernity, where the female body is medicalized, disciplined, and subdued. However, both converge on the same ethical insight: that resistance need not be vocal, spectacular, or external; it can be bodily, silent, and deeply interior. Yeong-hye and Marian enact what Braidotti describes as "the politics of immanence": resistance through embodied existence rather than transcendent ideals. Their refusals reconfigure agency as relational and material. Yeong-hye's transformation into a plant literalizes this; she seeks ethical harmony with the nonhuman world, while Marian's regained appetite signals reconciliation between self and body after rejecting the social consumption of femininity. In both, the posthuman body becomes a political instrument that defies Foucault's disciplinary power. Their hunger—or its absence—becomes a language of protest, an assertion that to live ethically may sometimes mean to unlearn being human as patriarchy defines it. In Atwood's satire, resistance survives through performance and irony; in Kang's tragedy, it manifests as metamorphosis and silence. Together they reveal that the politics of the body remains the frontier of feminist and posthuman thought: the place where life itself contests the powers that seek to discipline, define, and devour it.

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From Survival to Resilience: A Study of Subaltern Womanhood in Arupa Patangia Kalita's *Josnar Jhitas*

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Abstract

This paper studies the woman protagonist Durgi Bhumij as depicted in Arupa Patangia Kalita's remarkable novel ***Josnar Jhitas***(2022). The author's endeavor to explore **Durgi Bhumij**, the never recognized heroine, who belonged to tea garden labour community, as a pillar of strong womanhood defying every hardship that she had gone through in her life as an immigrant labourer to Assam tea garden, her sudden widowhood; then her fate of becoming the mistress of Fraser, the British manager of the tea garden and her painful motherhood with three children she had from Fraser. She realized her sense of nationalism from the circumstances that she had experienced throughout her life. She worked as a secret agent for the nationalist party and bravely fought against the British colonials; eventually, she became a martyr in India's independence struggle, but the saga of her martyrdom is never recognized by mainstream history. Unlike other women of her time, she evolved as a dominant resister against British exploitation and domination, while simultaneously,her sufferings as a victim at the intersections of gender, race, and class compel her to negotiate for survival. Hence, Durgi, the unsung hero of India's nationalist movement against British colonialism, represents the lived experiences of subaltern womanhood.

Keywords:colonialism, subaltern, womanhood, nationalism, survival,resilience.

Introduction

The term 'Subaltern' is related to the world's hegemonic power dynamics, referring to groups of people who are socially, politically, geographically, and economically excluded from the colonial hegemonic power structure. Italian Marxist thinker and theorist Antonio Gramsci introduced the term "subaltern" in his article "Notes on Italian History," which appeared later in his most widely known book,*Prison Notebooks,*written between 1929 and 1935. For him, the term subaltern refers to a group of people who are "low rank" in a particularsociety, suffering under the hegemonic domination of a ruling elite class that denies them the basic rights to participate in shaping local history and culture as active members of the same nation. Defining the subaltern class, Gramsci said that it is not unified and cannot unite until it becomes a "state"; its history, therefore, is intertwined with civil society and, thereby, with the history of states and groups of states. (Gramsci 52) He described the socio-economic status of "the native" in an imperial colony. In postcolonial studies, colonial subjects are considered subalterns because they are always positioned at the margins of hierarchical order.

Ranjit Guha, an Indian historian and the founding figure of the Subaltern Studies Collective, interprets subaltern studies as a name for the general attribute of subordination in South Asian Society, whether expressed in terms of class, caste, gender, ethnicity, religion, or any other. He borrowed the notion of subalternity from Gramsci, following which subaltern classes are deemed to have limited means of representation. RanajitGuha used the concept of the subaltern to signify anyone in India who did not belong to the elite; therefore, his definition included peasants, workers, impoverished landlords, and others whose behavior exhibited a combination of defiance and deference toward the elite.

Gayatri Spivak,in her thoughtful essay "Can the Subaltern Speak?" raises an aspect of the subalterns that the subalterns can never truly speak for themselves, that they are truly heard. She states that the voice of the subalterns iserased by colonialism, patriarchy, and even well-meaning Western intellectuals. She has expanded the meaning of subaltern, placing the stress on gendered subalternity- women who are doubly oppressed not just by colonialism, but also by various factors in Third World countries.Spivak explored the concept of subaltern womanhood in her remarkable essay"Can the Subaltern Speak?" in which she remarks that these women are "in shadow," unable to be heard or represent themselves outside the structures of power that oppress them:

> "Within the effaced, obliterated journey itinerary of the subaltern subject, the track of sexual difference is doubly effaced. The question is not of female participation in insurgency, or the ground rules of the sexual division of labor, for both of which there was evidence. It is, rather, that, both as object of colonialist historiography and as subject of insurgency, the ideological construction of gender keeps the male dominant. If, in the context of colonial production, the subaltern has no history and cannot speak, the subaltern as female is even more deeply in shadow. (Spivak, 41)

According to Spivak, the subaltern woman cannot speak, not because "the subaltern cannot pronounce words or produce sentences", but because her speech falls short of fully authorized, political speech. "The subaltern as female cannot be heard or read" (308).

The prestigious SahityaAcademiAward-winning Assamese author ArupaPatangiaKalita is well known for her novels and short stories,which encompass various aspects of Assamese history and culture, address the lives of people from the middle and lowerclasses, and specifically focus on concerns such as women's issues, violence, and insurgency. Her latest novel, *Josnar Jhitas* (2022),uncovers a historical period of British colonialism and tea plantations, and the trafficking of poor, exploited coolies from various states of India, such as Bihar, Bengal, Odisha, etc., into Assam to work in British-occupied tea gardens.In the novel, the author portrays the sufferings of displaced communities who had been engaged in the tea gardens of Assam during British colonial rule in India. The exploitation of this tea garden community, irrespective of gender, is prominent in the writings of the author. The protagonist, Durgi Bhumij, is a representative of this community through whom the author reflects on all immigrant men and women coolies who were victims at the intersection of race and class.Durgiwas an unsung martyr who died participating in India's Independence Movement against the British colonizers, andin the novel, the author strives to write an alternate history of the subalterns like Durgi, who were always excluded socially, politically, economically, and geographically,and are always outside the recorded/ documented/official history. By blending fact and fiction, the author can present a new version of history that is unknown to the world. Regarding her characters, ArupaPatangiaKalita said;

> "My characters are all real life. But I fictionalized them, and they were reborn. Through a blend of imagination and reality, I tried to portray the patriotism in the hearts of the tea garden laborers, many of whom remain unsung heroes, though they sacrificed their lives for the freedom of the country." (quoted in *The Times of India*, 8th March, 2022)

Discussion

In *Josnar Jhitas*, the author positionsDurgi at the margins of race, class, and gender,indicating her exclusion from the social hierarchy. Throughout her life, she remained an outsider in Assam. The colonial British traffickers had spread a conspiracy to attract tribal coolies from outside Assam to come to Assam and get engaged in the tea plantation work. Like many others, Durgiand her husband, Docharu,migrated to Assam in search of a good life. Consequently, both were employed as coolies in the Atharighat tea gardens under British colonial rule. The British officials treated the coolies as the 'other' or 'inferior' who were meant to work endlessly as if they were machines.Indeed,

the coolies were provided food, clothes, and shelter, but they were never treated as human beings. Exploitation and domination had been an inseparable part of their lives.The laborersworked overtime, but they never received their due wages on their payday. If they raised their voice against this injustice, the accountants (*borkerani*)exploited and abused them physically in public, creating terrorin their minds.

Besides being a coolie,Durgi was a woman first. She experienced patriarchal domination within her domestic life, and most of the time became an object of gaze in the eyes of the colonial males. Throughout the novel, it can be assumed that, as a husband,Docharu was unable to satisfy Durgi's unfulfilled physical desires. But most of the time, Durgi overlooked this aspect of her husband and remained committed to her relationship despite all the physical and mental abuse by her husband. Indeed, she was a devotee of her husband's great skill as an archer, and she believed that one day her husband would understand her feelings. But all were in vain. The British officer of their tea garden ordered Docharu to kill the large snake to save the life of ParitonSahab from being killed by it in a dense forest, and Docharu had to kill the snake involuntarily.The trauma of killing the snake in such circumstances made him mentally disturbed, and as a consequence, he indulged in living a very abnormal life. All the time, he used to be lost in consuming bhang and liquor. He used to beat Durgi very often as an expression of his frustration and his suspicions about Durgi's responses to Fraser, the new Manager of the Atharighat Tea Estate.

In the novel, the author clearly reveals how the British officialssexually exploited thecoolie girls (*minis*) and women of the tea gardens and treated them as their objects of gaze. Durgi's life was not exceptional as she was also a victim of certain circumstances, but somehow, she was under the protective care of her husband till his death.After her husband's death, Durgi became alone, and her future became uncertain. Suddenly, out of nowhere, she received a proposal fromFraser Sahebto becomehis mistress, which Durgi never expected. Initially,Durgihad no idea about the lives of mistresses; therefore, she decided to move on in lifewith much curiosity by becoming FraserSahab's mistress. Moreover, she had noalternative but to abide by Fraser's order.

On the contrary, Fraser's urge for Durgi stemmed from his own physical needs; therefore, he decided to keep Durgi as his mistress. Indeed, the managersof the tea estates were allowed to keep their wives or mistresses. But Fraser preferred keeping a mistress to marrying a wife. Besides,Fraser had a certain weakness for Durgi's attractive body from the very first day he noticed her.In the novel, the author sheds light on Durgi's helplessness or pitiable condition, in which she suffered from loneliness after losing her husband at a very young age, and on the uncertain future that awaited her in this colonial land, where she was the other, the object of the gaze. Indeed, Durgi was suffering at the crossroads of her race, class, and gender.

Durgi was illiterate and unaware of thelife she would lead as a mistress. Indeed, she received respect from those around her for being Fraser's mistress, butgradually, she realized she was no longer like her own people, with whom she had spent her life in the tea gardens as a laborer.Durgi was just a mistress, and she understood that she could never claim the rights of a wife, but her respect and admiration for Fraser was pure. Durgi received the endless joy of being a mother of three children from Fraser; it was as if Durgi had achieved everything in her life.Durgi was lost in the world of motherhood and in her duties and responsibilities asmistress. All her children were like Fraser, with clear white skin, blue eyes, and golden hair, and in no way could she find even a trace of her physical features in them. Her children were a mixture of both white and black races, and the author uses the term *dubhochia* to refer to these children of white officers and black *minis*.

The movement for India's Independence was in full swing in Assam, as in other parts of India, and during the later part of Fraser's service at Aatharighat tea estate, British rule in India was nearing its end. Almost all the Britishers were preparing for their return journey to their own land, but the ignorant Durgi could notunderstand what was going on outside her

home.Durgi's joy of motherhood was short-lived. She lost her second child in an epidemic that broke out during that time, and her daughter was driven away from her by her master, Fraser.As a mother, Durgi felt that her daughter was far from her because she was raised in Western culture and properly trained by British tutors. Fraser often discouraged his daughter from speaking the language Durgi used, which greatly disturbed Durgi. Her motherhood was in jeopardy when Fraser left Assam with his daughter, giving Durgi false hope that they would return to bring her and Laba (Durgi'selder son) back to the land where Fraser lived.Durgi and Laba were left alone, and an uncertain future awaited them. All these misfortunes happened in Durgi's life because of her marginalized position in the society in which she lived. First of all, her identity as a mistress limited her authority over her own choice.Despite her intense desire, she could not even claim her dearest daughter from Fraser to keep with her in Assam, as the political circumstances of the time did not permit it. Assamese people boycotted all the *dubhochia* children of the white Britishers;thinking about her daughter's future, she could not help acting according to the circumstances.On the contrary, Durgi's son, Laba, also separated from his mother to avoid any danger that might arise during the independence movement. Buddha Boruah, the *borbabu* of the Atharighat tea garden, was in Durgi's good books, who helped her by providing shelter and education forDurgi's son.Durgi lost everyone in her life, and it was her misfortune that in spite of being a mother of three children, she became childless. The fruit of being the mistress of white Britishers became traumatic for her.Durgi was left with nothing. After Fraser had left for his motherland forever, Durgi was deprived of every facility she had previously received.

The author ArupaPatangiaKalita rightly observes the pitiable circumstances of the subalterns, especially the subaltern women, and the way both the colonial as well as the post-colonial history overlook or deny their existence as insignificant, uncivilized, or other:

> Various details about the white officials are readily available in any document. But the papers become dumb when searchingfor the black mistresses kept by the white officials. However, in official documents, it was clearly written that 'minis allowed'. Nowhere to find out about the minis the company is lawfully allowed to have. Nowhere to find out about the *dubhochia* children born of the minis and white sahibs. Not a single line is there about the hard-working community of tea garden laborers…. The context for these people comes only from one or two small, easily overlooked remarks by the sahibs about the tea laborers. White Sahibs clearly wrote that 'the term coolie itself is a problem' (Kalita, 423-424, own translation).

Conclusion

Throughout the novel, the author narrates the circumstances of tea garden coolie women in colonial and post-colonial India through the character of DurgiBhumij, who was denied justice simply because she was a subaltern woman. It is as if subaltern women are insignificant creatures without feelings and emotions. ArupaPatangiaKalita took responsibility for introducing DurgiBhumij in the pages of her novel *JosnarJhitas*; otherwise,Durgi would have remained unknown to the world. The official historical account did not recordDurgibecause of her inferior social rank. In all her life, she remained theimmigrant coolie/ the tea garden laborer, the widow, and then the mistress of a British officer, an insignificant outsider, neither wholeheartedly accepted by Assamese society nor by the British colonizers. Indeed, subalterns are never listened to; therefore, their speaking never matters. But there is always an instinct of survival and resilience within the subalterns. Despite the uncertainty in her life, Durgi yearns to live a life dedicated tosincere service for her country in the name of patriotism.But the brave Durgi was murdered by the conspiracy of Britishofficer LakraSahebbecauseshe was a secret agent working for the freedom movement of India against the British.Durgi became a martyr, but her martyrdom was never celebrated.It has been observed that the voice and the body of the subaltern or other women were ignored, erased, effaced, and forgotten. But throughout the novel, the author foregrounds Durgi's life to

emphasize that even subaltern women possess an instinct for survival that fosters their resilience. The lived experiences of subaltern women at the crossroads of race, class, and gender set them apart from others.

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The Effect of Online Communities on Social Norms and Behaviour

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Abstract

In today's world of unprecedented technological advancements, online communities have become a significant feature of modern social life. In many ways, they now perform functions that have traditionally been associated with agents of socialisation such as family, peer groups and schools. This paper examines the role of online communities in shaping social norms and behaviour. It examines the concept of online communities and suggests that these communities are not merely for communication but they also influence the way people interact, develop identities, form relationships and manage their social realities. Existing norms are continually challenged within these communities and new norms emerge through collective interaction. Members become familiar with shared understandings of what is acceptable or unacceptable within a group through digitized feedback systems. Additionally, online communities can also encourage public discussion, raise awareness about social issues and mobilize collective action, while simultaneously threatening social stability by normalizing harmful behaviors like cyberbullying and misinformation. By examining these complex processes, this paper contributes to a better understanding of the role and significance of online communities, the changing nature of social behaviour and interactions in the digital age as well as the broader implications that these communities hold for society at large.

Keywords: Online communities, social norms, behaviour, socialisation, social change.

Introduction

The sweeping social changes unleashed by the Industrial Revolution had many effects, one of which was the perceived destruction of communities. Classical sociologists from the nineteenth century including Emile Durkheim and Ferdinand Tönnies believed that community was lost under the anomie of modernity. Pre-modern and communitarian utopias were thus replaced by a modern, liberal and independent society of individuals. In the mid-twentieth century, some sociologists grew skeptical of this community lost theory. In fact, studies have found that traditional communities continued to exist but were maintained through new means (Wellman and Berkowitz, 1988; Wellman and Gulia, 1999).

In today's world of unprecedented technological advancements, online communities have become a significant feature of modern social life. These communities gained prominence with the development of the internet and information and communication technologies in the 1990s and expanded significantly with the rise of social media in the 2000s. With greater access to the social media platforms such as Facebook, Snapchat, Twitter (X), Instagram and others, participation and interaction in online communities has become a regular part of everyday life. As argued by boyd (2014) and Papacharissi (2015), social media platforms are not merely tools for communication but they are socio-cultural ecosystems that inform behavioral norms, social expectations and attitudinal

dispositions. Within these platforms, online communities emerge around shared interests, identities, experiences and goals. These communities are assuming a central role in the processes of socialisation. They influence how individuals learn, adopt and reinforce norms, values and patterns of behaviour. These norms in turn affect how people communicate, express opinions, construct identities and engage with others. Understanding what motivates people to participate in these communities, the benefits and risks associated with them and the social dynamics that govern them is therefore essential.

This paper examines how online communities act as agents of socialisation. It explores the mechanisms through which existing social norms are challenged and new norms emerge through collective interaction. The paper then considers what these processes mean for individual behaviour and whether these online communities can contribute to broader social change. By examining these processes, the study contributes to a better understanding of the role and significance of online communities, the changing nature of social norms and behaviour in the digital age as well as the broader implications that these communities hold for society at large.

Objectives of the Study

1. To examine online communities as emerging agents of socialization alongside traditional institutions such as family, schools and peer groups.
2. To analyze how social norms are formed, reinforced and challenged within these communities and how these dynamics shape individual behaviour.
3. To evaluate the impact of these online communities on wider society and their role in shaping social change.

Methodology

This paper is based on a review and synthesis of existing literature. It draws on scholarly works from various disciplines including sociology, psychology, communication studies and media studies to examine the role of online communities in socialization and their influence on social norms and behaviour. The study uses secondary sources obtained from academic databases such as Google Scholar, JSTOR and Scopus. Sources were selected using keywords such as "online communities," "digital socialization," "social norms" and "online behaviour."

Literature Review

The term 'online community' is often used interchangeably alongside terms such as cyber societies, cyber communities, internet communities, virtual communities, web communities, virtual social networks and e-communities. Earlier literature often used the term 'virtual community' to refer to social groups that interacted through computer-mediated communication. Over time, however, many scholars have come to prefer the term 'online community' because it more accurately captures the nature of these interactions. While the term virtual community broadly refers to communities that exist in virtual environments, online community basically means that members interact through online technologies rather than face-to-face communication. However, defining what exactly constitutes an online community remains a challenge because the term is multidisciplinary in nature and means different things to different people. According to de Souza and Preece (2004), there is no consensus regarding a definition for an online community. One of the earliest and most influential characterizations of the concept was provided by Howard Rheingold (1994), who coined the term 'virtual community.'

> He wrote: "…virtual communities are cultural aggregations that emerge when enough people bump into each other often enough in cyberspace. A virtual community is a group of people […] who exchanges words and ideas through the mediation of computer bulletin boards and networks" (p. 57).

Preece, Abras and Maloney-Krichmar (2004) define online communities as having "a purpose, are supported by technology and are guided by policies" (p. 2). According to Jenny Preece (2000) an online community is composed of four key elements: socially interacting people striving to satisfy their own needs; a shared purpose such as a common interest or need

that encourages cooperation; policies in the form of tacit assumptions, rituals or rules that regulate members' behaviour; and a technical system that serves as a medium for social interaction. Preece et al. (2002) further highlighted that members of online communities perform different roles that contribute to the functioning of the community. These include moderators and mediators (who lead the discussions and help to settle disputes); professional commentators (who provide opinions and influence the discussions); provocateurs (who question or provoke other members); general participants (who actively engage in discussions) and lurkers (who watch the interactions but do not participate directly). Aditionally, Henri and Pudelko (2003) based on their study of discussion forums, chats and websites, they identified four types of communities: the community of interest (low social bond and intentionality); goal-oriented community of interest (formed around a specific objective); learners' community (students working under instructor guidance in educational settings); and community of practice (professionals engaged in similar work with strong social ties). Each type differs in the degree of member participation, mutual support, sharing of meanings and identity formation (Henri & Pudelko, 2003, pp. 478–484).

To understand online communities, it is also necessary to consider their relation to traditional (offline) communities, as these two are often presented in opposition to one another. However, the distinction between the online and traditional (offline) communities is not always straightforward and at the same time has become blurred. This problem of defining communities whether they are traditional or online has been an ongoing concern among scholars. Wellman and Leighton (1979) define a traditional community as an entity formed by individuals who interact face-to-face, are interconnected and share a sense of solidarity. However, scholars of online communities argue that such feelings of solidarity and shared identity can also emerge in the absence of face-to-face interaction through computer-mediated communication (Baym, 2000). In fact, many argued that socalled traditional communities are themselves 'virtual' since many of them are also imagined. In an imagined community, members do not necessarily know each other and/or have not met, 'yet in the minds of each lives the image of their communion' (Anderson, 1983: 6). More recently, Gruzd et al. (2011) have argued that some online platforms (in their case, Twitter) can serve as a basis for both traditional and imagined communities.

Morover, online communities are increasingly playing an important role in shaping social norms and behaviour. Members are exposed to shared values, expectations and patterns of behaviour that shape their understanding of what is considered appropriate or desirable within a particular group. The influence of these communities becomes evident through the various forms of feedback mechanisms embedded in social media platforms. A study by Sherman et al. (2016) found that adolescents were more likely to like photographs that had already received a large number of likes than those with fewer likes. This pattern was observed for both neutral images and images depicting risky behaviours such as drinking and smoking. The findings suggest that peer approval in online environments can influence adolescents' perceptions and behaviour.

Online Communities, Social Media And Socialization

Socialisation is a key social process through which individuals internalize the values, norms, beliefs and practices of groups including family, friends, colleagues as well as the wider society in which they live. Through socialisation, people acquire the knowledge and skills necessary to participate in social life and learn what is considered appropriate or inappropriate behaviour in different situations. It is through this process that culture is passed from one generation to another. Socialisation also plays a crucial role in shaping how individuals develop their identities, attitudes and understanding of the world around them. Traditionally, socialisation has taken place through a range of groups and institutions. The family is considered as the primary agent of socialisation, with parents playing a central role in shaping children's attitudes and behaviour from an early age. Some of the important secondary agents of socialisation are peer groups, schools and mass media.

Mass media has become an important part of people's everyday lives and its role in the socialisation process has been widely discussed by scholars. It includes various forms of communication such as radio, newspapers, magazines, television, media portals, websites etc. According to Prot et al. (2015), the rise of electronic media has created new opportunities for learning by exposing children to a wider range of events and experiences than was possible in earlier generations. As a result, socialisation is no longer shaped solely by traditional agents such as the family, school or peer groups. Media has increasingly become an important source through which individuals acquire information, form opinions and understand the world around them. Frønes (2016) argues that contemporary media give social realities and cultural meanings both visual and narrative forms. He suggests that media do not simply transmit messages but also shape the ways in which communication takes place. Using Facebook as an example, he argues that the design of social media platforms encourages users to present aspects of their identity, preferences and social relationships, thereby influencing both the content and form of interaction. In this way, media have become increasingly significant in shaping social experiences and patterns of behaviour.

Mass media is often divided into old media and new media. Old media includes traditional forms of communication such as newspapers, magazines, radio, television, and films. These forms of media primarily followed a one-way model of communication in which information was produced by a limited number of sources and transmitted to a large audience. Opportunities for audience participation were generally limited. However, the development of digital technologies and the internet led to the emergence of new media. Social media has become one of the most widely used forms of new media. Unlike traditional media, social media allows users to participate actively in the creation and circulation of content. Individuals are no longer only consumers of information but they also produce, share and respond to content. Social media platforms such as Facebook, Instagram, X (formerly Twitter), TikTok, Reddit and Snapchat have changed the way people communicate and maintain social relationships by enabling continuous interaction among users. Through features such as discussion forums, comment sections, likes, shares and chats, individuals can interact regularly and build relationships without the need for face-to-face contact. Among the many features of social media, one of the prominent is its ability to connect like-minded individuals. People from different parts of the world can connect, come together, form groups and networks as well as become part of communities based on shared interests, identities, occupations, hobbies or common causes. With greater access to the internet and social media platforms, participation in online communities has become a regular part of everyday life. Individuals are now part of multiple online groups and communities at the same time. For example, an individual may participate in a Facebook group related to higher education, follow discussion communities on Reddit, join professional or hobby-based groups on Telegram and interact with gaming communities on Discord.

The rise of social media has been a major factor in the expansion and proliferation of online communities. The growth of these communities has also created new sites for socialisation. By bringing together individuals with shared interests, experiences, identities and concerns, they provide opportunities for communication, participation and the exchange of knowledge. Participation in these communities also exposes individuals to a diverse range of people including peers, content creators, activists, professionals and public figures. Members of online communities are not merely passive recipients of information but also contribute to discussions and influence others. Such interactions expose individuals to different ideas, beliefs, values and ways of thinking that they may not encounter within their immediate social surroundings. At the same time, members become familiar with new norms, values and expectations of the groups to which they belong. In this way, online communities now contribute a significant role in the socialisation process. This socialisation may take different forms including social, cultural, educational and political engagement.

Social Norms And Behaviour

An important aspect of socialization process is the learning of social norms and patterns of behaviour. As discussed, socialization involves the internalisation of the social norms of the groups and societies to which

they belong. These norms provide guidelines for what is considered acceptable, regulate social behaviour and help maintain order within social life. Sherif (1936) defined norms as the jointly negotiated rules for social behaviour, including the "customs, traditions, standards, rules, values, fashions, and all other criteria of conduct which are standardised as a consequence of the contact of individuals" (p. 3).

The influence of social norms on behaviour is not a new phenomenon. Research conducted over several decades has shown that social norms play an important role in shaping people's beliefs, attitudes and behaviours. Individuals often make decisions based on what they perceive to be acceptable or desirable within their social environment. In other words, our behaviour is often guided by the norms of the society in which we live. We tend to do things that we think others will approve and avoid behaviours that may be viewed negatively. For example, people generally greet others politely, wait their turn in a queue and follow basic rules of courtesy because these behaviours are acceptable. Likewise, behaviours that are considered disruptive are often avoided because they may invite criticism or social disapproval. Therefore, social norms influence the way people behave and engage with one another in their everyday life.

However, the rise of social media and online communities has changed the ways people interact, form relationships and engage with the world around them. Today, people are exposed to a constant flow of information and opinions from not just family members, friends, classmates or colleagues but also from large networks of individuals whom they may never meet in person. Through these online interactions, users encounter different lifestyles, identities and views which can influence their understanding of what is normal, acceptable or desirable. While traditional sociological studies have emphasized the role of family, educational institutions, peer groups in transmitting norms, online communities are increasingly playing an important role in shaping new norms, challenging existing norms and reinforcing established ones through continuous interaction among their members.

According to Preece (2000), online communities develop their own norms, policies and patterns of interaction that regulate member conduct. Similarly, Baym (2010) argues that repeated communication within these communities contributes to the development of shared meanings and behavioural expectations. In other words, as members interact over time, they develop common understandings about appropriate behaviour, acceptable forms of expression and group values. These expectations may not always be formally written but they often influence how members participate within the community. The various features of digital platforms also contributes to this process. By providing immediate feedback, features such as likes, comments, shares and reactions help shape users' online behaviour and encourage conformity to community expectations. Online posts that receive positive responses are often encouraged while content that attracts negative reactions or criticism may be deleted or avoided in the future. This can contribute to the development and reinforcement of shared norms, values and standards of conduct where members learn what kinds of behaviour are appreciated within a particular online environment. Because participants often come from different social and cultural backgrounds, members may challenge established beliefs and introduce alternative viewpoints. Consequently, online communities tend to develop social norms for their members.

Regular participation in online communities can also affect attitudes, behaviour and identity formation. People often adjust their communication styles, language and online conduct to fit the expectations of a group. One of the ways in which online communities influence social norms is through processes of social learning where behaviour is learned through observing others and responding to social feedback. New members, for example, often spend time observing discussions before actively participating. By watching how experienced members interact, they develop an understanding of what is acceptable within the community. Over time, these observations may influence their own behaviour.

Online communities are also important sites for identity expression and self-presentation. Many users use digital platforms to share personal experiences, express opinions and connect with others who have

similar interests or backgrounds. For young people in particular, online communities can provide opportunities to explore different aspects of identity and find a sense of belonging. Ellison and boyd (2013) note that social network sites support development and maintenance of social connections which in turn influence how people present themselves and interact with others. The desire for recognition, approval or acceptance from fellow members can encourage users to align their behaviour with the expectations of the communities to which they belong. As a result, online communities can shape not only what people say but also how they choose to present themselves to others.

Additionally, the effects of these communities also reach into everyday social life and contribute to broader social change. Online communities have played a significant role in raising awareness about social issues, in challenging existing inequalities as well as in mobilising collective action. The #MeToo movement provides a well-known example. Through social media, people shared their experiences of sexual harassment and assault, helping to draw attention to a problem that had often remained hidden or silenced. As more people participated across different countries, the movement grew beyond individual stories and became a wider public discussion about gender relations, workplace behaviour and accountability. In this way, the movement contributed to broader social change by encouraging people to speak out and support one another. Although it is difficult to determine whether these changes will be sustained over time, the #MeToo movement shows how an online phenomenon can lead to tangible social, legal and political changes. It shows how online communities can mobilise people around shared concerns and support collective efforts for social change.

However, the influence of online communities is not always beneficial. Many online communities can provide support, foster a sense of belonging and create opportunities for people to discuss issues that may be overlooked in mainstream society. At the same time, some communities may promote harassment, reward aggressive behaviour, encourage exclusion or the spread of misinformation. Cyberbullying often manifested through such behaviours has emerged as one of the major concerns of recent years. The relative anonymity and the lack of face-to-face interaction on online platforms can make it easier for individuals to engage in online harassment, public shaming and other forms of hostile behaviour. The rise in cyberbullying cases is particularly alarming as it points to the ways in which harmful behaviours gradually become normalised and continue to be reproduced over time. Such behaviour can have serious consequences for mental well-being particularly among young people. Repeated exposure to online harassment can lead to anxiety, stress, low self-esteem and social withdrawal. As a result, the influence of online communities on social norms and behaviour can vary considerably. As more people engage with online communities in their everyday lives, their role in shaping behaviour is likely to become increasingly significant.

Conclusion

In conclusion, online communities have become an important part of contemporary social life. The growth of the internet and social media has enabled people to interact, exchange ideas and form relationships beyond geographical boundaries. Online communities now contribute a significant role in the socialisation process. They are increasingly shaping new norms, challenging and reinforcing existing ones through continuous interaction among their members. In doing so, they influence how individuals think, interact and behave both online and offline. Moreover, online communities often encourage public discussion, raise awareness about social issues and mobilize collective action. At the same time, their influence is not always positive. The spread of misinformation, harassment and cyberbullying shows that harmful norms can also develop within certain communities. Ultimately, online communities are not passive tools for communication but are socio-cultural ecosystems that continuously redefine how social realities are constructed. The impact of these communities on social norms and behaviour can vary considerably. As participation in these communities continues to increase, understanding their influence remains important for understanding changing nature of social norms, human relationships and behaviour in the digital age.

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Digitalizing Disaster Response :The Political Economy of Flood and Erosion Relief in Rural Assam

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Abstract:

The recurring occurrences of floods and riverbank erosion in the Brahmaputra Valley of Assam cause severe socio-economic disruption, with thousands affected each year. In the past, the distribution of the government's flood and erosion relief had been largely influenced by local politics, making it part of a deeply established political economy. However, in the past decade, the Government of Assam has launched several initiatives for digital governance, including Direct Benefit Transfer (DBT), the JAM trinity (Jan-Dhan-Aadhaar-Mobile), and Mission Basundhara, which entails digitization of land records. This paper aims to understand the impact of these innovations in digital governance in relation to the political economy of relief distribution. Through an analysis of the shift from intermediary-driven in-kind aid to technology-driven cash transfers, the effect of such innovations on the state-society relationship, leakages, and existing patronage systems will be understood. Nevertheless, the paper will also highlight the problems of 'digital exclusion errors,' lack of proper infrastructure, and legal issues involving IDPs caused by erosion that have no access to land on the ground but need rigid digital cadastral evidence to receive relief. However, despite the improvements that digitalization brings to administrative efficiency, it essentially changes the power equation of disaster governance in rural Assam.

Keywords : Digital Governance, Political Economy, Assam Flooding, Riverbank Erosion, Patronage, etc.

Introduction

The northeastern Indian state of Assam has a complicated geology because it is made up of the Brahmaputra and Barak river systems, and it happens to be the area most prone to flooding anywhere in the world (Assam State Disaster Management Authority [ASDMA], 2023). Every year, floods affect a huge number of people by displacing them and damaging crops, as well as infrastructure in rural areas(Ahmed, 2020)(Baruah, 2020). Traditionally, the allocation of aid by the government of the region in terms of food supplies, tarpaulins, and money has been linked to a local political economy where allocation took place using intermediaries such as Panchayat representatives, block development officers, and other local political elites.

Recently, there has been a technological transformation of the model of welfare administration in India. The process towards digital governance through the Jan-Dhan-Aadhaar-Mobile (JAM) model and Direct Benefit Transfer (DBT) system has aimed at establishing an interface between the state and the beneficiary without friction(Gupta, 2020). This has been complemented in the case of Assam through state-based initiatives such as Mission Basundhara that seeks to cleanse the land records in the state(Assam, 2022). Utilizing these digital governance mechanisms for disaster management changes the political economy of rural Assam entirely(Borah, 2023). The elimination of the middleman makes patronage politics of flood relief redundant(Banerjee, 2019)(Masiero, 2017). Nevertheless, using digital architecture on the dynamic geography of Brahmaputra char-chaporis presents a new socio-political puzzle. This paper discusses how the use of digital governance reforms has transformed the political economy of flood and erosion relief distribution in rural Assam.

Objectives of the Study

The objectives of the present study have been framed as follows:

1. To study the impact of Direct Benefit Transfer (DBT) and digital governance systems on the existing political patronage network for the distribution of flood relief services in rural Assam.
2. To assess the efficacy of digitalization in terms of administrative efficiency and transparency in relation to disaster welfare schemes.
3. To examine the issue of "digital exclusion" and other socio-legal barriers faced by people who are displaced due to riverine erosion.

Scope of the Study

This study's geographical scope is limited to the rural and riverine (char) regions of the Brahmaputra Valley of Assam, which are disproportionately affected by annual flooding and erosion of the riverbanks. As far as the thematic scope of the research is concerned, the subject matter is concerned with the interrelation of public administration, political ecology, and digital governance. This includes an analysis of policies that have been put into place since 2014 until 2024, such as the implementation of the DBT scheme based on guidelines from the NDRF, SDRF allocations, and land digitization initiatives like Mission Basundhara.

Significance of the Study

The importance of investigating the role of digital governance in disaster management cannot be overstated in the context of developing countries facing the problem of climate change. The significance of the research is in the fact that it touches upon both technological effectiveness and the political economy aspect of the issue under discussion. Whereas many works have been dedicated to the environmental consequences of flooding in Assam(Borgohain, 2021)(Guha, 2018), as well as the effectiveness of DBT as a way of reducing fiscal leakages at the national level(Bank, 2024), the relationship between digitalization and the particular geography of the Brahmaputra Valley remains poorly understood. This paper offers new insight into the matter by analyzing the disruptive impact of switching from in-kind localized assistance to centralized transfers in terms of how power relations operate within the communities involved.

Literature Review

Welfare in developing countries has had a tradition of principal-agent issues due to the manipulation of government resources by local intermediaries for political gains (Chatterjee, 2021)(Khera, 2019). For example, flood relief in Assam has not only been about humanitarian aid but also served as currency in terms of political patronage (Baruah M. &., 2021). It involved the use of relief materials in such a way that elected leaders and Gaonburhas (village headman) formed a vote bank by excluding those who belonged to oppositions or were marginalized tribal communities (Das, 2022) (Deka., 2020).

The development of e-governance and introduction of DBT system came up as a solution for such leakages within the system([MeitY], 2022). Many studies reveal that using biometric (Aadhaar) and connecting them with banking networks increase fiscal powers of the state by eliminating "ghost beneficiaries"(Dreze, 2017)(Muralidharan, 2016). In the realm of disasters, DBT enables the state to pay monetary compensation for crop losses, animals, and destroyed houses directly into the bank accounts of the victim citizens(Ali, Economic and Political Weekly)(Bhuyan, 2018).

Nevertheless, the literature also cautions against the uncritical celebration of "techno-solutionism"(Ghosh, 2021). Political ecologists also note that riverbank erosion, unlike flood seasons, entails permanent loss of land(Hazarika, 2019). The rigidity of digitizing land ownership data, as was recently witnessed during modernization efforts(Department of Information Technology, 2023), becomes a double-edged sword for erosion victims, whose lands exist on the computerized land registry but physically lie at the bottom of the Brahmaputra(Phukan, 2018)(Talukdar, 2020). Therefore, as much as the adoption of digital governance mitigates the challenge of intermediaries, it creates a new phenomenon of "algorithmic exclusion," whereby the most vulnerable people are unable to seek government support because of the strictness of digital verification requirements(Saikia, 2021).

Research Methods & Methodology

In this study, a qualitative and analytical method based on political economy methodology has been used.

• **Methodology Design:** An exploratory and descriptive research design will be adopted by the study to analyze the interconnections of state technology, local politics, and disaster displacement in Assam.

• **Data Sources:** This study is highly dependent upon secondary data sources, where data will be obtained from the government's policies, such as ASDMA annual reports, Mission Basundhara guidelines, and World Bank's assessments of institutional reforms in Assam Public Finance.

• **Literature Review:** A thorough and systematic literature review has been conducted from peer-reviewed journal articles, sociological works, and political economy on the issue of hydro-politics and digital India projects in Assam.

• **Analysis:** For data analysis, a political economy of rent-seeking and public value theory will be considered in this research. Comparative analysis will be conducted between intermediary and algorithmic distribution of disaster relief distribution in the past and present respectively.

Effects Of Digital Governance On Political Economy Of Aid

Movement from Patronage to Direct Monetary Transfer

The most important effect of digital governance in Assam's political economy has been its systematic undermining of patronage systems(Bose, 2019). Earlier, in post-flood situations, local elites played the role of mediators of state resources, allocating goods (such as rice, dal, and construction materials) to people loyal to them(Chaliha, 2020)(Pegu, 2021). This created a situation of political dependency where the rural poor depended on the favor of the local elite rather than on the privileges of citizenship(Majumdar, 2019)(Sarma, 2020).

The use of DBT through the Public Financial Management System (PFMS) has completely transformed the nature of this state-citizen relationship(Agarwal, 2021). The introduction of the PFMS through which bank accounts are linked to the database of Aadhaar means that now disaster relief payments are made directly into the beneficiary's account based on damage assessment reports(Kalita, 2021). Through this process of fiscal rationalization, the local intermediaries are deprived of the means to engage in rent-seeking activities(Biswas, 2022). It is important to note that this move toward digital governance has brought about centralization in welfare delivery, thereby making political credit accrue to the central and state executives rather than the local Panchayats(Datta, 2021)(Singh, 2021).

Land Records, Mission Basundhara, and Erosion Victims

While flood is about temporary inundation, riverbank erosion leads to the complete and permanent destruction of the geographical landscape(Hazarika P. &., 2022). Digitization of land records by means of digital initiatives such as Mission Basundhara seeks to establish an irrefutable registry of land ownership to minimize disputes and improve governance(Assam, Mission Basundhara: Standard operating procedures, 2022). Yet merging disaster aid with rigid digital land records poses serious issues in political economy terms for the char dwellers(Rahman, 2022).

Claiming digital rehabilitation money or agriculture compensation requires digital ownership of the land. However, since the geomorphological character of the Brahmaputra is ever-changing, old land records become obsolete, and the new sandbars emerging from river erosion do not have any cadastral survey(Dutta, 2019)(Lahiri, 2020). In an eroded village, the land ceases to exist, yet the digital record stays active. Victims have to pay land revenues for eroded lands merely to keep the digital patta alive and to avoid being listed as 'landless,' or even 'stateless,' under demographic and citizenship considerations(Mahanta, 2021). This shows how the digital infrastructure of the state fails in computationally recognizing moving land assets, thus making digital governance an instrument of punishment to victims of erosion.

The Digital Divide and New Forms of Exclusionary Errors

Whereas DBT removes "inclusionary errors" where fake beneficiaries get relief aid, it introduces "exclusionary errors" where the real beneficiaries do not receive any aid owing to technology issues(Medhi, 2023). Assam rural areas face a huge digital divide. During floods, there is a breakdown of electricity grids and the telecommunication network collapses, thus making the process of digital identification non-functional(Borah, E-governance and service delivery in Assam: An empirical study. , 2023). In addition, biometric error due to erosion of fingerprints in workers who are engaged in manual work and destruction of identity proofs through water further make it difficult

for the marginalized populations to access the DBT money when they need it most(Gupta S. &., 2020)(Khera, Dissent on Aadhaar: Big data meets big brother., 2019).

Limitations Of The Study

This research admits certain methodological and theoretical constraints, namely:

1.Dependence on Secondary Sources: The research is heavily dependent upon secondary data from academic literature, government sources, and policy papers but does not conduct any ethnographic field research, which could help achieve better qualitative insight into the lives of those affected by floods.

2. Fast Paced Technological Developments: Governance mechanisms in India are rapidly developing in terms of technology. Information on how successful localized portals like Mission Basundhara 2.0 are at the moment could differ greatly from what was found in this study.

3. Regional Specificity: Char areas of the Brahmaputra valley have very unique socio-political context, thus results related to erosion problems and digitization of land registry can not be generalized to other flood prone regions of India.

Suggestions / Recommendations:

To ensure the compatibility of digital governance with environmental and sociopolitical conditions of Assam, the following policy suggestions are made:

1. Dynamic Cadastral Mapping: In order to ensure that IDPs do not face marginalization in terms of welfare benefits, it is imperative that the State Revenue Department move beyond conventional forms of digital land record management and adopt satellite-driven dynamic GIS that keeps track of the status of land in the event of riverbank erosion.

2. Offline Mechanisms: To ensure the functioning of digital governance even when there is a disparity in Internet connectivity, especially during floods, the state needs to provide offline mechanisms where the beneficiaries can be paid through manual processes if biometric authentication does not work.

3. Separate Policy for Erosion: There needs to be separate policies concerning 'erosion' apart from 'flood'. Digital welfare schemes must have an algorithm that addresses the needs of IDPs who require resettlement rather than crop losses compensation.

Conclusion

In terms of integrating digital governance mechanisms within the disaster management structure of rural Assam, one can observe that it constitutes a revolutionary change in the political economy of the region. Through the adoption of the Digital Governance architecture, the state government has successfully managed to mitigate the issue of local rent-seeking, improve financial transparency and develop a direct, unmediated connection between the state and the vulnerable citizens.

However, the implementation of the technological framework is not without drawbacks. The rigidity and linearity of the architecture frequently contradicts with the chaos that prevails in the Brahmaputra basin. Moreover, the reliance on digital land records as means of disbursing relief excludes the victims of erosion from such services. Overall, while technology can effectively mitigate the issue of political patronage in disaster relief, equitable relief provision can only be ensured by adapting technological architectures to the ecological and socio-economic conditions of the population.

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Environmental Issues and Oppression of Women in Canadian Literature

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Abstract

The Handmaid's Tale is a dystopian novel set in a totalitarian theocracy in the former United States called the Republic of Gilead, where a drastically declining birth rate has led to the subjugation ofwomen, particularly fertile women known as 'handmaids', The novel follows Offred, a handmaid whose sole purpose is to bear children for the ruling class, and explores themes of women's rights, identity, resistance, and the dangers of extremist ideologies and environmental toxicity. The abstract often focuses on the extremegender roles, the oppressive surveillance, and the struggle for survival and freedom in a society where women are treated as property and stripped of their basic rights.

Introduction

The paper attempts to analyse the novel 'Handmaids tale' by Margaret Atwood which highlight environmental issues and oppression of women which aredeeply interconnected. The paper seeks to examine how environmental degradation and the oppression of women within patriarchal capitalist societies.

The novel draws a parallel between the female body and the natural world. The former being reduced to its reproductive function and the natural world being exploited and controlled by the state.

The dystopiannoveldepictsasocietyfacingasevere fertility cris is due to widespreadenvironmental pollution and radiation. Women are stripped of their rights and reduced instatus. At wood examines environmental degradation and the oppression of women within patriarchal capitalist societies in her novel Handmaids tale.

Women and nature have acloseresemblance. Both are life sustaining, resource giving and nurturing, but their role is often neglected in society. An ideal societyis based on co-operation and balance rather than dominance and hierarchy. Nature has become sterile because of human intervention, industrial development and technology. The greenhousegases and electronic wastes have caused sterility of nature. Similarly the society becomes sterile because of hostility of men and oppression of women.

The term ecofeminism was first coined by the French feminist Francoise d'Eaubonne in1974. Her aim was to lead an ecological revolution to save earth from destruction. Eco feminismequates the exploitation of women with the exploitation of nature. Eminent Eco feminists worth mentioning are Rosemary Radford Ruther, Yvonne Gerbera, Vandana Shiva, Susan Griffin, Alice Walker, Star Hawk, Greta Grad and Karen Warren.

The nation of Gilead is a totalitarian country featuring taming of females. The sad plight of the handmaids is depicted. They are used as machines to bear children for childless commanders. They are reducedto the role of mere reproductive beings. They cannot act feed or think independently.

The protagonist and narrator of The Handmaid's Tale is Offred, a fertile woman in the totalitarian Republic of Gilead who is forced to be a handmaid, or surrogate mother, for an elite couple. Her name is a title indicating she belongs to her Commander, Fred ("Of Fred").

The narrative follows Offred through flashbacks and recalls her life in Gilead's oppressive, patriarchal society. The story explores the themes of oppression, female subjugation, loss of agencyand resistance.In the new, oppressive society, women have no rights, and Offred is a victim of strict surveillance and social control, but she maintains her identity and memory through flashbacks to her past life.

Handmaids don't have any identity of their own. Their identity is merged with the commanders who impregnate them.Her life in Gilead is like a prison where she has toremaininconfinement. At wood presents a time less vision of sexual gender politics inafallen world.

Offred is a character caughtin world of oppression and regulation. She's to be reunited with her husband and children. Offred the protagonist is considered a reproductive being and is exploited to the maximum. The effects of environmental degradation are focussed in a totalitarian country.

In the republic of Gilead, men rape women and also destroy nature by the use of pesticides and nuclear accidents. Women are only reduced to their reproductive role and nature inGilead is seen as a justification for male sexual domination and female oppression.

Both women and nature suffer patriarchal domination. They are subdued, consumed, exploited dominated, controlled and tamed. Men's relationship with nature is similar to the master slaverole which is replicatedinmen's relationship with women. Women are merely

Bodies for men to be used and abused according to their whims. It seems as though society has taken ownership of their bodies especially the handmaids.

A transition is seen in the character of Offred the protagonist who realized that she is a victimized woman. She longs for her lover Nick, which shows that she identifies herself with nature. Her passivityis born because of the fear of herself and her lover. She realizes that she is a victimised woman which motivates her to subvert the fixed canons of Gilead.

Her language depicts the inner suffering and bitter experiences in Gilead. Her affair withNick and the underground network is meantfor rescuing women from oppression. Women hope to findharmony andequality by returning to naturefor its healing powers. Thus, although Gilead is horrible, the female friendship and closeness to nature is the greatest strength that they have in their hands to control the patriarchal and dualistic ideas.

A totalitarian regimeis observed in the nation of Gilead. The subjugationof womenand control over their bodies is seen. There is a restrictionin the freedom of women in theregime. Women are reduced to their biological functions and treated as property. Their bodies are defined by their roles as wives mothers and handmaids.

Offredthe protagonist suffers from identity crisis. Atwood uses nature imagery particularly of gardens and flowers to symbolise women's confinement and the irpotential for fertility andresistance. The well maintained gardens represent an artificial attempt to control and cultivate nature.

This domination of the handmaids is similar to the control exercised over nature. It can be seen that both women and nature are treated as commodities within the social and economic structure of Gilead.

Thus it is evident that in Gilead women suffer from identity crisis. Women are denied legal rights and are deprived of owning property. Women are treated as if they are owned by the state and they are required only for their reproductive capacity. In Gileadwomen arereduced to strict gender roles confining women to subordinate positions and are denied the right of expression.

Offred as sociatesher bodywith the Earth which reflect her body as territory that is subject to violation and control. Herinner thoughts and memories of the natural world provide akind of resistance against the total itarian regime.

At wood consistently explores the connection between the exploitation of nature and the oppression of women by patriarchal, technocratic societies in novels like Surfacing,The Edible Woman, and the Madd Addamtrilogy. In these works, nature serves as both a

literal setting and a powerful metaphor for female experience, self-discovery, and resistance.

Surfacing(1972), is often considered a seminal text in ecofeminist literature. The unnamed female protagonist's journeyinto the Canadian wilderness to find her missing father becomes a quest for her own lost identity and a reconnection with her 'natural self'. The pristine wilderness contrasts sharply with the encroaching 'Americanism' (representing industrialization and a destructive mindset) that is taming and scarring the landscape.

Theprotagonist rejects theoppressive citylife and maledomination. Hereventual 'surfacing' from the lake symbolizes a psychological and spiritual rebirth, aligning herself completely with nature (even shedding clothes and language to live in harmonywith the environment) as a form of resistance against a society that objectifies both women and the natural world.

Thenovel explicitlydraws parallels between the violation of the natural environment through pollution and industrial development and the psychological and physical violation of women by men.

Another work, The Edible Woman(1969) focuses on consumerism and the objectification of women within a modern, urban patriarchal society. The protagonist, Marian MacAlpin,begins to lose her ability to eat as a subconscious protest against the feeling that she, like food, is being 'consumed' and packaged for a patriarchal society, particularly by her fiancé, Peter.

The novel exposes how men and a consumerist culture "silentlyconsume women and nature" for personal fulfilment and profit. Marian's body, like an animal or product, is treated as a commodity, highlighting the shared objectification of the female body and natural resources.

TheMaddAddamTrilogy (Oryx and Crake, The Year of the Flood, Madd Addam) is a speculative fiction trilogy which explores a post-apocalyptic world brought about by unchecked scientific exploitation and environmental degradation.

The novels depict the ultimate consequences of treating nature as a limitless resource for human manipulation. Environmental collapse and engineered plagues lead to the downfall of human civilization, highlighting the dangers Atwood consistently warns against.

In the world of the 'Corpses' both human and animal life are genetically engineered and commoditized (e.g., 'Pigoons,' 'Crakers,' engineered human organs). This reflects the same ideology that reduces women to their reproductive functions in The Handmaid's Tale. Both nature and the female body are resources to be controlled and exploited by the technocratic elite.

The survivors, particularly the 'God's Gardeners' environmental group, live close to nature and attempt to build a more sustainable existence suggesting that a harmonious relationship with the natural world is essential for human survival and an alternative to the destructive patriarchal system.

Atwood addresses environmental issues through her literature and activism, focusing on the impactsofclimatechange,pollution,and ecological collapse.She high lights the link between environmental survival and human survival, criticizing 'shallow environmentalism' and warning about the potential for social breakdown and a world where human-centric power structures are unsustainable.

Her work, such as the MaddAddam trilogy explores these themes by depicting eco-dystopian futures shaped by unchecked biotechnology, resource depletion and a distorted relationship between humans and nature.

Some key environmental themes can be seen in her work. They are ecological collapse, plastic pollution, human-nature relationship, social consequences and eminist environmentalism. Her novels in the MaddAddam trilogy explore the consequences ofclimate change and ecological destruction, portraying futures where environmental collapseis intertwined with social and political breakdown.

She has explicitly addressed the problem of plastic waste, referring to our current era as the 'Plasticene' and highlighting its destructive potential. One of the biggest changes humans have made is inventing and using plastic, which has now become a

major pollutant. Because plastic is now found everywhere, some scientists, like us, think we have entered a new stage in Earth's history called the Plasticene.

Her work critiques the human tendency to exploit nature and the conflicting relationship between technology and the natural world. Her eco-dystopian visions often show how environmental degradation leads to social collapse, the rise of warlords, and the breakdownof established systems.

Furthermore, she connects environmental issues to gender noting how climate change disproportionately affects women who are often the primary food producers and caretakers. She also critiques how women's voices are often excluded from top-level discussions on climate change. She is critical of 'shallow environmentalism' which she believes seeks technological fixes without addressing the root causes of environmental problems

She argues that literature, and indeed human existence, is dependent on a healthy environment, stating 'If we didn't have the environment – the air we breathe, the water we drink,thefood weeat– therewouldn't beanyliteratureatallbecauseweourselveswouldnot exist. She sees environmental crisis as a fundamental issue that transcends political divides affecting all of humanity.

She has explained that she is against the abuse of belief by extremist regimes to control people, noting that this desire for power is a common human trait. Both religious and atheist regimes have been totalitarian throughout history.

The fictional Republic of Gilead was inspired by a range of historical events and regimes.The 17th century American puritanism was the primary structural foundation of Gilead with its roots in New England theocracy. The Islamic Revolution in Iran was also a contributing influence. It saw the establishment of a theocracy that drastically reduced women's rights showing how quickly an established order can collapse.

Inspiration also came from regimes in Argentina where children were taken from dissidents and the Soviet Union, among others.

Atwood describes her work as 'speculative fiction' meaning everything in it has a precedent in history or real life, designed as a cautionary tale about societal complacency regarding human and women's rights. She aimed to show how such a takeover 'might play out' in the United States, which had a history of rigid Puritanical beliefs.

Atwood's focus is on universal themes of human rights, power dynamics and the dangers of extremism in any form. Her ideology is a complex blend of feminist, environmentalist and nationalistconcerns. Herworkisfundamentallydrivenbyconcernsabout socialjusticerather than adherence to a single, narrow doctrine.

Her writing consistently explores the constraints society places on women, the female bodyas a site of political and sexual control and the need for women to achieve equality and autonomy. She defines feminism as a 'belief in the rights of women' and advocates for a world where men and women are equals. She is critical of patriarchal ideology and the ways in which women aresocialized into victim roles, whilealso acknowledgingthecomplexityof female relationships and the potential for women to be 'creative non-victims'.

A deep concern for the environment and the relationship between humanity and nature is present in many of her works, notably Surfacing and the MaddAddam trilogy. She highlights the destructive potential of consumerism and technology using environmental degradation as a metaphor for the violation of women.

Atwood has contributed significantly to the theorizing of Canadian identity, which she characterizes by a 'survival' theme and a 'victor/victim' dynamic, often with Canada in the victim position relative to more dominant cultures like the United States. This postcolonial perspective often links the oppression of women to the cultural and economic occupation of Canada.

Her works often serve as a commentary on contemporary social and political trends, particularly totalitarianism and the fragility of democratic institutions.

A recurring motif in her work is the idea that

one must refuse to be a victim to survive. Her protagonists often move from a state of silent victimization to self-awareness and self-realization, finding their voice and agency.

While critics have applied other lenses to her work, including Marxist, post-colonial, and psychoanalyticapproaches, Atwood generallyresists specificliterarylabels, preferringto call manyofher futuristicworks'speculative fiction' based on real-world possibilitiesratherthan pure science fiction or a strict ideological blueprint.

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Implementation of the Four-Year Undergraduate Programme (FYUGP) in Assam

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Abstract

India has implemented the National Education Policy (NEP) 2020 with the view of transformingits higher education system, aligning with the global standards and strengthening the nation's transition toward a knowledge-based economy. The policy aimed at revamping the system into a flexible,multidisciplinary, and research-oriented one with greater academic and institutional autonomy.A key reform of the system under the NEP 2020 is the introduction of theFYUGP across states. In Assam, it was introduced in the academic year 2023–24. It incorporates a flexible curriculum structure enriched with skill-based, value-addedand inter-disciplinarycourses,includingprovision formultiple entry and exit.Its Academic Bank of Credits (ABC) facilitates academic mobility and uninterrupted learning. Basing on secondary sources of information and applying qualitative technique, this paper attempts to investigate prospects of the programme and challenges of its implementation.We foundthat the FYUGP implementation in Assam faces significant structural and institutional challenges.Our study underscores inadequate infrastructure, shortage of qualified teachers, financial constraints, and governance inefficiencies as key hindrance of effective implementation of the programme. Furthermore,freezing of teacher recruitment,restrictions on appointment of contractual teachers in colleges of Assam, including partial as well as delays in reimbursement of student fees under government's schemes have aggravated the challenges. These challenges are more pronounced in rural and socio-economically disadvantaged regions with scarce institution for higher education.We argue that despite the potentiality of the FYUGP to reform higher education significantly, the programme would remain unsuccessful unless the critical infrastructural, financial and administrative gaps are addressed.

Keywords: NEP, FYUGP, Higher Education, Multidisciplinary, Autonomous

Introduction

Development literaturesignifies that higher education plays a crucial role in societal development. It significantly contributes to the intellectual growth of individuals with advanced knowledge and skills, and prepares them for meaningful careers, valued civic and independent life. By enlightening them on various aspects of life, higher education makes people more capable of meaningful and constructive participation in social life(Das et al., 2023). Moreover, by supporting the creation of skilled human resources, fostering innovation, and enhancing productivity, higher education contributes to long-term economic growth with sustainable livelihood (Yadab and Yadab, 2023).Quality higher education is, thus, crucial for national progress and human wellbeing.

In developing countries like India, higher education serves as a key driver of the transformation of nations towards knowledge-based economy. Studies highlight that universities or colleges play a multifaceted role in this regard by producing skilled workforce, advancing research, fostering critical thinking, and promoting civic engagement. These all are essential pillars of a knowledge economy (ibid). As India progresses towards becoming a knowledge society, a growing number of young people aspire to pursue higher education (Government of India, 2020). Indian universities or colleges are therefore urgently required to play a proactive role in meeting the requirements of a knowledge-based society with global standard and competitiveness.

However, studies on Indian higher education highlightmany structural and institutional challenges. Researchers have pointed out that the system of Indian higher education remains highly fragmented and regulated by multiple bodies having no well connections to institutions, adversely affecting itsefficiency (Chattopadhyay, 2020; Venkateshwarlu, 2021). It is argued that the rigid and outdated curriculumof higher education limit development of cognitive skill and learning outcomes(Bhandarkar, 2025). Furthermore, the early specialization and strict disciplinary separationshave been obstruction of interdisciplinary learning and innovation, suggesting narrow pathwaysfor learners(Government of India, 2020 &Gaurav, 2026). Unequal access to higher education also remains as a serious issue of concern, especially in socio-economically disadvantaged and rural areas, where there has still been dearth of institutions for higher education(Upadhyay, 2025). Governance structures with ineffective administration and bureaucratic inefficiencies alsolead to an ineffective regulation and functioning of higher education (Priyanka, 2024).For example,the prevalence of large number of institutions or colleges affiliating to universities leads to low academic standard and reduced quality of education (Government of India, 2020).Suchlimited institutional and teacher autonomy coupled with insufficient research fundings have been shown as some of the principal causes for the slow progression in merit-based career and limited improvement in teachers' quality, which in turn affects desirable educational outcomes (Deb & Lal, 2026).Expansion ofinstitutions for quality higher education with greater operational and administrative autonomy to the extend to accessible for all is imperative for sustaining long-term economic growth and enhancing global competitiveness in our country.Growing demand for higher education necessitates a modern and adaptive education system matching global standards and fulfilling the presentrequirements of nation. The NEP 2020 was implemented with the objective of providing quality higher educationrequired in modern era.

Methodology

This study is based on secondary source of information and uses descriptive and analytical research method. Information isgathered consulting government reports, policy documents, and relevant literature. Gathered information is analysed in detailedto contextualise findings and provide a holistic evaluation of the prospects and challenges ofthe FYUGP implementation in Assam. We believe that our study acts as base for further empirical research on various aspects of the NEP.

Implementation of the FYUGP

The National Education Policy (NEP) 2020 is implemented, after 34 years from the year of last revision of the NEP in 1986,with a view of comprehensive transformation of India's higher education system by emphasizing multidisciplinary learning, institutional autonomy, research development, and streamlined governance (Yenugu, 2022). The policy envisions restructuring institutions into large multidisciplinary universities, promoting flexible undergraduate education, and enhancing student experiences through curriculum and pedagogical reforms. Additionally, the NEP 2020 focuses on improving access, equity, and inclusion through digital education, scholarships, and support for disadvantaged groups.

Features of NEP 2020

The NEP 2020 recommends to establish a simplified, transparent, and efficient regulatory framework for higher education. It proposes the creation of a single regulatory body, excluding legal and medical education. Accordingly, the Higher Education Commission of India (HECI) is proposed to be established as a single regulatory authority, uniting the present multiple regulatory authorities such as the National Higher Education Regulatory Council (NHERC), National Assessment and Accreditation Council (NAAC), Higher Education Grants Council (HEGC), and General Education Council (GEC). Furthermore, it proposes the creation of a National Research Foundation (NRF) to provide funds and support institutions inpromoting research and innovation (Umachagi&Tejashwini, 2023).

The NEP 2020 emphasises transition of higher education toward multidisciplinary one. Universities or colleges are expected to evolve into large multidisciplinary institutions with a minimum of 3,000 enrolment in each by 2040 with expectation of significant progress by 2030 (Priyanka, 2024). These institutions may specialize either in teaching or

research, while maintaining a broad academic framework. Furthermore, colleges are given flexibility to either become autonomous institutions or remain as a constituent college of university. An autonomous college has independent authority to decide or design its curriculum and syllabus,determine evaluation method, and awarddegree to its graduates.Additionally, such institutions enjoy greater academic, administrative, and financial autonomy. However, a constituent college is required to follow the curriculum prescribed by university, while examinations, evaluation procedures, and the award of degree are conducted in accordance with the regulations framed by university. Besides expected increase in gross enrolment ratio in higher educational institutions due the structural reform, the NEP 2020 is expected to transform those into capable of producing employable skilled graduates required to meet the demand for labour evolving in contemporary labour market.

The NEP 2020 promotes a holistic approach to education, shifting from the traditional teacher-centric approach to student-centric one. The new approach allows students to choose subjects of their interest, irrespective of disciplines to encourage multidisciplinary learning. It also emphasises on skill development and research exposure of learners from the undergraduate level (Yenugu, 2022). Moreover, the Academic Bank of Credits (ABC) incorporated in the new policy provides students with freedom for multiple entry and exit, enabling them to complete degrees at their own pace. Additionally, it strengthens digital learning through the expansion of online platforms and the digitization of libraries (Narkhede, et al., 2025). Presence of counselling centres in HEIs is also pressed/emphasised by the policy to supporting mental well-being of learners.

Benefits of NEP 2020

The NEP 2020 is expected to significantly improve the quality and global competitiveness of India's education system. It aims to bridge existing gaps, promote innovation, and support the development of skilled human resources. Under this framework the institutions for higher education are granted withgreater autonomy in student enrolment, teacher appointment, curriculum framing, and research and innovations. Additionally, the policy sets and targets to achieve goalsaligning with the United Nations Sustainable Development Goals (SDGs).It also makes provisions for equalaccess to higher education for all sections of the society. It proposesthe provisions for teacher training to enhance quality of teachers. The policy encourages research at both undergraduate and postgraduate levels, supported by funding from the National Research Foundation. It also promotes online and distance learning, which is expected to improve access and increase GER.Finally, Indian institutions are now allowed to collaborate freely with foreign universities, enabling global exposure and academic exchange.

FYUGP in Assam

Like the other states, Assam introduced the Four-Year Undergraduate Programme (FYUGP) in the academic year 2023–24, emphasising both academic and administrative flexibility. National Assessment and Accreditation Council(NAAC) accredited colleges are encouraged to opt for autonomous degree colleges. As of now a total number of 24 collegeshave already been converted toautonomous degree collegein the state of Assam. All colleges in Assam are now required to offer four years courses to the students who are eligible and willing to pursue the fourth-year courses. The FYUGP in Assam incorporates a flexible curriculum structure enriched with skill-based, value-added and inter-disciplinary courses, and the provision for multiple entry and exit. Ensuring academic flexibility,it allows students to choose major and minor subjects across streams, such as combining arts with commerce or science. Furthermore, skill enhancement, inter-disciplinary and value-added courses are made compulsory components of the FYUGP. The credits earned by the students from the courses are stored in Academic Bank of Credits (ABC)which can betransferred across institutions, enabling mobility and lifelong learning. Students having left their studies prior to completion of the courses can rejoin the same from where they left out with their preserved credits. However, such students have to complete the course within a maximum period of seven years from registration date. As per the norms, a student who exits after completing the first year (two semesters) is awarded an undergraduate certificate, while leaving after two years (four semesters) leads to a diploma. Students,those who complete three years

courses with no backlog, are awarded graduate degree and they earn eligibility for admission into post graduate courses in universities.On the other end, students completing four-yearprogrammewith a minimum 75 percent marks or equivalent CGPA are awarded degree with honours or honours with research. Such students can join directly the research programme with one year PG course in universities. The FYUGP is, therefore, particularly beneficial for those aiming for research, or higher education.Furthermore, students completing a three-year degree need two years to finish a master's programme, whereas those completing the four-year honours or research degree require only one additional year, making the total duration of a master degree coursefor five years in both pathways.

Challenges in implementation of the programme in Assam

In Assam, it has been four years since the implementation of the Four-Year Undergraduate Programme (FYUGP) in colleges or universities. Under this framework, the colleges are required to introduce the fourth-year courses from this current academic year. This would lead to addition of another students' batch to existing ones,resulting in a significant increase in student enrolment across colleges. This increase in student enrolmentnecessitates adequate infrastructural support, including the provision of adequate classrooms, well-equipped and standardised laboratories for science students, and libraries stocked with adequate course-related books.Most importantly,qualified teachersare required to be appointed to deal with additional workloads arise due to implementation of the fourth-year course.Without these essential supports, the successful execution of the programme remains a challenge.

It is worth mentioning here that the teacher appointment in provincialised colleges of Assam has remained frozen for the past several years, resulting in an acute shortage of teachers and resultant adverse effect on the effective curriculum delivery.Collegeshave been compelled to be dependent on contractual or visiting faculty, leading to substantial financial burdens due to honorarium payments to them. Moreover, a recent restrictionon the engagement of contractual teachers in provincialised colleges vide letter eCF No. 778434/2026/3 dated 17th March, 2026,notified by the Assam's Higher Education Department has intensified the crisis.It also needs to mention here that a large number of students from Below Poverty Line (BPL) households enrolled in colleges under the government's free-ship scheme. It is alleged on several occasions that the Government of Assam does not reimburse their admission fees in a timely manner, and the partial amount due is being paid in many cases. This also leads to critical concern relating to the financial sustainability of colleges. The introduction of fourth-year courses with no corresponding infrastructural expansion and improvement of faculty strength has further exacerbated this problem.Addressing such gapsin infrastructure, faculty recruitment, and financial support is, therefore, imperative for successful implementation of the FYUGP and subsequent achievement of the NEP's broader objective.

Conclusion

The NEP 2020 represents a transformative vision for Indian higher education. It aims to create a dynamic and globally competitive higher education system through multidisciplinary approach andby promoting research excellenceand integrating technologyin teaching-learning process. Its institutionalrestructures into Research-Intensive, Teaching-Intensive, and Autonomous Degree-Granting Colleges reflects a strategic effort to achieve the goalof the new policy. While the policy offers significant opportunities for educational advancement, its success depends on effective implementation, adequate funding, and continuous stakeholder engagement. If implemented successfully, the NEP 2020 has the potential to reshape India's higher education landscape and contribute significantly to national development, innovation, and social progress.

However, the realization of these noble goals is dependent on effective execution of the programme at the institutional level. Evidence from recent studies exhibitschallenges being faced by institutions in implementation of the programme, such as inadequate infrastructure, shortage of qualified faculty, financial constraints, and governance inefficiencies, hindering the successful execution of the reforms. In the context of Assam, the FYUGP introduction with no corresponding improvements in physical and academic resources risks compromising the quality and

inclusiveness of higher education. Several issues like delayed financial reimbursements, freezing on faculty appointment, and increased dependence on contractual staff further intensify institutional vulnerabilities. Addressing these gaps is essential not only for ensuring equitable access and quality education but also for achieving the broader national goal of building a competitive, knowledge-driven society. A coordinated effort between government, institutions, and stakeholders is thus imperative to translate the vision of NEP 2020 into tangible outcomes.

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Anti-Colonial Struggleamong The *Zeliangrong:* With Special Reference To The Zeme Nagas In North Cachar Hills

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Abstract

This paper studies the historical background of the Zeme Naga community and their encounter with the colonial administration. Among the three kindred tribes of the *Zeliangrong*. the Zeme Naga tribe are mostly found in North Cachar Hills district of Assam, presently renamed as Dima Hasao.The Zeme Naga community claimed that they are the first inhabitant of North Cachar Hills and had settled down in the Borail ranges since the 13th Century. The colonial reports mentioned that the inhabitants of the hill tract namely the Kutcha Naga or Arung Naga, Kuki and Cachari were constantly 'in terror of attacks' from the Angami raids. In 1854 the whole of North Cachar Hills came under the British rule but the tribal raids were in constant threat to their territory. The hill people were always in war against each other and among them the most common was the incursions of the Angamee Nagas therefore, the administration invited Welsh missionaries to promote stability through religious and cultural influence. These missionaries worked extensively among the Zeme people and among the other tribes as well but inspite of the multiple endeavours made by the missionaries, the Zeme Naga especially are still inclined to the revived form of their traditional religion, i.e. *Heraka* and hadinitiated a revival movement under the leadership of Jadonang and Rani Guidiliu. No doubt the movement had started in Manipur but the repercussion was witnessed much in North Cachar Hills and even till date, a great number of *Heraka* followers are still present in the district. The objective of the paper is to explores the circumstances leading to the Zeme Nagas' resistance against the colonial rule and Christian evangelism in North Cachar Hills with the help of both primary and secondary sources.

Keywords: Zeme Naga, colonial rule, missionary endeavours, resistance, revival movement.

Introduction

The word 'Zeme' means 'zemena' or 'nziena', which means people living in the hot and humid climate. The origin of the word might have derived during their settlement in the Andaman archipelago south west of Mayanmar, where the climate is warm and humid.(Elu (ed), 2012, p:4)Whereas Dr. S.T. Das mentioned that the word Zeme denoted to the dwellers of the southern or the plain regions to the Naga Hills and called themselves as 'Nzieme' (Das, 2006, p:110)The three Kindered tribes of the Naga namely, Zeme, Liangmei and Rongmei are together known as *Zeliangrong*. In Manipur, the Zeme and Longmei Nagas together are known as Kacha Naga and in Nagaland these two kindered tribes are known as *Zeliang*.(Bordoloi, 1988, p: 108)

The Zeme claimed that they are the first inhabitant of North Cachar Hills and settle down in the Borail ranges since of the 13th Century. North Cachar Hills was known to them as the land belonging to *Kechingpethka,* the eldest son of the family. The Zeme believed that the name of the Borail ranges was also derived from the word *Kechingpethka,* which means elder or'boro' in Hindi. However, during the 16th century the Angami Naga migrated to the Borail ranges and the Zeme Naga enable to encounter them moved downward and eastward beyond the Borail ranges.(Das, 2006, p:110) The colonial reports also mentioned that the inhabitants of the hill tract namely the Kutcha Naga or Arung Naga, Kuki and Cachari

were constantly 'in terror of attacks' from the Angami raids.(Foreign Department, 1881, p:2)

In 1854, the whole of North Cachar Hills came under the British rule and was placed in charge of a separate officer with its headquarters at Asalu.(Home Department (Police),1880, Nos.: 42-44) It was the duty of the officer to maintain harmony among the Kukis and Kachcha Nagas living in the neighbourhood, and to safeguard them against the Angami Nagas to the east, who were constantly making raids into the British jurisdiction and that held by Tularam. (Report, 1984, p: 43) With these advantages, the Christian missionaries along with the government patronage propagated their evangelization work in full dimension resulting to increase in the number of conversions of the indigenous tribes.Major John Butler, Principal Assistant Agent to the Governor General North Eastern Frontier of Assam was placed in charge of the Hill tribes subject to the political Agent of Upper Assam and during his expedition in North Cachar Hills, he wrote about the Zeme Naga of Hosang-Hajoo village. According to Major Butler a schoolmaster was stationed in the village to teach and preach the Bible in order to change the habits and ideas of the tribe. (Butler, 1855, pp: 66, 67)

The missionaries worked extensively among the Zeme people and among the other tribes as well: they developed a written form of the local dialect, produced books in indigenous languages, translated the Bible, introduced Western education, and provided Western medical services. However, the missionaries could not make any inroad into the belief system of certain tribes such as Dimasa, Zeme Naga and Karbi. Thus, this article is an attempt to study firstly, why inspite of the multiple endeavours made by the missionaries. the Zeme Naga especially are still inclined to the revived form of their traditional religion, i.e. *Heraka* and secondly, what were the circumstances that lead to the Zeme Nagas' resistance against the colonial rule and Christian evangelism in North Cachar Hills.

Missionary Endeavours :

As the district was 'a land of many tribes' as described by John Hughes Morries which included the Cacharis, Zeme Nagas, Hmars, Thadaos, Khasis, Mikirs and many other minor tribes who spoke in their own languages; it was necessary that the missionary stationed there should be well conversed with several languages, especially Bengali which was the court language at that period.Rev. D. Merfyn Jones (1955-61) was mastered with the Zeme Naga language and he formed a team of five members: two Naga ministers, Mirei Lungba and Semion Johan son of Mirei, and Kwingambe Kuame, who had received college training. Merfyn Jones laid the foundation with Kwingambe and two Gospel John and Luke were translated to the Zeme language, but the project came to an end when the missionary returned to Wales in August 1960. Because of Rev. Merfyn Jones the Zeme Nagas obtained their written literature therefore he could be regarded as the "Father of Zeme Nagas language".(Rees, 2003, pp-83,84)

Beside Rev. D. Merfn Jones, two female missionaries namely Miss Sybil Roberts and Miss Gwen Catherine Evans had tremendously worked among the Zeme Naga tribes. Miss Sybil Roberts (1951-52) was a missionary in the plains and hills of Cachar. In the end of June 1951, she went to Haflong where she taught English and hand work to the upper classes in the Middle Schoolfor three months. She worked among the Zeme Nagas and she reported that during that period there were over 8,000 of the Zeme Naga tribe and out of that 600 were Christians. There were two Christian workers; one evangelist and one ordained minister. They did not have any literature of their own; and only the portion of the Gospel of St. Mark was translated and about a hundred of hymns were been published in their tongue. She also reported that the Zeme tribe was the most illiterate tribe on the Cachar Hills. (Vanlalchhunga, 2003, p-479) In 1952 when Rev. and Mrs. William Morgan went to Shillong for their holidays, Miss Roberts was the only missionary to look after the mission field in the Cachar Hills. She was very much concerned for the Nagas and that year she witnessed great awakening among the Nagas. She used to hold a Bible class every morning for the Naga Hostel Boys and also a Naga class in the Sunday school, where the whole family attended in the same class. She visited a Naga house weekly for bible meeting

which greatly helped them in reading the Bible. She was very much anxious for them that she wrote, 'The Nagas, even more than any other tribe on these hills, need the light from heaven to disperse their great darkness'. (Vanlalchhunga, 2003, p-488)

In 1961 Miss Gwen Catherine Evans (1960-61) left Durtlang for Haflong to work mainly among the Zeme Nagas and also at the same time to care for the girls' hostel. She remained there for two years.(Rees, 2003)During her stay in Hafong, famine occurred when the road and rail were closed for three weeks,the district was totally cut off from the outside world and then the mission with the assistance from the World Council of Churches distributed food to the people.(Bhattacharjee, 1995, p-177)

Thus, the Welsh missionaries had indeed contributed a lot for the development of the indigenous people of North Cachar Hills especially the Zeme Nagas with the introduction of English education, providing medical assistance and in the meantime providing health education and sanitation. And their effort had greatly affected their socio-political structure and beliefs many tribes of the Hills. However, some of the tribes, especially, the Zeme Naga regarded Christianity and the missionary endeavours as a grave threat to their traditional beliefs.

Miss Bower and the Zeme Nagas

During the Second World War when India also in the grip of war and while the Japanese troops were approaching North Cachar Hills, the British in order to get the support of the local people employed Miss Ursula Graham Bower, one of the pioneer anthropologist in the Naga Hills between 1937 and 1946, thus she who was a much talked about person in the hills during the war. She stayed at Laisong for a long time and befriended herself with the tribal people around the place. At that time particularly at the closing year of the war, the fear of the Japanese invasion was very much ripe and the Army Contingent stationed at Haflong had needed information. Miss Bower had developed a good rapport with the Naga villagers of Laisong area. Though Miss Bower's work was more voluntary, it had a purpose to serve. The purpose was to influence the Naga population to gain their support against the Japanese, who was alleged of being weaned away from the anti-British forces generated through the Japanese incursions. (Bhattacharjee, T. (Ed), 1995, pp:171-172)

However, when the war was approaching and the activities of Indian freedom movement were spread in all dimensions in the Surma and Brahmaputra valleys, while evangelization of Christianity was at its peak and the Naga freedom was set in danger, Jadonang emerged as a claimed 'Messiah' for the Nagas. Jadonang Malangmei or popularly known as Haipou Jadonang was a Naga spiritual leader and political activist from Manipur. The news spread like wild-fire and people went ten days' journey to pay him homage. He was against the British government as he felt that it was menace to the animistic society where the authority of tribal law and custom was inevitably breaking down in the increasing urbanised authority with the spread of Christianity.(Yonuo, 1982, pp: 39-40)

Revival Movement

Religious revival movement took place among the Zeme Nagas under the leadership of Jadonang and Gaidinliu in 1927. (Newme, 1974, p:4) They introduced *Heraka* religion which they believed to be the revived form of their traditional religion. The word *Heraka* simply means 'pure' and it testified the pureness of the religion and its believers as pure men. The believers believed that Tingwang (God) had sent Gaidinliu to revive the traditional religion and in their last pilgrimage at Bhubon Cave had revealed to them the truthfulness and pureness of the religion. (Newme, 2002, p:4) Yonuo stated that "She was painful, bitter and unhappy to see that her Naga people were being ruled by the foreigners, and the Christianized Nagas had drifted away from their own Animism and adopted an alien religion." (Yonuo, 1982, p:85) The philosophy of *Heraka* appears to be deeply incorporated with the political ideology of alienating the British rule in India and to safeguard their sovereignty.(Elu, 2012, p:118) Gaidinliu was worshipped and regarded as the only Messiah sent by God to protect their traditional religion from foreign rule and as such from Christianity.(Yonuo, 1982, p:87)

Thus, the movement was primarily anti-British since it aimed at establishing 'Zeliangrong kingdom' in place of British rule. It was also partly anti- Christian because it wanted to revive their traditional religion which was threatened by Christianity. (Dena, 1988, p:102) The British government of India was quick to see all these developments as a great danger to their imperialism and colonialism, and therefore was determined to put the movement to an end before it encompassed all Nagas to fight against the British.(Yonuo, 1982, p:89) However Rev. J. H. Harries, in his report in 1932 stated that Jadonang was convicted and given death penalty for the death of three Manipuri traders, who were killed on his instigation for sacrifices. After his death, the government was again in search of Gaidinliu, who was hiding in some of our villages and had so far eluded them. "....She was ultimately declared as a 'wanted' woman on a charge of murder, and a warrant was served for her arrest and to put her under trial...Above all, the Government also blasphemed that Gaidinliu was the priestess of a heinous cult, worshipping the devils, practising human sacrifices and holding blood feasts." (Yonuo, 1982, p:89)

The Government took major measures to stamp out the movement with its human sacrifices and anti-British ideology. (The Treasury, 1932, p: 27) "The name of Gaidinliu became a great symbol of the national fight or revolt against a foreign rule and control...However in the years following, the movement slowly withered away and there was a decrease in the Christian persecution of the Animist Nagas, and Christianity had spread its influence in the area far and wide."(Yonuo, 1982, p:110)

Conclusion

As a result,inspite of the missionary endeavours, the Zeme Naga till date are deeply inclined to their traditional religion. No doubt, some of them had converted to Christianity but still *Heraka* religion is deeply rooted among the tribe. When the Christian missionaries had preached Christianity in the region, the Zeme tribe was in the peak of reviving their traditional religion. The census report also shows that the percentage of Christianity had increased tremendously but the increase was negligible as compared to the total population of the district. Therefore, we can conclude that the missionary endeavours in North Cachar Hills was not successful to that extend as compare to their other mission fields. However, they indeed introduce a new religion in the region and it was a life changing experience for many people.

The main reason for mass conversion among other tribes of the district was due to some affinity between the Christian concept of God and the indigenous belief system. The concept of God was there among the tribes from time immemorial which was link up by the missionaries with their belief. Since their concept of God coincided with the missionary belief system, the tribes were easily convinced resulting to mass conversion. However, among the Zeme Nagas the revival movement was started by Rani Guidiliu and had greatly influenced the people resulting to the revival of the traditional religion called *Heraka.*Though the movement had started in Manipur but the repercussion of the movement was much felt in North Cachar Hills due to which till date a large number of *Heraka* followers are practicing and preserving their tradition and culture with great pride.

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NEP and Indian Knowledge System(IKS)- A Glimpse

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Abstract

The NEP,2020 marks a significant shift in India's approach to education by emphasizing the integration of Indian Knowledge System. Main objective of NEP is the integration and revitalization of the Indian Education System, aiming to restore and promote traditional knowledge. NEP aims to target the Indian Knowledge System, examining its objectives, strategies, potential impact and challenges. NEP envisions an education system rooted in Indian ethos that contribute directly to transforming India sustainably into an equitable and vibrant knowledge society by providing high quality education to all.

The rich heritage of ancient and eternal Indian knowledge and thought has been a guiding light for NEP. It fosters the creation of language resources to facilitate Indian Knowledge System as it recognizes the importance for disseminating indegeneous Knowledge.

Keywords: *Envisions, Vibrant, Fosters, Facilitate, Disseminating*

Introduction

Education is a powerful catalyst for personal growth and societal progress. Recognizing the need for comprehensive reforms, the Indian Government introduced the National Education Policy in 2020 aiming to transform the education system to meet the demands of the 21st century. It was laid out by the Union Cabinet on July 29,2020. NEP outlines the vision of the new education system in India. Main objective of the NEP is the integration and revitalization of the Indian Education System, aiming to restore and promote traditional Knowledge.

The NEP, 2020 marks a significant shift in India's approach to education by emphasizing the integration of Indian Knowledge System. It has emphasized that Indian Knowledge System will be part of curriculum and will be incorporated scientifically. NEP is founded on five pillars of Access, Equity, Quality, Affordability and Accountability. According to NEP, 2020, education is becoming multi-disciplinary. It foresees the flexibility of a student to choose their career path based on their interests, also places ample emphasis on job-oriented courses.

Aim of the study

This study aims to make it understand how NEP aims to target the Indian Knowledge System examining its objectives, strategies, potential impact and challenges. It aims to make the teachers grounded in Indian values, language, knowledge, ethos and traditions including tribal traditions.

Source of study:

Study materials have been collected from secondary sources such as books, journals and internet domain.

Analysis of the study

NEP is a philosophy to realise the full human potential of India's demography, drive a culture of innovation and entrepreneurship as envisioned by P.M. Narendra Modi with the ethos of "Vasudhaiva Kutumbakam". It is aimed at decolonizing education and achieving aspiration, creating pride in our language, culture, knowledge and thought. NEP envisions an education system rooted in Indian ethos that contribute directly to transforming India, sustainably into an equitable and vibrant knowledge society by providing high quality education to all. The Indian Knowledge System is promoted by the IKS cell, a division of the Ministry of Education, New Delhi. It is a collective

range of Indian knowledge that has exhibited in systematized ways of knowing about the evolving system of Education. IKS is introduced at all levels of education from primary to higher education.

It is indeed becoming critical that children more importantly have to learn about the quickly changing employment landscape. Education thus must move towards less content and more towards learning about how to think critically and solve problem, how to be creative andinnovate, adapt and absorb new material in changing field. The introduction of NEP in higher education focuses on multi-disciplinary and flexible curricula allowing students to choose subjects across streams, has been praised. These flexibilities are seen as steps towards fostering creativity and critical thinking, allowing students to pursue diverse interests. It will foster growth and understanding of rich and diverse indegeneous knowledge among stakeholders and rejuvenate tradition and knowledge with the help of modern technology.

The NEP emphasizes a holistic and skill-based education, shifting focus from rote learning to a broader learning experience. It seeks to create individual with better employment skills. The NEP encourages the Internationalization of Indian Institutions allowingtop foreign universities to operate in Indian and promote exchange programs, which is viewed as a step towards raisings the global standards of Indian higher education. One of the major targets of NEP is at least one university in or near every district will be established.

This policy proposes the revision and revamping of all aspects of the education structure to create a new system that is aligned with the aspirational goals of the 21st century. NEP, 2020 lays out clear guidelines and a road map for adoption of vocational education and practical training in the regular academic curiculum. The vision of the policy is to instill among the learners, a deep-rooted pride in being Indian in spirit,intellect and deed. As a part of holistic education, students at all higher educational institution will be provided with opportunities for internships with local industry, artists etc as well as research internships with faculty and researchers at their own so that students may actively engaged with the practical side of their learning. An academic bank of credit shall be established which would digitally store the academic credits earned from various recognizedhigher educational institutions. India's education sector is seeing changes increasing internet penetration and smart device adoption, coupled with a growing demand for, quality education. For achieving the goals of NEP,2020 activities have been undertaken by the Ministry, regulatory bodies like UGC, AICTE and HEIS.

Guidelines for incorporating Indian Knowledge in higher education curricula has been issued on 13-06-2023. It emphasizes on the promotion of Indian languages, arts and culture and tries to remove discontinuity in the flow of Indian Knowledge System by integrating IKS into curriculum at all levels of education. It prescribes that every student enrolled in a UG or PG programme should be encouraged to take credit courses in IKS in all to at least five percent of the total mandated credits. The medium of instruction for the IKS courses could be any of the Indian languages.

From the ancient Vedic concepts related to astronomy to the ancient Indian system of plastic surgery, UG and PG students have to strictly study the subjects related to Indian Knowledge System. Five percent of the local credits in degree colleges would be allotted to such courses. Medical students are required to study Indian systems of medicine in their course of study. The students should gain a basic knowledge about Ayurveda, Yoga, Naturopathy, Unani, Siddha and Homoeopathy in their syllabus. These courses instruct about the ancient Indian Knowledge System related to plastic surgery.

According to UGC guidelines Indian Knowledge System along with tribal knowledge will be included Mathematics, Engineering, Philosophy, Yoga, Medicine, Sports, Games, Languages and various other domain. NEP has focused on specific courses in tribal ethnomedicinal practices, forest management, and Organic & Natural farming. Under NEP, Indian Knowledge System will be taught as an elective course for secondary school students. These inputs will be

delivered through modern technology, fun games, and cultural exchange programs among different states. NEP focuses on multilingualism and the Indian Knowledge System repository has many languages. The multilanguage formula will cover the aspects of Constitutional provisions and it will create unity and diverse culture of the nation.

The promotion of Indian Knowledge System is a key initiative of the Union Government which started with a workshop on Indian traditional knowledge research in 2020. Curriculum, pedagogy, continuous assessment and student support are the cornerstones for quality learning. The rich heritage of ancient and eternal Indian Knowledge and thought has been a guiding light for this policy. The vision of the policy is to instill among the learner a deep rooted pride in being an Indian. NEP,2020 emphasises on integrating skills with the general education curriculum to equip students with practical skills.

Indian Knowledge System covers the knowledge assets from the pre-historic to the current period. It evolved in the society reflected through various Sanskrit works. NEP fosters the creation of language resources and technology to facilitate Indian Knowledge System as it recognizes the importance for disseminating indigeneous knowledge. The integration of Indian Knowledge System with NEP will help to understand the underlying Contemporary societal issues and to carry out further research on these issues.

Conclusion

The objective of NEP is to universalize education and achieve global standards of education NEP targets the phasing out of all institutions offering single stream. The credit-based eight-semester formats seek to create a standardized mobility based higher education ecosystem, where students can transfer their credits theoritically anywhere.

When looking at NEP's positive and negative aspects, it is clear that the positive aspects outweigh the negative ones. There are certain challenges when it comes to integrating Indian Knowledge System with NEP. There is a lack of awareness among the community and stakeholders about the importance of Indian Knowledge System. There is no clear-cut curriculum about Indian Knowledge System. As Indian Knowledge System is available in different languages, it may create barriers to those who are not well-versed in those languages. Moreover, the colonial system of education has created bias against the Indian Knowledge System. The Indian education system is largely focused on the western knowledge system and it can create difficulty in accommodating this system.

As IKS is based on tacit knowledge it can help students to face and tackle the challenges they are going to face in their real life. Inclusion of IKS has certain challenges and this need to be addressed before the inclusion. There is need for proper training of the teachers so that they have knowledge of IKS and can deliver it in a meaningful way.

In summary, while the NEP,2020 has been largely welcomed, the success of its implementation will depend on careful planning, resource allocation and collaboration between Government and Academic Institutions.

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Faith, Food, and Vaishnavite Practice: Religious Beliefs and Dietary Habits of Disciples in Majuli Island

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Abstract

Majuli, a river island in the Brahmaputra in Assam, holds an important place in the socio-cultural and geographical history of the region. It is also a major centre of Assam's Neo-Vaishnavite tradition, associated with the religious movement initiated by Srimanta Sankardeva in the sixteenth century. The Vaishnavite disciples of Majuli follow a disciplined way of life rooted in devotion to Lord Krishna, purity, humility, non-violence, and communal harmony. Their religious practices include *Naam Prasanga*, communal prayers, and participation in the activities of the *satras*, which function as religious, cultural, and social institutions. The food habits of these disciples are closely shaped by their religious beliefs. Their diet emphasises simplicity, purity, vegetarianism, and spiritual discipline. Rice, lentils, vegetables, *khar*, *pitika*, *poita bhaat*, milk, *payas*, and *prasad* form important parts of their food culture. Items such as garlic, onion, and other strong-smelling or stimulating ingredients are generally avoided, as they are considered unsuitable for maintaining spiritual purity. Thus, food among the Vaishnavite disciples of Majuli is not merely a means of physical sustenance but also an expression of devotion, discipline, and the ethical principles of Neo-Vaishnavism. This paper seeks to examine how the religious beliefs of Neo-Vaishnavism are reflected in the dietary practices of its disciples.

Keywords: *Sattriya, non-violence, chanting, sanctified food, devotion, communal harmony.*

Introduction

Majuli is the world's largest river island, located in the Brahmaputra River in Assam. It is known for its rich Vaishnavite culture, vibrant *satras*, and cultural heritage in Assam. The Vaishnavite disciples of Majuli Island, primarily associated with the Neo-Vaishnavite movement initiated by Srimanta Sankardeva in Majuli in the third decade of the 16thcenturyA.D. The Vaishnavite disciples of Majuli Island, primarily associated with the Neo-Vaishnavite movement, follow specific religious beliefs. Their practices are centred on devotion to Lord Krishna and the principles of purity, humility, communal harmony, and a monastic way of life. This Neo-Vaishnavism is also known as '*Mahapurusia Dharma*', based on the liberal doctrine of *bhakti* or devotion. It aimed at teaching the common people simple ways of living, equality of all men in the field of religion, and practising non-violence and doing away with the belief in sacrifice. At the same time, complicated and elaborate systems of rituals and practices associated with the propitiation of various gods and goddesses under the canopy of Brahminism exploited the common people in all possible ways. The religion was based on the *SrimatBhagavata* and the *Geeta*. His teachings centredaround morals and ideals and do not support the worship of any other gods & goddesses but Krishna, the supreme reality. In other words, in the *'Eka Sharan Nam Dharma'* of Sankaradeva, there is only one God, Lord Krishna, who is about all. The simple way of congregational prayer (*Naam-kirtan*), belief in and submission to one supreme god, and rejection of caste distinctions in the religious plane as an attempt to create a unified society of universal brotherhood, thereby uniting men in a single platform.

The study aims to examine the religious beliefs and food habits of the Vaishnavite disciples associated with the *satras* of Majuli Island. It seeks to understand how the principles of Neo-Vaishnavism, particularly devotion, purity, simplicity, humility, and non-violence, shape the everyday life and dietary practices of its followers. The study also attempts to analyse the relationship between religious belief and food culture by looking at how certain food practices are accepted, avoided, or ritualised within the Vaishnavite tradition. In addition, the paper seeks to explore the major features of Neo-Vaishnavite culture in Majuli, especially its religious institutions, communal practices, devotional traditions, and their role in preserving the socio-cultural identity of the island.

The study adopts a descriptive and analytical methodology to examine the relationship between religious beliefs and food habits among the Vaishnavite disciples of Majuli Island. The study is based on both primary and secondary sources. Secondary data has been collected from published books, research articles, journals, newspapers, government documents, and relevant records available from the *satras*. In addition, primary data was gathered through field visits to the study area, where the researcher observed socio-cultural practices and collected information related to the religious life, food culture, and everyday practices of the Vaishnavite disciples. The collected materials have been carefully examined and analysed to understand how Neo-Vaishnavite beliefs influence dietary practices and cultural life in Majuli.

The *Satras*

The *Satras* of Assam may broadly be classified into three types: monastic, semi-monastic, and house-holding *Satras*. Among these, the monastic *Satras* occupy a distinct place in the religious and cultural life of Majuli. In a monastic *Satra*, both the pontiff, known as the *Adhikar*, and the devotees, known as *Bhakats*, are expected to lead celibate lives, remaining detached from domestic and family responsibilities. Majuli has several important monastic *Satras*, including Auniati, Dakshinpat, Kamalabari, Natun Kamalabari, and Uttar Kamalabari. These *Satras* have their own distinctive organisational, architectural, and cultural features. Each *Satra* is generally situated within a clearly defined compound and consists of four residential units or *Hatis*, where the devotees live in rows of small huts. The structural arrangement of a monastic *Satra* includes important religious and functional spaces such as the *korapat*, prayer hall known as *kirtanghar* or *namghar*, shrine or *monikut*, *mahaprabhu griha*, *podasila griha*, storehouse, and *guru griha*. The *Adhikar* usually resides either in the eastern or northern part of the compound, although in Auniati Satra, he resides in the central area near the prayer hall. The *Bhakats* follow a disciplined daily routine that includes prayer, agricultural work, religious learning, and training in *Sattriya* culture. Their dress code is simple and uniform, usually consisting of a white *dhoti* and *kurta*. They are also expected to remain neat and clean, avoiding moustaches and beards as part of their disciplined monastic life. Within the *Satra* campus, traditional seating arrangements such as *dhari* and *koth* are used instead of modern furniture, reflecting simplicity and detachment from material comforts. The devotees avoid worldly pleasures and engage themselves in devotional practices, *Sattriya* music, craft-making, and painting. In this sense, the monastic *Satras* of Majuli appear not merely as religious institutions but as secluded hermitages where spiritual discipline, cultural preservation, simplicity, and collective devotional life are carefully maintained.

Seen in this context, the monastic *Satras* of Majuli possess a distinct physical, institutional, and cultural identity. They are generally marked by secluded and independent territorial spaces, organised structural arrangements, and a disciplined community of celibate devotees known as *Bhakats* who reside within the *Satra*. At the same time, these institutions maintain a wider network of lay disciples spread across different parts of Assam. The internal organisation of such *Satras* often reflects a pattern of administration that resembles certain features of the medieval political structure, with the celibate pontiff or *Satradhikar* occupying the highest position. In many cases, the *Satradhikar* is selected on a hereditary basis. The *Satra* complex usually consists of a common prayer hall or *namghar*, rows of residential huts or *baha* arranged in *hatis*, and

other spaces connected with religious, cultural, and everyday life. More importantly, the monastic *Satra* represents a distinct mode of living, shaped by particular habits, moral discipline, devotional conduct, and regulated patterns of behaviour.

In contrast to the monastic type, the semi-monastic *Satra* follows a slightly different form of religious and social organisation. In this system, the *Adhikar* and *Deka Adhikar* remain celibate, while the *Bhakats* may marry and live with their families within the *Satra* campus. Garamur Satra of Majuli is an important example of this type. It was originally a monastic *Satra* until the first quarter of the twentieth century, where both the pontiff and the resident devotees followed a celibate way of life. However, under the leadership of the then *Satradhikar*, late Pitambardeva Goswami (1908–1962), the system of strict monasticism was abolished in view of the welfare and changing needs of the institution. Thereafter, the inmates were permitted to marry, while the *Satradhikar* and his deputy, the *Deka Adhikar*, continued to remain celibate. Since then, Garamur Satra has functioned as a semi-monastic institution. The third type is the house-holding *Satra*, where both the *Adhikar* and the devotees lead family lives with their wives and children within the *Satra* campus. Chamaguri and Benganati Satras of Majuli may be cited as examples of this house-holding type. Thus, the different forms of *Satras* in Majuli reveal the flexible and adaptive character of Neo-Vaishnavite institutions, where religious discipline, social organisation, and everyday life are structured in different ways according to the nature of each *Satra*.

Dietary Habits in the Satras

The dietary practices of the Vaishnavite disciples of Majuli are closely connected with the religious discipline, moral codes, and everyday life of the *Satras*. Rice forms the staple food of both *Bhakats* and *Sishyas*. However, the food habits of the *Bhakats*, especially those who are brought to the *Satra* in childhood to follow a celibate and disciplined life, are shaped by a distinct spiritual orientation from an early age. They are expected to remain careful and restrained in matters of food, as diet is regarded not merely as a physical necessity but also as a part of devotional discipline. Along with rice, locally available fruits such as banana, mango, coconut, and papaya form an important part of their regular diet. In the monastic *Satras*, the *Satradhikars* generally prefer simple vegetarian food, particularly boiled preparations without much use of oil and spices. This simplicity of food reflects the larger ideals of purity, self-control, and detachment from material pleasures.

The question of fish and meat within the Vaishnavite tradition, however, reveals a more complex historical pattern. In general, meat is avoided in the *Satras* because the killing of animals is considered contrary to religiously sanctioned customs. At the same time, the *charita puthis* and other Vaishnavite biographical traditions suggest that fish and meat were not always treated as absolutely prohibited items for Vaishnavite devotees. The emphasis was placed more on avoiding the act of killing than on the consumption itself. A devotee was discouraged from killing animals for food, although the meat of animals killed by others was not always considered forbidden. The *Katha Guru Charita* also narrates an incident relating to fish consumption: when Vamsigopaladeva, a celibate Brahmin disciple of Sankardeva and a vegetarian, visited the house of his guru, he was unknowingly served fish curry by the guru's wife. Such references indicate that Neo-Vaishnavism, while encouraging purity and restraint, did not impose an extreme dietary rigidity upon ordinary followers. This may have been because common people living in the riverine and agrarian society of Assam could not easily be expected to give up fish and meat entirely.

Two varieties of rice are commonly used in the *Satras*: *ukhuwa* and *aroi*. *Ukhuwa* rice, prepared from a special variety known as *kumal chaol*, is especially important in the food culture of the *Satras*. It is used as breakfast and is also offered to guests. Boiled rice remains popular among the people of Majuli and is also used for ritual purposes, often with curd or milk. S. N. Sarma has rightly observed that the Assamese Vaishnavas followed a "middle path" in matters of food. According to this view, a celibate devotee is expected to maintain a careful balance

between laxity and excessive austerity.(Sarma, 1966) Therefore, where certain *Satras* avoid fish and meat, it is often due to convention rather than an absolute theological prohibition. This interpretation helps us understand the dietary system of the *Satras* as one based on moderation, discipline, and custom rather than rigid asceticism.

Pulses also occupy an important place in the diet of the Vaishnavite disciples. Varieties such as *mati mah* and *magu mah* are commonly used in the preparation of curry. *Magu mah* is particularly significant in ritual practice, where it is offered as *mah prasad* along with fruits, *sana*, ginger, coconut, banana, and rice. This form of *prasad* is believed to have been introduced by Sankardeva into the Vaishnavite religious culture. The food habits of the *Satras* also reflect the ecological setting of Majuli and the wider Assamese food tradition. Many food items are collected from the natural surroundings, including *betgaj* or cane shoot, *kharicha* or bamboo shoot, *dhekia* or edible fern, *pachala* or banana shoot, *kochu* or arum leaves and roots, and other wild creepers and sour-tasting plants. These items show the close relationship between the *Satra* community, local ecology, and traditional food knowledge.

The chewing of *tamul-pan*, consisting of areca nut and betel leaf, is another significant feature of *Satra* food culture. It is not merely a habit but has a definite ritual and social meaning. *Tamul-pan* is used in religious and ceremonial functions, offered to guests, and exchanged in devotional and social relations. Villagers visiting the *Satras* often carry *tamul-pan* as a symbol of respect and dedication to the Guru. Milk is also widely used among the devotees, especially in ritual and devotional contexts. At the same time, irritant and excitant food items are generally avoided, as they are believed to disturb spiritual discipline and mental calmness. Thus, the food practices of the *Satras* reflect a careful concern for purity, moderation, and devotional conduct.

Fasting also forms an important part of the Vaishnavite religious life. Vaishnavite writers have repeatedly emphasised that fasting has no real value unless it is accompanied by *bhakti*. Fasts are observed on occasions such as *Ekadashi*, *Ausi*, and the death anniversaries or *tithis* of major Vaishnavite reformers such as Sankardeva, Madhavdeva, Harideva, and Damodardeva. Individual *Satras* also observe fasts on the death anniversaries of their own Gurus. On the days of solar and lunar eclipses, the devotees strictly observe fasting. These practices show that food abstinence in the *Satra* tradition is not simply a ritual act but a means of cultivating devotion, discipline, and remembrance.

Several myths and symbolic beliefs are also associated with the cooking and serving of food in the *Satras*. Spiritual meaning is attached to the utensils used in food preparation. For instance, the pot used for boiling rice is identified with Lord Vishnu, the stirring stick or *heta* with Brahma, and the water pot or *lota* with Lakshmi. Such symbolic associations reveal how ordinary acts of cooking and eating are incorporated into the sacred world of Vaishnavite belief. The *Satra* tradition also maintains specific rules regarding the consumption of vegetables and fruits on particular lunar days. For example, *kumura* or white gourd is avoided on the first day, brinjal on the second, *patal* or pointed gourd on the third, radish on the fourth, stone apple on the fifth, neem leaves on the sixth, *tal* fruit on the seventh, coconut on the eighth, bottle gourd on the ninth, *kalmou* or water spinach on the tenth, *urahi* or Indian bean on the eleventh, *purai sak* or Indian spinach on the twelfth, *mati mah* on the fourteenth, and fish and meat on the fifteenth day. Devotees believe that the observance of such food discipline helps one attain *bhakti*.

The manner of eating is also regulated by specific codes of conduct. P. D. Goswami, the present *Satradhikar* of Auniati Satra, has noted that in the *Satriya* system, one should sit on the ground and eat silently. During meals, the devotee is expected to keep his attention fixed on the plate and avoid unnecessary movement or distraction. A common proverb suggests that a wise person concentrates on his food and eats while looking down at the plate, whereas a foolish person looks around before eating. One should not leave the meal unfinished or return to the same plate after going away from it. There are also rules regarding food

combinations and storage. Curd is not taken in the evening and should not be kept in bell-metal or brass vessels; it is preferably stored in earthen pots. Coconut water is also not kept in bell-metal or brass vessels, as it is believed to become polluted or harmful. Two sour items are not taken together, and sour food is avoided after drinking milk. Certain vegetables and fruits also have prescribed methods of handling: gourds such as *jatilao* and *komora* should not be cut from the middle; when *pachala* or plantain shoot is cut, it should be brought inside covered with its leaf; and a full banana leaf should not be carried inside the house. After taking food, one is expected to walk for some time and then take *tamul-pan*. These rules demonstrate that dietary habits in the *Satras* are not casual practices but are embedded in a larger system of religious discipline, ritual purity, ecological knowledge, and cultural continuity.

Religious Beliefs and Dietary Habits of the Satras

The religious beliefs of the Vaishnavite disciples of Majuli Island have a deep influence on their dietary practices. In the *Satra* tradition, food is not understood merely as a means of physical sustenance but as an important part of spiritual discipline, devotional practice, purity, and surrender to Lord Krishna. The everyday food habits of the disciples are therefore shaped by the ideals of Neo-Vaishnavism, particularly simplicity, restraint, non-violence, and collective religious life.

Religious Beliefs

1. **Devotion to Lord Krishna:**In the Neo-Vaishnavite tradition of Majuli, Lord Krishna is worshipped as the Supreme Being. The disciples follow the principle of *Ek Saran Dharma*, which means complete surrender or shelter in one God. This devotional belief forms the foundation of their religious life and also influences their personal conduct, including food habits.
2. **Satras (Monastic Institutions):**Majuli is known for its *Satras*, which function as important centres of Vaishnavite religion, culture, and social life. In these institutions, the monks or *Bhakats* practise devotion through prayer, singing, *Naam-Kirtan*, *Sattriya* dance, music, and other forms of religious performance.
3. **Non-Idolatry:**Unlike many forms of mainstream Hindu practice, the Vaishnavite tradition of Majuli gives greater importance to *Naam-Kirtan*, or the chanting of God's name, rather than idol worship. The sacred text, devotional singing, and collective remembrance of Krishna occupy a central place in their religious practices.
4. **Community Prayers:**Community prayer is an important feature of religious life in the *Satras*. Devotees regularly gather in the *Namghar* or prayer hall for *Kirtan*, *Bhajan*, and recitation from the *Bhagavata*. These collective practices strengthen both religious devotion and social unity among the disciples.
5. **Ahimsa (Non-Violence):**The principle of *Ahimsa*, or non-violence, occupies an important place in the Vaishnavite belief system. The disciples are expected to avoid causing harm to living beings. This belief has a direct connection with their food practices, especially their preference for a simple and non-violent diet.

Food Habits

1. **Strict Vegetarianism:**Many Vaishnavite disciples abstain from meat, fish, eggs, onion, and garlic, as these items are often considered unsuitable for maintaining ritual purity and spiritual discipline. However, the degree of restriction may vary among different *Satras* and their respective traditions.
2. **Simple Sattvic Diet:**The diet of the disciples is generally simple and *sattvic* in nature. It usually consists of rice, lentils, green leafy vegetables, fruits, and dairy products such as curd, milk, and ghee. Such food is believed to promote purity, calmness, restraint, and devotional concentration.
3. **Mahaprasad:**Food offered to Lord Krishna holds special religious significance. *Mahaprasad*, usually consisting of rice, pulses, banana, fruits, and other simple items, is consumed by the devotees as a sacred blessing. It symbolises the relationship between food, devotion, and divine grace.

4. **Rice-Based Cuisine:**Since Majuli belongs to the rice-growing cultural region of Assam, rice forms the staple food of the Vaishnavite disciples. It is commonly taken with dal, seasonal vegetables, leafy greens, and locally available food items. Thus, rice-based cuisine forms the central part of their everyday dietary practice.
5. **Community Feasts (Bhoj Vaat):**Community feasts, locally understood as *Bhoj Vaat*, are an important part of religious and social life in the *Satras* and *Namghars*. During festivals and religious occasions, food is prepared collectively and served among devotees, reinforcing the values of equality, community participation, and devotional fellowship.
6. **Rules Related to Lunar Days and Food Consumption:**In the *Satra* tradition, specific rules are followed regarding the consumption of vegetables, fruits, and other food items from the first day of the lunar cycle up to *Purnima* or *Ausi*, the day associated with the conjunction of the sun and the moon. These rules reflect the belief that food discipline is closely linked with purity, self-control, and the attainment of *Bhakti*.

Conclusion

In conclusion, Majuli occupies a significant place in the religious and cultural history of Assam, particularly because of its long association with the Neo-Vaishnavite *Satra* tradition. In earlier times, the island had a large number of *Satras*, many of which flourished under the patronage and policy of the Ahom rulers. This religious importance gave Majuli the reputation of being *etaka mahantar than*, meaning a sacred place of great religious men. The *Satras* not only functioned as centres of devotion and religious instruction but also shaped the social, cultural, and everyday life of their disciples. Within this broader religious framework, the food habits of the Vaishnavite disciples reflect the ideals of purity, devotion, simplicity, discipline, and self-restraint. Their dietary practices are therefore not merely concerned with physical nourishment but are closely connected with their spiritual philosophy. Food, in the *Satra* tradition, becomes a medium of worship, moral discipline, and self-purification, expressing the deeper principles of Neo-Vaishnavism in everyday life.

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NEP And Indian Knowledge System (IKS)- A Glimpse of Northeast English Literature: Trends, Transformations and Future Possibilities

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Abstract

Northeast Indian English literature has emerged as one of the most dynamic and intellectually significant areas of contemporary Indian writing in English. Rooted in the socio-cultural plurality of the region, this literature articulates themes of identity, ethnicity, insurgency, migration, memory, ecological consciousness, gender relations, and cultural resistance. Once marginalized within the mainstream canon of Indian English literature, the literary voices of Northeast India have gradually attained national and global recognition through their distinctive narrative techniques and indigenous perspectives. Contemporary writers from the region employ English not merely as a colonial inheritance but as a medium for cultural negotiation and creative self-expression. This paper critically examines the historical growth, changing literary trends, thematic transformations, and future possibilities of Northeast English literature. The study also explores how the literature of the region negotiates between tradition and modernity while preserving indigenous consciousness in an era of globalization and digital transformation.

Keywords: Northeast India, Indian English Literature, Identity, Ethnicity, Marginality, Indigenous Culture, Globalization, Ecocriticism, Postcolonialism

Introduction

Northeast India occupies a unique position in the cultural and literary landscape of India. Comprising eight states—Assam, Meghalaya, Manipur, Mizoram, Nagaland, Tripura, Arunachal Pradesh, and Sikkim—the region is characterized by immense ethnic diversity, multilingual traditions, rich folklore, oral narratives, and distinctive socio-political realities. Despite its cultural richness, the Northeast remained largely marginalized within mainstream Indian literary discourse for many decades. Colonial historiography and metropolitan literary criticism often portrayed the region as peripheral, exotic, or politically disturbed, thereby ignoring its complex human experiences and literary traditions.

The emergence of Northeast English literature signifies a major transformation in Indian literary studies. Writers from the region increasingly began using English as a language of articulation, resistance, and cultural representation. English enabled these writers to communicate local realities to wider national and international audiences while simultaneously preserving indigenous histories, memories, and identities.

The literature of Northeast India today reflects a wide spectrum of concerns including insurgency, migration, ethnic conflict, environmental degradation, gender politics, cultural displacement, and the search for identity. At the same time, it celebrates oral traditions, myths, rituals, spirituality, and community life. The evolution of Northeast English literature therefore represents both continuity and transformation within contemporary Indian literature.

Historical Evolution of Northeast English Literature

The roots of Northeast English literature may be traced to the colonial period when British

administration and missionary education introduced English language and Western education into the region. Missionary activities contributed significantly to the development of written literature by translating religious texts, documenting folk traditions, and establishing educational institutions.

Before the introduction of written literary culture, the societies of Northeast India possessed vibrant oral traditions that included myths, folktales, legends, songs, proverbs, ballads, and ritual narratives. These oral traditions formed the foundation of later literary expressions.

During the post-independence period, the region experienced political unrest, ethnic tensions, separatist movements, and socio-economic instability. Such historical circumstances deeply influenced literary production. By the late twentieth century, writers from the Northeast increasingly began expressing regional experiences through English literature.

The rise of prominent literary figures such as Temsula Ao, Easterine Kire, Mamang Dai, Robin S. Ngangom, Kynpham Sing Nongkynrih, Mitra Phukan, and Aruni Kashyap transformed the literary map of Indian English literature. Their writings challenged stereotypical representations of the Northeast and foregrounded indigenous perspectives rooted in lived experiences.

Major Trends in Northeast English Literature

Identity and Ethnic Consciousness

The assertion of identity remains one of the most dominant themes in Northeast English literature. The people of Northeast India have historically struggled against cultural marginalization and political exclusion. Literature therefore becomes a powerful medium for reclaiming indigenous identity and preserving cultural memory.

Writers frequently explore issues related to ethnicity, language, community, migration, and belonging. Literary texts often portray the psychological conflict experienced by individuals caught between tradition and modernity. Indigenous customs, rituals, myths, and oral traditions are incorporated into literary narratives to affirm cultural uniqueness and resist homogenization.

Easterine Kire's works, for instance, reconstruct Naga history and collective memory, while Mamang Dai's writings reflect the spiritual and ecological worldview of Arunachal Pradesh. Such literary representations contribute significantly to the preservation of indigenous consciousness.

Literature of Insurgency and Violence

Political conflict and insurgency have profoundly shaped the literary imagination of Northeast India. Several states in the region have witnessed decades of violence, militarization, ethnic clashes, and political instability. Consequently, literature emerging from the Northeast frequently reflects themes of fear, trauma, alienation, and loss.

Writers portray the emotional and psychological consequences of prolonged violence on ordinary human lives. Temsula Ao's short stories vividly depict the impact of insurgency on rural communities and individual identities. The literature humanizes political conflict by focusing on human suffering rather than ideological debates.

Such narratives distinguish Northeast literature from many other streams of Indian English literature because they emerge directly from lived socio-political realities.

Oral Tradition and Indigenous Narrative Techniques

One of the most distinctive features of Northeast English literature is its deep connection with oral traditions. Indigenous societies of the Northeast possess rich oral cultures that continue to influence literary expression. Contemporary writers adapt myths, legends, folktales, chants, and storytelling techniques into modern literary forms.

The incorporation of oral tradition creates a unique narrative structure that differs significantly from conventional Western literary models. Oral storytelling enriches literary language through symbolism, rhythm, repetition, and communal memory.

Moreover, the preservation of oral culture through literature becomes an act of cultural resistance in an age of globalization and cultural homogenization.

Ecological Consciousness and Environmental Writing

Nature occupies a central place in Northeast literature. The mountains, forests, rivers, and landscapes of the region shape both cultural imagination and literary sensibility. Contemporary writers increasingly express concern regarding ecological destruction, deforestation, environmental exploitation, and climate change.

Ecological writing from the Northeast is deeply connected with indigenous spirituality and traditional ecological knowledge. Nature is not portrayed merely as scenery but as an integral part of human existence and community life.

Mamang Dai's poetry and prose particularly emphasize the sacred relationship between humans and nature. Such ecological perspectives contribute significantly to the growing field of ecocriticism in Indian literature.

Feminist Perspectives and Gender Discourse

Another significant transformation in Northeast English literature is the emergence of feminist voices and gender-sensitive narratives. Women writers from the region explore issues such as patriarchy, domestic oppression, sexuality, motherhood, violence against women, and female agency.

These writings challenge stereotypical assumptions regarding Northeastern women and reveal the complexity of gender relations within traditional and modern societies. Women authors provide nuanced portrayals of female experiences shaped by both cultural traditions and contemporary social change.

The feminist dimension of Northeast literature enriches broader discussions within Indian feminist literary studies and contributes to more inclusive literary discourse.

Contemporary Transformations in Northeast English Literature

Globalization and Cultural Negotiation

Globalization has significantly transformed the social and cultural realities of Northeast India. Urbanization, migration, consumer culture, media expansion, and technological developments have created new forms of identity and cultural interaction.

Contemporary literature increasingly addresses themes of urban alienation, diasporic identity, unemployment, generational conflict, and cultural fragmentation. Younger writers portray the experiences of individuals negotiating between indigenous traditions and global modernity.

English itself has become a language of aspiration, mobility, and international communication. However, writers also express anxiety regarding the erosion of indigenous languages and cultural traditions. Contemporary Northeast literature therefore often reflects a tension between preservation and transformation.

Emergence of New Literary Forms

Recent decades have witnessed remarkable diversification in literary genres and narrative styles. Northeast English literature now includes novels, short stories, poetry, memoirs, autobiographies, travel writing, graphic narratives, and experimental fiction.

Digital platforms, literary blogs, online journals, and social media have further expanded opportunities for emerging writers. Literary festivals and academic conferences dedicated to Northeast literature have also contributed to greater visibility and critical recognition.

The inclusion of Northeast literature in university syllabi across India marks another important development in contemporary literary studies.

Translation and Cross-Cultural Exchange

Translation has played a crucial role in the growth of Northeast English literature. Works originally written in Assamese, Bodo, Khasi, Manipuri, Mizo, and other regional languages are increasingly being translated into English.

Translation enables indigenous voices to reach wider audiences and facilitates cross-cultural understanding. It also helps preserve endangered languages and oral traditions in a rapidly globalizing world.

The interaction between regional languages and English literature creates a rich multicultural literary

environment that strengthens the overall literary identity of the Northeast.

Future Possibilities of Northeast English Literature

The future of Northeast English literature appears highly promising due to increasing academic interest, expanding publication opportunities, and growing international recognition.

Digital Literary Expansion

The digital age offers unprecedented opportunities for writers from remote regions. Online publishing platforms, e-books, digital magazines, podcasts, and social media provide greater accessibility and visibility for emerging literary voices.

Young writers can now bypass traditional metropolitan publishing structures and directly engage with global readership.

Preservation of Indigenous Culture and Language

Although English continues to function as an important literary medium, the preservation of indigenous languages and cultural traditions will remain central to the future of Northeast literature. Future literary production may increasingly incorporate multilingual expression and collaborative translation projects.

The integration of oral narratives into digital archives may also help preserve endangered cultural traditions.

Growing Academic Recognition

Northeast English literature has become an important field within postcolonial studies, cultural studies, gender studies, trauma studies, and ecocriticism. Universities and research institutions are increasingly recognizing the academic significance of the region's literature.

Future scholarship is likely to produce more critical studies, dissertations, translations, and interdisciplinary research on Northeast literary traditions.

International Literary Visibility

The themes explored in Northeast literature—identity, migration, violence, ecological crisis, memory, and cultural survival—possess universal relevance. Consequently, writers from the region are increasingly gaining international readership and critical attention.

The unique narrative styles and indigenous perspectives of Northeast literature may contribute significantly to global literary discourse in the coming decades.

Challenges Before Northeast English Literature

Despite remarkable progress, Northeast English literature continues to face several challenges:

Limited publishing infrastructure within the region

Inadequate translation facilities and linguistic barriers

Marginal representation in mainstream Indian literary criticism

Threats to indigenous languages and oral traditions

Political instability and economic constraints

Lack of sufficient institutional support for regional writers

Addressing these challenges will require stronger academic engagement, cultural preservation initiatives, translation projects, and policy support.

Conclusion

Northeast English literature represents one of the most significant and transformative developments in contemporary Indian literature. Emerging from histories of marginalization and cultural diversity, it has evolved into a powerful literary movement that foregrounds indigenous voices, regional realities, and alternative histories.

The literature of Northeast India reflects not only political conflict, displacement, and identity crises but also resilience, cultural memory, ecological harmony, and human dignity. Through innovative narrative techniques, oral traditions, feminist perspectives, and ecological consciousness, writers from the region continue to redefine the boundaries of Indian English literature.

The changing trends within Northeast literature demonstrate a movement from marginality to visibility and from regional isolation to global recognition. As digital culture and globalization continue to reshape literary production, Northeast English literature is likely to attain even greater prominence within national and international literary spaces.

Ultimately, the literature of Northeast India enriches the broader framework of Indian literature by offering diverse cultural experiences, indigenous knowledge systems, and profound reflections on humanity, identity, and survival.

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Transforming Pedagogy in North-East India : Assessing the Impact and Equity of Digital Educational Resources in Assam

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Abstract

The paper examines the impact of digital resources on the modern education system in North-East India, with special reference to Assam. The rapid integration of digital technologies in education has transformed teaching and learning processes, especially in the wake of the COVID-19 pandemic. The research explores the extent of digital resource adoption, the effectiveness of digital tools, challenges faced by students and teachers, and the role of government initiatives in promoting digital education. Data was collected through surveys, interviews, and secondary sources from various educational institutions across urban and rural areas of Assam. The findings reveal significant improvements in access and engagement but also highlight persistent issues such as infrastructural limitations, the digital divide, and inadequate teacher training. The study concludes with recommendations for enhancing digital infrastructure, capacity building, localized content development, and inclusive policies to ensure equitable and sustainable digital education in the region.

Keywords : Digital Resources, Modern Education, Assam, Digital Divide, Teacher Training

01. Introduction

The rapid advancement of digital technology has significantly reshaped the global education landscape. In India, the integration of digital resources into the education system has been a pivotal development, particularly in the context of the National Education Policy (NEP) 2020 and the Digital India initiative. While urban regions have been quicker to adopt such technologies, the impact in geographically and socio-economically diverse areas like North-East India (NEI) is both critical and complex.

North-East India, known for its ethnic diversity, remote terrain, and infrastructural challenges, presents a unique case for evaluating the role of digital tools in modern education. Among the eight North-Eastern states, Assam stands out due to its relatively advanced infrastructure and policy implementation, making it an ideal focal point for understanding broader regional dynamics.

Digital resources such as online learning platforms, smart classrooms, virtual libraries, and mobile applications have increasingly become part of the educational ecosystem in Assam. Their adoption has been catalyzed by government initiatives, the COVID-19 pandemic, and the growing need for inclusive, flexible learning models. However, the transition has faced obstacles such as digital illiteracy, limited internet access, and socio-economic disparities. This study explores the impact of digital resources on the modern education system in Assam by examining both the opportunities provided and the challenges presented.

02. Background of the Study

The integration of digital resources into the education system marks a significant shift from traditional teaching methods. While attention has focused heavily on urban and metropolitan regions, there remains a gap in understanding their influence in remote areas. In this context, Assam provides an important case for in-depth analysis due to its emerging digital infrastructure and educational reforms.

This study holds relevance across several key domains:

- **Regional Development:** Highlights how digital resources can act as a catalyst for educational development and regional integration in geographically challenging areas.
- **Policy Assessment:** Evaluates central and state initiatives like Digital India, PM e-VIDYA, and smart classroom projects.
- **Educational Equity:** Assesses whether digital education reaches rural, tribal, marginalized, and underrepresented communities.
- **Capacity Building:** Examines how digital tools contribute to teacher training and institutional innovation in rural and government schools.
- **Post-Pandemic Context:** Captures the long-term implications of the accelerated shift to digital tools forced by COVID-19.

03. Review of Literature

1. Sarma, M. (2002), "Information Technology and Secondary Education in North-East India: Prospects and Problems" paper assesses the introductory phase of computer education across secondary schools in urban centers of Assam. The author examines infrastructure constraints, erratic electricity supply, and the initial reluctance of traditional teaching faculties toward computer literacy. The study highlights that infrastructural disparities between metropolitan hubs and rural regions pose a major hurdle for uniform technology adoption. It emphasizes the urgent need for structured state-level funding to supply basic hardware and initiate computer laboratories in secondary institutions.
2. Goswami, B. (2005), "Bridging the Digital Divide: Policies and Realities in Higher Education in Assam" the study investigates the early implementation of national information technology policies within degree colleges and universities across Assam. The author analyzes budgetary allocations, institutional readiness, and the accessibility of digital library networks for undergraduate and postgraduate students. The research indicates that while premier institutions gained access to early internet connectivity, mofussil colleges faced severe financial and technical neglect. It recommends establishing centralized regional resource hubs to share digital academic content and software licenses among remote institutions. The work concludes by calling for a more inclusive administrative approach to ensure equitable technological advancement in higher education.
3. Hazarika, J. (2007), "Teacher Preparedness and Computer Literacy in Rural Schools of Assam" focuses on evaluating the computer literacy levels and technological apprehension among school teachers in rural Assam. The author surveys educators across multiple districts to measure familiarity with basic office software, operating systems, and audio-visual aids. The results reveal that an overwhelming majority of rural teachers lacked formal training, leading to significant anxiety regarding computer usage. The study points out that professional development programs during this period were infrequent, poorly structured, and restricted to urban centers. It argues that empowering educators through mandatory, continuous in-service training is the most critical prerequisite for successful pedagogical reform. The paper provides actionable suggestions for integrating computer literacy modules into state-run teacher training certification courses.
4. Phookan, R. (2008), "Mass Media and Educational Broadcasting in Assam: An Evaluation of Instructional Television and Radio" evaluates the pedagogical effectiveness of educational broadcasting initiatives, including early school television and radio programs in Assam. The author investigates student engagement levels, broadcast scheduling conflicts, and curriculum alignment across primary and secondary school levels. The findings demonstrate that while

audio-visual broadcasts successfully captured student interest, rigid timetables often clashed with regular classroom instruction. The study notes that poor maintenance of television sets and irregular power supply severely crippled the reach of media-based teaching in remote areas. It suggests shifting toward recorded media formats and localized content creation to make educational broadcasts more flexible and culturally relevant.

5. Barua, D. (2009), "E-Governance and Administrative Efficiency in Technical and Higher Education in Assam" examines the early adoption of e-governance systems, digital record-keeping, and computerized admission portals within educational institutions in Assam. The author analyzes the transition from manual administrative workflows to database-driven management systems across select colleges and directorates. The evaluation indicates that computerization significantly reduced processing time for student admissions, examinations, and scholarship disbursements. It stresses that administrative digitization must be accompanied by comprehensive capacity-building programs for non-teaching staff and institutional managers.
6. Dutta, K. (2010), "Language, Script, and Digital Media: Challenges of Local Language Computing in Assamese" explores the technical and pedagogical hurdles associated with local language computing, font standardization, and digital Assamese script processing. The author investigates the availability of Assamese character sets, unicode compatibility, and digital typing tools for educational content creation. The research highlights that the lack of standardized regional language software severely limited the production of digital textbooks and local e-learning modules. It emphasizes that educational content must be made available in regional languages to ensure comprehension among primary and secondary students. The paper calls for collaborative efforts between academic institutions and software developers to build robust open-source Assamese digital tools. Ultimately, the study frames linguistic accessibility as a fundamental pillar for achieving equity in technology-mediated education across the state.

04. Research Objectives

1. To examine the extent of digital resource integration in educational institutions across different regions of Assam.
2. To assess the effectiveness of digital tools in enhancing teaching-learning processes and student engagement.
3. To identify the major challenges faced by students and teachers in accessing and utilizing digital education resources.
4. To evaluate the role of government initiatives in promoting digital education in Assam.
5. To recommend measures for improving the accessibility, quality, and inclusiveness of digital education in the state.

05. Research Gap

Existing literature indicates rapid growth in the Indian online education market and highlights policy frameworks like NEP 2020, NDEAR, SWAYAM, and DIKSHA. However, specific research gaps persist in the regional context:

- There is limited state-specific empirical research regarding the long-term effectiveness of digital education in Assam.
- Few studies systematically address the internal digital divide within Assam, particularly between urban and rural, or tribal and non-tribal populations.
- The direct impact of digital tools on educational equity, inclusivity, and regional language integration remains underexplored.

06. Research Methodology

The study adopted a mixed-methods research design to examine the impact, accessibility, pedagogical implications, and equity dimensions of digital educational

resources in Assam. The quantitative component was used to assess patterns of digital access, frequency of resource utilisation, perceived usefulness, learner engagement, and pedagogical transformation, while the qualitative component explored the experiences, challenges, perceptions, and contextual realities of teachers and learners. The integration of both forms of evidence enabled the study to move beyond a simple assessment of digital availability and examine whether digitalisation is contributing to a more inclusive and effective educational environment.

07. Discussion and Results

7.1. Digital Access and Availability

The study indicates that access to digital devices has expanded considerably among respondents. Smartphones emerged as the most commonly available digital device because of their comparatively lower cost, portability and multifunctional capacity. However, access to computers, laptops and tablets remained comparatively limited, particularly among economically disadvantaged and rural learners.

Internet connectivity was identified as a critical determinant of meaningful participation in digital education. Although a substantial proportion of respondents reported regular access to the internet, connectivity was not uniform. Poor network coverage, unstable connections, limited data affordability and dependence on mobile internet continued to affect the continuity of digital learning.

Effective digital participation depends upon the combined availability of suitable devices, reliable connectivity, affordable data and adequate digital skills.

7.2. Utilisation of Digital Educational Resources

The respondents reported using a variety of digital resources, including online learning platforms, educational videos, digital textbooks, electronic documents, online assessment tools, messaging applications and web-based reference materials.

Digital resources were particularly valued for their capacity to provide learners with access to materials beyond the physical classroom. Teachers also reported that multimedia resources enabled them to supplement conventional lectures with visual, audio and interactive materials.

However, the intensity and diversity of digital-resource use varied significantly according to digital competence, institutional support and technological accessibility. In several cases, technology was used primarily for content delivery and communication rather than for genuinely interactive or learner-centred pedagogy.

7.3. Transformation of Pedagogical Practices

One of the major findings of the study is that digital technology has contributed to a gradual transformation of conventional pedagogical practices. Teachers increasingly incorporated:

- Multimedia presentations;
- Educational videos;
- Digital reading materials;
- Online assignments;
- Virtual communication;
- Digital assessments; and
- Blended teaching-learning practices.

These practices have increased the flexibility of teaching and enabled teachers to provide supplementary resources beyond classroom hours.

Nevertheless, the findings also reveal that digitalisation does not automatically produce pedagogical transformation. Where teachers lacked adequate training or technological confidence, digital tools were often used simply as substitutes for conventional teaching materials. Meaningful pedagogical transformation therefore depends on teachers' digital competence, instructional design skills and institutional support.

7.4. Impact on Learner Engagement

The study suggests that digital resources have generally enhanced learner engagement by providing greater flexibility and opportunities for self-directed learning. Educational videos, online materials and digital reference resources were perceived as particularly useful for revising lessons and accessing information at the learner's own pace.

The qualitative responses further indicate that students appreciated the convenience of accessing educational materials outside formal classroom hours.

Digital resources also enabled learners to revisit difficult topics and explore additional materials according to their individual learning needs.

However, learner engagement was not uniform. Students experiencing poor connectivity, inadequate devices or limited digital skills were less able to benefit consistently from technology-mediated learning.

7.5. Digital Equity and the Persistence of the Digital Divide

The most significant finding concerns the relationship between digital education and educational equity. While digital resources have expanded educational opportunities, they have not benefited all learners equally.

Three major dimensions of inequality were identified:

First, the access divide: differences in ownership of smartphones, computers and other digital devices.

Second, the connectivity and affordability divide: differences in the quality, reliability and affordability of internet services.

Third, the capability and utilisation divide: differences in digital literacy and the ability to use technology effectively for educational purposes.

It demonstrates that the digital divide is not simply a question of whether a learner has an internet-enabled device. Rather, it is a multidimensional phenomenon involving access, affordability, quality, skills, meaningful use and educational outcomes.

7.6. Teacher Preparedness and Institutional Support

Teacher preparedness emerged as a crucial factor in determining the effectiveness of digital pedagogy. Teachers with greater familiarity and confidence in using digital technologies were more likely to integrate multimedia, online resources and blended approaches into their teaching practices.

At the institutional level, respondents identified the need for:

- Regular digital-pedagogy training;
- Better internet infrastructure;
- Access to digital devices;
- Technical assistance;
- Digital-resource repositories; and
- Continuous professional development.

08. Major Findings

- **Increased Adoption:** The usage of smart classrooms, online platforms, and mobile apps expanded significantly, accelerated by the COVID-19 pandemic.
- **Enhanced Access & Engagement:** Digital tools improved access to diverse learning materials in urban/semi-urban areas and enhanced student engagement through interactive multimedia content.
- **Persistent Digital Divide:** Poor internet connectivity, low device availability (smartphones/tablets), and limited digital literacy continue to affect rural and remote regions.
- **Teacher Preparedness:** Rural educators lag in digital pedagogy, highlighting an urgent need for targeted professional development.
- **Role of Localization:** The introduction of localized digital content in Assamese and other regional languages significantly boosted comprehension and inclusivity.
- **Infrastructural Constraints:** Irregular electricity supply, bandwidth issues, and inadequate technical support affect the long-term sustainability of digital initiatives.

09. Key Recommendations

1. **Infrastructure Upgrade:** Enhance power supply and broadband connectivity in rural and remote regions.
2. **Device Accessibility:** Provide subsidized or free devices to economically disadvantaged students and teachers.
3. **Capacity Building:** Conduct ongoing professional training on digital pedagogy for teachers.
4. **Content Localization:** Expand localized and multilingual learning resources in regional languages.

5. **Policy & Monitoring:** Strengthen implementation, monitoring, and evaluation of state and central schemes via public-private partnerships.

10. Conclusion

The integration of digital educational resources in Assam represents a crucial step toward modernising education, enhancing learner engagement, and widening access to knowledge and learning opportunities. Digital platforms, online resources, multimedia tools, and technology-enabled teaching practices have the potential to make education more flexible, accessible, and learner-centred. However, the benefits of digital transformation remain uneven due to persistent infrastructural limitations, disparities in internet connectivity and device access, socio-economic inequalities, and gaps in digital literacy and teacher preparedness. These challenges demonstrate that technological availability alone cannot ensure meaningful and equitable educational transformation.

Therefore, achieving inclusive, sustainable, and equitable digital education requires coordinated and continuous efforts among policymakers, educators, educational institutions, technology providers, and local communities. Strengthening digital infrastructure, improving affordability and accessibility, enhancing teacher capacity through digital-pedagogy training, and developing inclusive and locally relevant digital content are essential for addressing existing inequalities. A sustained equity-oriented approach can enable Assam to harness the transformative potential of digital educational resources and contribute meaningfully to the broader development of digital and inclusive education across North-East India.

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Industry without Development? Revisiting the Historiography of Colonial Industrialization in Nineteenth Century Assam

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Abstract

This review explores a foundational account of the relationship between industrialization and British colonialism in the Brahmaputra Valley Assam, India. Drawing on tea, coal, oil and ancillary industries, communications and resource mobilization, the authors contend that modern industry at best produced externally connected enclaves rather than regional development. Its most lasting finding is the presence of "pockets of prosperity", a dynamic industrial sector coupled with a stagnant agrarian and artisanal economy. The review engages with the book as an architectural work, in terms of its evidence and contribution to the economic history of Northeast India, while also juxtaposing it with subsequent scholarship on plantation labour, environmental transformation and colonial infrastructure. The value of the book lies as much in its sectoral synthesis, statistical evidence and insistence that roads, steam navigation, and railways be seen not merely as instruments of modernization but also extraction, which remain relevant in our times. But there are also limits to the theoretical model that holds it together: this 'drain-of-wealth' and de-industrialization framework sometimes reduces local variation, presents a too-homogeneous picture of the colonial economy, and pays less attention to the role played by workers, women and indigenous communities in ecological change. Though not read critically, it remains an indispensable map of how Assam evolved from an agrarian frontier into a strategic resource region of the British Empire.

A Regional Economic History with a Colonial Argument

The nineteenth-century economic history of Assam, too, has at times come up only as a secondary theme in political histories of annexation, administration and frontier policy. It shifts the scale of analysis in this book. It questions how the emergence of tea plantations, coal mines, oilfields & transport networks transformed the Brahmaputra Valley, and how these advancements contributed to the consolidation of British rule. The topic is industrialization, but the governing category is colonial penetration: industry appears not as detached technological advance but rather as a constellation of land policy, imported capital, migrant labour and communication or political power.[1]

The geographical definition is deliberately restricted. "Assam" refers mainly to the nineteenth-century districts of Kamrup, Darrang, Nowgong, Sibsagar and Lakhimpur, rather than the entire colonial province. This produces analytical clarity, since tea, coal and oil were concentrated in the Brahmaputra Valley, but it also limits the book's capacity to compare the valley with Cachar, Sylhet and adjoining hill regions. The title is consequently broader than the study's actual spatial field.[2]

The book's thesis is stated with unusual directness. British capital and European management developed primary-export industries without generating the structural and institutional changes needed to spread real income across the local population. Industrial growth produced "pockets of prosperity" within an otherwise stagnant economy. Communications, education, medicine and ancillary trades appeared as spin-offs, but the benefits remained restricted. This distinction between increased output and regional

development is the work's most important analytical contribution.[3]

Structure and Principal Arguments

Eight chapters move from colonial policy and the precolonial economy to sectoral studies and an epilogue. The first chapter connects annexation to frontier security, commercial calculation and Britain's transition from merchant to industrial capitalism. The second reconstructs indigenous production and trade before examining de-industrialisation. Separate chapters then treat tea, coal and oil. A sixth chapter considers ancillary industries and the communication network; the seventh analyses resource mobilisation, the drain of wealth and neglected possibilities for local industry; and the final chapter draws the sectors into a general interpretation of colonial transformation.[4]

Tea occupies the pivotal position. The industry required extensive land grants, large capital investments, imported technical knowledge, migrant recruitment and dependable transport. Its development therefore made plantation enterprise a mechanism for reorganising territory and labour. The analysis of wasteland rules is particularly significant because it connects a legal category land declared unused or available to the material creation of European estates. Labour scarcity, recruitment, enticement, absenteeism and wages are treated as integral costs of plantation formation rather than as peripheral social questions.[5]

The chapters on coal and oil expand the plantation-centred account into a history of mineral extraction. Coal initially served steam navigation, railways and tea manufacture, linking one colonial sector to another. Oil became commercially viable through concessions, geological exploration and the transport capabilities of the Assam Railways and Trading Company. By putting tea, coal and oil in the same analytical frame, this book shows that the resource frontier was an interconnected system: tea generated transport demand; coal fuelled steam and industry; railways opened mineral zones; oil enhanced strategic and commercial value for Assam.[6]

Discussion of communications is one of the strongest aspects of the study. Waterways, roads and railways are not ideal fusion with modernity. Pasikheti's and Rangamati's patterns catered to military transport, estate regions, mines, river ports, and interactions with markets beyond Assam. Bypassing older towns and trade routes, newer centres formed around administrative and extractive priorities, leading to a decline of those that fell out of favour. The conclusion that urbanisation was not substantial is strengthened when the evidence shows that only about two per cent of the population of the Brahmaputra Valley was living in urban areas in 1901.[7]

Evidence, Method and Historiographical Contribution

Developed from doctoral research, the book draws on administrative proceedings, official reports, gazetteers, industry records and economic statistics. Its sectoral method is particularly effective where production, transport and capital must be tracked across institutions. The bibliography and tables make the volume a useful reference work, while the chronological discussion of concessions, companies and communication schemes supplies a foundation for more specialised studies.

The interpretation is located within the nationalist and Marxist historiography of colonial political economy. The arguments of Dadabhai Naoroji, R. C. Dutt, R. Palme Dutt, Bipan Chandra and other historians of economic drain and de-industrialisation provide its conceptual vocabulary. Assam exported primary commodities, imported manufactured goods and transferred profits, freight payments and commercial returns beyond the region. Indigenous handicrafts received little protection, while European enterprise benefited from favourable land, transport and administrative arrangements.[8] The regional application of this larger model is not mechanical. The book identifies Assam's distinctive conditions: sparse population, difficult communications, limited indigenous capital, a weak urban network and the strategic anxieties of a frontier province. Its importance lies precisely in demonstrating how all-India colonial proclivities were refracted through a specific ecology and political geography. The book remains a rudimentary

account of commercial development in Assam, particularly for tea study, coal, local industry and colonial infrastructure.

The Value of the Enclave Thesis

The book's portrayal of tea, coal and oil as outward-facing enclaves remains persuasive. Production could surge, but only if local manufacturing capacity isn't built up. An example of this would be a railway that moves tea and coal but misses nearby rural communities where the agrarian economy may lack access to services or markets. Employment could increase even as profits and elevated management compensation flew out the door. This, however, did not simply represent the lack of development of Assam, but rather that spaces and sectors had been developed according to imperial priorities during colonialisation.

This also seeks to provide insight into the contradictionbetween new infrastructure and continuing underdevelopment. Roads, steamers and railways are not illusions; they were a real revolution. However, ownership and route, freight policy, and the sink of the surplus turned out to be factors that determined their developmental effects. The author steers clear of the simplistic assertion that colonialism does not bring about any change. What it argues instead is that change was, in fact, large-scale but uneven, and that the institutions guiding it blocked the widespread diffusion of benefits.

This critique becomes stronger the more neglected those industrial possibilities were. The valley had raw materials that could have aided economic drivers such as paper, chemicals, metalwork, matches, rice processing, dairy products and other industries. But their low development was not a sign of cultural atavism; it reflected how capital was allocated, how markets were structured, and, most importantly, where states set their sights. The comparison between its promoted export sectors and its neglected domestically oriented industries makes the notion of colonial distortion real.[9]

Limitations and Questions for Later Scholarship

However, the main shortcoming of the book stems from its macroeconomic scale. Workers show up primarily through hiring statistics, wage schemes and production issues in the story. The literature on their experience of captivity, disease, family formation, gendered labour and resistance is relatively thin. More recent labour histories have established that profits from plantation operations depended not only on imported labour but also on penal contracts, managerial violence, mobility management, and the reproduction of a resident workforce. The question of labour scarcity becomes more complex when we consider how workers became dependent and how they negotiated with plantation authority.[10]

Gender is especially underdeveloped. Although women's labour was key to both plucking and the demographic reproduction of plantation communities, the sectoral framework does little to analyse recruitment ratios, maternity, household work or sexual vulnerability. Studies of women as recruits have shown that contractors, regulation and employers used women at once both as workers and as points of stabilisation for an employee base essentially dependent on migration.[11]

Environmental history also changes how one reads the industrial sectors. Forest clearance, altered drainage, malaria, soil exhaustion, mining waste and the remaking of human-animal landscapes were not merely side effects; they were part of the material process through which plantations and mines were produced. Recent work on tea environments demonstrates that plant disease, human morbidity, law and profit were intertwined. Incorporating this perspective would make "colonial penetration" ecological as well as economic and political.[12]

The de-industrialisation argument would also benefit from closer attention to adaptation. Imported goods undoubtedly damaged some crafts, but indigenous producers did not always disappear; they could alter materials, markets, designs or relations with traders. A sharper distinction between decline, transformation and displacement would prevent the village economy from appearing static before colonial intervention and uniformly destroyed afterwards. Likewise, the idea of a weak Assamese intelligentsia requires analysis of internal class, caste and regional

differences rather than treatment as a single collective incapacity.

Finally, colonial causation occasionally appears too seamless. European officials, companies and investors shared broad interests, but they also disagreed over expenditure, labour regulation, transport subsidies and the proper role of the state. Colonial actors were not a monolithic entity comprising missionaries, administrators, planters, and managing agencies. Increased focus on these conflicts may elucidate exactly how penetration succeeded and why specific schemes failed, changed course, or had unexpected consequences.

Assessment

These limitations do not devalue the foundational importance of the book. It centres industrial history in nineteenth-century Assam and shows how economic change and colonial power mutually constituted each other. They are not just distinct success stories but part of a single, uneven regional change in which technologies such as tea, coal and oil will no longer be looked at or treated separately from developments in communications. The book also traces a historical genealogy of discourses over the resource wealth, economic neglect and hyper-visibility/decreasing ex-post degree of outward-orientation for Assam's infrastructure which will be vital for later debates.[13]

It was published in 1999, so it belongs to the period of scholarship particularly preoccupied with drain of wealth, regional imbalance and colonial distortion. Later research expanded the scope to include labour agency, gender, environmental change, medical history and identity. So, the best we can do with the book today is neither to accept its content uncritically nor dismiss it as an antiquated political-economy narrative. It should be read as a durable structural account whose silences delineate an agenda for future research.

The book concludes with a question that remains pertinent today: how does a region with its tea, coal, oil, and most of the continent's forests and waterways fail to develop industrially on any significant scale? Even where the approach needs refining, its answer (separate external controls, limited linkage effects and surplus transfer) still resonates. For students of colonial Assam, economic history, and Northeast India, the volume remains a starting point.

(Footnotes)

[1] Priyam Goswami, *Assam in the Nineteenth Century: Industrialisation & Colonial Penetration* (Guwahati: Spectrum Publications, 1999), xi–xiii.

[2] Goswami, *Assam in the Nineteenth Century*, xii. Goswami defines the geographical scope of the study as the districts of Kamrup, Darrang, Nowgong, Sibsagar, and Lakhimpur.

[3] Goswami, *Assam in the Nineteenth Century*, xi–xii.

[4] Goswami, *Assam in the Nineteenth Century*, vii–ix.

[5] Goswami, *Assam in the Nineteenth Century*, 63–85.

[6] Goswami, *Assam in the Nineteenth Century*, 86–127.

[7] Goswami, *Assam in the Nineteenth Century*, 128–64, xii–xiii.

[8] Goswami, *Assam in the Nineteenth Century*, xii–xiii, 165–200; see also Amalendu Guha, *Medieval and Early Colonial Assam: Society, Polity, Economy* (Calcutta: K. P. Bagchi, 1991).

[9] Goswami, *Assam in the Nineteenth Century*, 183–200.

[10] Rana P. Behal, *One Hundred Years of Servitude: Political Economy of Tea Plantations in Colonial Assam* (New Delhi: Tulika Books, 2014); Nitin Varma, *Coolies of Capitalism: Assam Tea and the Making of Coolie Labour* (Berlin/Boston: De Gruyter Oldenbourg, 2017), https://doi.org/10.1515/9783110463170.

[11] Samita Sen, "Questions of Consent: Women's Recruitment for Assam Tea Gardens, 1859–1900," *Studies in History* 18, no. 2 (2002): 231–60, https://doi.org/10.1177/025764300201800205; Samita Sen, "Commercial Recruiting and Informal Intermediation: Debate over the Sardari System in Assam Tea Plantations, 1860–1900," *Modern Asian Studies* 44, no. 1 (2010): 3–28, https://doi.org/10.1017/S0026749X09990047.

[12] Arnab Dey, *Tea Environments and Plantation Culture: Imperial Disarray in Eastern India* (Cambridge: Cambridge University Press, 2018), 97–132, https://doi.org/10.1017/9781108687034.

[13] Jayeeta Sharma, *Empire's Garden: Assam and the Making of India* (Durham, NC: Duke University Press, 2011), 1-18, https://doi.org/10.1215/9780822394396; Goswami, *Assam in the Nineteenth Century*, 201–31.

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Gobinda Bhawan Gita Satra, Manikpur: History, Philosophy and Cultural Significance

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Abstract

Gobinda Bhawan Gita Satra, located in Manikpur of Bongaigaon district, Assam, is an important religious and cultural institution that has played a significant role in the spiritual, social, and cultural development of the region. The satra established by Swami Krishnananda Brahmachari has become a place of learning the teaching of the Bhagavad Gita, the philosophy of the Vaishnava community and Vaishnava ethics according to the Indian spiritual and ethical tradition. Since its establishment, the institution has also supported the propagation of devotion, moral education, scriptural learning and welfare of communities, which reinforces the cultural and religious life of the Assamese society.

This paper outlines the historical development, philosophy and religion of Gobunda Bhawan Gita Satra and its cultural significance. It considers how the institution successfully incorporates values of Bhakti Yoga, Karma Yoga, and spiritual self-realization in its daily religious practices and education programmes. It has also revealed the way in which the satra has sustained the Assamese culture through devotional music, the congregation of religion, religious festivals, and the transmission of the traditions and values of the previous generations to the new generations. It also examines how the institution is contributing to social peace, ethical revival, social cohesion, and cultural sustainability in a changing socio-cultural environment.

The study concludes that Gobinda Bhawan Gita Satra continues to function as a vibrant institution that nurtures religious devotion, ethical consciousness, and social unity while safeguarding the rich cultural traditions of Assam for future generations.

Keywords: Gobinda Bhawan Geeta Satra, Vaishnavism, Bhagavad Gita, Cultural Heritage, Spirituality, Social Harmony.

1. Introduction

Religious institutions have historically played a crucial role in shaping the social, cultural, and spiritual life of communities across India. They have also been used as centers of learning, preservation of culture, moral education, and social organization in addition to being used as places of worship. In Indian history, temples, monasteries, ashrams, and other religious institutions have played a major role in shaping the moral and intellectual growth of the society. The institution of the satra has a special and distinguished status in the northeast state of Assam as a center of religiosity, cultural custodianship, moral education and social integration. The satras have helped shape the Assamese identity and have been an influential organization throughout several centuries.

The history of the satra institution dates back to the Neo-Vaishnavite movement initiated by the great saint-reformer Srimanta Sankardeva (14491568) and developed by his follower, the great saint-reformer Madhavdeva (14891596). Their preaching of Ekasarana Nama Dharma aimed at building devotional faith, grounded on the worship of Lord Krishna, equality, compassion, and devotion in place of ritualism and social discrimination. Satras became the organized centers of spreading these teachings and was viewed as a powerful instrument in spreading the devotional religion, fostering social harmony, and preserving the traditional cultural traditions of the indigenous people.

Throughout the years, the satra system has transformed the Assamese society through the establishment of institutional spaces in which individuals

could practice religious worship, scriptural education, arts, and community service. In addition to their religious roles, the satras emerged as a protector of Assamese literature, music, dance, drama and traditional knowledge systems. Although most of the satras directly relate to the Ekasarana tradition, many more recent organizations embraced wider Vaishnavite philosophies and scriptural studies as a part of their work.

Gobinda Bhawan Gita Satra at Manikpur is just one such institution and has been effective in integrating both Bhagavad Gita philosophy with holy devotions to Lord Krishna. The satra is one of the leading institutions of spiritual education and cultural heritage, founded by Swami Krishnananda Brahmachari in Lower Assam. It has been the source of moral, spiritual, and cultural development of the local community through religious discourses, devotional music, congregational worship, scriptural study, and social welfare programs.

The proposed research aims at analyzing the historical process, philosophy, religious tradition, cultural meaning, and modern implications of Gobinda Bhawan Gita Satra. Its purpose is to emphasize how the institution has played a very important role in holding on to Assamese heritage, enhancing the promotion of spiritual values, as well as our social harmony in a world that is increasingly evolving.

2. Objectives of the Study

The major objectives of this study are:

- To examine the historical development of Gobinda Bhawan Gita Satra.
- To analyze the philosophical principles underlying its activities.
- To study its religious and cultural practices.
- To assess its contribution to society and community development.
- To evaluate its contemporary relevance and future prospects.

3. Methodology

The current paper shares the qualitative, descriptive, analytical and historical research design in order to explore the history, philosophy and cultural meaning of Gobindi Buaban Gita Satra, Manikpur. The study relies on primary and secondary sources of knowledge. Primary sources include oral histories and guru-parampara narrations provided by devotees, elders, and local people and members of the satra. An ethnographic observation of the religious practices, devotional worship, festivals, cultural shows and community activities has also been adopted to establish how the institution played a modern role and impacted.

Books, research articles, journals, historical documents, local publications, souvenir volumes, institutional records and literature on Assamese Vaishnavism and satra institutions available have been collected as a secondary data source. In order to study the philosophical underpinnings of the satra, a comparative study of the relevant Neo-Vaishnavite literature, such as the writings of Srimanta Sankardev and Madhavdev, is presented. Through historical, philosophical, cultural and sociological approaches, the information collected has been critically reviewed to give a complete account of the development, religious observances, cultural contributions and social importance of Gobindo Buaban Gita Satra in terms of the larger perspective of Assam Vaishnavite heritage.

4. Historical Background of Gobinda Bhawan Geeta Satra

Gobinda Bhawan Gita Satra is in Manikpur of the Bongaigaon district in current Assam, which is also associated with strong cultural heritage and religious background. Swami Krishnananda Brahmachari, a sacred spiritual teacher, founded the satra with his vision that was devoted to Lord Krishna, study of the sacred scriptures, and service to humanity without concern about self. Having been heavily influenced by the Bhagavad Gita and the Vaishnavite tradition in general, he established the institution as a spiritual awakening centre, moral teaching institution, and place of worship.

The development of the satra was a significant event in the religious life of Lower Assam. When society was experiencing massive social and cultural transformations, the institution aimed at enforcing the value of spirituality by spreading scriptural knowledge and religious practices. The Bhagavad Gita forms a key focus in the affairs of the satra and to this day its lessons on devotion (bhakti), right action (karma) and spiritual wisdom (jnana) still shape its religious programs and educational initiatives.

Gobinda Bhawan Gita Satra has developed into a dignified seat of pilgrimage and devotion since its

inception. Spiritual inquisitors and adherents of various Assamese territories visit the satra frequently and attend religious rituals, Bhagavad Gita retelling, naam-kirtan, yearly festivals, and spiritual discussions. These practices have contributed to the reinforcement of religious awareness and community among the followers.

The satra has, over the decades, kept strong ties with the local people and significantly engaged in the life of the area, in terms of culture and social life. Gobinda Bhawan Gita Satra has established itself as a key element of the Manikpur cultural identity and has remained a source of faith, education and societal cohesion in contemporary Assam due to its focus on spiritual growth, ethical conduct, culture and service to the community.

5. Philosophical Foundations

The Gobinda Bhawan Gita Satra is philosophically oriented towards the teachings of Bhagavad Gita and the wider Vaishnavite tradition of India. The organization aims to advance an equitable spiritual existence founded on submission, upright behaviour, self-awareness, and upright ethical behaviour. The Satra is also based on the teachings of Lord Krishna but it focuses on nurturing spiritual awareness and promoting the performance of social and moral obligations by people. Its philosophy focuses on whole-person development through combination of religious faith with practical wisdom and service to society.

5.1 Bhakti Yoga

The most crucial pillar of the philosophy practiced by the satra is Bhakti Yoga or the path of devotion. The followers are advised to connect with lord Krishna on a personal and close level through prayer, naam-kirtan, meditation, worship and constant remembrance of the divine. The satra preaches that devotion in earnestness cleanses the heart, eradicates egoistic dispositions and prepares the person to achieve spiritual freedom. Devotional practices are communal and they enhance unity among the devotees and reinforce their dedication to moral and religious values.

5.2 Karma Yoga

The teachings of the institution are dominated by the philosophy of Karma Yoga. According to the teachings of the Bhagavad Gita about selfless action, the followers are instructed not to do their responsibilities with affection for personal gain or recognition. The satra stresses that work done with passion and a spirit of service is a form of worship. This value promotes discipline, social responsibility and involvement in the community welfare and service to humanity.

5.3 Jnana Yoga

Wisdom and knowledge are considered vital components of spiritual development. The satra encourages intellectual questioning and introspection through frequent reading of Bhagavad Gita and other religious books to find answers to their questions. The teachings are not only proposed in the form of theological doctrines but they are also exhibited as a kind of practical guide to live an ethical and meaningful life. The religious debates and Divine arguments can assist the followers to acquire self-control, ethical judgment, and introspection.

5.4 Universal Brotherhood

The other significant element of the philosophy of the satra is its focus on universal fraternity and equality among humans. Institution proclaims that every person is a reflection of the same divine entity and he, as such should be respected and treated with compassion. This humanistic approach reflects the humanistic beliefs of Assamese Vaishnavism which helps in social unity, community association, and harmonious co-existence. Gobinda Bhawan Geeta Satra still serves to spur spiritual development, moral life and social harmony among its devotees through these philosophical principles.

6. Religious Activities and Practices

Religious work is the base of daily life at Gobinda Bhawan Gita Satra and is essential to achieving its spiritual mission. This institution is a place where believers engage in worship, study of scriptures, devotional singing and group religious practice. Such practices not only build individual faith, but they also build community and community of spiritual identity among participants.

❖ **Daily Worship**

Daily devotion is part of the regular routine of the satra. Day usually starts with prayers, devotional songs, and readings of the sacred texts. Such practices generate a sense of spiritual discipline, devotion, and

peace. These are done regularly in worship where the devotees develop inner peace, morality and stronger relationship with the divine. Self-reflection and spiritual development are also promoted during prayer sessions.

❖ **Bhagavad Gita Study**

Among the unique aspects of Gobinda Bhawan Gita Satra, it is possible to mention its focus on systematic study of the Bhagavad Gita. Devotional scholars, religious leaders and educated followers discuss the text regularly and discuss its philosophical lessons and their applicability in their daily lives. During these sessions, the devotees will have a deeper insight into key principles like duty, devotion, selfless action, and spiritual realization. Gita study is intellectual as well as spiritual enrichment.

❖ **Naam-Kirtan**

The chanting of the names and glories of God, known as Naam-Kirtan, has played a central role in the devotional life of the satra. Through these sessions, people of various backgrounds come together in a common act of worship and devotion. Collective chanting produces a spiritually uplifting atmosphere and reinforces the fellowship bonds amongst devotees.

❖ **Celebration of Festivals**

The satra is extremely enthusiastic about major religious festivals like Janmashtami, Dol Utsav, Gita Jayanti, Ras Mahotsava, and other Vaishnavite festivals. These events enable the exchange of religion, culture and bring about social peace with the help of thousands of believers and guests. This is because the celebrations serve to keep the traditional practice alive and to build a foundation of cultural and spiritual background for the region.

7. Cultural Significance

Gobinda Bhawan Gita Satra is a crucial place for maintaining and sharing the cultural and religious legacy of Assamese people and culture. In addition to its religious purpose, the satra is also a cultural centre, where traditional values and the arts are promoted and preserved, and community traditions are strengthened and celebrated. It contributes to the preservation of the cultural identity of the local community, as well as the Assamese society in general, through several activities.

❖ **Preservation of Devotional Music**

This is one of the main cultural legacies of the satras, and they are responsible for preserving and spreading the devotional music and traditional methods of religious expression. Regularly, during religious ceremonies and festivals, bhajans, naam-kirtans, devotional recitations, and spiritual songs are performed. These practices contribute to ensuring the continuity of valuable music heritage related to Vaishnavite culture and to allowing the transmission of music and devotional arts to younger generations.

❖ **Transmission of Cultural Values**

The informal educational institution is the satra, where the traditional customs, moral values, and ethical principles are introduced to individuals, especially the youth. Young people are educated about and practise devotion, respect, compassion, discipline and community service through religious education, scriptural discussions and cultural activities. This helps to sustain cultural heritage and deepen the sense of continuity and connection between generations.

❖ **Promotion of Social Harmony**

The satra is also very significant in the development of social harmony and community cooperation. People with diverse socio-economic cultural backgrounds come together in religious festivals, congregational prayers and cultural events. These exchanges foster relationships within the community, build understanding, increase unity and a sense of communal responsibility.

❖ **Cultural Identity**

The rapid process of modernization and globalization makes Gobinda Bhawan Gita Satra a significant contribution to the preservation of local cultural identity. The institution preserves important elements of the Assamese heritage by continuing traditional practices, rituals, language, music and community events. This has ensured that the satra remains a source for cultural memory and a representation of the spiritual and cultural continuity within the region.

8. Social Contributions

The social role of Gita Satra of Gobinda Bhawan is not limited to the realm of religious worship. It is an integral part of the community and plays an active role in the moral, educational, and social background of the people of both Manikpur and its surrounding areas. The satra follows the ideas of Bhagavadgîtâ and the tradition

of Vaishnavites to encourage social welfare, ethical conduct, and collective well-being.

❖ **Moral Education**

Among the most important, the satras have promoted moral and spiritual education. The religious discourses, scriptural studies, and devotional activities promote the development of virtues in people of every age group, including respect for others, self-discipline, compassion, humility, and honesty. These teachings promote moral growth and direct them to responsible and meaningful lives.

❖ **Community Welfare**

Gobinda Bhawan Gita Satra is actively involved in various charitable and welfare activities for the welfare of society. During religious festivals and public gatherings or in times of need, support is extended. These programs adhere to selfless service (seva) as practiced in Bhagavadgîtâ and encourage mutual support and participation within the community.

❖ **Youth Engagement**

Young people are given opportunities to attend religious, cultural and social events throughout the satra. Youth cultivate leadership, organizational skills, and social responsibility through participation in festivals, devotional music, organizational work, and community service. All these experiences are aimed at preparing them to become active contributors to society.

❖ **Promotion of Ethical Living**

The institution strives to make people lead disciplined and moral life according to their religious principles. Self-control, simplicity, devotion, respect for others, and service to humanity are emphasized. Through this approach, Gobinda Bhawan Geeta Satra not only fosters these values but also helps develop a morally conscious and socially responsible community, thereby enriching the lives of its citizens and ensuring social harmony.

9. Contemporary Relevance

In the contemporary world, society faces numerous challenges such as moral decline, increasing materialism, social fragmentation, cultural erosion, and psychological stress. In this context, Gobinda Bhawan Gita Satra remains meaningful and significant to both individuals and communities. The institution offers spiritual sustenance and moral strength, enabling individuals to handle uncertainty, anxiety and moral questions in the context of rapid social change.

The message of the Bhagavadgîtâ, as disseminated by the satra, cultivates values such as devotion, self-control, service unselfishly, action with ethics, which are indeed relevant in resolving many contemporary social issues. The satra teaches individuals to develop inner peace, moral duty and social awareness through religious discourses and devotional exercises and through activities in the local community.

Additionally, the institution also makes a significant contribution to the preservation of the Assamese cultural heritage by preserving traditional rituals, festivals, devotional music, and religious practices. It plays a significant role in modern-day Assamese society, encouraging social harmony and a sense of cultural identity, as well as strengthening the bonds of community.

10. Challenges and Future Prospects

Though it has played a significant role in the religious, cultural and social life of Assam, Gobinda Bhawan Gita Satra has been subjected to various challenges in the modern world. Meanwhile, there are several opportunities to retain and enhance its rich heritage.

❖ **Challenges**

- **Declining Interest among Youth:** Concerns are expressed about the continuity of the satra's traditions because of the reduced engagement of younger generations in traditional religious and cultural practices in modern lives, urbanization, and the effect of digital media.
- **Limited Documentation:** Much of the satra's history and traditions are retained in oral interpretation and memory. There is no systematic documentation, which is a risk to the preservation of its heritage.
- **Financial Constraints:** The lack of financial resources also has an impact on infrastructure maintenance, organization of religious festivals, preservation of manuscripts, and cultural programmes.
- **Impact of Modernization:** Social and cultural changes occurring at a high pace have affected traditional life and values, and hence, it is hard to maintain old life and values.

❖ **Future Prospects**

- **Digital Preservation:** Manuscripts, photographs, and historical records and materials can be efficiently preserved and made available to future generations through digitization.
- **Academic Research:** Encouraging research, seminars, and publications on the satra can enhance awareness of its historical, philosophical, and cultural significance.
- **Government Support:** Assistance from government agencies and cultural organizations can strengthen heritage conservation efforts and support infrastructural development.
- **Youth-Oriented Programmes:** Workshops, cultural activities, and educational programmes can encourage greater participation of young people and ensure the continuity of traditions.
- **Collaboration with Educational Institutions:** Partnerships with schools, colleges, and universities can promote documentation, research, and heritage education.

These initiatives can help ensure the continued vitality, relevance, and preservation of Gobinda Bhawan Gita Satra and its traditions for future generations.

11. Conclusion

Gobinda Bhawan Gita Satra, Manikpur, is one of the important religious-cultural hubs which had played a great role in the religious and cultural life of Assam. It was founded by Swami Krishnananda Brahmachari and was used as a place of worship, education of scriptures, education of morals and community service. The values upheld at the satra include devotion, selfless service, moral conduct and social harmony, guided by the teachings of the Bhagavad Gita and the Vaishnavite tradition. The institution has contributed to the preservation and reinforcement of Assamese cultural heritage and identity through its religious activities, cultural programmes, and community engagement.

Even with the difficulties of modernization, changed life and lack of resources, Gobinda Bhawan Gita Satra is still relevant as a centre of spirituality and cultural preservation. It continues to play a vital part in encouraging social harmony, moral consciousness, and cultural continuity. Its rich legacy can be continued in documentation, research, digitisation, and heritage conservation, helping to preserve its spiritual and cultural benefits for future generations.

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Understanding Disability: Changing Perspectives from the Medical Model to Inclusive Education

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Abstract

Disability is a broad and complex concept. Its meaning and understanding have changed over time. In the past, disability was mainly seen as a problem within the individual, often related to illness, injury, or impairment. As a result, greater attention was given to medical treatment, rehabilitation, and correction of the individual's condition. However, this understanding has gradually changed. Disability is now increasingly viewed from social, functional, and human rights perspectives. It is recognised that a person's difficulties are not caused only by an impairment but may also result from barriers in the physical and social environment. These barriers may include inaccessible buildings, lack of communication facilities, unsuitable teaching methods, negative attitudes, and inadequate support. The International Classification of Functioning, Disability and Health (ICF) developed by the World Health Organization provides a broader understanding of disability by considering functioning, activities, participation, and environmental factors. Similarly, the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) focuses on equality, dignity, accessibility, participation, and inclusion. This changing understanding has important implications for education. Inclusive education requires schools to provide accessible facilities, suitable teaching-learning materials, trained teachers, assistive devices, reasonable accommodation, and a supportive environment. In India, the Rights of Persons with Disabilities Act, 2016 provides an important legal framework for promoting inclusive education. Thus, understanding disability from a broader perspective is essential for creating an educational system where children with disabilities can learn and participate equally.

Keywords: Disability, Medical Model, Social Model, ICF, Inclusive Education, Assistive Technology, Disability Rights, RPwD Act, 2016

1. Introduction

Disability is an important issue in education, health, society, and human rights. Persons with disabilities may face difficulties in accessing education, employment, social activities, and other opportunities. However, disability should not be understood only in terms of a person's physical, intellectual, sensory, or mental condition. The difficulties experienced by a person are also influenced by the environment, availability of support, accessibility of services, communication facilities, and attitudes of other people. Thus, disability is not simply an individual problem; it is also connected with the way society and institutions respond to individual differences.

The understanding of disability has changed considerably over time. Earlier, disability was mainly viewed from a medical perspective. The focus was on identifying the condition, providing treatment, and helping the individual overcome or manage the impairment. Gradually, disability rights movements and disability studies questioned this limited view. Greater attention began to be given to the social and environmental barriers that restrict the participation of persons with disabilities.

The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) reflects this broader understanding. It recognises that disability is related to the interaction between persons with impairments and various barriers that may prevent their full and equal participation in society (United Nations, 2006).

The World Health Organization (WHO) also provides a broader approach through the International Classification of Functioning, Disability and Health (ICF). The ICF considers not only a person's health condition but also body functions, activities, participation, and environmental factors (World Health Organization [WHO], 2001).

This changing understanding of disability is particularly important in education. If disability is viewed only as an individual limitation, schools may focus mainly on diagnosis and remedial support. However, a rights-based approach requires schools to identify and remove the barriers that prevent children with disabilities from learning and participating. Therefore, understanding the concept of disability is an important starting point for studying inclusive education and the implementation of disability-related laws and policies.

2. Concept and Meaning of Disability

Disability is a complex and multidimensional concept. It may be associated with physical, sensory, intellectual, developmental, or mental impairments. However, having an impairment does not mean that every person will experience disability in the same way. The difficulties faced by an individual depend on several factors, including the person's circumstances, available support, accessibility of the environment, communication facilities, and attitudes of society.

Disability may be present from birth or may develop later in life because of illness, injury, ageing, or other circumstances. It may also be visible or invisible. Therefore, disability cannot be understood as a single or uniform experience.

The UNCRPD also follows a similar approach. It recognises persons with disabilities as people who have long-term physical, mental, intellectual, or sensory impairments which, when combined with different barriers, may restrict their full and effective participation in society on an equal basis with others (United Nations, 2006).

This understanding is important because it shifts attention from the individual alone to the relationship between the person and the environment. For example, a child with a physical impairment may have difficulty entering a school if there is no ramp. However, the same child may move independently when the school provides ramps, accessible toilets, suitable furniture, and safe pathways. Therefore, the environment can either create barriers or help reduce them.

Disability should consequently be understood by considering both the individual's needs and the conditions in which the person lives. This approach is particularly important in education because schools have a major role in creating an environment that supports the learning and participation of children with disabilities.

3. Historical Development of the Concept of Disability

The way disability has been understood has changed throughout history. Different societies have viewed disability in different ways. At various times, persons with disabilities have been treated with fear, pity, charity, rejection, or acceptance. In recent times, disability has increasingly been understood in terms of human rights, equality, and social inclusion.

In earlier societies, physical and mental differences were sometimes explained through religious or supernatural beliefs. Certain conditions were associated with supernatural powers, punishment, fate, or other religious explanations. With the development of scientific knowledge and medicine, these explanations gradually changed. Disability began to be understood more in terms of health conditions, impairment, diagnosis, and treatment.

During the eighteenth and nineteenth centuries, scientific classification became increasingly important. People were often compared with ideas of what was considered "normal." Those who differed from these standards were sometimes treated as abnormal or less capable. In some historical situations, such thinking contributed to institutionalisation, discrimination, and eugenic practices. These developments show that ideas about normality can strongly influence how people with disabilities are treated.

The Industrial Revolution also influenced attitudes towards disability. Society increasingly valued

productivity and the ability to perform standard forms of work. People who could not meet these expectations were often considered less productive and were excluded from many economic and social opportunities.

A major change occurred during the twentieth century. Persons with disabilities, activists, and researchers began to challenge the idea that disability was simply an individual problem. They argued that social attitudes, inaccessible environments, institutional practices, and discrimination could create significant barriers. This thinking contributed to the development of the social model of disability.

4. Major Models of Disability

4.1 Medical Model of Disability

The medical model mainly views disability as a problem within the individual. According to this approach, disability is related to illness, injury, trauma, or another health condition. Therefore, the main focus is on diagnosis, treatment, rehabilitation, and professional care.

The medical model has made important contributions to diagnosis, treatment, rehabilitation, therapy, and assistive technology. Medical care can be very important for persons with disabilities. However, relying only on the medical model can create a limited understanding of disability because it may not give enough attention to environmental and social barriers.

For example, a child with a physical impairment may receive appropriate medical treatment but still be unable to enter the classroom if the school has no ramp. Similarly, a child with hearing impairment may be able to learn effectively but face difficulties if teachers do not know suitable communication methods.

Therefore, medical treatment is important, but it should be combined with educational, social, environmental, and other forms of support.

4.2 Social Model of Disability

The social model brought an important change in the way disability is understood. Instead of focusing only on the individual's impairment, it looks at the barriers created by society. According to this approach, an impairment may exist within an individual, but the person's disability can become greater when society does not provide an accessible and supportive environment.

Michael Oliver played an important role in developing and popularising the social model of disability. He argued that attention should be given to removing disabling barriers rather than focusing only on changing the individual (Oliver, 1983).

For example, a person using a wheelchair may not face major difficulties in a building with ramps and lifts. However, the same person may experience serious restrictions in a building that can only be accessed by stairs. Similarly, a child with hearing impairment may participate successfully when appropriate communication support is available but may struggle in a classroom where only spoken communication is used.

The social model therefore encourages society to ask not only **"**What difficulty does the person have?" but also "What barriers are preventing the person from participating?"

The social model has greatly influenced disability rights and inclusive education. However, it also has limitations. If social barriers are given too much emphasis, the real effects of impairment and the importance of medical treatment, therapy, and personal support may be overlooked. Therefore, a balanced approach should consider both individual needs and social barriers.

5. The ICF Perspective on Disability

The International Classification of Functioning, Disability and Health (ICF) was developed by the World Health Organization as a broader way of understanding health, functioning, and disability. It was endorsed by the World Health Assembly in 2001 (WHO, 2001).

The ICF does not focus only on a person's diagnosis or impairment. It also considers what a person can do, the activities they perform, their participation in society, and the environmental factors that affect their functioning.

The ICF is particularly useful in education. When considering a child with a disability, teachers and researchers should not look only at the child's disability category. They should also consider:

- what the child can do;
- the activities the child finds difficult;
- participation in classroom activities;
- communication needs;
- accessibility of the school;
- availability of assistive devices;
- support from teachers and classmates; and
- attitudes within the school and community.

The ICF also shows that disability can change according to the environment. When barriers are removed and appropriate support is provided, a person's participation and functioning may improve.

6. Causes and Forms of Disability

Disability can occur for many different reasons. Some disabilities are present from birth, while others may develop later because of illness, injury, ageing, or other conditions. Some impairments may be temporary, whereas others may continue for a long period or throughout life. Disability may also be visible or invisible.

It is important to understand that people with the same type of disability may not have the same educational needs. Two children with similar impairments may have very different experiences because of differences in family support, economic conditions, school facilities, teacher preparation, communication support, assistive technology, and social attitudes.

Therefore, children with disabilities should not be treated as one homogeneous group. Their individual needs should be identified, and appropriate support and reasonable accommodation should be provided.

7. Assistive Technology and Disability Support

Assistive technology is an important means of supporting persons with disabilities. It includes devices, equipment, software, and other forms of technology that help people communicate, move, access information, and perform everyday activities. Examples include wheelchairs, prosthetic devices, Braille materials, large-print materials, accessible keyboards, screen readers, speech-recognition software, and communication devices.

Assistive technology is particularly useful in education. For example, Braille and screen-reading technology can support children with visual impairments, while hearing-related technologies can help children with hearing impairments. Mobility devices can help children move around the school and access classrooms.

However, simply providing assistive devices is not enough. Children and teachers may need training to use them properly. Devices also require maintenance, technical support, and regular assessment. Teachers should understand how assistive technology can be used as part of classroom teaching. Thus, assistive technology should be considered as one part of a wider system of educational support.

8. Disability as a Socially Constructed Concept

The idea of disability as a socially constructed concept highlights the role of society in shaping the experience of disability. Social expectations, institutional practices, and ideas about what is considered "normal" can influence whether a particular impairment becomes a major barrier to participation.

For example, a child with a physical impairment may have difficulty participating in school activities if the school has no ramps, accessible toilets, suitable furniture, or safe pathways. If these facilities are provided, many of the difficulties may be reduced.

Similarly, a child with hearing impairment may face communication difficulties when teachers depend only on spoken communication. The same child may participate more effectively when suitable communication methods and support are available.

This shows that schools can either increase or reduce the barriers experienced by children with disabilities. Therefore, inclusive education requires changes not only in the child-support system but also in the school environment.

9. Disability, Language, and Human Dignity

The language used to describe disability is also important. Words and expressions can influence how people think about disability and how persons with disabilities are treated. Person-first language, such as **"person with a disability,"** places the individual

before the disability. Some people and communities, however, prefer identity-first language, such as **"disabled person."** The preferred terminology can differ from one person or community to another.

The UNCRPD gives importance to dignity, equality, non-discrimination, participation, independence, and respect for differences (United Nations, 2006).

Therefore, academic and educational discussions should use respectful and non-stigmatising language. Persons with disabilities should not be defined only by their impairments. They should be recognised as individuals who have abilities, aspirations, rights, and the potential to contribute to society.

10. Disability and Inclusive Education

The changing understanding of disability has important implications for inclusive education. Inclusive education does not simply mean admitting children with disabilities into regular schools. It means creating an educational environment where they can learn, participate, communicate, interact, and progress along with other children.

A rights-based approach requires schools to identify and reduce different kinds of barriers. These may include:

- physical barriers;
- communication barriers;
- teaching-learning barriers;
- technological barriers;
- social barriers; and
- negative attitudes.

To promote meaningful inclusion, schools need accessible buildings, suitable learning materials, trained teachers, assistive devices, reasonable accommodation, accessible communication, flexible teaching methods, and a supportive school environment.

The UNCRPD also emphasises accessibility as an important condition for equal participation. Accessibility includes the physical environment, transportation, information and communication, and public facilities such as schools (United Nations, 2006).

In India, the **Rights of Persons with Disabilities Act, 2016** provides an important legal foundation for inclusive education. Sections 16 and 17 deal with the duties of educational institutions and measures for promoting inclusive education. Section 31 provides for free education for children with benchmark disabilities (Government of India, 2016).

Therefore, studying inclusive education requires attention not only to what the law provides but also to how these provisions are actually implemented in schools.

11. Implications for Educational Practice

The modern understanding of disability has several important implications for schools and teachers.

First, schools should focus on the **abilities and potential of children** rather than only on their limitations. Every child should be given opportunities to learn and participate.

Second, schools should provide an accessible physical environment. Ramps, accessible toilets, suitable furniture, safe pathways, and other facilities can reduce physical barriers.

Third, teachers need proper training to understand different disabilities and use suitable teaching methods. They should also be familiar with appropriate communication techniques and assistive technology.

Fourth, teaching-learning materials should be flexible and accessible according to individual needs.

Fifth, children should receive appropriate support and reasonable accommodation so that disability does not become a barrier to learning.

Finally, inclusion requires positive attitudes from teachers, school heads, classmates, parents, and the wider community. Even when physical facilities are available, negative attitudes and discrimination can prevent genuine inclusion.

Thus, inclusive education is much more than enrolment. It involves access, participation, learning, support, accommodation, communication, dignity, and equal opportunity.

12. Conclusion

The concept of disability has changed considerably over time. Earlier, disability was mainly

understood as an individual medical problem that required treatment or rehabilitation. Today, a broader understanding recognises that disability is also influenced by social, physical, institutional, communication, and attitudinal barriers.

The medical model remains important because medical care, rehabilitation, and therapeutic support may be necessary for many individuals. However, the social model reminds us that society also has a responsibility to remove barriers. The ICF provides a broader framework by considering functioning, activities, participation, and environmental factors.

This changing understanding is particularly important in education. A child with a disability may experience difficulties not simply because of the impairment but because the school environment is inaccessible, teachers are not adequately trained, communication support is unavailable, or suitable learning materials and assistive devices are not provided.

The UNCRPD and the Rights of Persons with Disabilities Act, 2016 have strengthened the rights-based approach to disability and inclusive education. Effective implementation, however, requires more than legal provisions. Schools must create environments where children with disabilities can learn, participate, communicate, and develop their abilities with dignity and equal opportunities.

Therefore, disability should be understood not simply as a limitation within a person, but as an interaction between the individual and the environment. This understanding provides a strong foundation for examining the implementation of inclusive education and the educational provisions of the Rights of Persons with Disabilities Act, 2016.

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Language Policy in Multilingual Schools

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Abstract

Language policy in multilingual schools has emerged as one of the most significant educational concerns in linguistically diverse societies. This research paper examines the role, implementation, challenges, and impact of language policies in multilingual educational settings. It explores theoretical frameworks of language planning and policy, pedagogical implications of multilingual education, sociopolitical dimensions of language choice in schools, and comparative case studies from different multilingual nations. The paper argues that inclusive and flexible language policies foster educational equity, preserve linguistic diversity, and improve learning outcomes, while rigid monolingual approaches often marginalize minority language speakers. The study concludes with policy recommendations for effective multilingual language planning in schools.

Keywords: Language Policy, Multilingual, Language, Language Planning, Education.

Introduction

In the twenty-first century, multilingualism has become a defining feature of educational systems worldwide. Migration, globalization, colonial legacies, and indigenous linguistic diversity have made multilingual classrooms increasingly common. In such contexts, language policy in schools determines not only the medium of instruction but also broader issues of access, identity, inclusion, and social mobility.

Language policy in multilingual schools refers to formal and informal decisions regarding which languages are taught, used as mediums of instruction, or recognized in school administration and curriculum. These policies shape educational opportunities and influence the preservation or erosion of linguistic identities. The issue is particularly significant in postcolonial and multicultural societies where multiple languages coexist in unequal power relations.

This paper explores how language policy functions in multilingual schools, its theoretical foundations, implementation strategies, challenges, and implications for educational justice.

Theoretical Framework of Language Policy

Language policy is broadly understood as the explicit and implicit principles governing language use within institutions. Scholars such as Bernard Spolsky conceptualize language policy through three interconnected components: language practices, language beliefs or ideologies, and language management.

In multilingual schools, language policy is shaped by:

- National education policy
- Regional linguistic politics
- Community language ideologies
- Institutional decisions of school authorities
- Classroom-level pedagogical practices

Language policy intersects with theories of language planning, particularly:

1. **Status Planning** – determining the function/ status of languages in education.
2. **Corpus Planning** – developing orthographies, vocabulary, and standardization.

3. **Acquisition Planning** – promoting language learning through curriculum.

Historical Development of Language Policy in Education

Historically, language policies in schools have reflected state-building projects. Colonial administrations often imposed imperial languages as mediums of instruction. Postcolonial states frequently retained colonial languages due to their perceived neutrality or global value.

Examples include:

- English in India, Nigeria, and Kenya
- French in Senegal and Cameroon
- Spanish in Latin America

However, modern educational discourse increasingly emphasizes mother tongue-based multilingual education as a means of promoting equity and cognitive development.

Importance of Language Policy in Multilingual Schools

Educational Access and Comprehension

Students learn most effectively in languages they understand. Research consistently demonstrates that early education in a learner's first language improves literacy, comprehension, and academic performance.

Identity and Cultural Preservation

Language is deeply tied to cultural identity. Inclusive language policies validate students' linguistic backgrounds and promote self-esteem.

Social Inclusion and Equity

Language policy affects whether minority-language students are included or marginalized. Monolingual policies often privilege dominant groups.

National Integration

Balanced multilingual policies can promote unity while respecting diversity.

Models of Language Policy in Multilingual Schools

Monolingual Model

One dominant language serves as sole medium of instruction. Common in assimilationist systems.

Transitional Bilingual Model

Mother tongue is used temporarily before transition to dominant language.

Maintenance Bilingual Model

Seeks to preserve minority language while adding dominant language proficiency.

Dual Language / Immersion Model

Students learn through two languages over sustained periods.

Flexible Multilingual / Translanguaging Model

Encourages dynamic use of multiple linguistic resources in classroom interaction.

Benefits of Multilingual Language Policies

Research identifies several benefits:

- Improved cognitive flexibility
- Better metalinguistic awareness
- Higher academic achievement in long term
- Greater intercultural competence
- Enhanced preservation of minority languages

Challenges in Implementing Language Policy

Political Resistance

Dominant-language elites may oppose multilingual policies.

Resource Constraints

Lack of textbooks, trained teachers, and standardized orthographies.

Teacher Preparedness

Teachers may lack multilingual pedagogical training.

Assessment Systems

Standardized testing often privileges dominant languages.

Social Attitudes

Parents may prefer dominant/global languages for economic reasons.

Comparative Case Studies

India

India follows a Three-Language Formula but implementation varies across states. English and

regional languages dominate, while many tribal and minority languages remain underrepresented.

South Africa

Officially recognizes eleven languages, yet English and Afrikaans continue to dominate many schools.

Canada

Bilingual education in English and French demonstrates institutionalized multilingual policy, though Indigenous languages remain marginalized.

Ethiopia

Regional language instruction in primary education has improved access but faces implementation gaps.

Language Policy and Classroom Practice

Official policy often differs from actual classroom practice. Teachers frequently engage in translanguaging regardless of formal restrictions. Classroom-level language negotiation significantly shapes student experiences.

Role of Teachers in Language Policy Implementation

Teachers function as policy interpreters and implementers. Their attitudes, competencies, and beliefs influence policy success.

Professional development should include:

- Multilingual pedagogy
- Translanguaging strategies
- Inclusive curriculum design
- Language-sensitive assessment methods

Technology and Language Policy

Digital platforms can support multilingual education through:

- Multilingual e-learning materials
- AI translation and support tools
- Digital dictionaries and language apps
- Online teacher training resources

Policy Recommendations

1. Adopt mother tongue-based multilingual education in early grades.
2. Provide sustained bilingual/multilingual instruction rather than rapid transition.
3. Invest in teacher training for multilingual pedagogy.
4. Develop teaching materials in minority languages.
5. Align assessments with multilingual realities.
6. Include community stakeholders in language policy planning.
7. Recognize translanguaging as a legitimate pedagogical practice.

Language Policy and Sociolinguistic Diversity

Multilingual schools exist within broader sociolinguistic environments shaped by historical, political, and economic conditions. Sociolinguistic diversity refers to the coexistence of multiple linguistic communities within a society. Schools often become spaces where these linguistic identities interact, compete, and negotiate legitimacy.

In multilingual societies, language hierarchies frequently emerge. Certain languages acquire prestige because of colonial history, economic opportunity, or political dominance, while minority and indigenous languages are often undervalued. Educational institutions can either reinforce or challenge such inequalities.

Pierre Bourdieu's concept of linguistic capital is particularly relevant in this context. According to Bourdieu, language functions as a form of social power. Dominant languages provide social mobility and institutional recognition, whereas minority languages may lack economic value despite their cultural importance. Therefore, school language policy has a direct impact on students' future opportunities.

The relationship between language and identity also influences classroom interaction. Students who are discouraged from using their home languages may experience alienation, low participation, and reduced confidence. Conversely, policies that validate linguistic diversity encourage inclusion and emotional security.

Mother Tongue-Based Multilingual Education

Mother Tongue-Based Multilingual Education (MTB-MLE) has become a widely discussed

educational approach in multilingual nations. This model emphasizes the use of the learner's first language in the early years of education while gradually introducing regional, national, and international languages.

Research indicates that children develop literacy skills more effectively when initial learning occurs in familiar languages. Conceptual understanding acquired in the mother tongue can later transfer to additional languages.

Key principles of MTB-MLE include:

- Initial literacy in the first language
- Gradual introduction of second and third languages
- Cultural integration within curriculum
- Community participation in educational planning
- Long-term maintenance of multilingual proficiency

Countries such as the Philippines, Nepal, and Ethiopia have adopted variations of MTB-MLE to improve educational inclusion. In many cases, the approach has led to reduced dropout rates and improved academic participation among minority-language students.

However, successful implementation requires:

- Trained multilingual teachers
- Adequate learning materials
- Standardized orthographies
- Community support
- Government commitment

Without these conditions, multilingual education policies may remain symbolic rather than transformative.

Language Ideologies in Multilingual Education

Language ideologies are beliefs and assumptions about languages and their speakers. These ideologies strongly influence language policy in schools.

Three dominant ideologies commonly shape educational systems:

Monolingual Ideology

Monolingual ideology views one language as essential for national unity and educational success. Such perspectives often marginalize minority languages.

Assimilationist Ideology

Assimilationist approaches encourage minority groups to abandon home languages in favor of dominant national or global languages.

Pluralist Ideology

Pluralist ideology values linguistic diversity as a social resource and promotes multilingual competence.

Educational institutions often reflect tensions between these competing ideologies. Policymakers may publicly support multilingualism while continuing to privilege dominant languages in examinations, employment, and administration.

Language Policy and Educational Equity

Educational equity refers to fairness in access, participation, and outcomes within educational systems. Language policy significantly affects equity because language functions as the primary medium through which knowledge is transmitted.

Students from dominant-language backgrounds typically possess advantages in:

- Classroom participation
- Literacy development
- Examination performance
- Teacher interaction
- Access to higher education

Minority-language students may encounter linguistic barriers that reduce comprehension and confidence. Consequently, language policy can either reproduce social inequalities or challenge them.An equitable multilingual policy should:

- Recognize linguistic rights
- Provide equal educational opportunities
- Avoid linguistic discrimination
- Encourage inclusive participation
- Ensure representation of minority cultures in curriculum

The United Nations and UNESCO have repeatedly emphasized linguistic inclusion as a fundamental component of quality education.

Language Policy and Indigenous Communities

Indigenous communities around the world have historically experienced linguistic marginalization in

formal education systems. Colonial education often suppressed indigenous languages and imposed external linguistic norms.As a result:

- Many indigenous languages became endangered.
- Traditional knowledge systems weakened.
- Cultural continuity was disrupted.
- Students experienced educational alienation.

Contemporary multilingual policies increasingly recognize the importance of indigenous language revitalization.Examples include:

- Mâori language education in New Zealand
- Sami language schools in Scandinavia
- Indigenous immersion schools in Canada
- Tribal language initiatives in India

Indigenous language inclusion not only supports educational participation but also preserves ecological knowledge, oral traditions, folklore, and cultural memory.

Language Policy in Urban Multilingual Schools

Urban schools often represent highly complex linguistic environments due to migration and demographic diversity. In metropolitan areas, classrooms may contain students from multiple linguistic backgrounds.Urban multilingual schools face unique challenges:

- High linguistic heterogeneity
- Diverse literacy backgrounds
- Limited teacher preparedness
- Pressure toward dominant/global languages
- Rapid demographic changes

Despite these challenges, urban multilingualism also creates opportunities for intercultural learning. Flexible language practices such as translanguaging allow students to utilize their full linguistic repertoire for communication and learning.

Many urban schools have begun adopting inclusive strategies such as:

- Multilingual signage
- Heritage language programs
- Community translation services
- Peer language support systems
- Multilingual parent engagement

These practices contribute to stronger school-community relationships and greater student inclusion.

Translanguaging and Classroom Interaction

Translanguaging refers to the dynamic use of multiple languages within communication and learning processes. Unlike traditional bilingual models that separate languages strictly, translanguaging recognizes that multilingual speakers naturally draw upon all linguistic resources.In multilingual classrooms, translanguaging can:

- Improve comprehension
- Encourage participation
- Support collaborative learning
- Reduce linguistic anxiety
- Strengthen identity affirmation

Teachers may use translanguaging to:

- Explain difficult concepts
- Clarify instructions
- Connect prior knowledge
- Facilitate peer discussion
- Scaffold language learning

Critics argue that excessive translanguaging may weaken target language acquisition. However, contemporary research increasingly views multilingual fluidity as an educational strength rather than a deficit.

Assessment and Evaluation in Multilingual Schools

Assessment remains one of the most difficult aspects of multilingual education policy. Standardized examinations are often conducted only in dominant languages, disadvantaging minority-language learners.

Challenges include:

- Linguistic bias in test design
- Translation inaccuracies
- Cultural assumptions within questions
- Lack of multilingual assessment frameworks

Alternative assessment approaches include:

- Portfolio-based evaluation
- Oral assessment methods
- Multilingual project work
- Continuous assessment systems
- Context-sensitive evaluation criteria

Educational systems should distinguish between language proficiency and subject knowledge. Students may understand scientific or mathematical concepts but fail to demonstrate knowledge because of language barriers.

Teacher Education and Professional Development

Teachers are central to successful multilingual policy implementation. Even well-designed policies may fail if educators lack appropriate training.Teacher education programs should include:

- Sociolinguistics
- Bilingual education theory
- Multilingual pedagogy
- Inclusive classroom management
- Language-sensitive assessment
- Cultural responsiveness

Teachers should also be encouraged to view multilingualism positively. Deficit-oriented attitudes toward minority languages can negatively affect student motivation and classroom interaction.

Continuous professional development workshops can help teachers adapt to changing linguistic realities.

Community Participation in Language Policy

Effective language policy requires collaboration between schools and communities. Parents, local leaders, and linguistic communities possess valuable cultural and linguistic knowledge.

Community participation may involve:

- Curriculum consultation
- Development of local language materials
- Oral history documentation
- Cultural programs in schools
- Parent-teacher partnerships

When communities participate actively, educational policies become more culturally relevant and sustainable.

Language Policy and Globalization

Globalization has intensified the importance of international languages such as English, French, Mandarin, and Spanish. Many parents view global languages as pathways to economic mobility.

Consequently, multilingual schools often experience tension between:

- Local language preservation
- National integration
- Global competitiveness

English-medium education has expanded rapidly across many countries, even where students possess limited English proficiency. While global languages provide access to international communication and employment, excessive emphasis on them can contribute to language shift and erosion of local linguistic heritage.

Balanced language policy should therefore integrate:

- Local languages
- National languages
- International languages

Such an approach allows students to participate in global networks while maintaining cultural identity.

Digital Technology and Multilingual Learning

Technological innovation has transformed multilingual education.

Digital tools supporting multilingual schools include:

- Online dictionaries
- Translation software
- Multilingual educational platforms
- Speech recognition systems
- AI-based language learning applications
- Digital storytelling platforms

Technology can also help preserve endangered languages through:

- Audio archives
- Online documentation
- Virtual classrooms
- Community language databases

However, digital inequality remains a challenge. Rural and economically disadvantaged schools may lack adequate infrastructure.

Language Rights and Educational Policy

Language rights refer to the right of individuals and communities to use, maintain, and transmit their languages. Educational institutions play a crucial role in protecting these rights.

International frameworks supporting linguistic rights include:

- Universal Declaration of Human Rights
- Convention on the Rights of the Child
- UNESCO language education declarations
- United Nations Declaration on the Rights of Indigenous Peoples

Language rights in education involve:

- Access to learning in one's language
- Respect for linguistic identity
- Protection against discrimination
- Opportunities for multilingual development

Policies that deny linguistic rights may contribute to social exclusion and cultural assimilation.

Economic Dimensions of Language Policy

Language policy also has economic implications. Dominant languages often provide access to employment, higher education, and economic mobility.

Governments therefore face complex policy decisions:

- Which languages should receive funding?
- How can minority languages be economically supported?
- What balance should exist between global and local languages?

Multilingual competence itself can become an economic asset in sectors such as:

- Tourism
- International business
- Translation and interpretation
- Diplomacy
- Information technology

Consequently, multilingual education should not be viewed merely as a cultural project but also as an investment in human capital.

Future Trends in Multilingual Education Policy

Several emerging trends are reshaping multilingual education:

Increasing Recognition of Translanguaging

Educational systems are gradually moving away from rigid separation of languages.

Technology-Driven Multilingual Learning

AI tools and digital platforms are expanding access to multilingual resources.

Revival of Indigenous Languages

Growing awareness of cultural preservation has strengthened indigenous language movements.

Global Citizenship Education

Schools increasingly emphasize intercultural competence and multilingual communication.

Inclusive Curriculum Development

Curriculum reforms seek to represent diverse linguistic and cultural communities.

Future policies are likely to become more flexible, learner-centered, and culturally responsive.

Conclusion

Language policy in multilingual schools is not merely an administrative matter but a deeply political and pedagogical issue that shapes educational equity, identity formation, and linguistic justice. Effective language policy should move beyond monolingual ideologies and embrace multilingualism as an educational resource rather than a problem. Inclusive, flexible, and context-sensitive policies can improve academic outcomes while preserving linguistic diversity and promoting social cohesion. The future of multilingual education depends on the willingness of policymakers, educators, and communities to reimagine schools as spaces where linguistic plurality is valued and cultivated.

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A folkloristic study of the Novels of Birinchi Kumar Borua

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Abstract

The cultural characteristics that define a group worldwide are embodied in folklore. A community's togetherness is symbolized by its folklore. Many tribes, schedule castes, and other backward classes call Assam home, and they all work hard to preserve their unique cultural traditions from one generation to the next. In short, folklore covers the different aspects like myth, folktale, proverbs, folksongs, folk medicine, folk food and traditions etc. Regarding the study's scope, the researcher will look into the issue using two novels. The primary sources of information are the two novels, "**JivanarBaatat**" (1944) and "**SeujiPatorKahini**" (1959), while the secondary sources are books, periodicals, and journal articles.This research aims to highlight some unique aspects of the Ahom and Tea Tribe communities' mythology. Additionally, the article will highlight several outdated social beliefs that will eventually need to be changed. The analysis and interpretation of the aforementioned works serve as the foundation for this paper. The framework of conflict has been taken for this study.

Keywords: Cultural traits, heritages, community, reformation.

Introduction

A significant component of folk culture, which is an essential component of social life, is folklore. With its diverse local cultural values and traditions, Assam is home to numerous tribes and castes. Legends, riddles, myths, folktales, proverbs, songs, ballads, folk language, folk medicine, folk cuisine, folk drama, customs, and traditions are all part of Assam's rich folklore. From one generation to the next, these traditions and rituals are passed down informally. Through folklore, cultural legacy, identity, and even diversity have been encouraged and preserved. Together with the socialization process, it can promote communal cohesion. Additionally, it plays a big function in teaching morals and values. Through folklore, people can learn about a community's history and culture, and it aids in the growth of various economic development initiatives, such as tourism. In many respects, these objects contribute to the advancement of society.To sum up, these are the integral part of society.

Discussion: Through the characters and location of the novel '**JivanarBaatat'**, the novelist introduces certain ancient customs, traditions, folk songs, folk dances, and marital rites at the very beginning of the novel. They are an integral component of Assamese culture and are essential to effectively leading both the Ahom community. To put it briefly, they are referred to as society's mirror. The rural areas of Assam prior to independence serve as the basis for the novel's setting. Places like Morongi (Gulaghat District), Roha (Nagaon District), Dibrugarh, and others have well-known names, and the novelist does a good job of capturing the way of life in the villages. Traditionally in a rural village a wedding is observed like a festival in which people use to enjoy with the recreational activities even by arranging 'Vaona' also.It is delineated when MouzadarBhugadutta prepares the wedding ceremony of his daughter hastily. The following speech express the joyful emotion ;

'The Young men desire to perform the drama of the killing of Abhimunu or the killing of Rawan,''[1](Borua,1).

As is still customary in Assamese society, guests are invited to the wedding ceremony by gifting them betel nut. A long-standing custom in Assamese culture, Hum PuraBiya is organised for Bhugadatta's daughter's wedding. Regarding the wedding ceremony procedures, there are various traditions and customs that are rigorously adhered to. The daughter of mouzaderBhugadatta observes the custom of fasting for three days consecutively. The host assigns the many activities related to the marriage ceremony to specific individuals in the village. The following dialogue expresses;

'The works are to be done by whom for which works are all fixed before by the mauzader. Who will supply foods to a group of people by whom, who will take things out of the storehouse?''(Borua, 13)

The exact time for marriage between bride and groom is generally determined by the astrologer which is expressed through thedaughter of Bhugadutta's marriage ceremony. It isaccepted as a tradition of Assamese culture. In Assamese culture, the ring ceremony is regarded as an essential component of marriage ceremony and is a well-known custom. Through the character Tagor the study reveals the tradition of ring ceremony which is seriously taken into account in Assamese society. The following dialogue of Tagor express:

'Tagor screamed covering shame of eye with the corner of the shawl, 'Why did you destroy me?

Kamalakanta was unprepared. The body trembled with fear and danger, he asked anxiously, your distruction'(Borua, 24).

Casteism is also an important issue in respect of the ancient tradition. Casteism plays an important role in terms of the marriage ceremony particularly in the Assamese society. The marriage between high caste and low caste is not fixed and arranged by the concerned community. In the novel, Dharani master is belonged to high caste and Tagor is belonged to the low caste .The marriage between Dharani and Tagor is not morally accepted by the relatives of Dharani;s family. The following speech of the character Sunadreveal it: ''Your son has not done the work well. The punishment will be imposed on you along with your son by the society''(Borua,59)

The most well-known song in Assamese culture is "BihuGeet." In the novel, it is depicted when Dharani and Tagor, as newlyweds, arrive in the village. The young lads stopped the cart, began to sing a tune called "Bihu," and joyfully danced. When Dharani and Tagor return at their home as newlyweds, the novel reveals numerous additional marriage ceremony traditions and rituals. For instance, some mango leaves are hung for decoration, and a little banana plant is put in the yard. Beneath the banana plant is a little wooden chair. Additionally, a brass plate and a bell-shaped metal pitcher filled with water are set up according to marriage customs.In Assamese culture, it is customary for new brides to take off their veil. The new bride respects each senior relative individually in order to receive their blessings. The mother in low is the one who leads and guides the process of respect. Sunod reads aloud a few passages from holy texts to Ahini during her severe illness so that she might hear them and feel at peace for eternity. In addition, a religious dish called "Panchamit" and Ganga water are prepared to be offered to her in accordance with religious ceremonies. All are the religious beliefs of the Assamese community. The third part of the novel 'JivanarBaatat' begins with a folk song i.e. oral song or Lokgeet. The following lines of an oral song:

''Someone calls mother, someone calls sister, mother becomes the wife of house''(Borua,115). Another religious rite of Assamese people is the redemption from the sin named 'Puhkar' which is the religious custom in respect of the expired person. It is exposed in the novel through the death of Ahini. All are the religious superstitions of Assamese people and these are needed to be reformed to some extend.

In the novel 'JivanarBaatat' the novelist skillfully depicts folk cuisine and traditional medicine, which often vary among cultures. Through the character Ahini, the novelist aims to highlight some unique traditional foods that remain popular within the Assamese community. These dishes include a broth made from peppermint and termentherasessilis, the

frying of tender leaves from a medicinal vine, a curry made with arum plants and small pieces of garceniapedunculata, and a curry of phaseolusradiatus with alkali, which Ahini prepares at times for her son Dharani when he is seriously illness.

In the novel '**SeujiPatorKahini** (1959),' Dr. Barua expertly emphasizes various aspects of folklore. Right from the start of the novel, Dr. Barua highlights some traditional ideas and customs of the rural populace that impact everyone either directly or indirectly. These views held by conservative individuals include hatred, inhumanity, filthy thoughts, illiteracy, and ruthlessness, which reflect the philosophies of rural society. The novelist effectively unveils the toxic atmosphere of the village through the plot and characters such as Naren, Malati, Debeswar, and Nareswar, among others. Furthermore, the novelist uncovers certain folk beliefs that have now transformed into folk tales Hareswar, a character from the novel, represents traditional beliefs and folk healing practices. He is renowned as both a physician and a magician who serves as a healer in ancient times. In the Assamese dialect, he is known as Kabiraj or Bej. During the reign of King GaurinathSingha of the Ahom dynasty, Hareswar had the ability to cure any illness. For instance, he once had the chance to treat the snakebite of Rangdoi's son, who was the king's most beloved servant, and as a result, he received special recognition from the royal family. He healed the boy by employing supernatural incantations, which are now considered folk beliefs or superstitions. Additionally, he administered herbal remedies for abortion as per the needs of the princes and princessesand female servants of the royal house. In this way, he plays as a special officer in the royal family. Following Hareswar's death, his son Jogyeswar pursued the same vocation and served during the reign of the Ahom king, KamleswarSingha. This monarch renovated numerous temples in Jogyeswar's village and observed the sacrifice of three bulls at the temple during the Shaaradotsava. The tradition of animal sacrifice continues in the temples, as it is a long-standing custom. The method of worship dedicated to the Goddess was established by Jagyeswar and remains a practice within the Ahom and Tea Garden communities to this day. Like his father, Maheswar had the ability to heal various ailments.He offered various herbal remedies for issues such as snake bites, pox, and abortions. At one point, he provided an abortion herbal remedy to a female servant named Sahita at the request of the prince, a relative of the king, ChandrakantaSingha, Maheswar observed the distressing state of Sahita and ultimately chose to abandon his practice as a Kabiraj going forward.

The patriarchal framework that underpins modern civilization has its roots in ancient customs and traditions. In rural areas, it is a common belief that women who remain barren are cursed by God. Everyone in the novel criticizes Malati for her infertility without understanding the true cause. A widow's right or benefit to remarry is prohibited in such a society. Malati has thus been a victim of both problems. Malati is a well-educated country girl who successfully finished Lower Primary school. After four years of marriage without children, her husband passed away. Malati's married life had only just begun when it abruptly ended. Instead of making hatred nobody has come to inspire or suggest her to do needful as per her will and well prospect.

Furthermore, this system ruthlessly oppresses other female characters like Mohuwa, Sonia, Alumoni, Malati, etc. They are unable to demonstrate against the accusations and oppressions they face from their male counterparts. It is the patriarchal system's cause and consequence. For instance, Armstrong, a British individual who had previously managed the Naharani Tea Estate and viciously raped Mohuwamanytimes.. Armstrong Sahab's immoral behaviour ultimately resulted in the birth of Sonia, who was presented as an orphan in the novel. The novelist uses characters such as Malati, Mohuwa, Sonia, and others to express reformation and protest against traditional and outdated orthodox practices.

Throughout the novel, the novelist highlights the Zhumur song and dance performances. The tea tribal communities' Zhumur song and dance are well-known folk songs and dances in Assam, Odisha, Jharkhand,

Bihar, and other places. The Zhumur song and dance sound more lovely and seductive when accompanied by a cymbal, flute, dhol, or trumpet. Hukhram, Alumoni, DurjanSarder, Budhu, Dumki, Lakhu, Radhu, Nareswar, Sonia, Sabitri, Sukumoni, Sohagi, and others frequently perform their Zhumur song and dance in Alumoni's courtyard, the focal point of the Naharani Tea Estate. A forty-year-old lady named Alumoni supplies and sells rice beer to them. Rice beer is also called as 'Sariya' by tea tribe community which is still continued as folk wine in the most of the gardens of Assam. Nareswar have to learn how to perform Zhumur dance and he has been first trained well holding his hand by Alumoni and Radhu. Later on, he gets a good opportunity to learn it well through Sonia whom he loves heartily. In the course of time Nareswar is interested in drinking rice beer along with dancing skill. The environment turns into a habitual action of drinking wine for Nareswar in due time. The whole socio- cultural scenario of tea tribe communities are founded on long standing custom and tradition. In the novel, Dr. Barua points out the negative aspects of several outdated social norms that need to be reformed.

Conclusion

The social ideals and cultural history of the Ahom and Tea tribe communities are reflected in the novels "**Jivanar Baatat**" and "**Seuji Patar Kahini,"** respectively. In contemporary era people of rural areas have faced several challenges and sometimes become victims in some issues due to many reasons such as illiteracy and poor economic status. The clash between mother in low and sister in low, inciting someone of village people are ordinary aspects of village life which are emphasized in the novel '**Jivanar Baatat'.** The regular performance of Zhumur dance and singing performance by DurjanSarder, Alumoni, Radhu, Lakhuetc are brilliantly illustrated in the novel **'SeujiPatarKahini'.** The regular use of Sariya or rice beer in the tea estates has been vehemently displayed and criticized by the novelist.

Under the impact of modern education, globalization, urbanization some traditions, superstitions, old practices etc have been altered and some need to be reformed for better prospect of all communities of Assam. To sum up, these socio cultural dimensions are very necessary to promote the society constructively.

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E-Government Services and Citizen-Centric Services Delivered through Common Service Centre in Assam

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Abstract

Common Service Centres (CSCs) are the access point of delivering e-government services, citizen-centric services to the citizens. It save the time of citizens of visiting government offices and helps them in establishing a transparent service delivery mechanism. On May 18, 2006, the government of India approved the National E-Governance Plan with 27 Mission Mode Projects, comprising 8 integrated projects, 8 central projects and 11 state projects. Among 8 integrated projects Common Service Centre is one of integrated projects, aiming to cover all 6 lakhs census villages by 1 lakh CSCs i.e. 1:6 ratio across rural India. As per April 2026 data, total number of functional CSCs across India are 5, 01, 153. Out of these 3,89,338 CSCs are located in rural areas and 1,11,815 are in urban areas. In Assam total functional CSCs are 13,659. Out of these 12,438 are located in rural areas and 1221 are located in urban areas. CSC provides services like Government to Citizen Services, Business to Citizen Services, State Services, Financial Services, PM Welfare Scheme Services, Education Services, E-mobility Services, Grameen E-Store Services, Health Services, Legal Services, Skill Services, Travel and Tourism Services and Agricultural Services to citizen at their doorsteps across the world. This paper, try to identify and analyse the e-government services and citizen centric services provided by CSC in Assam. Here, descriptive and analytical methods have been used. The paper is based on secondary sources including books, journals, government websites, internet sources etc.

Keywords: Assam, E- Government Services, Citizen-Centric Services, Common Service Centre, Service Delivery

Introduction

Before the development of Information and Communication Technology (ICT) government services between government and citizens took place only at governmental offices. With the development of Information Communication Technology, citizens can get the government services at their door steps through service centres or by using personal computers. After the emergence of Information and Communication Technologies, seen the transformation of work culture of governmental offices, seen the better delivery of government services to the citizens, traditional government services transformed into e-government services. E-governance is a type of government where citizens get government services by using electronic means. It is known as electronic governance. E-governance is not only about an introduction of electronic tools in terms of delivering government services to the citizens but it is about the change of traditional work culture with the Information and Communication Technologies. (Rao, 2007). Citizen-Centric approach is a strategy for e-governance that encompasses various policies and processes which are designed to attract citizens, fulfill citizen's requirement. In this approach primary focus is on citizen, in service delivery the needs of citizens became first (Gupta, 2008).

Through the application of ICT e-governance brings government services as Simple, Moral, Accountable, Responsive and Transparent (SMART). The main dimensions of e-governance are Government to Citizen (G2C), Citizen to Government (C2G),

Government to Government (G2G), Government to Business (G2B), Government to NGO (G2N). The main aim of Government to Citizen is connecting citizens to government by talking to citizens and supporting accountability, by listening to citizens and supporting democracy and by improving public services. Citizen to Government focuses on citizen's interaction with government, for instance through election citizens choose their representative and they form government, census where citizens provide information regarding themselves to the government, taxation where citizens pay taxes to the government. Government to Government also can be termed as e-administration, involves improving government processes by managing performance, by making strategic connections within government and by creating empowerment. Government to Business refers the various services a business agency needs to get from the government, including getting license. Government to NGO refers building interactions beyond the boundaries of government by developing communities, by building government partnerships and by building civil society.

To promote e-governance in India, to improve efficiency, transparency and accountability at the Government- Citizen interface on May 18, 2006, the government of India approved the National E-Governance Plan with 27 Mission Mode Projects, comprising 8 integrated projects, 8 central projects and 11 state projects. Among 8 integrated projects Common Service Centre is one of integrated projects (Thadaboina, 2013), aiming to cover all 6 lakhs census villages by 1 lakh CSCs i.e. 1:6 ratio across rural India. Common Service Centres (CSCs) are the access point of delivering e-government services, citizen-centric services to the citizens. CSCs save the time of citizens of visiting government offices and helps them in establishing a transparent service delivery mechanism (CSC e-Governance Services India Limited, 2026). In August 2015, the Government of India initiated CSC 2.0. under Digital India programme, aiming to set up at least one CSC in 2.5 lakh Gram Panchayats (GPs) across the country. The Common Service Centres are run by Village Level Entrepreneur (VLE) (CSC e-Governance Services India Limited, 2022-23). As per data available on CSC official website in the month of April 2026, total number of functional CSCs across India are 5, 01, 153.Out of these 3,89,338 CSCs are located in rural areas and 1,11,815 are in urban areas. In Assam total functional CSCs are 13,659. Out of these 12,438 are located in rural areas and 1221 are located in urban areas (CSC e-Governance Services India Limited, 2026).

Objective of the Study

The main objective of the paper is to identify and analyze the e-government services and citizen-centric services provided by Common Service Centre in Assam.

Methodology

The present paper is based on descriptive and analytical method followed by secondary sources including books, journals, government websites, internet sources etc.

Review of Literature

V S (2021) in the paper on "Impact Assessment of Akshaya Common Service Centres as an e-service Facilitator in Kerala". This study examined that through CSC repeated visits of citizens to government offices have been reduced. Users of the study area satisfied with the location of the centre. Users face problems like long queue, arrogant nature of staff, lack of certain infrastructure facilities such as scanning of documents, taking finger prints etc.

Sharma (2025) in her thesis title "E District in Himachal Pradesh with Special Reference to Common Service Centre A Study" stated that through Himachal Online Seva Project (E-district portal) Common Service Centres provide 23 services to the citizens. 70% of respondent strongly agreed that e-district is helpful in bringing transparency in government services. It reduces corruption in delivering the services. These services are free from red-tapism. Through E-District portal CSC provided services such as getting bonafide Himachali, income certificate, agriculture certificate, BPL certificate, Parivar nakal, OBC certificate, Caste certificate, marriage certificate, birth and death certificate, Ayushman Bharat card, Abha card, Him care card, driving license etc. 92 % of respondents

satisfied with security of personal information on e-district portal.

Anuranjan (2017) in PhD thesis title "Information Technology based Agricultural Extension through Common Service Centre in Jharkhand" found that Common Service Centre in Jharkhand provides services such as, AADHAR services, caste certificate, birth certificate, income certificate, residential certificate, land receipt, death certificate, driving license, passport, print facility, photography, banking facility, railway reservation, insurance.

Das (2019) in her PhD thesis title "Public Service Delivery Through Information and Communication Technology in Two Indian States A Comparative Study of Common Service Centres in Varanasi Uttar Pradesh and Nadia West Bengal" found that in some CSCs mini ATM machines are installed where clients as per their convenience can withdraw money Rs. 10000/- in a single day, which save their times.

Rawat (2025) in the study "Bridging the Digital Divide: Evaluating the Common Services Centres (CSC) Scheme in India" states that during COVID-19 pandemic also CSC played vital role in providing services in public health outreach by enabling teleconsultations, facilitating vaccination registrations, supporting welfare disbursements under the PM Garib Kalyan Yojana.

Verma, and Singh (2026) in their study, "Twenty Years of Common Service Centers: Promise, Performance, and the Road Ahead" talked about to reform agenda, reframe CSCs, inclusion of Green CSC Guidelines, inclusions of multiple languages etc. The study finds that CSCs are not "kiosks" but governance infrastructure which play important role as democratic intermediary. Most of the time it is also seen that CSC increases accessibility of government services, but on the other hand, it leads to digital dependency.

Thanooj, and Ananth, (2025) in their study, "Assessing Citizen Satisfaction and Service Efficiency in E-Governance: A Study of Common Service Centres in Kerala" found that citizens perceive CSCs as convenient and accessible platforms for availing government services, especially in rural areas. Transparency, timely service delivery and staff professionalism influence citizen satisfaction in Kerala. Enhancement of Technological infrastructure, continuous capacity building of service providers and citizen feedback integration are vital for strengthening e-governance performance.

E-Government Services and Citizen-Centric Services delivered through Common Service Centre across India

Common Service Centre provides various services to citizen at their doorsteps that saves the time of citizens in terms of availing services. CSC provides services like Government to Citizen Services, Business to Citizen Services, State Services, Financial Services, PM Welfare Scheme Services, Education Services, E-mobility Services, Grameen E-Store Services, Health Services, Legal Services, Skill Services, Travel and Tourism Services and Agricultural Services to citizen at their doorsteps**.**

Under **Government to Citizen Services** CSC provides services including Aadhaar Service, PAN card. Water and Electricity Bill collection, ITR Filling, Jeevan Pramaan (for pensioner), Passport, E-Stamp, Government E-Marketplace, Udyam Services.

CSC provides various **Business to Citizen** services, including Bharat Bill Pay System, Electricity, DTH, Mobile/Landline Postpaid, Broadband Postpaid, Gas, Water, Loan, FASTag, Life Insurance, Renewal, Cable TV, LPG, CSC Dhwani, CSC e-Vigyapan, Diginame, Mobile & DTH recharge, CSC e-wallet recharge.

State Services includes E-District Service, Public Distribution Service, E-Vahan, E-Sarathi, Municipal Services**.** Under **E-District Service** CSC provides services like Land registration, land records, government taxes, utility bill payments, ration cards, disbursement of social welfare pensions, online RTI filling etc. CSC provide **Public Distribution Services** including Ration card updation, Aadhaar Seeding, Duplicate Printing of Ration Card, Check Status of availability of ration, Registration of Grievances, Application for new ration cards. CSC provides various services under **E-Vahan** including Renewal of

Temporary RC, Transfer of ownership, Change of address, Renewal of Registration, Surrender of RC, Cancellation of RC, Vehicle Conversion, Vehicle Alteration, Addition of Hypothecation, Termination of Hypothecation, Continuation of Hypothecation, services under **E-Sarathi-**Conductor Driving License Service, Apply for conductor Driving License, Driving License Service, Learning Driving License, Apply for Learner Service, Driving Service (Replace of Driving License/ Others), Print Application Form, Update Mobile Number, Driving License Extract, Fee Payment, Upload Document, Check Payment Status, Application States, Tutorial of Learning License, Appointments.

CSC provides **Municipal Services,** including Guwahati Property Tax Portal, Property Tax Collection, MCD Birth Certificate (Municipal Corporation Delhi), MCD Birth Certificate Updation.

Financial Services provided by CSC include Banking, Loan, Insurance, Digipay, FASTag.

PM Welfare Scheme Services provided by CSC include Ayushman Bharat Yojana, PM Kisan Maan-Dhan Yojana, PM Street Vendor's Atma Nirbhar Nidhi Yojana, Pradhan Mantri Fasal Bima Yojana, PM Shram Yogi Maan Dhan Yojana, PM Kisan Samman Nidhi Yojana, PM Laghu Vyapari Maandhan, PM Kisan Credit Cards Yojana, Pradhan Mantri E-Shram Yojana, Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMDISHA).

Under **Education Services** CSC provide services like, Sarkari Pariksha, Adda 247, GST Advance and GST Advance Kit, IEEE Blended Learning Programme, Infosys Springboard Programme, NIELIT Courses, Vidyakul Online Coaching Class, GD Goenka University, Symbiosis Centre for Distance Learning, Basic Computer Course, Microsoft product and Services, Tele-centre Entrepreneur Course, National Institute of Open School, Tally Kaushal Praman Patra, Certificate in Stock Market, Indian Institute of Banking Finance, Boston Training Academy, Certificate in Computer Application, Certificate Course in Entrepreneurship, Utkarsh Classes and Edutech, TalentEdge University, Basic Course in Information Technology, First in Math, Kutuki-Learning for PreSchool Children, CSC Olympiad, English Bolo, CSC Bal Vidyalaya, 21st Century Employability Skills, Cybersecurity, Spoken Tutorial, Yogyata, Institute of Digital Education and Employment Develoment, Geneo Online, Start-Up Skill.

E-mobility Services delivered through CSCs are Grid-Tie PV System (battery free), Stand Alone PV System, Solar Microgrids, Smart Products Sale (including all types of CCTV, Security Cameras, Thermal Sensors), Rural Cinema.

Another services provided by CSC is **Grameen E-Store Services.**

CSC provides **Health Services** including Telemedicine, Hello Health Kits, Nethra Kits, Tele-medicine remote Diagnostic Kit – Control H, Thyrocare, JIVA Ayurveda Scheme, Health Homeo service, Apollo registration.

CSC provides **Legal Services** including Tele Law, E-Courts, Skill Services, Financial Services.

Skill Services includes Optical fiber splicer, DTH Set-top Box Installation ans Service Technician**,** Retail Sales Associate, 2 Wheeler Delivery Associate, Sewing and Tailoring Course, Digital Wellness, Soft Skills and Personality Development**.**

Travel and Tourism Services including Travel and Tourism (Book train tickets, book bus tickets, book airline tickets, book hotels tickets.

Agricultural Services CSC e-Agri, Agri Tele Consultation and E-Pashu Chikitsa, Agricultural and Crop Consultation, E-Pashu Chikitsa, Weather Forecast and Agro-met Advisory, Nursery and Seed Production, Soil Testing Centre, Protected cultivation and organic farming, Kisan E-Mart, Kisan Credit Card (CSC e-Governance Services India Limited, 2026-27)**.**

E-Government Services and Citizen-Centric Services Delivered through Common Service Centre in Assam

Assam has become the first Northeastern State of having digital villages in all 33 districts under Digital India campaign (Kalita, 2020). In 2018, the Union Ministry of Electronics and Information Technology department awarded Darrang District as the best

performing district for digital online services through Common Service Centre among 750 districts across the country (Goswami, 2018). Girija Nath, VLE Assam awarded for her contribution to the last mile citizen service delivery in Assam at Seva Se Samriddhi: Regional Workshop on Panchayat-led Service Delivery at Guwahati rganised by the Ministry of Panchayati Raj (Government of India, Ministry of Panchayati Raj, 2026). On July 2011, at Vigyan Bhawan, New Delhi the Ministry of Communications and Information technology, Government of India awarded 5 VLEs of Assam for top performance among 50 VLEs across India (Assam Electronics Development Corporation Ltd., n.d.). Jintu Gogoi from Tinsukia District and Danswrang Basumatary from Baksa District awarded for highest no of e-KYC registration of farmers under PM Kishan Scheme across India. Jintu Gogoi secured top position and Danswrang Basumatary secured 3rd position among top 5 VLEs (Tinsukia District Administration, 2024). Mahua Routh from Kamrup Metro earned 6.7 lakh as commission for delivering Axis Bank Services (CSC e-Governance Services India Limited, 2024).

In Darrang district, under Sipajhar Block in the village Khandajan, CSC provides services like are PAN, Aadhar correction, Voter ID correction, Xerox, DTP, LIC, DigiPay (NEFT, AePS, Saving Account-PNB), Mobile Recharge, Electricity Bill, DTH, E-district services. In Deomornoi village, CSCs provide E-district services, PAN, Aadhar, Xerox, DTP, DigiPay (ICICI, Money withdrawal & Deposit), Mobile recharge, electricity bill etc. In Maroi village CSC provides E-district services, PAN, Aadhar, Xerox, DTP, DigiPay. In Dumunichowki village CSC provides Aad0har enrollment and correction, E-dalil (Khazana), LIC, AEPS, Xerox, DTP, Digipay, Mobile recharge & Electricity bill payment, DTH & others (Parbin and Parveen, 2026).

Services offer by CSCs in Golaghat district are e-district services, e-stamp vendor, IRCTC, Bharat Billpay, Passport, PAN Card, Swacch Bharat Abhiyan, Pradhan Mantri Awas Yojana (PMAY), FSSAI, Soil Health Card, utility bill payments like DTH & Mobile recharge, Digital finance inclusion awareness & access, VLE Bazaar, Skill development, CSC's as GST Subidha provider, Banking, Insurance Service, Pension Schemes, Pradhan Mantri Fasal Bima Yojana (PMFBY), NDLM/ Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA), legal literacy, Neilit, BCC, Tally, Learn English, Sarkari Pariksha, Tele Health Consultations, Pradhan Mantri Jan Aushadhi Kendra, Health Homeo (Government of Assam, Golaghat District, 2022).

In Jorhat district services offer by CSCs are Central Government Services i.e. PAN card application, Passport applications, Income Tax Return, Employment Service, Swachh Bharat Abhiyan, Pradhan Mantri Awas Yojana, Agriculture Service, Soil Health Card; Sate Government Services are e-district/ State Delivery Gateway (SSDG) Services, Land record, Ration Card, Birth/Death Certificate, Income, Caste, Domicile certificate etc. UIDAI AAdhaar Services are like Aadhaar print, Mobile updates, Demographic updates, enrolments, e-KYC (Electronic Know Your Customer), Authentication, Seeding, printing of Aadhaar Card. Election Commision Services, including Electoral Registration, deletion of electoral's details, modification of elector's details, transposition etc, EPIC printing etc. Under, Business to Citizen Services, CSC provides services like IRCTC Services, e-recharge, tour & travels, sale & purchase of seeds & farmer equipments, e-commerce etc. Banking services are like setting up of Business Correspondent Agents of various banks at CSCs, new account opening, deposit, withdrawal and remittance. Insurance services are like LIC, Aadhaar Enabled Payment System i.e. withdrawal of money only. Educational services are like National Digital Literacy Mission (NDLM), Pradhan Mantri Digital Saksharata Abhiyan, Cyber Gram Project, various courses through National Institute of Open Schooling (NIOS), National Institute of Electronics & Information Technology (NEILIT) courses i.e. courses on Computer Course i.e. BCC, Tally, various coaching courses (IIT, Civil services), Financial and legal Literacy. Skill Development courses on electronics, motor mechanic, mobile repair, health adviser are offered. Health services are like telemedicine, JAN Aushadhi, Diagnostic services are

also offered. Stree Swabhiman (Government of Assam, Jorhat district, 2024).

In Dhubri districts following services are provided through Common Service Centre: Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA), Digital Village Project, Tele Law Science, Pradhan Mantri Fasal Bima Yojana (PMFBY), Pradhan Mantri Shram-Yogi Maandhn (PMSYM), Pradhan Mantri Kishan Maandhan (PMKMY), Pradhan Mantri Laghu Vepari Yojana (PMLVY), Individual Household Latrine (IHHL) Application Geo Tagging, Food Safety and Standards Authority of India (FSSAI) registration, Skill Courses for PWD, Different type Computer Education Courses, Tele Medicine Services, E Stamp Printing, Financial Services i.e. Insurance, Banking, Digipay AEPS, Investment Awareness Programme, Electricity Bill Online Bill Payment, E-court Service, PAN , ITR, Kishan Estore, E-District Services including Application for delay Birth/ Death permission, Income Certificate, PRC, Electoral roll Certify Copy, Senior Citizen Certificate, Non Creamy Layer Certificate, Bakijai Clearance; Railway ticket, Electronic Voter Verify service, 7th Economic Service (Government of Assam, Dhubri District, 2022).

CSC of Kokrajhar District provides following services: Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA), Digital Village Project, Tele Law Science, Pradhan Mantri Fasal Bima Yojana (PMFBY), Pradhan Mantri Shram-Yogi Maandhn (PMSYM), Pradhan Mantri Kishan Maandhan (PMKMY), Pradhan Mantri Laghu Vepari Yojana (PMLVY), Individual Household Latrine (IHHL) Application Geo Tagging, Food Safety and Standards Authority of India (FSSAI) registration, Skill Courses for PWD, Different type Computer Education Courses, Tele Medicine Services, E Stamp Printing, Financial Services i.e. Insurance, Banking, Digipay AEPS, Investment Awareness Programme, Electricity Bill Online Bill Payment, E-court Service, PAN , ITR, Kishan Estore, E-District Services including Application for delay Birth/Death permission, Income Certificate, PRC, Electoral roll Certify Copy, Senior Citizen Certificate, Non Creamy Layer Certificate, Bakijai Clearance; Railway ticket, Electronic Voter Verify service, 7th Economic Service (Government of Assam, Kokrajhar District, 2022).

In Bongaigaon District CSC provides following services: Government to Citizen, Business to Citizen, Financial Inclusion, Education, Agriculture, Health Services, Digitize India, Digipay (Government of Assam, Bongaigaon District, 2023).

In Udalguri District CSC provides following services: Government to Citizen, Business to Citizen, Financial Inclusion, Education, Agriculture, Health Services, Digitize India, Digipay ((Government of Assam, Udalguri District, 2022).

Ratul Saikia, a VLE from CSC Naharkatia, Dibrugarh district trained women under Pradhan Mantri Kaushal Vikas Yojana in the e-samvalika TRI project (Assam Power Distribution Company Limited, n.d.).

From the above writings it is seen that through Common Service Centre citizen can get government services at their door steps which save their money as well as time of visiting governmental offices. But there is seen service delivery delays in certain services like Permanent Resident Certificate, Caste Certificate, Driving License due to multiple stages of verification and validation process (Das, 2023). Poor internet connection, lack of staff, distance of the centre from citizen's home are prime barriers of CSC's services (Hazarika, 2022).

Conclusion

CSC is an important agency of delivering e-governance and citizen-centric services to citizen in a corruption free and transparent way. It also plays important role in digitally literate the rural people and people from geographically isolated regions. Digital infrastructure development, more training of VLEs, organising awareness programme for citizen can enhance the service delivery process of CSCs.

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A Case Study of the Customary Laws of Bodos

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Abstract

This paper delves in the customary laws with respect to marriage, women's' role and rituals of the Bodo society of Assam. The Bodos are the largest indigenous ethno-linguistic tribe in Assam, India, belonging to the Tibeto-Burman speaking Indo-Mongoloid group. They are known as early settlers (sons of the soil) of the Brahmaputra Valley, and are concentrated in the Bodoland Territorial Region (BTR). They have a rich culture, traditional agriculture-based livelihood, and mostly practice Bathou religion. Racially the Bodos are Mongolian. This study examines from both primary and secondary sources. In Bodo traditional society, both as young children and as mothers have a great deal of independence, which is hardly ever misused for malevolent ends. They are not required to perform any outdoor labour, and their husbands consult them as their safest advisors on all matters. Bodos in rural set up comply strictly by the customary laws of marriages, birth and death ceremony,divorce, etc. The findings suggest that the aged-old Bodo traditions must be preserved, as many Bodo societies with modern lifestyles, advent of education, social media influence and other religion practices have been factors for extinct of the traditional practices. Questionnaires and direct interview method, participation in social events, observation methods were adopted for collection of data.

Keywords : Bodo, Marriage, Customary, Women, Bathou

Introduction

The Bodos are the largest indigenous ethno-linguistic tribe in Assam, India, belonging to the Tibeto-Burman speaking Indo-Mongoloid group. They are known as early settlers (sons of the soil) of the Brahmaputra Valley, and are concentrated in the Bodoland Territorial Region (BTR). They have a rich culture, traditional agriculture-based livelihood, and mostly practice Bathou religion. Racially the Bodos are Mongolian.

- The word *Bod* means a homeland. There were many parts of the country known as Hor-Bod, Kur-Bod etc.
- The inhabitants of various parts of the Bod country were known as the *Bodo-Ficha* or *Bodo-cha* or *Bodosa* (Bod means land and *Ficha-C*ha means children, hence children of the Bod country).

Bodo Customs

Bodo customs exert a strong influence on social behaviour. The traditional practices of joking and avoidance appear to be usages that govern the behaviour of Bodo individuals tied by kinship or marriage. To ensure mutual respect, contact is restricted. In Bodo community, there is a defined rule of conduct for female relations. One can frolic with a grandmother, the elder brother's wife, or the wife's younger grown-up sibling. Frolic but not beyond, because fornication (or adultery) is punishable. Outraging a girl's modesty is considered a major crime against the community. One must maintain a distance from the younger brother's wife or the wife's older sister. The aunts are all treated as mothers.

Women in Bodo Society

The Bodo culture is patriarchal. However, women have a very high status in Bodo society. Women are treated with great respect and are treated equally to males in every way. In public, they dine and drink with men. The husband "usually treats his wife

with distinct respect and regards her as an equal and a companion to an extent which can hardly be said to be the rule among many Indian people." Be *ang-ni buri*, which means "This (is) my old woman," is the most often used expression when speaking to his wife. The words are used with genuine respect and affection rather than in a mocking manner.

Both as young children and as mothers have a great deal of independence, which is hardly ever misused for malevolent ends. They are not required to perform any outdoor labour, and their husbands consult them as their safest advisors on all matters pertaining to the home and anything else that women are thought to be able to comprehend. While married women typically avoid external displays, maidenhood gives them the freedom to take part in singing, dancing, and festivals. Teasing a girl is generally prohibited. Respected women are all regarded as moms.

Social transgressions are referred to as ***baad*** (offences) in Bodo. A person is considered guilty and required to undertake penance ***(udrainai)*** in accordance with certain rigid social conventions if they commit an offence in society, especially one involving moral immorality. The Bodo people uphold very rigid moral standards (Brahma: 1998). The following rules about offences are strictly followed by the Bodo society-

- A person is taken as morally guilty, if he engages himself in illicit sexual relation with female relatives, such as mother, daughter-in –law, sister –in –law, niece, wife of the younger brother and any other close female relatives.
- If he touches the body of the wife of his younger brother or of the elder sister of his wife.
- Lastly, if he gets involved in bestiality and sex relation with a bitch, a female pig or cow.
- Indulging in false accusation with the evil intensions is also considered a social offence.

Traditionally the offences are divided into five categories, namely-

1. **Agorbaad:** incest, i.e. illicit sexual relation between related people, physically assault on one's own mother, father, illicit sexual relation with a person belonging to a different religion.
2. **Phongslodbaad:**If somebody touches the body of a young girl of any cast; and if someone cuts the tail or leg of a cow then the penance must be performed under the seven bows method.
3. **Daokhibaad:** This offence takes place if some eats the meat left half-eaten by a tiger or a vulture. And if someone received money by cutting somebody else's hair.
4. **Khaoalibaad:** If somebody uses the coins or utensils given with the dead bodies.
5. **Kholuborbaad:** If someone deliberately accuses somebody and puts blames on some others without any reason, he must perform penance in a simple way.

If any person of the society is convicted of charges of five categories as discussed above then he or she must perform penance under the Purification methods of the Bodos. The guilty person offers a chicken to ***BathouBwrai***. From the body of the sacrificed chicken some pieces of meat are detached and thrown to the sky with help of a bow and arrow. (Ibid: 1998).

Bodo women have enough freedom to wander around in the fields, farms, and forests. The sex ratio is favourable, and there is no female infanticide or bride burning, as in other parts of India. As Sidney Endle observes: female infanticide, no bride burning like the other parts of India. As Sidney Endle observes, ''Among the Kacharis women do not perhaps occupy the same influential position as seem to be enjoyed by their sisters in the Khasi hills, where something like a matriarchate apparently hold the field of social and domestic life. Still, with this interesting race the position of the wife and mother is far from being a degraded one'' (Endle: 1990: 22). Endle goes on to say that the women in Bodo society enjoy in their social and family life enjoy 'a large measure of freedom'.

Endle's statements are based on the social realities he witnessed throughout the first decade of the twentieth century. Men and women are regarded equally in Bodo society, and women participate heavily in household matters and religious events. There is no evidence of child marriage, the purdah system, dowries,

sati, or the ban on widow remarriage. In the socioeconomic structure of Bodo culture, women hold positions of dominance over men, and as a result, their social status is significantly greater. The Bodo literature of Colonial Assam provides proof that Bodo women have sufficient freedom to select their mate. The situation of Bodo women during the Colonial era is described in the first Bodo short story, "Abari," written by the late Ishan Mushahary in 1932. The story's main character, Abari, is a girl with a disability. Despite pressure from her family, she declines to marry someone who has a physical disability, because she had enough self-assurance to be able to stand. There are provisions for women's rights in the Bodos' customary rules pertaining to marriage and property inheritance.

Divorce- In Bodo community, divorce is acceptable. When a husband and wife decide to get a divorce together, they do it by shredding a betel leaf. In Bodo, this is referred to as *pathwi lai bisinai*. If the spouse files for divorce without a valid basis, he will be responsible for her income for a predetermined amount of time. It is occasionally noted that the divorce issue is brought up in a large public gathering in order to resolve the matter.

The Brahma movement and its impacts- Organisations like "Bodo Kachari Chatra Sammilani" were formed in 1919 as a result of the Bodos' increased political consciousness and education, as well as the government's policy of giving scheduled tribes special treatment. The first Bodo Mahasammilani was organised in 1913 as a result of a significant sociocultural movement among the Bodos of the then-Goalpara, led by Gurudev Kalicharan Brahma and a few other notable Bodo figures.

In that meeting regarding education of Bodo women the following resolutions were adopted-

- It was resolved that action plans for the Bodo women be taken up.
- It was resolved that actions be initiated for the establishment of Primary and middle schools in the Bodo dominated areas. Even the Bodo girls should seek education in these schools.
- In 1925, at Rangia session, again a resolution was taken to impart education among the Bodos; the following was the resolution of the session
- It is resolved that both boys and girls must be provided educations equally, and have equal status in Bodo society, only than Bodo society can be progressed.

In 1929, at Roumari village of Bongaigaon, the Bodo Mahasammilani has resolved a strong resolution to prevent the practices of the production of country liquor. The resolution was-

"It was resolved that the selling and consumption of country liquor be stopped and volunteers would move from village to village to keep an eye on this, and even break the utensils used for making the country liquor." (Boro, The Brahma 2008).

Witch Hunting- The witch hunt among the Bodos is a relatively new phenomena that began in the mid-1900s. Prior to the 20th century, there was no mention of witches among the Bodos, despite the fact that there are no documented records of the predominance of witches and witchcraft in the Bodo society. Witches in Bodo are referred to as daina, and although they are primarily female, there are some male dainas. However, there is still widespread belief in witchcraft, and the daina have always been blamed for any bad that occurs in the society. These days, it's easy to settle personal grievances by accusing someone of being a daina, which causes them to be shunned and harmed with the village's approval. In the majority of witch hunting incidents, it is noted that the villagers approach the ojha as a quick fix for their serious health issues. If this doesn't work, the ojha makes his provocative predictions, which set off a frenzy of accusations against vulnerable people, particularly women who are purportedly accused of being witches and haunted by the villagers as a group.

Marriage laws- The social Laws currently prevailing in undivided Kokrajhar sub-division is based on the published book of "*Boro Samajik Bidhan*" which was amended and enhanced in 1980. In this constitution as many as 47 sections are incorporated. Some of these salient points are enumerated below:

i) In relation to marriage

Section 1: of the social laws

(a) Marriage between the Bodo families exclusive of the parental lines is entitled to get recognition of the society.

(b) Marriage within the members of the families of consanguinity is strictly prohibited.

(c) Marriage among the persons of post fifth generation in case of paternal lines and after three generations in case of maternal family is permissible.

Section 2

(a) The age of bride must attain 18 years and the age of bridegroom must be of at least 21 years.

(b) A husband's age must not exceed to 20 years of his wife.

Section 3

(a) In the marriage father is the sole guardian. But in absence of him, his son is entitled to perform as guardian in marriage of younger sister.

(b) In absence of father and sons, paternal uncle and his sons are entitled to act as guardian.

Section 4: Types of marriage

The following forms of marriage are recognized by the society.

(i) *Songnai Haba*: This type of marriage is arranged by the parents or guardians as per the social system.

(ii) *Kharsonnay*: This form of marriage is performed when the bride goes to house of bridegroom and offers herself for marriage at her own accord. But the marriage ceremony is performed only after receiving consent of the bride's father or guardian.

(iii) *Gorjia*: Under this system the boy stays at the house of girl's father and works there as a labourer without wages for one or two years or more. On satisfaction of the girl's father with the service of the boy marriage is allowed.

(iv) *Dongkha Habnay*: This is a kind of marriage of a widower with a widow. It is affected on condition that the widower has to cut off all with his children by the first wife and forgo all properties of there.

(v) *Gonkhon Haba*: Widow Marriage.

The following type of marriage may be recognized under certain conditions.

(i) *Donkhar nay*: marriage by elopement.

(ii) *Man hanay*: Marrige after secret illicit connection.

(iii) *Borai nay*: Marriage by enticement.

These three types of marriage are recognized by society only after receiving parental or guardian consent and paying a fine imposed by the Samaj. Prior to the marriage, both the bride and the bridegroom must undergo a purification process. Raikhas Haba, which means "demoniac marriage," refers to a guy abducting a female and forcing her to marry. This sort of marriage is now defunct. During those days, the criminal was punished up to one hundred rupees, and his companions were penalised fifty rupees each. The victimised girl had the option of returning to her parents or marrying the attacker.

ii) Divorce

It is observed that divorce occurs seldom in Bodo community. If any case of divorce is brought to the notice of the *Samaj,* the president of the *Samaj* summons a meeting wherein the case is disposed of after thorough discussion.

For divorce the following grounds are considered valid and responsible.

Section 11

If husband or wife as the case may be suffers from diseases like leprosy, lunacy and mental imbalance etc. or if he or she is proved to be neuter, divorce is admissible.

(d) If both husband and wife are mutually willing to end their marital connection, the *Samaj* admits their divorce.

(e) If husband inflicts repeatedly intolerable hurt on the concealed part or on the person of wife, she can divorce him.

(f) If husband is dacoit, thief, indifferent to wife and of loose character, wife can divorce her husband.

If wife is disobedient, dishonest, faithless, thief, treacherous and licentious and if she does anything that may lead to injury of husband's life, divorce from husband's side is considered legal and reasonable.

The Samaj witnesses and records divorces, written documents with signatures of both from both parties are maintained. The divorcees tear a piece of betel leaf, each holding one side, to dispose of it according to tradition. It is known as *Phathoi Lai Bisinai*. Both husband and wife must pay a divorce fee of twenty-five rupees each to the Samaj.

Section 12: Hereditary right

"After death of father sons, adopted sons or grandsons inherit the property on hereditary right".

A man's property after his death is divided equally among his sons by virgin wives; or, if he has none such, among his sons by widowhood or unmarried concubines; but his brothers succeed in preference to his wives or daughters, who are left entirely at the mercy of the men. Sons by concubines, if there are sons by wives, receive nothing, except by will or donation.According to Endle, when a man dies without sons, the property usually passes to his eldest surviving brother, who generally makes some provision for the deceased man's widow and daughters.The adopted children are accepted as full members of the family. As such the adopted son by the childless parents has the right to preserve the properties of the foster father. If a female child is adopted by a couple having no child of their own at all, then she can inherit the property of her foster father after his death.Though female child is not entitled to inherit property, sometimes, in the absence of the male heirs in a family a daughter is also inherit the property of her father.

(b) Section 13: Adoption of child

(i) By consensus of husband and wife a child from husband's clan can be adopted

(ii) A child from wife's line also can be adopted.

(iii) A child from outsiders also can be adopted if both husband and wife are agreeable.

(iv) In absence of legal heir of husband, the widow can adopt a child from among the kindred of her deceased husband.

(v) To adopt a child a grand feast with pork is entertained to the village people as witness of adoption. Rice feeding ceremony *Engkham Dounai* (*Anna prasana*) of the adopted child is also to be solemnized with religious rite. Otherwise, the adoption is treated as illegal and invalid. In such cases the adopted child is debarred from inheriting the property of the person concerned.

Section 23: Punishment for immoral and illegal acts

The social laws of Bodos, section 23, 24, 25, 26 and 40 deals with the punishment of the offenders. If a person violate of any section of the social laws may, according to degree and nature of offence is subject to punishment under the five categories of traditional social laws of *bad* system such as (1) *Agor-bad,* (2) *Phongslod-bad,* (3) *Daokhi-bad,* (4) *Khaowali-bad*, (5) *Khoulobod-bad.* The aspect of the nature of crimes and penance method of these *bad* has already been dealth with in the subsequent chapter, especially in moral codes of Bodos. Inntentional offences and immoral behaviour are punished severely. In these situations, societal punishment is impersonation, and ritual purification is essential. The codified social regulations have undergone a dramatic shift, abandoning the custom of using any type of bow as a form of penance under the original five bad systems.

Chastity in Bodo Society- Because of the high standards of morality in Bodo community, chastity is highly valued for both sexes. They have a very high regard and dignified concept of chastity and they live by it. For them "Chastity is esteemed a virtue." In the words of Sidny Endle, "The standard of chastity among the Kacharis, both men and women, is by no means a low one. As a rule the young people, in the villages at least, lead pure lives before marriage, and are faithful to their marital vows in after life." The societal norm pertaining to the issue of chastity for both sexes is strict.

Agor-bad and Phongslod-bad, the Bodo moral codes, view incest and unlawful sexual relations as social transgressions.

Those who commit immoral acts of above type are punished with fines and undergo cleansing. A member of the group forces any suspected individual to confess their criminal connection in front of the ***Bathou*** altar. According to Endle, "the following plan for detecting the offender is sometimes adopted in cases where there are several unmarried girls in the family and one of them is suspected of breaking the law of chastity." In the evening, the entire family congregates around the revered ***Sijou*** tree (Euphorbia splendens), which is frequently seen growing in the courtyard and encircled by a split bamboo fence. A large amount of raw rice is respectfully buried at the base of this renowned tree and left there overnight. This rice is carefully unearthed early the following morning, and each adult girl (Sikla) is given a specific amount to chew. The offender's ability to secrete saliva is compromised by her dread of being discovered and humiliated, making it impossible for her to chew her rice. After that, she is forced to reveal the identity of her lover, whom the Kachari public opinion forces to immediately wed his victim.

CUSTOMS OF LIFE CYCLE

• BIRTH OF A CHILD

The Birth Ceremony- The birth of a child is a joyous occasion in any family, especially in a woman's life after marriage. Her health is closely monitored by the family's elderly women beginning with her pregnancy. She is prohibited from performing manual labour. During pregnancy, neither the wife nor the husband may kill an animal or a snake. She is not permitted to witness or participate in any funeral rites. She is not permitted to stitch or weave the material due to concerns about delivery. Her movement is restricted in order to protect her from evil spirits and potential harm. At the time of delivery, the family is assisted by experienced women of village and elderly women of adept practitioners of the village perform as *dhais*or midwife. Usually, there is no separate house is used for the purpose of delivery of a child. Shortly after the infant is delivered, the umbilical cord is tied with cotton or silk yarn, and the canal is cut above the knot with a sharp bamboo blade in front of family members. Male cords are tied six or seven rounds, whilst female cords are tied only five times.

It is said that cutting the chord by a sour-handed person takes longer to heal and may cause problems for the newborn infant. Sweet-handed people are also unlucky since their hands will not dry quickly. As a result, a bitter-handed person is typically favoured for this task, allowing the mending process to go more quickly. Following the chord cutting, the placenta is buried in front of the family's *Noma no* (main house) or labour house.

When the cord is cut, the new baby is washed with tepid water, wrapped it with dry cloths and placed on a bamboo winnower (*Songrai)* in an open space. One of the midwives collects nine *dubri*or *durba*grass, a branch of *tulsi* and a gold ring (if it is not available, a ring made of grass) are tied in a bundle which is dipped into water from a river and sprinkled over the new born and asked: "*Oi gotho? nwngbagwdwmamwn, bangalnajungal, Garo naGongar, Harsha namepalmwn ? Dinwinifrai Boro jabai*."[72] i.e., "O baby, what were you in your previous birth? Be a Bangal (Muslim) or a Garo or a Bhutia, a caste Hindu or a Nepali, whatever you were, from this day you have become a Bodo." The mother has to entertain the *dhai*and others who helped her to a feast within a year; not offering so is considered a great sin. This feast thrown to the helper is known as '*Dwi Sarnai'*, i.e., sprinkling of water. A cock is offered to the god *Bathou Borai* for the welfare of the baby. No other ceremony is performed at all. There is no formal feeding of baby also. But when a boy is five years old, his maternal uncle comes and shaves off his head. This rite is suspected to be the influence of Aryan Hindus.

When children frequently die in a household, the Bodos practice an unusual ceremony to save the life of the newborn baby. They think that if a freshly born baby is given an awful name, the bad spirit will not harm the newborn. So, the kid is given names like *Oma-khi* (pig excreta), *Swima-khi* (dog excreta), or *Dao-khi* (bird excreta), and so on. In certain instances, the youngster is fed the leftovers of a meal that a Bhutiya person has eaten in addition to being given such an unpleasant moniker.

Naming of Children- There is no particular rite that the Bodos follow while naming their offspring. Among them, naming a kid immediately after birth is permitted, though it is typically done a week or a month later. The child is given names in an odd way. Children's names are chosen based on their physical characteristics, the day or month of their birth, and occasionally the affection of their parents and other family members. For example, a child with long and tall stature is called *Laoga* (in male) or *Laogi* (in feminine); a child with low stature is called *Haita*(in masculine) or either *Haitu* or *Gaide* (in feminine); a child with wide nostrils is called *Hongla*(in masculine) or *Hongle* (in feminine).

A child born on Monday, or *Sombar*in Bodo, is called *Sombar* or *Sombaru* (in male) or *Sombari* (in feminine); similarly, a child born on Tuesday, or *Mongolbar*, is called Mongol (in masculine) or *Mongolti*(in feminine). A child's name, such as *Anjalu* (in male) or *Anjali* (in feminine), may occasionally be chosen by parents or other family members out of love. These days, Hindu converts from Brahma Dharma and Satsang adherents give their children Hindu names like *Ram, Krishna, Dharitri, Sabitri*, etc. However, some Christian adherents took on Christian names, such as *Joseph*, *Solomon*, *Christina*, *Eva*, *David*, etc.

• THE MARRIAGE CUSTOMS

Since we use the word "marriage" to refer to weddings, nuptials, or matrimony (wedlock), language really reflects the ambiguity of marriage. The final one is the only one that can be an institution. In general, the topic of the Hindu *Vivah* (marriage) is subject to similar problems. Because the *vivah* is essentially a very crucial ritual and formality that a person must go through in order to begin their life in *Grihasthasrama*, or the life of a householder. The rite of "carrying away" the bride to the bridegroom's home is the primary meaning of *vivah* (vi + vah = to carry).

For every man and woman in Bodo society to live a normal life—normal both biologically and ritually—marriage is a prerequisite. The Bodos refer to marriage as Haba. In the past, it was customary for a male dancer known as a *Barjew* or *Barlangpha* to travel with the groom's family in order to transport the bride from her birthplace. Before the bride is transported to the groom's home, the *Barlangpha* must dance while carrying a load of sod or a lump of dirt on a sling on his back.

The Bodo words ***ha***, which means soil or earth, and ***ba***, which means to bear on the back, are the source of the phrase *Haba*. *Haba* therefore refers to the lump of dirt or earth on the back. Therefore, the act of bearing dirt or soil on one's back during marriage symbolises the obligations of this world. Given that the Bodo word for marriage is *Haba*, which means *"earth carried on the back,"* this characteristic may be a sign of the agrarian character of the community.

Conclusion

Bodo society to live a normal life—normal both biologically and ritually—marriage is a prerequisite. The Bodos refer to marriage as Haba. In the past, it was customary for a male dancer known as a *Barjew* or *Barlangpha* to travel with the groom's family in order to transport the bride from her birthplace. Before the bride is transported to the groom's home, the *Barlangpha* must dance while carrying a load of sod or a lump of dirt on a sling on his back. The Bodos are the largest indigenous ethno-linguistic tribe in Assam, India, belonging to the Tibeto-Burman speaking Indo-Mongoloid group. They are known as early settlers (sons of the soil) of the Brahmaputra Valley, and are concentrated in the Bodoland Territorial Region (BTR). They have a rich culture, traditional agriculture-based livelihood, and mostly practice Bathou religion.

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Political Instability in Bangladesh: Strategic Implications for India's AEP and Japan's FOIP Vision

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Abstract

India shares a strategic convergence through Act East Policy (AEP) with Japan's Free and Open Indo-Pacific (FOIP) strategy. Japan is a key investor in the development and connectivity projects of India's northeastern region, which is central to the framework of AEP. However, the strategic and economic potential of the AEP remains limited in the absence of stable neighboring countries. Following the return of military rule in Myanmar in 2021, India now faces an additional challenge in the form of the ongoing political crisis in Bangladesh. Although a democratically elected government came to power in Bangladesh in 2026 following the ousting of Sheikh Hasina in 2024, the country's political and institutional environment has yet to fully stabilize. Analogous to the challenges to AEP, the unstable political situation in Bangladesh poses a similar impediment for Japan, whose investments in the broader Indo-Pacific region can only be fully realized if complemented by stability in its investments in Bangladesh in the shared geopolitical and geoeconomic landscape. In view of these considerations, this paper examines the implications of ongoing political instabilities in Bangladesh for India and Japan through the frameworks of India's AEP and Japan's FOIP strategy. This paper argues that persistent instability in Bangladesh could undermine prospective regional integration and delay critical infrastructure projects like the Matabari Deep Sea Port and Agartala-Akhaura Rail Link among others, and create a power vacuum for competing world powers. It concludes by exploring the diplomatic possibilities for both the nations to ensure a stable Indo-Pacific.

Keywords: AEP, FOIP, India, Japan, Bangladesh, Indo-Pacific

Introduction

The Indo-Pacific has evolved as the defining geopolitical theatre of the twenty-first century. The growing economic importance of Asia, the strategic significance of maritime trade routes and intensifying competition among major powers have transformed the region into a focal point of international politics. Within this evolving strategic context, India's Act East Policy (AEP) and Japan's Free and Open Indo-Pacific (FOIP) policy framework represent two complementary frameworks aimed at fostering connectivity, economic cooperation, regional stability and a rules-based order.

The Act East Policy (AEP), upgraded in 2014 from its earlier version of Look East Policy (LEP) has sought to deepen India's engagement with Southeast Asia and East Asia through enhanced economic integration, physical connectivity and strategic cooperation. Simultaneously, Japan's FOIP strategy, introduced in 2016, has promoted the principles of freedom of navigation, rule of law, connectivity and quality infrastructure development across the Indo-Pacific. Both the frameworks converge in their emphasis on infrastructure-led regional integration and maritime security. A careful reading of the frameworks indicates that a crucial geographical intersection of these frameworks lies in the Bay of Bengal region. In particular, Bangladesh occupies a strategic position between South Asia and Southeast Asia and serves as an indispensable transit and connectivity corridor linking India's Northeastern region with the wider Indo-Pacific. In this context, political developments within Bangladesh possess serious implications extending far beyond its national boundaries.

The political upheaval that unfolded in Bangladesh during 2024, leading to the departure of

Prime Minister Sheikh Hasina and following the establishment of an interim administration under Nobel Laureate Muhammad Yunus, introduced a new element of uncertainty into regional geopolitics. The disruption in Bangladeshi politics also exposed the fault lines underlying the growing anti-India sentiment. A popular grievance among the young generation in Bangladesh is India's perceived intervention in the country. "Delhi is struggling in Dhaka because of deep anti-India sentiment in Bangladesh and a hardening, often hostile turn, in India's own domestic political discourse towards its neighbor," says AvinashPaliwal of SOAS University of London (Biswas, 2026). Additionally, parts of Bangladeshi society became even more anti-Indian once India decided to welcome Sheikh Hasina after she left Bangladesh. General elections were finally held in 2026, which witnessed the landslide victory of the Bangladesh Nationalist Party led by Tarique Rahman. However, the bilateral relationship between India and Bangladesh is still in a condition of diplomatic stagnation, with differences particularly on issues like water sharing, border control and India's hostage of Sheikh Hasina, among other factors (Bhattacherjee, 2026).

Bangladesh and Japan have a long and friendly relationship, since the latter's recognition of the People's Republic of Bangladesh in 1972. The Government of Bangladesh and the Japan International Cooperation Agency (JICA) inked a financing deal in September 2023. It consented to give the Matarbari Ultra Super Critical Coal-Fired Power Project an Official Development Assistance loan of up to ¥217.6 billion JPY (about $1.5 billion USD). Japan is also making significant investments in the northeast of India. These infrastructural initiatives may eventually be connected. However, given the worsening circumstances in Bangladesh, Japan will also need to exercise caution to maintain its level of influence. However, it should be mentioned that in the past, attacks like the one at the Holy Artisan café in Dhaka, have primarily targeted Japanese citizens. Additionally, nine Italians, seven Japanese, an American, and an Indian were killed in a terror assault in July 2016 at a restaurant that was well-liked by foreigners in Dhaka's diplomatic district (Borah, 2026).

Based on such concerning developments, this paper argues that political instability in Bangladesh has emerged as a significant strategic challenge for both India and Japan. The effectiveness of India's Act East Policy (AEP) and Japan's Free and Open Indo-Pacific (FOIP) vision is contingent upon a stable and friendly Bangladesh capable of supporting regional connectivity, infrastructure development and maritime cooperation. It emphasises that persistent instability threatens to undermine these objectives and reshape the strategic balance in the Bay of Bengal. Furthermore, the paper concludes by offering a set of diplomatic possibilities.

In order to provide a comprehensive analysis aligned with the objectives of this paper, the discussion begins with an overview of the political developments in Bangladesh. The introductory section outlines the conceptual frameworks of India's Act East Policy (AEP) and Japan's Free and Open Indo-Pacific (FOIP) vision, establishing the rationale for the study. The subsequent section examines the strategic convergence between the AEP and FOIP and highlights the common challenges confronting both frameworks. This is followed by a discussion of Bangladesh's political transition since 2024 and its strategic significance in the Bay of Bengal region. The next two sections analyse the strategic repercussions of political instability in Bangladesh for India's AEP and Japan's FOIP, respectively. The ensuing section incorporates the 'China' factor to provide a more comprehensive assessment of the evolving regional strategic landscape. Finally, the paper discusses the key arguments presented throughout the study and concludes with a forward-looking and optimistic assessment of future prospects.

2. Strategic Convergence between India's AEP and Japan's FOIP

Over the past two decades, India-Japan relationship evolved from bilateral relation to regionally oriented strategic partnership. As the Indo-Pacific region emerged as a central arena of geopolitical

competition, India's Act East Policy (AEP) and Japan's Free and Open Indo-Pacific (FOIP) developed as an important strategic framework for better connectivity, maritime security and rule-based regional order. India's Act East Policy, earlier known as Look East Policy (LEP), aimed to strengthen India's engagement with South Asia, East Asia and Indo-Pacific through connectivity, economic and cultural linkage. On the other hand, Japan's FOIP, articulated by late Shinzo Abe, seeks to ensure a free and open Indo-Pacific, navigate connectivity, maritime security and adherence to international law. The convergence of these two policy frameworks indicates a strong convergence in the interests of both the nations.

The convergence of these two visions are reflected in some core domains. One of the major convergence points is promotion of connectivity and quality infrastructure. Japan's FOIP promotes transparent and sustainable infrastructure development. Through Japan International Cooperation Agency (JICA), Tokyo has financed numerous infrastructure projects in Northeast India, including the North East Road Network Connectivity Improvement Project and the Guwahati Water Supply Project, covering roads, bridges, urban services and energy-related infrastructure. These efforts complement India's objective of positioning Northeast India as a gateway linking South Asia and Southeast Asia under its Act East Policy. India's Act East Policy advances this objective through some infrastructure projects such as, India-Myanmar-Thailand Trilateral Highway. Also cooperation through projects like Asia-Africa Growth Corridor reflect India-Japan's shared vision for regional connectivity (Wason & Nagao, 2025).

India and Japan recognised the importance of maritime security and cooperation in the Indo-Pacific region to sustain regional trade and economic growth. Both the countries cooperate in the maritime domain through different activities such as joint naval exercises like Malabar exercise, maritime domain awareness initiatives and capacity building support for Indo-Pacific countries. Both the countries depend heavily on uninterrupted trade routes for economic growth. Also their concern for maritime security is a response to growing competition in the Indo-pacific region (De, 2023).

Regional integration is another significant area of convergence as both the countries aim for a more inclusive, interconnected and cooperative Indo-Pacific. Bangladesh serves as a critical connector within this framework because its territory provides the most efficient route linking India's Northeast to international markets and maritime networks. Through promotion of ASEAN centrality, infrastructure development and economic partnership, both the policies contribute to an open and interconnected regional framework. Although both the policies emerge from different geopolitical contexts, their shared interest created a strong foundation for strategic partnership between India and Japan (Basu & Neb, 2024).

3. Bangladesh Since 2024: Political Transition and Its Role in the Bay of Bengal Region

Bangladesh's domestic political trajectory has reshaped its strategic importance in Bay of Bengal. The importance for Bangladesh in India's AEP and Japan's FOIP derives from its geographical location. It is uniquely located at the crossroads of South Asia and Southeast Asia, functioning as a bridge between the two regions. Thus, any disruption in the peaceful domestic environment of Bangladesh can challenge the objectives of both these policies. Bangladesh serves as a crucial bridge for regional market, transport corridor and maritime connectivity. Therefore, political uncertainties since 2024 pose challenges to regional stability, economic integration and maritime security. Its domestic challenges put restrictions on its strategic position in the Bay of Bengal region (Alam & Akon, 2023).

This geographical position coupled with economic potential has enabled Bangladesh to become a key participant in numerous connectivity initiatives aimed at promoting economic integration and regional cooperation. Among the most significant are the Bangladesh-Bhutan-India-Nepal (BBIN) connectivity framework, India-Bangladesh coastal shipping arrangements, cross-border railway projects, inland water transport networks, BIMSTEC connectivity

initiatives and large-scale infrastructure projects such as the Matarbari Deep Sea Port. As India's Act East Policy aims to strengthen India's strategic and economic engagement with Southeast Asia through Northeast India, Bangladesh offers an instrumental strategic route. Further, connection to Northeast India through Bangladesh provides shorter and cost-effective transit to mainland India (Khongwar, 2025). Similar to India, Japan also sees Bangladesh as a strategic region for its Indo-Pacific vision. Japan's Bay of Bengal Industrial Growth Belt (BIG-B) initiative sees Bangladesh as a strategic component. This initiative of Japan aims for infrastructure projects, energy facilities and port connectivity in the Bay of Bengal region. Japan envisions its connectivity with Southeast Asia through Bangladesh, thereby proving it to be a central point of Japan's FOIP (Alam & Akon, 2023).

However these strategic prospects have been complicated by the recent political developments in Bangladesh since 2024. The situation in Bangladesh deteriorated following a protest of students against the reservation policy of the government for the family members of warriors of 1971 Bangladesh liberation war. This student protest later developed into an anti-government protest led to the resignation of PM Sheikh Hasina on 5th Aug, 2024. Her departure created a significant political vacuum and generated uncertainty regarding the future direction of Bangladesh's governance system. In response to the crisis, an interim administration under the leadership of Nobel Laureate Muhammad Yunus was established to oversee the country's political transition and facilitate discussions on institutional reforms. Following a complex and challenging political transition (Behera, 2025), a new government assumed office after fresh elections were held in 2026. However, internal political conditions and diplomatic relations with India have yet to fully normalize, limiting the realization of these strategic prospects. It can be well-argued that the implication of Bangladesh's political instability goes beyond the national boundaries. It disrupts the transportation corridors, delays infrastructure projects, affects foreign investment flows and creates uncertainty for regional economic initiatives. More broadly, instability in Bangladesh could influence the strategic balance within the Bay of Bengal and affect the functioning of regional organisations and cooperative frameworks.

4. Strategic Repercussions for Act East Policy and Northeast India

Although the whole of India is generally concerned about the situation in Bangladesh, the northeastern states of India are particularly susceptible to the security consequences of the situation. The porous border along the region raises the possibility of both illegal immigration and extremist elements entering Indian territory. Additionally, there are justified concerns that a government in Bangladesh that is less sympathetic to India may be less willing to work together on security issues, which could result in a return of support for various insurgents outfits from northeastern India that have traditionally found refuge in Bangladesh. Additionally, the strategically important Siliguri Corridor, also known as the "Chicken's Neck", that links India's Northeast to the rest of the nation is especially concerning. The demographic changes brought about by migration in this area and the possibility that extremist organizations could find a base of support among Bangladeshi migrants make it more difficult for India to maintain this vital land connection (Mukherjee, 2025).

In addition to the immediate security concerns, the crisis carries significant long-term strategic implications for India's Act East Policy (AEP), which serves not only as a foreign policy initiative but also as a transformative framework for promoting economic growth and regional integration in Northeast India. A key objective of the AEP is to unlock the developmental potential of the region by enhancing connectivity, expanding cross-border trade corridors and facilitating greater economic engagement with Southeast Asia. Any protracted unrest in Bangladesh might make it more difficult for planned and current connectivity projects to operate smoothly, interfere with transit and trade agreements, and jeopardize attempts to link Northeast India with regional value chains. As an outcome, persistent political unpredictability and a decline in bilateral collaboration may pose significant

obstacles to the achievement of the strategic and socioeconomic objectives outlined in the Act East Policy.

One of the most significant challenges is likely to arise on the connectivity front, as several major infrastructure and transit projects remain stalled or delayed. In order to give Northeast India a maritime outlet, former Bangladeshi Prime Minister Hasina gave India more access to Bangladesh's Chattogram and Mongla ports. Consequently, in June 2024, India obtained the operating rights to a terminal at Mongla port (Bose et al., 2025). Additionally, it provided funding for the building of the Khulna-Mongla Port train link, which connected the port to Khulna's rail system (Mondal, 2023). The goal of this initiative is to lower cargo transportation expenses and logistical obstacles between West Bengal and the Northeast. On this route, however, services have not yet started. Additionally, work on Bangladesh's Ashuganj Inland Container Port, which was built with assistance from India, has been halted. Its completion would have improved Tripura's trade with Bangladesh and made the recently opened Akhaura-Agartala train link more useful (Bose et al., 2025). Due to border restrictions, problems with customs clearances and heightened security surveillance, trade between Bangladesh and Northeastern India has reportedly decreased after the regime transition (Bhattacharya, 2025). Between April and October 2023, India's imports decreased by 2.3 percent while its exports to Bangladesh decreased by 13.3% (PTI, 2024). At the India-Bangladesh border, the once-bustling Benapole-Petrapole land ports, which handle almost 30% of bilateral trade, are now much less busy. Border-dependent livelihoods have suffered greatly as a result of the decreased activity (Bose et al., 2025). The proposals made in the last Joint Statement (MEA, 2024) between India and Bangladesh prior to the regime change continue to be suspended. The implementation of goods-train services from Gede (India) to Darshana (Bangladesh) through Chilahati (Bangladesh) and Haldibari (India) up to Hasimara (Indian border town near Bhutan) via the Dalgaon (Assam, India) railhead at the India-Bhutan border is one of these, as is the early operationalization of the Bangladesh-Bhutan-India-Nepal (BBIN) Motor Vehicle Agreement to promote sub-regional connectivity. Aside from physical connectivity, attempts to collaborate on digital connectivity through the digitization of cross-border BBIN-MVA licenses for bilateral trade and the launch of 4G and 5G by Indian companies JioInfocomm and Bharti Airtel have been stagnated.

Further, India has traditionally maintained close relations with the Awami League government; however, the emergence of a new political environment in Bangladesh necessitates a recalibration of India's diplomatic approach. New Delhi will need to develop closer relationships with a broader range of political actors, civil society organizations and youth populations in order to expand its outreach beyond conventional political allies. In view of Bangladesh's critical position in regional projects like the Bangladesh-Bhutan-India-Nepal Initiative (BBIN) and the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), which are essential to India's Act East Policy, such engagement is especially crucial. The advancement of important connectivity and economic integration projects could be hampered by Bangladesh's ongoing political unrest, hurting regional cooperation initiatives and limiting India's engagement with its eastern neighbor.

5. Bangladesh and Japan's FOIP Vision

The political instability in Bangladesh carries significant implications for Japan's Free and Open Indo-Pacific (FOIP) vision, particularly given Bangladesh's growing strategic importance in the Bay of Bengal and its central role in regional connectivity initiatives. Through the Japan International Cooperation Agency (JICA), Japan has become Bangladesh's biggest development partner over the last ten years, offering significant financial and technical support for infrastructure development. The Matarbari Deep Sea Port, the Dhaka Mass Rapid Transit system and the expansion of Hazrat Shahjalal International Airport are just a few of the major projects in which Japan has invested. In keeping with the larger goals of the FOIP strategy, these initiatives aim to improve regional connections throughout South and Southeast Asia in

addition to assisting Bangladesh's economic transformation (JICA, 2023).

The Matarbari Deep Sea Port is the most strategically important of these projects. The port which is situated on the Bay of Bengal is anticipated to develop into Bangladesh's first deep-sea port that can accommodate big container ships. It can potentially act as a significant hub for regional trade logistics. The project is seen as an essential part of Japan's initiatives to advance superior infrastructure and improve maritime connectivity across the Indo-Pacific (Dutta, 2016). Matarbari is viewed as potentially complementary to the vision of India's Act East Policy and broader FOIP connectivity goals. However, prolonged political unrest may cause delays in project execution, compromise investment security and raise questions about operationalisation of these strategically significant assets.

The connectivity aspect of FOIP is also challenged by the crisis. The establishment of an integrated regional order underpinned by robust supply chains, high-quality infrastructure and rules-based economic cooperation is central to Japan's vision of a Free and Open Indo-Pacific (MOFA Japan, 2022). Bangladesh is a key node in developing regional connection networks and has a strategic location that connects South and Southeast Asia. As a result, one of the most strategically significant elements of Japan's Indo-Pacific policy is made questionable by the instability in Bangladesh. Initiatives to provide continuous connection throughout the Bay of Bengal may be hampered by delays in infrastructure development, disruptions in trade and logistics networks or regulatory uncertainty.

6. 'China' Factor and the Strategic Competition in Bangladesh

The political changes in Bangladesh have important ramifications for Indo-Pacific strategic competition in addition to economic and connectivity issues. In the past, times of political unpredictability have given outside powers the chance to increase their position through diplomacy, infrastructural funding and economic support. Bangladesh is a vital partner in initiatives to advance regional connectivity and stability in the Bay of Bengal region and holds a crucial geostrategic location at the intersection of South and Southeast Asia for both Japan and India. India sees a stable and cooperative Bangladesh as crucial for protecting its northeastern region, advancing its Act East Policy and retaining its strategic influence in its immediate neighborhood. Similarly, Japan's interests go beyond economic concerns to include broader concerns about maritime security, regional stability and the shifting balance of power in the eastern Indian Ocean. The stability of Bangladesh becomes more crucial for both New Delhi and Tokyo in their attempts to advance a rules-based regional order, maintain strategic equilibrium and fortify cooperative frameworks throughout the Indo-Pacific as geopolitical competition in the region heats up, especially with the increasing involvement of external powers.

In such a context, it is observed that China has emerged as one of Bangladesh's largest development partners and investors through the Belt and Road Initiative (Gupta, 2023). China has been Bangladesh's largest trading partner for 15 consecutive years. Over 550,000 employment have been created in Bangladesh by the nearly 1,000 Chinese businesses that operate there (Ranjan, 2025). After Sheikh Hasina resigned as prime leader of Bangladesh and fled to India in August 2024, Dhaka and Beijing seem to have become closer. A number of recent meetings and trips between the two parties demonstrated this. China's Foreign Minister Wang Yi met Bangladesh's Foreign Affairs Advisor Touhid Hossain earlier this year, and the Communist Party of China invited a four-person team from the Bangladesh Nationalist Party (BNP) to visit China in November 2024. A 22-person delegation from eight political parties in Bangladesh traveled to China for 13 days in February 2025 (Ranjan, 2025). Dhaka's interactions with New Delhi and Beijing appear to be going in separate directions. The most significant of Bangladesh's numerous problems with India is Hasina's residence in New Delhi, where she has been making "problematic" remarks and upsetting the interim administration. Conversely, there are currently no significant political problems between China and

Bangladesh's interim government. As a result, Bangladesh has limited interactions with India while interacting with China on multiple fronts (Ranjan, 2025).

For India and Japan, this growing 'China' factor carries significant strategic implications. It can be well predicted that increased Chinese influence in Bangladesh could affect maritime security, infrastructure governance and regional connectivity patterns. Infrastructure investments and geopolitical goals are increasingly entwined in the Bay of Bengal, which has turned into a theater of strategic conflict. As a result, preserving Bangladesh's stability has emerged as a crucial factor in the larger strategic alliance between Japan and India.

7. Conclusion

Political stability in Bangladesh has emerged as a critical determinant for the potential success of India's Act East Policy and Japan's Free and Open Indo-Pacific vision. Bangladesh occupies a central geographical position within the connectivity architecture linking South Asia, Southeast Asia, and the Indo-Pacific region.

The political developments since 2024 have introduced new uncertainties into regional geopolitics. Long-standing instability threatens infrastructure development, regional integration, maritime security and economic cooperation. It also risks creating space for intensified strategic competition among major powers. For India, instability in Bangladesh undermines efforts to integrate the Northeastern Region with Southeast Asia and the broader Indo-Pacific region. Similarly, for Japan, it complicates the implementation of strategic infrastructure projects that form an essential component of FOIP. Along with it, the increasing Chinese engagement in Bangladesh has notable strategic implications for both India's AEP and Japan's FOIP.

Soft power can be an effective tool for India and Japan to maintain their relationship with Bangladesh amid shifting regional dynamics. Strengthening people-to-people connections, cultural affinity and development engagements can help to maintain public goodwill. However, there are also possibilities for closer collaboration between Japan and India. Both nations can help create a stable and successful Bangladesh through coordinated diplomacy, infrastructure development, support for democratic institutions and regional cooperation mechanisms. Ultimately, the future of both the Act East Policy and the Free and Open Indo-Pacific vision will depend significantly upon the political stability and strategic trajectory of Bangladesh. As such, ensuring a stable Bangladesh should remain a shared strategic priority for India and Japan in shaping the future Indo-Pacific order.

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Awareness of Undergraduate Students on Domestic Violence Against Scheduled Caste Women in Majuli District, Assam, : A Case Study

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Abstract

Domestic violence against women from marginalized communities, particularly Scheduled Castes (SC), is a deeply entrenched issue in India, often exacerbated by a lack of awareness and social stigma. While existing research highlights the high prevalence of such violence, there is a significant gap in understanding the level of awareness and knowledge among young, educated populations. This study, therefore, aims to assess the awareness of domestic violence against Scheduled Caste women among undergraduate students of Pub Majuli College in Majuli District, Assam. Adopting a descriptive case study design, the research will utilize a mixed-methods approach, including a survey to gauge general knowledge of domestic violence and its legal provisions, and in-depth interviews or focus group discussions to explore perceptions and attitudes. The study hypothesizes that while students may possess a basic understanding of domestic violence, there are significant knowledge gaps regarding its specific manifestations and the available support systems for SC women. Expected findings will shed light on how educational institutions can serve as crucial platforms for raising awareness, promoting gender equality, and empowering young individuals to challenge and address this social ill. The research will provide valuable recommendations for developing targeted educational programs and awareness campaigns within the college and the broader community to foster a more informed and supportive environment.

Keywords : Domestic Violence, Scheduled Caste Women, Majuli District, Pub Majuli College, Assam, Gender Equality

Introduction

Domestic Violence also known as domestic abuse, spousal abuse, battering, family violence and intimate partner violence(IPV), is defined as a pattern of abusive behaviours by one partner against another in an intimate relationship such as marriage, dating, family or co habitation. Domestic violence so defined has many forms- including physical aggression or assaults (Hitting, kicking, biting, shoving, restraining, slapping and throwing objects) or threats thereof; sexual abuse, emotional abuse, controlling or domineering.

Domestic violence is a global public health and human rights crisis that affects millions of women worldwide. In the context of India, this issue is particularly complex and pervasive, often intersecting with deeply rooted social hierarchies. Women belonging to Scheduled Castes (SC) face a unique and heightened vulnerability to domestic violence due to the combined forces of caste, class, and gender discrimination, a phenomenon often referred to as "triple discrimination." Despite the existence of legal frameworks and various government initiatives, the reported cases of violence continue to be high, and many instances remain unreported due to fear, social stigma, and a lack of awareness about rights and support systems.

According to the U.S Population Fund Report, around two third of the married women are victims of Domestic Violence. A recent study has shown that violence against women is the fastest growing crime in India. According to the India's National crime Report Bureau, a crime gets recorded against a women every 3 minutes in India. Every 6 hours a young married women is found beaten to death, burent or driven to

suicide. The rate of crimes against women was 66.4 per 100,000 women population in 2022.

While a significant body of literature exists on the prevalence of domestic violence at the national and state levels, there is a notable research gap concerning the specific context of geographically isolated regions and the awareness levels among the youth in these areas. Majuli, an island district in Assam, presents a unique socio-cultural landscape, with a diverse population and distinct community dynamics. Understanding the awareness of domestic violence against SC women in this specific context, particularly among educated individuals, is crucial for developing effective, localized interventions. This paper, therefore, undertakes a case study of the undergraduate students at Pub Majuli College, Majuli, to assess their knowledge, attitudes, and perceptions regarding domestic violence against SC women. By focusing on this specific demographic, the study aims to gauge whether education serves as a sufficient tool for awareness and empowerment or if more targeted efforts are needed to dismantle the social and cultural barriers that perpetuate violence.

Objectives of the Study

1. To assess the general level of awareness among undergraduate students regarding the forms and consequences of domestic violence against women.
2. To examine the students' understanding of existing legal provisions and institutional support systems available for victims of domestic violence.
3. To explore the sources of information (e.g., academic curriculum, media, family) through which students learn about domestic violence.

Methodology

This study adopts a qualitative case study approach to explore the awareness of domestic violence against Scheduled Caste (SC) women among the undergraduate student population of Pub Majuli College, Majuli. The case study method is particularly suitable for this research as it allows for an in-depth investigation of a contemporary phenomenon within its real-world context. The research design is structured into three main phases: an exploratory literature review, data collection, and data analysis.

Study Area and Population

The study was conducted at Pub Majuli College, Majuli, Assam. The target population consists of all undergraduate students enrolled in the college. A purposive sampling technique was employed to select a diverse group of participants from various academic Departments (e.g., Social Science and Humanities) to ensure a comprehensive representation of student perspectives. The sample included both male and female students from different years of study to capture a wide range of experiences and levels of maturity.

Data Collection

Primary data was collected through the following methods:

Survey: A structured questionnaire was administered to a sample of students to gather quantitative data on their general awareness of domestic violence. The survey is included questions on the different forms of violence, common causes, and their knowledge of legal protections and support services. This will help establish a baseline understanding and identify broad trends.

In-depth Interviews and Focus Group Discussions (FGDs)

A subset of survey participants has selected for in-depth interviews and FGDs. These sessions were semi-structured to allow for a flexible and conversational approach. The interviews and FGDs focused on exploring students' personal perceptions, attitudes, and specific knowledge about domestic violence against SC women. This qualitative data provide rich, nuanced insights that the survey alone cannot capture. Key themes has discussed that include the social and cultural factors contributing to violence, the role of education in raising awareness, and the perceived effectiveness of existing support mechanisms.

Data Analysis

The collected data was analyzed using a mixed-methods approach. Quantitative data from the survey is analyzed using descriptive statistics to summarize key findings, such as the percentage of students who are aware of certain legal provisions. Qualitative data from the interviews and FGDs is transcribed and subjected to thematic analysis. This process involved coding the data, identifying recurring themes and patterns, and interpreting their meaning within the

context of the research questions. The findings from both the quantitative and qualitative analyses are integrated to provide a comprehensive and robust understanding of the awareness levels and attitudes of the students.

Discussion on the Case Study

The Conceptual and operational definitions of the key term used in the study as follows:

Awareness: It refers to the extent to which a student is conscious towards any subjects, person or situation. In this present study, awareness refers to the scores obtained by the undergraduate students in their awareness scale.

Method: Considering the method of data collected, descriptive method has been adopted in the present study.

Population: The population of this study comprised of all the undergraduate students of the session 2025-2026 of Pub Majuli College, Majuli Assam which is a purely degree College.

Sample: For this study, the researcher has selected 100 students using the non probability sampling technique.

:Department wise Sample:

Sl. No	College Name	Stream/ Program	Department	Sample Collected
1	Pub Majuli College	UG-ARTS	English	10
2	Pub Majuli College	UG-ARTS	Assamese	20
3	Pub Majuli College	UG-ARTS	Sociology	20
4	Pub Majuli College	UG-ARTS	Political Science	20
5	Pub Majuli College	UG-ARTS	Economics	10
6	Pub Majuli College	UG-ARTS	History	10
7	Pub Majuli College	UG-ARTS	Education	10
	Total			**100**

Sex wise Sample:

Sl.No	Department	Male	Female
1	English	3	7
2	Assamese	7	13
3	Sociology	10	10
4	Political Science	9	11
5	Economics	5	5
6	History	4	6
7	Education	6	4
	Total	**44**	**56**

In the present study following tools and techniques were used for data collection.-

- Awareness Scale: An awareness scale constructed by the researcher consisting of 25 questions of multiple choice items.
- An Interviews schedule was also prepared for data collection.

In order to collect data, the investigator approached all the departments of the college and requested to Departmental Forum to distribute the Questionnaires and Interview Schedule. Selected sample students were invited to give necessary and sufficient oral instructions for their proper understanding about their activities to be done as well as their role to play. They were also advised not to copy the answers for the interest of a authenticate case study report preparation. All filled up Questionnaires were collected from the students.

For analysis of data, all correct responses in an awareness scale is calculated.

The major findings of this study are:-

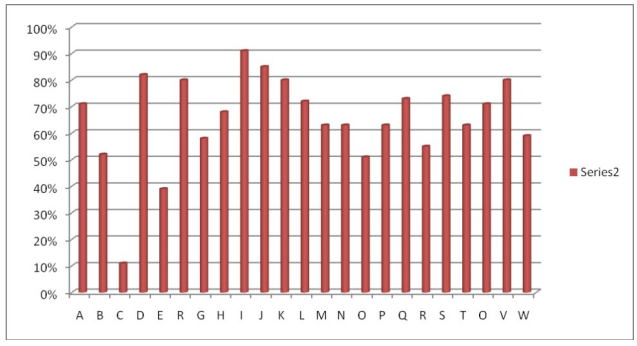


Table-1(Findings of the Case Study)

Here-

- Total 71% of students responded that people should come forward to help victims.
- 52% students believed that mere legislation of laws will not help in curbing the menace of domestic violence.
- 12% students consider that physical violence is a category of violence.
- 82% students believed that education helps in curbing the domestic violence.

- 39% believed that wife battering is the main form of Domestic violence.
- 80% think that domestic violence does not have its effect only on the victims.
- 58% students said that they will come forward if domestic violence is inflicted upon them.
- 68% students does not aware that women has a greater role to play in stopping domestic violence.
- 63% students are not aware of the full form of FAOW.
- 55% Students could answer that Actress Anuska Sarma is not an active women activist against AFSPA.
- 72% Students are aware about the new laws against Domestic violence.
- 80% Students are aware that the prohibition of child marriage is a law under Indian Constitution.
- 75% students are aware that International Women's day is celebrated on 8th March.
- 49% students believe that use of alcohol is the main cause of Domestic violence.
- 47% students that economic condition is the another cause of Domestic violence.
- 62% students does not feel that sometimes raising voice against violence improves the situation of domestic violence.
- 72% students are not aware that the religious practices have a connection with the matter of do9mestic violence against women.

Suggestions/Recommendations:

On the basis of the above findings of the study, the following suggestions may be offered:Community forums should be organized including the students to discuss about the problems and difficulty we face due to domestic violence. Aims and objectives of prevention of domestic violence should be discussed in tutorial classes. Suitable text books and reading materials on prevention of domestic violence in regional and national languages should be made available. Environment of home, school and community experiences including the local demands should be included in the curriculum. Education should not remain theoretical and verbal, but be practical relating to day to day life experiences with the rights of the people. Content of study should include the local as well as global needs. Principle of self responsibility towards the prevention of domestic violence should be developed in the students through workshops, seminars, conferences, projects etc. Training of teachers on human rights is a necessary step to its success. Spirit of innovation and experimentation of the students on human rights should be encouraged. Media should play a constructive role to bring awareness among the masses regarding this problem of the society. Such problems should be discussed clearly among children and parents. Mock shows should be organized to create awareness among people about this social evil. Police has a major role to play in preventing domestic violence. Gender training should be made mandatory while training the officers. Separate wings of police should be there to deal with women related issues. A crisis support cell needs to be established in all major government and private hospitals. All the commissions on Human Rights and women Rights has a limited role to play as these are merely recommendatory bodies. As such these bodies should be reformed by giving them more powers. Trial processes in the courts regarding cases of domestic violence should be faster. Economic independence of the women by dint of employment, self help groups and by maintaining their own separate/individual account in the banks, post offices etc.

Conclusion:

From the above discussions, we can conclude that the study of the concept of Domestic violence is the urgent need of the hour, specifically among the students of the Scheduled caste category. It is the responsibility of our educational institutions to promote the study of human rights, to protect the women from domestic violence, various laws and constitutional provisions relating to domestic violence against women. Proper involvement of governmental and non-governmental organizations is very much necessary for financial support to the women. Besides these local

community people of scheduled caste areas should also be encouraged to participate in the awareness meetings, seminars etc to reduce the trends of domestic violence against women.

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A Comprehensive Review on Chemical Aspects of Turmeric and its Relevance in Indian Knowledge System

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Abstract

Turmeric (Curcuma longa L.) is widely recognized by its Sanskrit name, '*Haridra'* and '*Halodhi'* in Assamese and is one of the most esteemed medicinal plants in the Indian Knowledge System (IKS). Turmeric has been an important part of Ayurveda, Siddha, cooking recipes, and religious ceremonies in Indian culture for several thousand years. Traditional writings refer to turmeric as an effective drug in dealing with inflammation, dermatological problems, digestive disturbances, respiratory disorders, and wound healing. Scientific studies have revealed that turmeric consists of numerous bioactive molecules, such as curcuminoids, volatile oil, polysaccharides, protein, and mineral. This paper reviews the chemical properties of turmeric with special emphasis on the Indian Knowledge System. In this review, traditional importance, classification, botany and chemical constituents of turmeric along with their scientific validity will be discussed. Thus, this paper aims to relate traditional knowledge system to current chemical perspectives of turmeric.

Keywords: Turmeric; IKS; curcumin; nanotechnology; Green Chemistry

1. Introduction

In India, there exists an indigenous system of knowledge that includes medicine, agriculture, ecology, mathematics, astronomy, and philosophy known as the Indian Knowledge System (IKS). The major contribution of this knowledge system has been the establishment of traditional healing practices like Ayurveda, Siddha, and Yoga, which have used medicinal plants for treating diseases since several years. The use of these healing practices is based upon scientific observation and evidence, as well as a holistic approach towards health. Turmeric (Curcuma longa L.) is one of the most studied medicinal plants in this regard [1-3].

Turmeric (*Curcuma longa* L.) has been an integral part of Indian life and culture for over four millennia, serving not only as a medicinal herb but also as a culinary spice, cosmetic ingredient, natural preservative, dye, and sacred substance. Its importance is well documented in classical Ayurvedic literature, including the *Charaka Samhita*, *Sushruta Samhita*, and *Bhavaprakasha Nighantu*, where it is referred to by names such as Haridra, Nisha, Kanchani, and Gauri. These ancient texts describe turmeric as a highly valued medicinal plant with diverse therapeutic applications, including wound healing, digestive support, blood purification, skin care, and the promotion of overall health and vitality [4, 5]. The continued use of turmeric across generations highlights the rich traditional knowledge associated with this plant and its enduring significance in Indian healthcare practices.

Scientific interest in turmeric increased considerably during the twentieth century following the isolation and characterization of curcumin, the major yellow pigment found in its rhizomes. This discovery marked the beginning of extensive research aimed at understanding the chemical composition and biological activities of turmeric. Over the years, numerous studies have confirmed many of the traditional claims regarding its medicinal value [6-9]. Research has demonstrated that turmeric and its bioactive constituents possess a wide range of pharmacological properties, including antioxidant, anti-inflammatory, antimicrobial, anticancer,

neuroprotective, hepatoprotective, and immunomodulatory effects [5, 6]. Furthermore, advances in analytical and phytochemical techniques have revealed that turmeric contains a complex array of bioactive compounds that often act synergistically, contributing to its broad therapeutic potential. These scientific findings provide strong support for the traditional uses of turmeric and underscore its importance as a valuable natural resource in both traditional and modern medicine [8].

The emerging importance of alternative medicine and herbal medicines has brought back the spotlight on the medicinal plant turmeric, which is an interesting blend of age-old wisdom and contemporary science. Analyzing the properties of turmeric from the perspective of the Indian Knowledge System does more than help comprehend its historical significance; it brings out the importance of traditional systems in providing direction for modern scientific studies. This paper will focus on understanding the chemistry behind turmeric and exploring how traditional knowledge corresponds to modern science.

2. Importance of Turmeric in IKS: A Historical View

For centuries, turmeric has been an integral part of Indian life and tradition. Beyond its use as a spice, it has been valued for its medicinal, cultural, and religious significance. Ancient Ayurvedic texts highlight its therapeutic properties, while communities traditionally used it for wound healing, skincare, and food preservation. As trade expanded, turmeric reached other parts of the world, and today India remains its largest producer and exporter [9].

3. Botanical Description and Traditional Classification

3.1 Botanical Characteristics of Turmeric

Turmeric (*Curcuma longa* L.) belongs to the Zingiberaceae family, which includes other well-known plants such as ginger, cardamom, and galangal. It is a perennial herb widely cultivated for its underground rhizomes, which are the most valuable part of the plant from both medicinal and culinary perspectives. These rhizomes are characterized by their distinctive yellow-orange color, which is primarily due to the presence of curcuminoids, particularly curcumin. In addition, the rhizomes contain aromatic volatile oils that give turmeric its characteristic fragrance and contribute to many of its therapeutic properties.

Turmeric is a perennial herb that grows up to a meter tall and has large leaves resembling lances that grow out of the underground rhizomes. When the herb is in bloom, it develops a spike of flowers ranging in color from pale yellow to white. This species thrives in warm tropical and subtropical regions with good amounts of rainwater and well-drained soils. India is the main area where this herb is grown due to its ideal growing conditions. Using conventional farming techniques and genetic selection, various strains of this species have been cultivated that differ in size, scent, amountof oils, and curcumin [5].

3.2 Ayurvedic Classification and Properties

Medicinal plants in Ayurveda are classified on the basis of sensory characteristics, energy, and biological effects. The turmeric is categorized as Rasayana, which are believed to contribute to longevity and health. They are also known to be good blood purifiers.

Turmeric's bitter taste along with its hot and dry qualities promotes digestion and stimulates the metabolism of the body, thereby expelling toxins from the body. Ayurvedic physicians knew that turmeric affected the functioning of various organs at once, which is a holistic approach to treating diseases. This means that turmeric was used not for treating a particular disease but for bringing back harmony within the body [10].

4. Phytochemical Composition of Turmeric

4.1 Curcuminoids

Curcuminoids are the main active compounds in turmeric responsible for its bright yellow color and many of its health-promoting effects. The three major curcuminoids found in turmeric are curcumin, demethoxycurcumin, and bisdemethoxycurcumin (Figure 1). Among them, curcumin is the most abundant, around 60–70% of total curcuminoids [6, 10]. Its unique chemical structure allows it to interact with

various biological processes and provides strong antioxidant and anti-inflammatory properties. The hydroxyl and methoxy groups in curcumin help it neutralize harmful free radicals by donating hydrogen atoms, which contributes to its protective effects in the body [11].

4.2 Volatile Oils and Essential Oil Components

Turmeric gets its smell and many of its health benefits from the combination of curcuminoids and essential oils present in its rhizome (underground stem). The major components of these oils include aromatic-turmerone, á-turmerone, â-turmerone, curlone, zingiberene, sabinene, and cineole.

These natural compounds contribute to several beneficial effects in the body. They are known for their antioxidant, anti-inflammatory, antibacterial, and neuroprotective properties. Recent studies suggest that turmerones, in particular, may help protect brain cells, support nerve growth, and reduces the risk of neurodegenerative conditions.

4.3 Polysaccharides and Other Bioactive Constituents

Several physiologically active high molecular weight polysaccharides, such as ukonan A, ukonan B, and ukonan C, are found in rhizomes of turmeric. These substances may help turmeric increase resistance to illness and infection because they have shown immunomodulatory qualities. According to studies, these polysaccharides promote immunological function and increase macrophage activity. Despite being found in smaller amounts than curcuminoids, these substances may work in concert to enhance turmeric's overall medicinal effectiveness [5].

4.4 Nutritional Components and Minerals

Because it contains important minerals and vitamins, turmeric also has nutritional value. Iron, calcium, potassium, magnesium, zinc, manganese, and phosphorus are found in the rhizome and promote a variety of physiological processes. These minerals support cellular metabolism, immunological response, enzyme functioning, and bone health.

Turmeric's nutritional profile supports its status as a functional food in the Indian Knowledge System and enhances its therapeutic qualities. The holistic approach of traditional Indian medicine, which views food and medicine as interrelated elements of health and well-being, is reflected in the integration of nutritional and therapeutic advantages.

5. Chemical Properties of Major Bioactive Compounds

5.1 Structure and Chemistry of Curcumin

The three curcuminoids present in turmeric are curcumin ($C_{21}H_{20}O_6$), demethoxycurcumin ($C_{20}H_{18}O_5$), and bisdemethoxycurcumin($C_{19}H_{16}O_4$). The structures of these three are displayed in Figure 1.

Its unique structure enables it to interact with different biological systems, supporting its advantageous effects. The hydroxyl and methoxy groups in curcumin help protect cells by neutralizing harmful free radicals. These properties make curcumin the major compound responsible for many of turmeric's beneficial health effects.

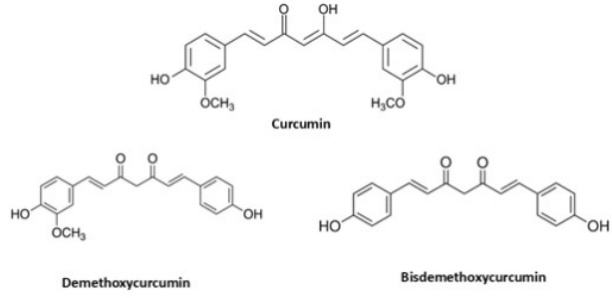


Figure 1. Chemicalstructures of curcuminoids present in turmeric [6].

5.2. Keto–Enol Tautomerism and Stability

Curcumin has an important chemical feature that allows it to exist in two forms: keto and enol forms. The keto form is more stable in acidic and neutral conditions, while the enol form is favored in alkaline environments and shows better metal-binding and free radical-scavenging abilities.

Keto form

$$-ArCO-CH_2-CO-Ar-$$

Enol form

$$-ArC(OH)=CH-CO-Ar-$$

However, curcumin can break down easily when exposed to light, heat, oxygen, or high pH. Protecting turmeric from sunlight and moisture helps maintain its stability and effectiveness. Understanding these properties is important for developing better curcumin-based health products [12].

5.3. Antioxidant Chemistry

The activity of turmeric is due to curcumin which has strong antioxidant activity. Curcumin scavenges free radicals, reactive oxygen species (ROS) and reactive nitrogen species (RNS), thus decreasing the oxidative stress linked to aging and chronic diseases. It also increases antioxidant enzymes like superoxide dismutase, catalase and glutathione peroxidase, thereby protecting the cells and maintain cellular balance.

5.4. Metal Chelation and Free Radical Scavenging

Curcumin has the ability to bind with transition metals such as iron and copper, which can otherwise promote the formation of harmful free radicals in the body. By reducing the activity of these metals, curcumin helps limit oxidative damage to cells. This metal-binding property is believed to contribute to its detoxifying, neuroprotective, and cardioprotective benefits.

The reactions explaining about metal-chelating ability contributes to its antioxidant, neuroprotective, and cardioprotective effects of turmeric can be represented as below [13, 14]:

Fenton Reaction (Free Radical Formation)

Transition metals such as iron can react with hydrogen peroxide to generate highly reactive hydroxyl radicals:

$$Fe^{2+}+H_2O_2 \rightarrow Fe^{3+}+OH^-+\cdot OH$$

$Fe^{2}z$ catalyzes the breakdown of hydrogen peroxide. The generated hydroxyl radical (•OH) can damage proteins, lipids, and DNA.

Haber–Weiss Reaction (Overall Oxidative Process)

$$O_2^{\cdot-}+H_2O_2 \rightarrow O_2+OH^-+\cdot OH$$

Superoxide radicals react with hydrogen peroxide in the presence of metal ions. This produces hydroxyl radicals that contribute to oxidative stress.

Curcumin Chelation with Iron ($Fe^{2}z$ /$Fe^{3}z$)

Curcumin's diketone group (especially the enol form) binds with metal ions:

$$Curcumin+Fe^{2+} \rightarrow Curcumin-Fe^{2+} \text{ complex}$$

or

$$Curcumin+Fe^{3+} \rightarrow Curcumin-Fe^{3+} \text{ complex}$$

This complex formation reduces free iron availability and prevents iron from participating in radical-generating reactions.

Curcumin Chelation with Copper

$$Curcumin+Cu^{2+} \rightarrow Curcumin-Cu^{2+} \text{ complex}$$

By binding copper ions, curcumin decreases copper-driven oxidation reactions.

Curcumin can donate hydrogen atoms from its phenolic hydroxyl groups:

$$Curcumin-OH+R^{\cdot} \rightarrow Curcumin-O^{\cdot}+RH$$

R• = free radical

Curcumin neutralizes radicals by converting them into stable molecules.

Overall Mechanism

$$Curcumin+Fe^{2+}/Cu^{2+} \rightarrow Metal-Curcumin\ complex$$

$$Metal-Curcumin\ complex \rightarrow \downarrow ROS\ production \rightarrow \downarrow Cellular\ damage$$

6.5. Antimicrobial Properties

Traditional medical systems often utilized turmeric to prevent infections and promote hygiene. Curcumin disrupts microbial cell membranes, interferes with protein synthesis, and inhibits essential metabolic pathways in microorganisms. Volatile oils present in turmeric further enhance antimicrobial efficacy. Such activities support traditional applications of turmeric in food preservation, wound care, and treatment of infectious diseases.

7. Pharmacological Activities of Turmeric

Curcumin is considered one of the most studied natural compounds for its anti-inflammatory, anticancer, and neuroprotective effects. It helps regulate inflammatory pathways, reduce inflammation-related markers, and may support the management of conditions such as arthritis and inflammatory bowel disease. Research also shows that curcumin may have anticancer potential by slowing cancer cell growth, promoting programmed cell death, and limiting tumor development. Although more clinical studies are needed, its effects on various cancer-related pathways remain promising

8. Turmeric as a Natural Dye and Chemical Indicator

Turmeric's vivid yellow hue has been used for ages in decorative arts, food colouring, and textile dyeing. The main colouring ingredient is curcumin, which has historical significance in traditional Indian crafts and religious rituals.The color of curcumin varies depending on the pH value, as it is yellow at an acidic pH level while reddish brown at an alkaline pH level. Turmeric can act as a biological acid-base indicator due to this property.

9. Use of turmeric in nanotechnology

Curcumin as a Nanochemical Agent

The most significant problem faced with respect to curcumin is its poor bioavailability. Once ingested, curcumin is rapidly metabolized and eliminated, leading to decreased efficacy as a drug. The use of nanotechnology in this case involves encapsulation of curcumin in nanoparticles that increase solubility and stability of curcumin.

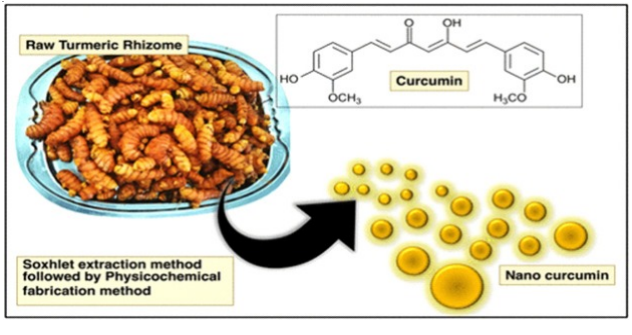


Figure 2. Schematic representation of nano curcumin production [15].

9.1. Curcumin Nanoparticles

The creation of curcumin nanoparticles is one of the most significant advances in nanochemistry. Curcumin is transformed into nanoparticles in these conditions, greatly expanding its surface area and rate of dissolution. When compared to traditional curcumin, curcumin nanoparticles show better cellular absorption and water dispersibility.

Research has demonstrated that tiny size of curcumin increases accumulation in sick tissues and permits effective passage through biological membranes. Curcumin nanoparticles have been studied for the treatment of microbial infections, cancer, inflammatory conditions, and neurological diseases.

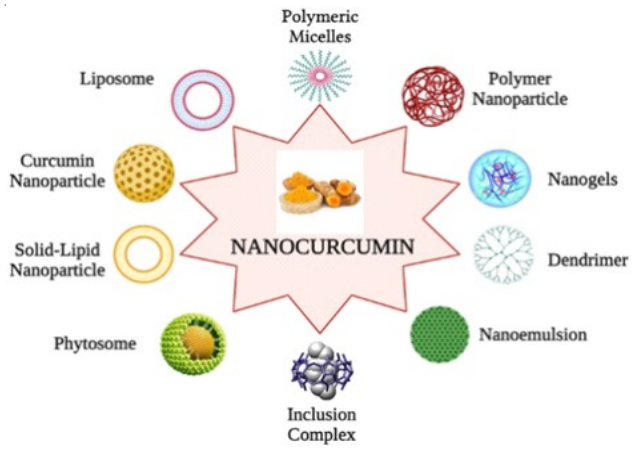


Figure 3. Various strategies of nanocurcumin synthesis [17].

9.2. Nanocarrier-Based Drug Delivery Systems

Nanocarrier systems are a major advancement in turmeric-based nanotechnology, designed to improve the delivery and effectiveness of curcumin in the body. Although curcumin has many health benefits, its use is limited due to poor absorption, low solubility, and instability. To overcome these challenges, researchers have developed nanoscale carriers that protect curcumin and improve its availability. Liposomes, made of phospholipid layers, can encapsulate curcumin and enhance its stability, absorption, and therapeutic effects. Polymeric nanoparticles using materials like PLGA, chitosan, and alginate provide controlled release and targeted delivery. Lipid-based nanoparticles further

improve curcumin transport across biological barriers. These advanced systems show promising applications in cancer therapy, brain health, and inflammatory disease treatment by increasing curcumin's overall effectiveness [16-18].

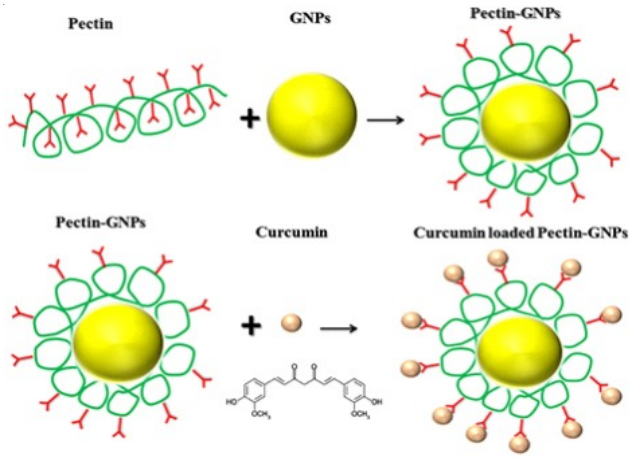


Figure 4. Curcumin-loaded nanocarriers and gold nanoparticle (GNP) systems [16]

9.3. Green Synthesis of Metal Nanoparticles

One major contribution made by turmeric in nanotechnology is its use in the eco-friendly synthesis of metallic nanoparticles. Nano-particles can be prepared in conventional ways that usually involve the use of toxic reagents as well as harsh reaction conditions. However, plant-mediated synthesis offers a greener option [19].

The phytochemical components in turmeric include curcuminoids, flavonoids, phenolics, and reducing sugars, which can facilitate the reduction of metal ions to form metallic nanoparticles. The phytochemicals in turmeric act both as reducing agents and stabilizing agents when synthesizing metallic nanoparticles.

Nano-silver particles have gained popularity owing to their high antimicrobial properties. The antimicrobial effects of silver nanoparticles have been tested against different types of bacteria and fungi. They have been successfully applied in wound dressings and antimicrobial coatings for medical applications and packaging.

Moreover, gold nanoparticles have been widely investigated due to their biological and physical properties. Turmeric-coated gold nanoparticles show increased anti-cancer activities, among other biomedical applications.

9.4. Turmeric-Based Nanocomposites

Curcumin, the principal bioactive compound in turmeric, is widely used in the development of nanocomposites, where nanoparticles are incorporated into a supporting matrix. Curcumin-based nanocomposites combined with polymers have shown promise in tissue engineering, wound healing, and drug delivery, benefiting from both biological activity and structural stability. It is also used in nanofibers, hydrogels, and nanofilms, which enable sustained drug release, promote tissue regeneration, and provide antimicrobial protection during healing [16,17].

9.5. Biomedical Applications

Turmeric-based nanoparticles have shown a sharp increase in biomedical applications in recent years. One of the fields that has been investigated the most is cancer therapy. Through improved permeability and retention properties, curcumin-loaded nanoparticles can aggregate specifically in tumour tissues. While lowering systemic toxicity, this tailored administration boosts anticancer activity.

Curcumin nanoparticles are more effective than free curcumin in crossing the blood-brain barrier in neurodegenerative illnesses like Alzheimer's. This characteristic offers prospective methods for treating neurological conditions and facilitates better transport of therapeutic substances to the brain.

Nanomaterials made from turmeric also have antiviral and antibacterial properties. Turmeric extracts have been used to create curcumin and metal nanoparticles, which have shown efficacy against a variety of harmful pathogens. These materials could aid in the creation of innovative antimicrobial treatments and infection prevention techniques.

9.6. Biosensing and Diagnostic Applications

Nanochemistry has enabled the development of advanced biosensors incorporating turmeric-derived compounds. Curcumin possesses fluorescent properties

and can interact selectively with certain biomolecules and metal ions. These characteristics make curcumin useful in sensing applications.

Curcumin-functionalized nanoparticles have been employed for detecting heavy metals, environmental pollutants, and disease biomarkers. In biomedical diagnostics, curcumin-based nanosensors may facilitate early detection of diseases through highly sensitive and selective molecular recognition [19].Furthermore, gold and silver nanoparticles synthesized using turmeric extracts exhibit unique optical properties that can be utilized in colorimetric sensing.

9.7. Environmental Applications

Turmeric-based nanomaterials have gained attention as an eco-friendly approach for environmental cleanup. Nanoparticles prepared using turmeric extracts can help remove harmful pollutants, heavy metals, and dyes from contaminated water due to their large surface area and active chemical groups. These properties allow them to interact with and capture unwanted substances more effectively [18]. In addition, turmeric-derived nanocomposites have been studied for their ability to break down environmental contaminants through photocatalytic processes. Since these methods use natural materials and support sustainable practices, turmeric-based nanotechnology offers a promising solution for pollution control while promoting the principles of green chemistry and environmental protection.

10. Validation of Traditional Knowledge Through Modern Science

Scientific Evidence Supporting Ayurvedic ClaimsMany traditional uses of turmeric mentioned in Ayurvedic practices have gained support through modern scientific studies. Research has shown that turmeric possesses several beneficial properties, including anti-inflammatory, antioxidant, antimicrobial, wound-healing, and liver-protective effects. These findings help explain why turmeric has been valued in traditional medicine for centuries. Scientific investigations have provided evidence that many ancient observations were based on real biological effects of turmeric's active compounds, particularly curcumin. This connection between traditional knowledge and modern research highlights the importance of studying natural remedies to better understand their potential health benefits and applications.

The relationship between the Indian Knowledge System (IKS) and modern chemistry shows how traditional wisdom can contribute to scientific innovation. Turmeric is a strong example of how ancient knowledge about medicinal plants can guide modern research and discovery. Traditional practices preserved over generations have inspired scientists to investigate the chemical compounds and biological activities behind these remedies. By combining historical knowledge with advanced scientific methods, researchers can develop a deeper understanding of natural products and explore their uses in healthcare, biotechnology, and sustainable solutions.

11. Challenges and Future Prospects

The future development of turmeric-based therapies requires addressing several important challenges. Differences in cultivation methods, climate, harvesting, processing, and plant varieties can affect turmeric's chemical composition, making standardization essential for ensuring consistent quality, safety, and effectiveness. Although many laboratory studies support the benefits of curcumin, more clinical trials are needed to confirm proper dosages, long-term safety, and its effectiveness for specific health conditions. Advances in nanotechnology, especially nanocurcumin delivery systems, offer promising solutions to improve absorption and targeted delivery in the body. Future research can further combine Ayurvedic knowledge with modern tools such as metabolomics, artificial intelligence, systems biology, and network pharmacology to develop innovative therapies while preserving traditional wisdom.

12. Conclusion

One of the most striking examples of how traditional knowledge and contemporary science may coexist is turmeric. Centuries before curcumin and other bioactive components were discovered, the Indian

Knowledge System acknowledged the therapeutic benefits of turmeric. Many ancient claims have been confirmed by modern phytochemical and pharmacological research, which has uncovered a complex array of substances with antioxidant, anti-inflammatory, antibacterial, immunomodulatory, neuroprotective, and anticancer properties. The study of turmeric serves as an example of how historical findings that have been preserved over many generations of customary practice can influence contemporary scientific research and advance medical innovation. Researchers can continue to investigate the entire medicinal potential of turmeric while maintaining the rich intellectual legacy of the Indian Knowledge System by fusing the concepts of Ayurveda with developments in chemistry, pharmacology, and biotechnology.

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Phytochemical screening of some secondary metabolites in five edible aroids of Jorhat district of Assam

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Abstract

The family Araceae, belonging to the order Alismatales, comprises a diverse group of monocotyledonous flowering plants commonly known as aroids. These plants are widely distributed in tropical and subtropical regions and are recognized for their distinctive floral morphology. The present study aimed to investigate the phytochemical composition of five edible aroid species collected from the Jorhat district of Assam through preliminary screening of their methanolic and aqueous extracts.

Phytochemical analysis revealed considerable variation in the distribution of secondary metabolites among the selected species and between the extraction solvents. Methanolic extracts demonstrated greater efficiency in extracting a wide range of phytoconstituents, particularly alkaloids, flavonoids, phenols, and glycosides. In contrast, aqueous extracts were more effective in recovering polar compounds such as saponins, tannins, and, in certain species, terpenoids. These differences are attributed to the polarity of the solvents and the chemical characteristics of the phytochemicals present in the plants.

The presence of bioactive secondary metabolites, including alkaloids, glycosides, flavonoids, terpenoids, saponins, phenols, and tannins in aroid plants is associated with important pharmacological properties such as antioxidant, antimicrobial, anti-inflammatory, antidiabetic, and anticancer activities. The occurrence of flavonoids, phenols, and tannins suggests strong antioxidant potential, while alkaloids and glycosides may contribute significant therapeutic effects. Terpenoids and saponins further enhances the medicinal value of these edible aroids. Overall, the findings indicate that the studied Araceae species are promising natural sources of bioactive compounds and may have potential applications in the development of herbal medicines, nutraceuticals, and pharmaceutical products.

Keywords: Aroids, Edible species, Jorhatdistrict, Phytochemical screening, Secondary metabolites.

Introduction

The family **Araceae,** belonging to the flowering plant order **Alismatales**, comprises a diverse group of monocotyledonous plants commonly known as aroids or the arum family. The term *Arum* originates from the Greek word *Aron*, reflecting the classical roots of its taxonomy. Aroids are widely distributed across tropical and subtropical regions and are recognized for their distinctive and often unusual floral structures. Their characteristic inflorescence, known as a **spadix**, is typically enclosed by a modified leaf called a **spathe** and bears separate male and female flowers. Such flowers are usually small, have a strong smell to invite the pollinators, and can have thermogenesis to increase the pollination effectiveness (Jimenez et al., 2019).

Edible aroids play a significant role in the livelihood of millions of relatively poor people in the developing countries (Sharma *et al*., 2016). These crops have the ability to improve household nutrition, generate revenue, and ensure food security. The tropical plants *Xanthosoma* and *Colocasia* are important members of the Araceae family, a large and diverse group of flowering plants commonly known as aroids. These genera are widely cultivated throughout tropical and subtropical regions for their edible corms, cormels, and nutritious leaves, as well as for their significance in traditional cultural and religious ceremonies. The genus *Colocasia*comprises approximately 25 species, while *Xanthosoma* includes about 50 species. Together, they contribute significantly to food security, cultural

heritage, and agricultural economies in many parts of the world. The Araceae family is one of the largest plant families, containing around 1,500 species distributed among numerous genera. Members of this family exhibit remarkable diversity in growth forms, including terrestrial plants, epiphytes, vines, and creepers, enabling them to thrive in a wide range of ecological habitats.

2. Materials and Methods

2. 1 Sample Collection and Identification

Plant specimens were collected from home gardens of Kakojan area of Jorhat district. The selection included aroid species. The specimens were identified locally as Kola kochu, BogaDahikochu, Kola Dahikochu,,Chengmora, Gandhkochu, Chengmora and Man kochu. They were identified on the basis of taxonomy as *Colocasiaesculenta* (L.) Schott, *Xanthosomasagittifolium* (L.)Schott, *Xanthosoma-violaceum* Schott, *Lasiaspinosa* (L.) Thwaites and *Alocasiaodora* (G.Lodd.) accordingly.

Sl. No	Scientific Name	Common Name	Habitat	Part used
01	*Colocasiaesculenta* (L.) Schott.	Kola kochu	Terrestrial	Leaf and petiole
02	*Xanthosomasagittifolium*(L.) Schott.	Boga Dahikochu	Terrestrial	Petiole
03	*Xanthosomaviolaceum* Schott.	Kola kochu	Amphibian	Petiole
04	*Lasiaspinosa* (L.) Thwaites	Chengmora	Terrestrial	Leaf and Petiole
05	*Alocasiaodora*(G.Lodd.) Spach	Man kochu	Terrestrial	Petiole

2.2 *Sample preparation*

The leaf and petiole were washed thoroughly and cut into pieces.The leaves and petioles were dried in hot air oven at 60 degree centigrade for 12 hours and the dried materials were coarsely powdered in a grinder. The powdered samples were divided equally into two parts and dissolved in distilled water and methanol respectively. The prepared plant extracts were subjected to preliminary phytochemical screening to detect the presence of major secondary metabolites, including alkaloids, glycosides, flavonoids, terpenes, saponins, phenols, and tannins.

2.3 Chemicals

Methanol, Ethanol, Mayer's Reagent, Glacial Acetic Acid, Ferric Chloride, Concentrated Sulphuric Acid, Ammonia, Chloroform and Distilled Water.

2.4 Tests

Test for Alkaloids:

To reveal the presence of alkaloids, few drops of Mayer's reagent (potassium mercuric iodide) reagent were added to the extract, cream colour precipitate visualises the presence alkaloids.

Test for Glycosides:

To 2 ml of extract, add 1 ml of glacial acetic acid, few drops of 5 % Fecl3and Conc. H_2SO_4were added reddish brown colour at the junction of two layers and upper layers appears bluish green visualises the presence of glycosides.

Testfor Flavonoids:

To the 1 ml of extract few drops of 10% Conc. $H_2SO_4$was added and followed byadding 1ml of ammonia, formation of greenish yellow precipitate visualises the presence of flavonoids.

Testfor Terpenoids

To 2ml of extract, 5ml of chloroform and 2 ml of Conc. $H_2SO_4$was added. Reddish brown colourationsof interfacevisualize the presence of terpenoids (Harborne 1973).

Testfor Saponins

To 2ml of extract water was added and shaken vigorously for frothing presence visualize saponins.

TestforPhenols

To1mlofextractalcohol (ethanol)was addedandfewdropsofferricchloride solution wassupplied for the formation of greenish yellow visualize the presence of phenols.

TestforTannins

To 1ml of extract, 1ml of 5% $Fecl_3$was added which visualize by the presence of greenish black precipitate.

3. Results

Table No. 1 : Phytochemical screeningofleaf and petiole of *Colocasiaesculenta* (L.) Schottin Methanoland Aquas extract shows following phytochemical constituents present:

Phytochemical compound	**Methanol extract**	**Aqueous extract**
Alkaloid	++	——-
Glycoside	+	——-
Flavonoids	++	——-
Terpenoids	———	++
Saponins	———	++
Phenols	++	——
Tannin	+	++

Abscence(—), Presence(+), Fairly good amount(++)

Table No.2: Phytochemical screening of leaf and petiole of *Xanthosomasagittifolium*(L.) Schott.in Methanoland Aquas extract shows following phytochemical constituents present:

Phytochemical compound	Methanol extract	Aqueous extract
Alkaloid	+	——-
Glycoside	++	——-
Flavonoids	+	——-
Terpenoids	———	——
Saponins	+	++
Phenols	+	——
Tannin	+	——

Abscence(—), Presence(+), Fairly good amount(++)

Table No.3: Phytochemical screening of leaf and petiole of *Xanthosomaviolaceum* Schott.in Methanol and Aquas extract shows following phytochemical constituents present:

Phytochemical compound	Methanol extract	Aqueous extract
Alkaloid	++	——-
Glycoside	———	——-
Flavonoids	——-	——-
Terpenoids	———	++
Saponins	+	++
Phenols	++	+
Tannin	+	++

Absence(——), Presence(+), Fairly good amount(++)

Table No.4:Phytochemical screening of leaf and petiole of *Lasiaspinosa* (L.)Thwaites.in Methanol and Aquas extract shows following phytochemical constituents present:

Phytochemical compound	Methanol extract	Aqueous extract
Alkaloid	+	+
Glycoside	++	——-
Flavonoids	+	——-
Terpenoids	———	——
Saponins	+	+
Phenols	+	+
Tannin	+	+

Absence(——), Presence(+), Fairly good amount(++)

Table No.5: Phytochemical screening of leaf and petiole of *Alocasiaodora*(G.Lodd.) Spach.in Methanol and Aquas extract shows following phytochemical constituents present:

Phytochemical compound	Methanol extract	Aqueous extract
Alkaloid	+	——-
Glycoside	++	——-
Flavonoids	——-	——-
Terpenoids	———	——
Saponins	+	+
Phenols	+	+
Tannin	+	+

Absence(—), Presence(+), Fairly good amount(++)

The preliminary phytochemical screening of the selected Aroid species revealed considerable variation in the distribution of secondary metabolites among the plants as well as between methanolic and aqueous extracts. In general, methanol proved to be a more efficient solvent for extracting a broader spectrum of phytochemicals, particularly alkaloids, flavonoids, phenols, and glycosides, whereas aqueous extracts were more effective in recovering polar compounds such as saponins, tannins, and, in some species, terpenoids. These differences can

be attributed to the varying polarity of the solvents and the chemical nature of the phytoconstituents present in each plant.

Among the studied species, *Colocasiaesculenta* exhibited a distinct solvent-dependent phytochemical profile. The methanolic extract contained appreciable amounts of alkaloids, flavonoids, and phenols, together with lower levels of glycosides and tannins, indicating the richness of the plant in antioxidant and bioactive compounds. In contrast, the aqueous extract was characterized by the presence of terpenoids, saponins, and tannins, suggesting that these compounds are more readily extracted by water. This marked variation demonstrates the influence of extraction solvent on the recovery of phytochemicals and highlights the chemical diversity of *C. esculenta*.

The phytochemical profile of *Xanthosomasagittifolium* showed a strong preference for methanolic extraction. The methanolic extract contained nearly all the tested phytochemical groups, including alkaloids, flavonoids, saponins, phenols, tannins, and a relatively high amount of glycosides, whereas the aqueous extract contained only saponins. This finding suggests that the majority of bioactive constituents in this species possess greater solubility in methanol than in water. The broad range of metabolites detected in the methanolic extract indicates that *X. sagittifolium* may serve as a promising source of pharmacologically active compounds.

In *Xanthosomaviolaceum* Schott., methanol was particularly effective in extracting alkaloids and phenols, while water favored the extraction of terpenoids, saponins, and tannins. The absence of glycosides and flavonoids in both extracts suggests either their true absence in the plant material or concentrations below the detection limits of the screening methods employed. The complementary distribution of phytochemicals between the two solvents further emphasizes the importance of solvent selection in phytochemical investigations.

The extracts of *Lasiaspinosa* displayed a comparatively rich phytochemical composition. Alkaloids, saponins, phenols, and tannins were detected in both methanolic and aqueous extracts, indicating their widespread occurrence within the plant tissues. However, glycosides and flavonoids were confined to the methanolic extract, while terpenoids were absent in both extracts. The broader phytochemical spectrum observed in the methanolic extract suggests that methanol is more suitable for extracting diverse secondary metabolites from *L. spinosa*. The presence of multiple classes of bioactive compounds supports the potential medicinal value of this species.

Similarly, *Alocasiaodora* exhibited a richer phytochemical profile in the methanolic extract than in the aqueous extract. Alkaloids and glycosides were detected only in methanol, while saponins, phenols, and tannins were present in both solvents. The absence of flavonoids and terpenoids in both extracts indicates a limited occurrence of these metabolites in the investigated plant parts. The results suggest that methanol is a more effective solvent for recovering the major bioactive constituents of *A. odora* and may therefore be preferred for further phytochemical and pharmacological studies.

Overall, the study demonstrates that members of the Araceae family possess diverse phytochemical constituents with potential biological significance. The predominance of alkaloids, phenols, tannins, saponins, flavonoids, and glycosides in various species suggests possible antioxidant, antimicrobial, anti-inflammatory, and therapeutic properties. Furthermore, the superior extraction efficiency of methanol for most phytochemical groups indicates its suitability for comprehensive phytochemical investigations, whereas aqueous extraction remains valuable for the recovery of specific polar compounds such as saponins, tannins, and terpenoids. These findings provide a scientific basis for further quantitative analyses and bioactivity studies of these economically and medicinally important plant species.

Conclusion

Phytochemical investigation of Araceae (aroid) species revealed the presence of several important secondary metabolites, including alkaloids, glycosides, flavonoids, terpenoids, saponins, phenols, and tannins. These bioactive compounds are known to contribute

to various pharmacological activities such as antioxidant, antimicrobial, anti-inflammatory, antidiabetic, and anticancer effects. The occurrence of flavonoids, phenols, and tannins suggests a strong antioxidant potential, while alkaloids and glycosides may be responsible for significant therapeutic properties. Terpenoids and saponins further enhance the medicinal value of these plants through their antimicrobial and protective functions. Overall, the presence of these phytochemical constituents indicates that Aroids are valuable sources of natural bioactive compounds and may serve as promising candidates for the development of herbal medicines, nutraceuticals, and pharmaceutical products. Further quantitative analysis and biological evaluation are recommended to identify specific compounds and confirm their therapeutic efficacy.

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A Comparative Sudy on the Growth Analysis of Different Sources of Irrigation of Bodoland Territorial Area District (BTAD), Assam

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Abstract

Irrigation is an essential component of agricultural development as it ensures a reliable water supply and enhances crop productivity. The present study examines the growth trends of different sources of major and minor irrigation in the Bodoland Territorial Area District (BTAD), Assam, using secondary data which were collected from the Statistical Handbook of Assam. The Compound Growth Rate (CGR) method wasused to analyze the growth rate of different sources of irrigation of BTAD. The findings reveal limited growth in major irrigation systems, with declining surface flow irrigation in Kokrajhar and Baksa and only marginal improvement in Udalguri. Minor irrigation sources showed mixed trends, while the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) contributed positively to irrigation expansion in some districts, particularly Baksa. However, the decline of several traditional irrigation sources indicates inadequate infrastructure and maintenance. The study suggests that modernization of irrigation facilities, improved institutional management and sustainable water conservation practices are essential for enhancing irrigation efficiency and promoting sustainable agricultural development in the region.

Keywords:Irrigation Sources, Surface Lift, Surface Flow, DTW, STW, PMKSY CGR

Introduction

Irrigation is the artificial application of water to agricultural land to support crop growth when rainfall is insufficient or irregular. Irrigation has been divided into different sources because water for irrigation is obtained from different origins and supplied through different methods. It supplies water through canals, wells, tube wells, tanks, pumps and other artificial means, ensuring adequate moisture during different stages of crop development. Different sources of irrigation help to save water and reduce production costs by ensuring efficient and timely water supply to crops. Reliable irrigation reduces crop losses, increases water-use efficiency and minimizes dependence on expensive energy measures during drought. They help to increase crop production, dependence on rainfall, support multiple cropping, promote agricultural modernization, improve farmers' income and ensure food security and rural development. Tubachi et al. (2024) reported that tube wells registered the highest compound annual growth rate in Karnataka, while canal and tank irrigation declined. Biswas and Panda (2024) also observed a nationwide transition toward groundwater irrigation. Similarly, Singh (2015) and Singh et al. (2025) found that tube wells and bore wells have become the dominant sources of irrigation growth in several Indian states.Agriculture is gradually shifting from tradition surface irrigation methods towards modern micro-irrigation systems such as drip and sprinkler irrigation due to their higher water use efficiency, reduced impact cost and potential to improve agricultural productivity, Gurjar et al. (2018), Namara, et al. (2007) and Reddy et al. (2023).

BTAD comprising Kokrajhar, Chirang, Baksa and Udalguri districts, is predominantly agrarian, with a large proportion of its population dependent on agriculture for their livelihood. Swargiary and Mahanta (2020) reported that agriculture remains the primary livelihood of the Bodo community, although diversification toward non-farm activities is gradually increasing. Basumatary and Panda (2020) observed that agriculture is a major source of household income and plays

a crucial role in the socio-economic development of BTAD. Ramchiary and Singh (2023) emphasized that the region has immense potential for agripreneurship because of its fertile land and favorable climate. Similarly, the Bharat Rural Livelihoods Foundation (BRLF) working paper noted that agriculture is closely linked with the culture and economy of Bodoland and has considerable scope for increasing farmers' income through crop diversification and productivity enhancement. **Basumatary and Panda (2020)** observed that agriculture is the backbone of the rural economy in BTAD and improving agricultural infrastructure, including irrigation, is essential for enhancing socio-economic development and reducing rural poverty.**Narzary (2024)** reported that irrigation is one of the most important agricultural infrastructures in Assam. **Daimary et al. (2024)** found that irrigated area has a significant positive effect on rice production in the Bodoland Territorial Region. Their econometric analysis showed that expanding irrigation coverage can substantially increase rice productivity and improve farmers' livelihoods. Basumatary (2024) found that various central sponsored, state sponsored and institutional sponsored schemes have been implemented in Assam.Therefore, the present study examines the growth rate of different sources of major and minor irrigation systems of four the districts of BTR. Therefore, it is important to study the growth rate of different sources of irrigation, as this helps in identifying growth rate of different sources of irrigation and formulating suitable irrigation strategies for the study area. Such an analysis contributes to the efficient management of water resources and the suitable development of agriculture.

Data and Methodology

This study was based on secondary data and were collected from various published sources. Data were collected from the Directorate of Economics and Statistics of Assam, Journals and Websites. The study covers the period for which consistent data were available.

Estimation of CGR

The compound growth rate (CGR) was used to measure the growth rate of different types of sources of irrigation. The growth rate was estimated by using the following formula

$$CGR = \left(\frac{Y_t}{Y_0}\right)^{\frac{1}{n}} - 1$$

Where: Y_t = Final year value, Y_0 = Initial year value and n = number of years. If CGR > 0 ! positive growth, if CGR < 0 ! negative growth and if CGR = 0 ! no growth. A higher CGR indicates faster growth of the variable over time.

Results and Discussion

Table 1 and Table 2 explain the district wise growth rate of different sources of major and minor irrigation system.

Table 1. District Wise Growth Rate of Different Sources of Major Irrigation System

	Sources of Major Irrigation System			
District	Surface Flow	Surface Lift	Deep Tube Well	Shallow Tube Well
Kokrajhar	-20.9	0	0	0
Chirang	0 (2019-20 to 2022-23)	0	0	0
Baksa	-12.75	0	0	0
Udalguri	1.71	0	0	0

Source : Secondary Data

Calculated by author

The results show that Kokrajhar experienced a negative compound growth rate of -20.9% in surface flow irrigation, indicating a substantial decline in the irrigated area under this source over the study period. Similarly, Baksa recorded a negative growth rate of -12.75%, suggesting a gradual reduction in the utilization or coverage of surface flow irrigation.

In contrast, Udalguri registered a positive compound growth rate of 1.71%, reflecting a slight expansion in surface flow irrigation, although the growth was modest. Chirang recorded zero growth from 2019–20 to 2022–23, indicating that the area under surface flow irrigation remained unchanged during these years.

For surface lift (SL), deep tube well (DTW) and shallow tube well (STW) irrigation systems, the compound growth rate is zero across all districts. This is because there was no recorded area under these irrigation sources or no change in their coverage throughout the study period. Hence, the growth rate could not be estimated, and the value remains zero. This suggests that these major irrigation technologies have either not been developed, are not operational or have remained stagnant in the region.

Figure No. 1 District wise Growth Rate of Different Sources of Major Irrigation System

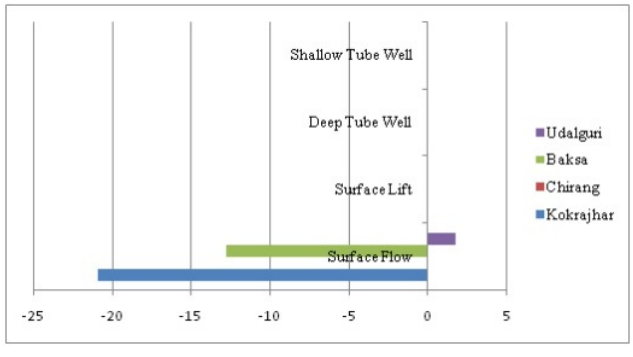


Table 2. District wise Growth Rate of Different Sources of Minor Irrigation System

District	Sources of Minor Irrigation System				
	Surface Flow	Surface Lift	Deep Tube Well	Shallow Tube Well	PMKSY (2020-21 to 2022-23)
Kokrajhar	-0.76	-16.42	-9.07	1.37	15.77
Chirang	8.78	2.06	-35.51	0	3.70
Baksa	-17.06	4.95	4.11	-22.34	59.58
Udalguri	-3.98	-2.14	-12.49	-11.49	0

Source: Secondary Data

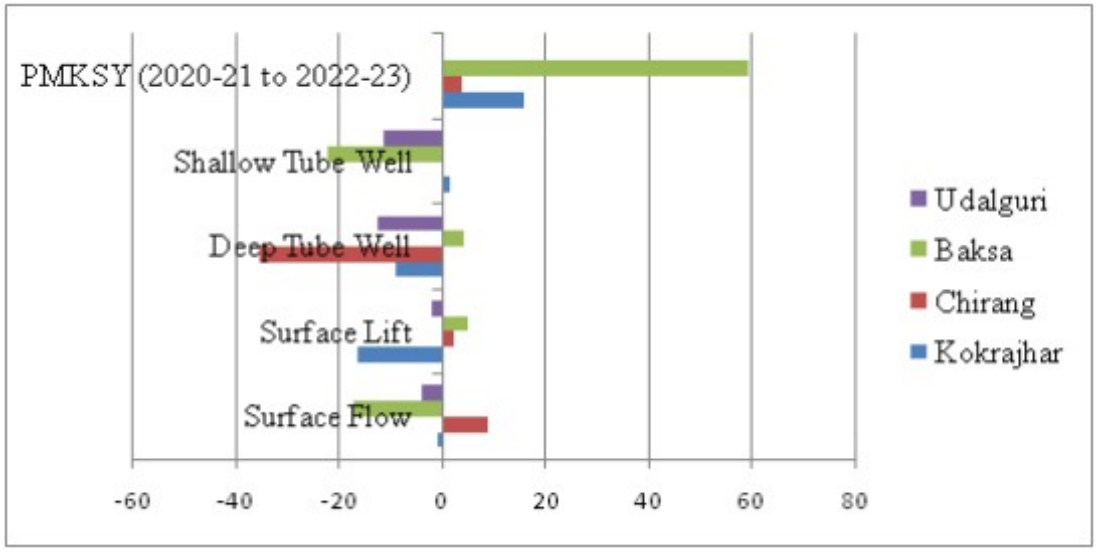
Calculated by author

The district-wise analysis of minor irrigation systems in BTAD reveals considerable variation in the growth and decline of different irrigation sources. Kokrajhar recorded a marginal decline of 0.76 percent in surface flow irrigation, 16.42 percent in surface lift irrigation and 9.07 percent in deep tube wells, while shallow tube wells increased by 1.37 percent and irrigation development under PMKSY increased by 15.77 percent. Similarly, Chirang showed positive growth in surface flow (8.78 percent) and surface lift irrigation (2.06 percent), although deep tube wells declined sharply by 35.51 percent, with no change in shallow tube wells and only a modest increase (3.70 percent) under PMKSY. Baksa experienced the highest decline in surface flow (17.06

percent) and shallow tube wells (22.34 percent), but recorded increases in surface lift (4.95 percent), deep tube wells (4.11 percent), and a substantial expansion of 59.58 percent under PMKSY. In contrast, Udalguri registered declines in surface flow (3.98 percent), surface lift (2.14 percent), deep tube wells (12.49 percent), and shallow tube wells (11.49 percent), with no improvement under PMKSY, indicating stagnation in irrigation development. Overall, the findings indicate uneven progress in the development of minor irrigation systems across BTR. Although government initiatives such as PMKSY have contributed to irrigation expansion in some districts, the decline in several traditional irrigation sources suggests inadequate maintenance and limited modernization of irrigation infrastructure.

The findings from Tables 1 and 2 indicate that irrigation expansion in the BTAD has remained limited, which may adversely affect agricultural productivity and water availability during dry periods. The decline in surface flow irrigation, particularly in Kokrajhar and Baksa, also supports the findings of Nigam et al. (2023), who identified inadequate infrastructure, poor maintenance, and weak institutional coordination as major constraints to irrigation development and recommended modernization to improve irrigation efficiency and agricultural sustainability. These results are consistent with the studies of Meinzen-Dick et al. (2002) on the importance of collective irrigation management, Van Meter et al. (2016) on sustainable water conservation, Dhawan (2017) on irrigation system maintenance and Gandhi et al. (2020) on participatory water governance.

Fig No. 2 District WiseGrowth Rate of Different Sources of Minor Irrigation System



Conclusion

The study concludes that the growth of irrigation sources in the Bodoland Territorial Region has been uneven across districts and irrigation types. Major irrigation systems have remained largely stagnant, while several traditional minor irrigation sources have experienced declining growth, reflecting inadequate infrastructure and maintenance. Although PMKSY has positively contributed to irrigation expansion in districts such as Baksa and Kokrajhar, overall irrigation development remains insufficient to meet the region's agricultural needs. Therefore, strengthening irrigation infrastructure, promoting efficient irrigation technologies, improving water conservation practices and enhancing institutional management are necessary to ensure sustainable water use, increase agricultural productivity and support long-term agricultural development in the BTR.

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Generative AI, Digital Pedagogy, and Academic Innovation in Higher Education: A Qualitative Analytical Study

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Abstract

The rapid advancement of Artificial Intelligence (AI) and Information and Communication Technology (ICT) has significantly transformed higher education by introducing innovative pedagogical models, intelligent learning systems, and AI-driven research practices. This qualitative study examines the role of Generative AI, Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), blended learning frameworks, and AI-enabled educational technologies in reshaping teaching, learning, and academic research. The study is based on systematic literature review, thematic analysis, and reflective observations derived from faculty development programmes and AI-oriented academic training sessions conducted under Artificial Intelligence in Higher Education (AIHE) initiatives. The research explores the educational applications of intelligent tutoring systems, AI teacher assistants, learning analytics, prompt engineering, digital collaboration platforms, and visualization tools in promoting learner-centered education and research innovation. The findings indicate that AI-integrated ICT ecosystems enhance personalized learning, improve academic engagement, strengthen interdisciplinary collaboration, and support adaptive instructional practices. The study further identifies major challenges including ethical concerns, digital divide, algorithmic bias, infrastructural limitations, and the need for responsible AI governance in education. A conceptual framework is proposed to illustrate the relationship between emerging AI technologies, pedagogical innovation, and institutional transformation in higher education. The study concludes that the strategic integration of Generative AI and ICT-based educational practices can significantly contribute to sustainable, inclusive, and globally connected higher education systems.

Keywords: Generative Artificial Intelligence, Higher Education, ICT-Enabled Learning, Prompt Engineering, Blended Learning

1. Introduction

The twenty-first century has witnessed significant educational transformation driven by rapid advancements in Information and Communication Technology (ICT) and Artificial Intelligence (AI). Higher education institutions are increasingly adopting AI-enabled technologies, digital platforms, and online learning environments to enhance teaching, learning, research, and academic administration. These developments have shifted traditional educational practices toward more learner-centered, flexible, and technology-supported approaches.

Artificial Intelligence has emerged as a powerful tool in higher education through applications such as machine learning, natural language processing, intelligent tutoring systems, predictive analytics, and generative AI. The integration of AI with ICT facilitates personalized learning, academic support, research productivity, and institutional efficiency. Recent innovations, including Large Language Models (LLMs), Retrieval-Augmented Generation (RAG) systems, AI-powered tutoring tools, and prompt engineering techniques, have further expanded opportunities for digital transformation in education.

Generative AI enables the creation of text, visual content, code, and instructional materials, supporting innovative pedagogical practices, research activities, and collaborative learning. Faculty development programmes and AI-oriented training initiatives have

highlighted the growing importance of AI literacy, ethical AI use, and human–AI collaboration in higher education.

Despite its potential, AI adoption faces challenges related to digital inequality, data privacy, algorithmic bias, infrastructural limitations, and academic integrity. Effective implementation therefore requires ethical governance, inclusive policies, and continuous professional development. In this context, the present study explores the role of Generative AI and ICT-enabled educational practices in transforming teaching, learning, and academic research in higher education through a qualitative analytical approach.

2. Objectives

The major objectives of the study are as follows:

1. To examine the role of Generative AI and ICT-enabled technologies in higher education.
2. To analyze the impact of AI-driven teaching-learning practices on academic transformation.
3. To explore the applications of Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), and prompt engineering in education and research.
4. To identify challenges and ethical concerns associated with AI integration in higher education.
5. To propose a conceptual framework for AI-enabled academic transformation.

3. Literature Review

The literature indicates that ICT and AI have significantly transformed higher education by enhancing access to learning resources, learner engagement, collaboration, and flexible learning environments (Selwyn, 2016). Intelligent Tutoring Systems provide adaptive guidance, real-time feedback, and personalized support, thereby improving student learning outcomes (Woolf, 2010).

Recent advances in Generative AI, particularly Large Language Models (LLMs) such as ChatGPT, have expanded opportunities for personalized learning, content creation, academic writing, assessment, and instructional design (Kasneci et al., 2023; Tlili et al., 2023). Generative AI also promotes creativity, accessibility, and collaborative learning in higher education (Parikh & Deka, 2025). Emerging approaches such as prompt engineering, Retrieval-Augmented Generation (RAG), and AI teacher assistants further enhance the effectiveness, accuracy, and personalization of AI-supported learning environments.

Learning Analytics (LA) and Educational Data Mining (EDM) enable institutions to identify learning patterns, predict student performance, support at-risk learners, and facilitate evidence-based decision-making (Baker &Inventado, 2014; Siemens, 2013). Similarly, AI supports personalized learning, adaptive assessment, intelligent tutoring, and institutional management while improving teaching effectiveness and student success (Holmes et al., 2019; Prayogi, 2025). The AAI-HE framework proposed by Jantakun et al. (2021) highlights the need for alignment among technology, policies, infrastructure, and stakeholder readiness for successful AI adoption.

Systematic reviews have identified profiling and prediction, assessment, personalized learning, and intelligent tutoring as the major applications of AI in higher education (Zawacki-Richter et al., 2019). GenAI is increasingly being applied in teaching, learning, assessment, academic writing, and research, although concerns regarding academic integrity, bias, privacy, and ethical governance remain significant (Yusuf et al., 2024; Kasneci et al., 2023). Human–AI collaboration is also gaining importance, emphasizing the complementary role of AI in supporting human creativity and decision-making.

Despite its potential, AI adoption faces challenges including digital inequality, inadequate infrastructure, limited faculty preparedness, privacy concerns, algorithmic bias, and ethical issues (Warschauer, 2004; Prayogi, 2025; Zine &Kaaouachi, 2024). Overall, the literature suggests that AI and ICT can substantially enhance higher education, provided their implementation is supported by ethical governance, inclusive policies, technological infrastructure, and AI literacy among educators and learners.

4. Methodology

The present study adopts a qualitative research methodology to examine the transformative role of Generative Artificial Intelligence and ICT-enabled educational practices in higher education. Considering the conceptual and exploratory nature of the study, qualitative analytical methods supported by systematic literature review, thematic analysis, and reflective interpretation have been employed.

The study additionally incorporates reflective qualitative observations obtained from AI-oriented faculty development programmes, academic workshops, and training sessions conducted under Artificial Intelligence in Higher Education (AIHE) initiatives. These reflective observations had been analyzed using thematic interpretation techniques to understand the pedagogical, technological, and research implications of Generative AI tools in higher education environments.

A qualitative content analysis approach has been used to identify recurring themes, emerging technological practices, educational innovations, and institutional challenges associated with AI integration. The analytical process involved reading, coding, thematic categorization, and conceptual interpretation of educational practices observed during AI training sessions.

The methodology also incorporates conceptual mapping techniques to develop a structured framework illustrating the relationship between AI technologies, digital learning environments, and academic transformation. Emerging technologies such as Large Language Models, Retrieval-Augmented Generation systems, intelligent tutoring systems, learning analytics, prompt engineering frameworks, and blended learning tools had been systematically mapped against educational outcomes including personalized learning, research productivity, institutional efficiency, and collaborative knowledge generation.

The interpretative analytical perspective adopted in this study allows the integration of interdisciplinary insights from educational technology, computer science, pedagogy, and social sciences. The research further examines ethical concerns, digital inequality, infrastructural challenges, and AI governance issues influencing the implementation of AI-enabled educational systems.

Overall, the qualitative methodological framework provides a comprehensive analytical foundation for understanding how Generative AI and ICT-based innovations contribute to academic transformation in higher education.

5. Generative AI and Emerging Educational Technologies

The rapid growth of Generative Artificial Intelligence has introduced new possibilities for innovation in higher education. Generative AI systems are capable of producing human-like text, visual content, programming code, summaries, simulations, and interactive instructional materials. Such technologies have significantly enhanced educational flexibility and learner engagement.

Large Language Models represent one of the most important developments in Generative AI. LLMs are trained on extensive datasets and can generate contextually meaningful responses through natural language interaction. These models support academic writing, lesson planning, research summarization, coding assistance, and collaborative learning.

Retrieval-Augmented Generation models combine generative AI capabilities with external knowledge retrieval systems to improve accuracy and contextual understanding. In educational environments, RAG models are particularly useful for information retrieval, question answering, and research support. By integrating real-time information retrieval with generative responses, RAG systems enhance the reliability and relevance of educational content.

Prompt engineering has become an essential skill in AI-assisted learning environments. Prompt engineering involves designing structured instructions that guide AI systems toward producing accurate and meaningful outputs. Different prompting techniques including instruction prompts, role-based prompts, comparison prompts, step-by-step prompts, zero-shot prompting, and few-shot prompting help improve

educational interaction with AI systems.

Visualization and concept-mapping tools further enhance AI-supported learning experiences. Platforms such as Mermaid Live enable students and educators to create flowcharts and diagrams representing AI workflows, system architectures, and research processes. These visual representations support conceptual clarity and analytical understanding.

Similarly, Napkin AI supports idea organization and conceptual mapping by transforming abstract thoughts into structured learning artifacts. Storm, developed by Stanford University, functions as an AI research and reasoning platform capable of synthesizing large volumes of information. Perplexity AI supports literature review automation, policy drafting, and research summarization.

Google educational tools also contribute significantly to digital pedagogy. Platforms such as Google Classroom, Google Forms, Google Slides, and Google Docs facilitate collaborative learning, formative assessment, resource sharing, and blended instructional delivery.

The integration of these emerging technologies demonstrates how AI-enabled systems are transforming educational practices from traditional content delivery models toward interactive, adaptive, and learner-centered academic ecosystems.

6. AI-Driven Teaching and Learning Practices

Artificial Intelligence has significantly reshaped teaching-learning practices in higher education by promoting personalized, adaptive, and interactive educational environments. AI-powered systems support educators in designing learner-centered instructional models that address individual student needs and learning preferences.

One of the major advantages of AI-driven learning systems is personalized learning. Adaptive learning platforms analyze student performance, engagement patterns, and cognitive behavior to recommend customized learning pathways. Such systems enable students to progress according to their individual pace and learning abilities.

Blended learning has emerged as another important pedagogical innovation supported by AI technologies. Blended learning integrates traditional classroom instruction with digital learning environments and AI-based educational support systems. The six-dimensional blended learning framework explored during AIHE training sessions incorporated video-based learning, text-based resources, assessments, AI-supported instruction, industry-oriented content, and reflective learning activities.

AI-supported assessment systems also contribute significantly to academic innovation. AI tools assist educators in quiz generation, automated evaluation, grading, attendance management, and real-time feedback delivery. These technologies reduce administrative workload and allow educators to focus more on mentoring and instructional engagement.

Reflective learning practices have become increasingly important in AI-enabled education. Reflective activities such as the "Reflexion Spot" encourage students to critically analyze their learning experiences and evaluate the role of AI in education and professional practice. Reflective learning promotes higher-order thinking, self-assessment, and ethical awareness.

The integration of industry-oriented examples and AI-supported instructional tools further strengthens practical learning experiences. AI technologies connect classroom instruction with real-world applications in business, research, digital communication, and academic problem-solving.

Digital collaboration platforms also facilitate interactive learning experiences by enabling students and educators to communicate, share resources, and collaborate across geographical boundaries. Such technologies strengthen global academic connectivity and interdisciplinary learning.

Overall, AI-driven teaching-learning practices contribute significantly to academic flexibility, learner engagement, adaptive instruction, and knowledge accessibility in higher education.

7. Prompt Engineering and AI-Assisted Research

Prompt engineering has emerged as one of the

most important skills in AI-supported educational and research environments. Prompt engineering refers to the process of designing effective instructions that guide AI systems toward producing accurate, relevant, and context-aware responses.

Different forms of prompts serve different educational and research objectives. Instruction prompts directly request specific information or outputs from AI systems. Role-based prompts assign professional or contextual identities to AI systems, thereby influencing the style and depth of responses. Comparison prompts support analytical thinking by evaluating similarities and differences between concepts.

Step-by-step prompts improve procedural understanding by requesting sequential explanations. Zero-shot prompting allows AI systems to perform tasks without prior examples, whereas few-shot prompting provides sample inputs and outputs to guide response patterns.

Effective prompting requires clarity, specificity, contextual framing, and well-defined output structures. A good prompt clearly defines objectives, target audience, tone, formatting requirements, and expected outcomes. Continuous experimentation and iterative refinement help improve prompting effectiveness.

Prompt engineering significantly enhances academic productivity and research efficiency. AI-supported research tools can automate literature reviews, summarize scholarly articles, identify research gaps, generate conceptual frameworks, and assist in proposal writing.

AI-assisted research systems also support interdisciplinary collaboration by synthesizing information from multiple sources. Advanced AI platforms can analyze large datasets, identify patterns, and generate predictive insights, thereby improving research quality and innovation.

Generative AI technologies further support content creation in multiple formats including text, audio, video, and visual media. Such capabilities expand educational accessibility and facilitate multimodal learning environments.

The integration of prompt engineering and AI-assisted research practices demonstrates how human-AI collaboration can strengthen academic inquiry, research productivity, and creative problem-solving in higher education.

8. AI Teacher Assistants and Personalized Learning

AI Teacher Assistants represent an important advancement in educational technology. These AI-driven systems are designed to support educators by automating repetitive tasks, improving instructional efficiency, and enabling personalized learning experiences.

AI Teacher Assistants assist in grading assignments, tracking attendance, generating quizzes, organizing instructional materials, and delivering feedback. Automation of administrative tasks reduces teacher workload and allows educators to devote more time to meaningful teaching, mentoring, and student interaction.

Personalized learning is another major contribution of AI Teacher Assistants. AI systems analyze student performance data to identify strengths, weaknesses, and learning gaps. Based on these analyses, AI tools recommend customized exercises, learning resources, and instructional interventions.

AI-powered tutoring systems also provide instant explanations, academic guidance, and continuous learning support beyond classroom hours. Such systems improve student engagement and promote independent learning.

Accessibility is another important advantage of AI-enabled educational systems. Technologies such as speech-to-text conversion, language translation, immersive reading tools, and adaptive interfaces support inclusive learning environments for students with disabilities and diverse learning needs.

AI Teacher Assistants further contribute to classroom management through behavioral analysis, engagement monitoring, and performance tracking. Real-time analytics help educators identify disengaged learners and implement timely interventions.

Gamified learning environments, AI-powered quizzes, and interactive digital content also improve student motivation and participation. Such technologies support experiential learning and collaborative academic engagement.

However, the successful implementation of AI Teacher Assistants requires ethical governance, data privacy protection, institutional support, and continuous digital literacy development among educators and learners.

9. Challenges, Ethics, and AI Governance

Despite the transformative potential of Artificial Intelligence in higher education, several challenges and ethical concerns remain significant barriers to effective implementation.

One of the major challenges is the digital divide. Unequal access to digital infrastructure, internet connectivity, and technological resources continues to affect educational inclusion, particularly in developing regions and economically disadvantaged communities.

Algorithmic bias represents another important concern. AI systems trained on biased datasets may produce discriminatory or inaccurate outcomes that negatively affect educational fairness and inclusivity. Ethical AI implementation therefore requires transparent algorithms, diverse datasets, and accountability mechanisms.

Data privacy and security issues are also increasingly important in AI-enabled educational environments. AI systems collect large volumes of student data including academic performance, behavioral patterns, and personal information. Institutions must therefore establish strong data governance frameworks to ensure responsible data usage and privacy protection.

Academic integrity is another critical issue associated with Generative AI technologies. The increasing use of AI-generated content raises concerns regarding plagiarism, authorship, originality, and ethical research practices. Institutions must develop clear guidelines regarding responsible AI usage in academic work.

Infrastructural limitations and inadequate technological readiness further affect AI integration in many educational institutions. Successful implementation requires digital infrastructure, technical support, faculty training, and institutional investment.

AI literacy among educators and students is equally important. Many educators require professional development programmes and continuous training to effectively integrate AI technologies into instructional practices.

The integration of AI with Indian Knowledge Systems (IKS) also highlights the need for culturally inclusive and ethically grounded technological development. AI systems should preserve cultural diversity, indigenous knowledge, and contextual relevance while promoting innovation.

Responsible AI governance therefore requires balancing technological advancement with ethical responsibility, inclusivity, transparency, and human-centered educational values.

9.1 AI for Inclusive and Equitable Higher Education

Artificial Intelligence has considerable potential to promote inclusive and gender-responsive higher education. AI-enabled learning environments can provide flexible access to educational resources, particularly benefiting women learners who may face geographical, social, or economic constraints in pursuing higher education. Personalized learning systems can support diverse learning needs and create opportunities for continuous skill development. AI-assisted translation, accessibility tools, and digital learning platforms can further enhance participation among learners from marginalized and underrepresented groups. In regions where educational opportunities for women may be limited by infrastructural or socio-cultural factors, technology-enabled learning can help bridge educational gaps and strengthen digital empowerment. However, ensuring equitable access to AI technologies requires careful attention to digital inclusion, affordability, representation in datasets, and gender-sensitive policy frameworks.

10. Results and Discussion

The analysis of literature and reflective academic observations indicates that Generative Artificial Intelligence and ICT-enabled educational practices are significantly transforming higher education through multiple interconnected mechanisms.

One of the major findings of the study is the increasing role of personalized learning environments supported by AI technologies. Adaptive learning systems, intelligent tutoring platforms, and AI teacher assistants enable customized instructional delivery according to individual student needs and learning behaviors.

The study further reveals that Large Language Models and Retrieval-Augmented Generation systems contribute significantly to research productivity, academic content generation, and information retrieval. These technologies support literature review automation, conceptual analysis, and interdisciplinary knowledge synthesis.

Prompt engineering emerged as a critical academic skill during AI-oriented training sessions. Structured prompting techniques improve the quality, depth, and contextual relevance of AI-generated responses. Prompt engineering also enhances critical thinking, analytical reasoning, and instructional design.

Visualization platforms and concept-mapping tools improve conceptual understanding and collaborative learning. Tools such as Mermaid Live and Napkin AI support educational visualization, workflow representation, and structured idea organization.

The findings also indicate that blended learning frameworks enhance academic flexibility by integrating traditional instruction with AI-supported digital learning environments. Video-based learning, textual resources, AI-supported explanations, assessments, and reflective activities collectively strengthen student engagement and adaptive learning.

AI Teacher Assistants significantly improve administrative efficiency through automation of grading, scheduling, attendance tracking, and assessment management. Such systems reduce routine workload and enable educators to focus more on mentorship and instructional interaction.

The study also identifies several critical challenges associated with AI integration in higher education. Digital inequality remains a major barrier affecting technological accessibility and educational inclusivity. Ethical concerns regarding algorithmic bias, academic integrity, and data privacy require careful institutional governance.

Furthermore, successful implementation of AI technologies depends on digital literacy, teacher training, infrastructural readiness, and responsible AI policies. Institutions must therefore adopt inclusive and ethically grounded strategies for AI integration.

Overall, the findings suggest that Generative AI and ICT-enabled educational practices can function as transformative forces in higher education when implemented strategically, ethically, and inclusively.

10.1 Implications for Higher Education Institutions in Assam and Northeast India

The integration of Artificial Intelligence and ICT-enabled educational practices presents significant opportunities for higher education institutions in Assam and the Northeast region of India. Many colleges and universities in the region are increasingly adopting digital learning platforms, online resources, and technology-supported teaching methods. Generative AI tools can support faculty members in content development, assessment design, research activities, and multilingual educational resource creation. The application of AI technologies can also contribute to the preservation and promotion of regional languages and indigenous knowledge systems by facilitating digital documentation, translation, and knowledge dissemination. However, challenges such as uneven digital infrastructure, limited access to high-speed internet in rural areas, and varying levels of digital literacy among educators and students may affect the effective implementation of AI-based educational practices. Therefore, institutions in the region should focus on strengthening digital infrastructure, promoting AI literacy programmes, and developing context-sensitive policies that support inclusive and ethical adoption of emerging technologies in higher education.

Table 1. Emerging AI Tools and Educational Applications

AI Tool	Educational Application
ChatGPT	Content generation and academic assistance
Mermaid Live	AI workflow visualization
Napkin AI	Concept mapping and structured learning
Storm	Research synthesis and reasoning
Perplexity	Literature review support
Google Classroom	Blended learning and collaboration
Intelligent Tutoring Systems	Personalized learning support
AI Teacher Assistant	Automated instructional support

Table 2. Benefits and Challenges of AI in Higher Education

Benefits	Challenges
Personalized learning	Digital divide
Research efficiency	Algorithmic bias
Administrative automation	Data privacy concerns
Adaptive instruction	Ethical challenges
Global collaboration	Infrastructural limitations
Academic flexibility	Lack of AI literacy

Table 3. Major Themes Emerging from Qualitative Analysis

Theme	Key Observation	Educational Implication
Personalized Learning	AI systems adapt content according to learner needs	Improved learner engagement and academic performance
Prompt Engineering	Structured prompts improve AI-generated outputs	Enhanced critical thinking and digital literacy
AI Teacher Assistants	Automation of routine academic tasks	Increased instructional efficiency
Research Automation	AI tools support literature review and information synthesis	Improved research productivity
Blended Learning	Integration of digital and traditional teaching approaches	Greater flexibility and accessibility
Human–AI Collaboration	AI acts as a supportive academic partner	Enhanced creativity and problem-solving
Ethical AI	Concerns regarding bias, privacy, and integrity	Need for responsible AI governance
Digital Inclusion	Unequal access to technological resources persists	Requirement for inclusive educational policies

The conceptual framework in Figure 1 illustrates the relationship between Generative Artificial Intelligence technologies, ICT-enabled educational practices, and academic transformation in higher education. AI technologies such as Large Language Models, Retrieval-Augmented Generation systems, intelligent tutoring systems, prompt engineering frameworks, learning analytics, AI teacher assistants, and blended learning environments function as core components of educational transformation.

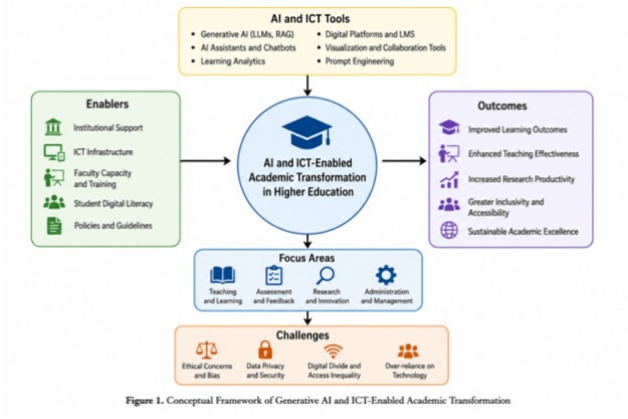


Figure 1. Conceptual Framework of Generative AI and ICT-Enabled Academic Transformation

These technologies influence three major dimensions of higher education:

1. Pedagogical Transformation – personalized learning, adaptive instruction, reflective learning, and collaborative education.
2. Research Transformation – AI-assisted literature review, interdisciplinary collaboration, data analysis, and knowledge synthesis.
3. Institutional Transformation – administrative automation, data-driven decision-making, resource optimization, and digital governance.

The framework also recognizes key challenges including digital divide, ethical concerns, algorithmic bias, infrastructural disparities, and AI governance issues that influence successful implementation.

10.2 AI Adoption Trends in Higher Education

The following data from the Higher Education Policy Institute (HEPI) student surveys:

Table 4. Growth of Generative AI Usage among Higher Education Students

Year	Students Using AI (%)	Students Using GenAI for Assessments (%)
2024	66	53
2025	92	88
2026	95	94

Source: HEPI Student Generative AI Surveys (2025, 2026).

Recent surveys indicate a rapid increase in the adoption of Generative Artificial Intelligence among higher education students. The proportion of students using AI tools increased from 66% in 2024 to 92% in 2025 and further to 95% in 2026. Similarly, the use of generative AI for assessment-related activities increased from 53% in 2024 to 88% in 2025 and 94% in 2026. These findings suggest that AI has moved from being an emerging educational technology to becoming an integral component of the higher education learning ecosystem. The results further highlight the growing need for AI literacy, ethical usage guidelines, and institutional support mechanisms for effective AI integration in higher education.

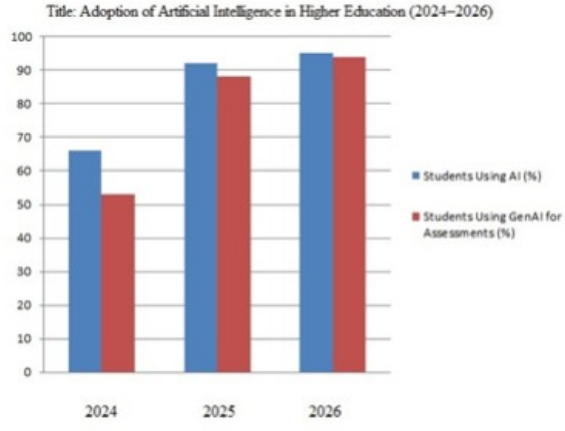


Figure 2. Adoption of Artificial Intelligence and Generative AI for assessment-related activities among higher education students during 2024–2026.

Figure 2 shows a substantial increase in AI adoption among higher education students between 2024 and 2026. The proportion of students using AI increased from 66% in 2024 to 92% in 2025 and 95% in 2026. Similarly, the use of Generative AI for assessment-

related activities increased from 53% in 2024 to 88% in 2025 and 94% in 2026. These findings indicate that AI technologies are becoming an integral component of teaching, learning, and academic assessment practices in higher education.

10.3 Limitations of the Study

This study is based primarily on qualitative analysis of contemporary literature and reflective observations derived from AI-oriented faculty development programmes and training initiatives. The study does not include primary survey data or experimental investigation. Therefore, the findings should be interpreted as exploratory rather than statistically generalizable. Future studies may employ empirical methods involving students, faculty members, and institutions to further validate the findings.

11. Conclusion

Generative Artificial Intelligence and ICT-enabled technologies are transforming higher education by supporting personalized learning, adaptive instruction, research innovation, and institutional efficiency. The findings indicate that tools such as Large Language Models, Retrieval-Augmented Generation systems, prompt engineering, AI teacher assistants, and blended learning environments enhance teaching, learning, and academic productivity. Reflective insights from AI-oriented faculty development programmes further highlight the growing importance of AI literacy, human–AI collaboration, and responsible technology use in higher education. Despite their potential, challenges related to digital inequality, data privacy, algorithmic bias, and academic integrity require careful attention. The study concludes that the ethical and strategic integration of AI can promote inclusive, innovative, and sustainable higher education. Future research should focus on empirical investigations of AI implementation and its long-term educational impact across diverse contexts.

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Conflict of Interest

The author declares no conflict of interest.

Authors' Contribution

The sole author conceived the study, conducted the analysis, and prepared the manuscript.

Funding

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Data Availability

All data used in this study are derived from published literature and publicly available sources cited in the manuscript.

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Gender Differences in Parental Involvement of Senior Secondary School Students of Golaghat District Assam

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Abstract

Parental involvement refers to a situation in which parents are actively involved in their children's education and fulfill their parental responsibilities by aiding the learner as much as possible in the learning process, decision-making, and career selection. Adolescence is a time when students demand the most guidance and cooperation from their parents. After completing the 12th class, the adolescents' tentative selections go to the first step of the higher educational ladder. In today's society, a wide range of vocations confuses young minds seeking for greater educational supervision. Parents play a significant role at this period.Therefore, the present study is conducted to study the level of parental involvement ofsenior secondary schoolstudents in Golaghat district Assam. And to find out the significant difference between male and female senior secondary school students of Golaghat district. The researcher carried out the study on a sample of 150 students from a set group in Golaghat District. The standardized tool 'Parental Involvement Scale' (PIS-CA, 2022) was developed by Dr. Vijaya Laxmi Chouhan and Mrs. Gunjan Ganotra Arora was used for the study. Mean, SD, t test has been employed to analyze the collected data. The findings of the study revealed that there is no significant difference in parental involvement as perceived by 12th class students of Golaghat District with respect to their gender.

Keywords : Parental Involvement, Academic Achievement, Career, Gender,Golaghat

1.0 Introduction

Education is widely accepted as a strong determinant of an individual's future chances, economic stability, and overall well-being. Academic brilliance is essential for both personal and societal growth. Parents have a huge impact on their children's overall learning and education, both at home and at school. Parents play a significant part in their children's education by providing a safe and healthy environment, appropriate learning opportunities, support, and a positive attitude toward school.

Parental involvement, in general, refers to a range of behaviors, methods, and attitudes that parents take to support their children's educational journeys, career opportunities, and overall growth. One of the most well-known forms of parental involvement is direct academic support, which includes helping children with their homework, participating in reading activities together, and discussing school subjects and career options with their children.Holloway et al. (2008) defined parent involvement as an initiation of home-based behaviour like monitoring homework and school-based activities such as participating in school events and corresponding with teachers. Previous studies reported a significant positive relationship between parental involvement and scholastic achievements of students (Boruah, 2022; YapiMessar, et al. 2023; Sharma, 2025). Epstein the educationist and researcher has identified a framework which consists six important factors with regards to parental involvement. This framework is based on findings from many studies of what factors are most effective with regards comes to children's education. Those six factors are parenting, communicating, volunteering, learning at home, decision-making and collaborating with the community.

2.0Review of Related Literature

Gogoi, Bibimoni (2017)conducted a study on "Impact of parental involvement on the Academic Achievement of Adolescents of Sonowal Kachari tribes of Hapjan educational block in Tinsukia district, Assam". The objective of the study was to study the relationship between parental involvement and academic achievement of Sonowal Kachari Tribal Adolescent students of Government and Private school. And to find out the difference between the Parental Involvement of Sonowal Kachari tribal adolescent boys and girls' students. The results revealed that there was a significant high positive relationship between Parental Involvement and Academic achievement of Sonowal Kachari Tribal Adolescent students of Government Schools. Also found that there was no significant difference between the Parental Involvement of Sonowal Kachari Tribal Adolescent Boys and Girls students.

Handique, Ishmi Rekha (2017) carried out research on "Effect of Parental Involvement and Study Habits on Academic Achievement of Secondary School Students in Lakhimpur and Dhemaji District of Assam". The objective of the study was to study and compare the parental involvement of secondary school students in relation to sex, location, level of education of father and mother, community, management and districts. The findings revealed that there was no significant difference between male and female in Parental Involvement. The study also revealed that there was a significant positive relationship between Parental Involvement and Academic Achievement of secondary school students.

Sahin, A. and Borah (2018) studied onEffects of parental involvement on secondary school students' mathematics achievement in Assam, India. The purpose of this study is to explore the effects of parental involvement on secondary school students' academic achievements in mathematics. Students are studying in class nine in both urban and rural areas in Karbi Anglong district of Assam. Results revealed that there exists no significant relationship between parents' communication with school or teachers regarding students' education and mathematics achievement of students.

Doley, Rajlakhi(2021) studied on Parental Involvement and Academic Achievement of Secondary School Students of Assam. The objective of the study was to study parental involvement in the education of secondary school students. The study reported that there was a negative correlation between parental involvement and academic achievement of secondary schools students of Assam.

Gogoi and Rajkhua (2021)studied on Perceived Parental Involvement of Secondary School Students of Sivasagar District. The objective was to compare the Parental Involvement as perceived by the secondary school students of Sivasagar district in relation to their Gender, viz. male and female and rural and urban.It was found that there is a significant difference between male and female and rural and urban secondary school students of Sivasagar district of Assam with respect to their parental involvement.

Boruah, Bahniman (2022) conducted a study on The Impact of Parent Involvement and Education Level on Secondary School Student's Academic Achievement in District Sivasagar, Assam. The study was aimed at finding out the impact of parent's involvement and education level on secondary school student's academic achievement. The result revealed that the majority of the secondary school student's parents were highly involved in their child's academics. It was also revealed that there is a significant positive relationship between parental involvement, education level, and secondary school student's academic achievement.

YapiMessar, et al (2023) studied on Parental Involvement in Academic Achievement of Secondary School Students at Deomali, Tirap District of Arunachal Pradesh. The purpose of the study was to analyze the relationship of academic achievement with parental involvement. The study revealed that the parental involvement plays an important role in academic achievement of students.

3.0 Significance of the study

It is commonly accepted that students need their

parents' complete support in order to achieve their full academic potential. Adolescence is the time when students need the most help and cooperation from their parents. After, completing the 12th grade, adolescents make tentative choices for the first step of the higher educational ladder. In today's world, when a large number of jobs confuses young brains, the need for educational guidance is strongly felt. Academic performance, goals for higher education, employment, and family support all play a role in children's future success. The present study is significant because it raises awareness among parents about how their engagement stimulates their children's academic achievement, desires for higher education, and career choices.

4.0 Statement of the Problem

The present study is entitled as"***Gender Differences in Parental Involvement of Senior Secondary School Students of Golaghat District of Assam.***"

5.0 Objectives of the study

The objectives of the present study are –

I. To study the level of parental involvement of senior secondary school students of Golaghat district Assam.

II. To study the level of parental involvement of senior secondary school students of Golaghat district Assam with respect to gender (male and female).

III. To find out significant difference in parental involvement of senior secondary school students of Golaghat district Assamwith respect to gender (male and female).

6.0 Hypothesis of the study

The hypothesis of the study is-

i. There is no significant difference in parental involvement of senior secondary school students Golaghat district Assam with respect to gender (male and female).

7.0 Delimitations

The delimitations of the study are-

- The study is delimited to bothgenders i.e. male and female senior secondary school students only.
- The sample of the present study includes 12th class students of senior secondary school of Golaghat district.
- The result of the study will be applicable for Golaghat district only.

8.0 Methodology and Procedure

8.1 Method used

The present study employed the descriptive survey method of research.

8.2 Population

The population of the present study comprises the12th class senior secondary school students of Golaghat district Assam.

8.3 Sample and Sampling Technique

The investigator followed stratified random sampling technique for selecting the total 150 samples (male 82 and female 68) of 12th class students from senior secondary schools of Golaghat district. The samples were selected from both government& private schools.

8.4 Tools used

The investigator used Parental Involvement Scale (PIS-CA, 2022) which was developed by Dr. Vijaya Laxmi Chouhan and Mrs. Gunjan Ganotra Arora to measure the parental involvement in children's lives, at school, spend time together, doing activities together, listening to and talking with them, reading together, guiding through important decisions, developing their unique talents and abilities.

8.5 Procedure of data collection

The data for the present study were collectedby the investigator. Prior to administering the research tool, the investigator provided a comprehensive explanation regarding the objectives of the study and the preferred method of response. Furthermore, participants were given consent that all data collected would be treated with utmost confidentiality and will be utilized for research purpose only.

8.6 Statistical techniques:

As per the objectives of the study, researcher employed descriptive statistics like mean and S.D. for description of the level of Parental Involvement of the sample. And to find out the differencebetween male and female sample the researcher used t-test.

9.0 Result and Discussion

Objective I: To study the level of parental involvement of senior secondary school students of Golaghat district Assam.

Table 1: Level of Parental involvement of senior secondary school of Golaghat District.

Sl. No	Level of Parental Involvement	Raw Scores	No. of Students	% of Students
1	Very High	96-125	61	40.66
2	High	89-95	34	22.66
3	Average	85-88	21	14
4	Low	76-84	26	17.33
5	Very Low	25-75	08	5.33
	Total Sample		150	100

Source: Field Survey, 2025

The above data is graphically represented in Figure:1

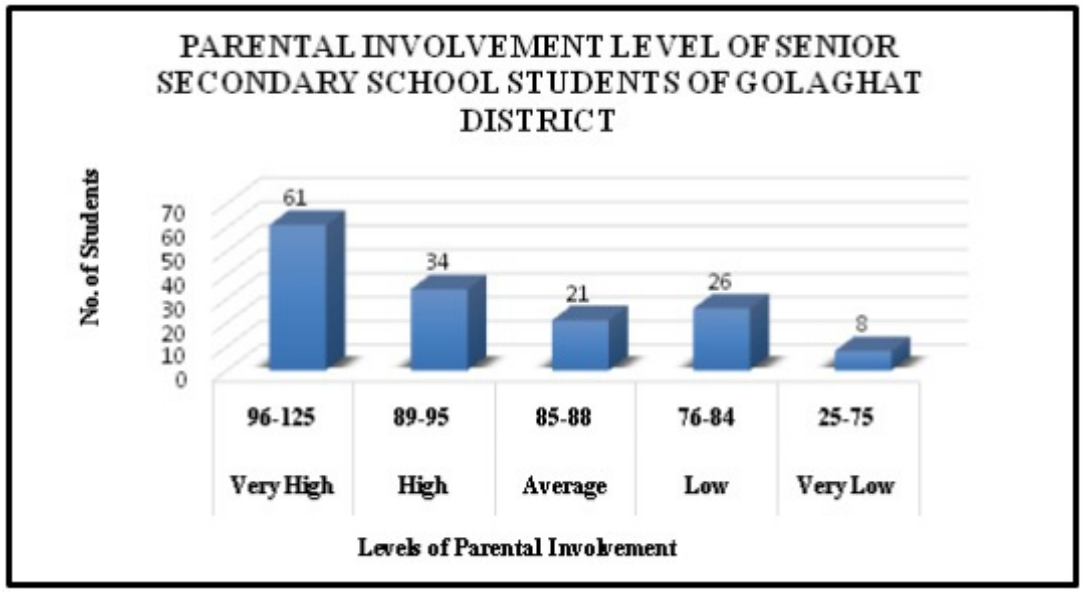


Figure 1: Level of Parental Involvement of Senior Secondary School Students

Interpretation

Table 1& Figure 1- Indicates that out of 150 sample,61 students (40.66%)have very high level of parental involvement, 34 students (22.66%)fell under high level of parental involvement,21 students (14%) have average level of parental involvement,26 students (17.33%) have low level of parental involvement and 08 students

(5.33%) fell under the very low level of parental involvement.

Therefore, it may be interpreted that majority of the 12th class students of Golaghat district have very high level of parental involvement which is consonance with the result of BahnimanBoruah (2022).

Objective II:

To study the level of parental involvement of senior secondary school students of Golaghat district Assam with respect to gender (male and female).

Table-2: Level of parental involvement with respect to gender (male and female).

Sl. No.	Level of Parental Involvement	Raw Scores	Male	Percentage	Female	Percentage	No. of Students
1	Very High	96-125	18	21.95	43	63.24	61
2	High	89-95	21	25.61	13	19.12	34
3	Average	85-88	14	17.07	07	10.29	21
4	Low	76-84	14	17.07	12	17.65	26
5	Very Low	25-75	07	8.54	01	1.47	08
	Total Sample		82		68		150

Source: *Source: Field Survey, 2025*

The above data is graphically represented in Figure: 2

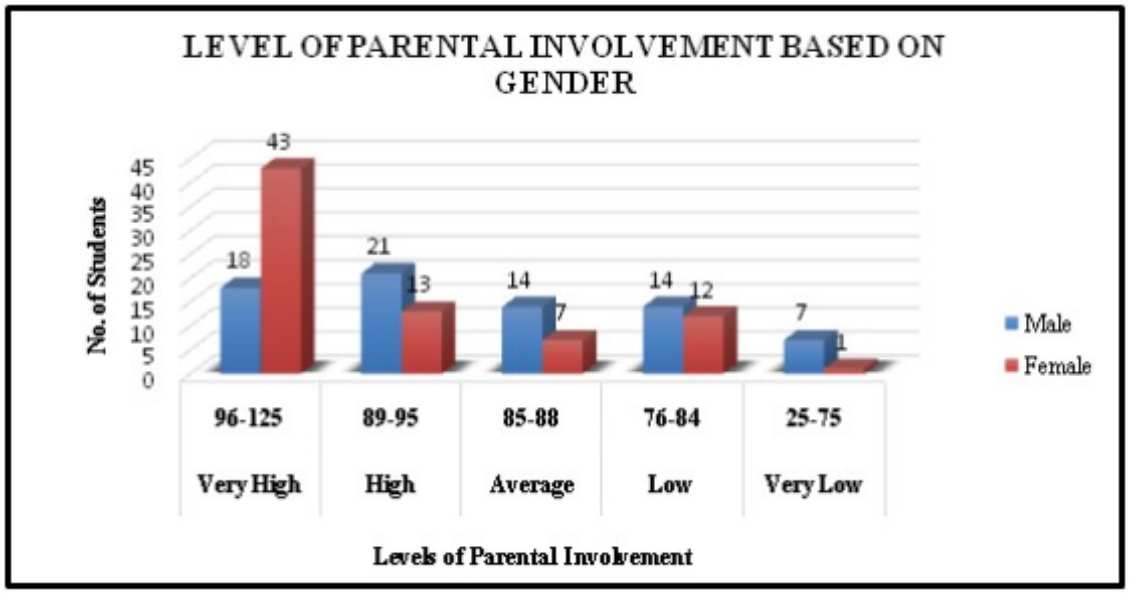


Figure:Level of Parental Involvement of Senior Secondary School Students of upper Assam based on gender (male and female)

Interpretation

Table 2 & Figure 2- Indicates that out of 82 male sample, 18 students (21.95%) have very high level of parental involvement, 21 students (25.61%) fell under high level of parental involvement, 14 students (17.07%) have average level of parental involvement, 14 students (17.07%) have low level of parental involvement and 07 students (8.54%) fell under the very low level of parental involvement. Furthermore, out of 68 female sample, 43

students (63.24%) have very high level of parental involvement, 13 students (19.12%) fell under high level of parental involvement, 07 students (10.29%) have average level of parental involvement, 12 students (17.65%) have low level of parental involvement and 01 students (1.47%) fell under the very low level of parental involvement.

Objective- III: To find out significant difference in parental involvement of senior secondary school students of Golaghat district Assam with respect to gender (male and female).

Hypothesis-I: There is no significant difference in parental involvement of senior secondary school students Golaghat district Assam with respect to gender (male and female).

Table-3: Mean, S.D and t- values of Parental Involvement based on Gender (Male and Female)

Gender	N	Mean	SD	T value	Table value	Level of Significance (0.05 level)
Male	82	89.21	9.61	0.008	1.98	Not Significant
Female	68	93.59	10.32			

Interpretation

The table-3 shows that the mean for male and female 12th class student's parental involvement is 89.21 and 93.59 respectively. The SD is 9.61 and 10.32 for male and female 12th class students respectively. It is seen that 't' value of parental involvement for male and female 12th class students is 0.008at df148 which is less than table value 1.98 and not significant at 0.05 level of significance. Thus, the null hypothesis, viz. 'There is no significant difference in parental involvement of senior secondary school students Golaghat district Assam with respect to gender (male and female)' is accepted. It is therefore, concluded that there is no significant difference between male and female 12th class students with respect to their parental involvement.

The finding is supported by the result of the study of **Gogoi(2017),Handique, IshmiRekha (2017)**.The finding is contradictory with the finding of **Gogoi and Rajkhua (2021**) which stated that there was significant difference between male and female secondary school students with respect to their parental involvement.

10.0 Findings of the Study

The findings of the present study are as follows-

I. From the analysis it is found that out of 150 sample, 61 students (40.66%) have very high level of parental involvement, 34 students (22.66%) fell under high level of parental involvement, 21 students (14%) have average level of parental involvement, 26 students (17.33%) have low level of parental involvement and 08 students (5.33%) fell under the very low level of parental involvement.

II. It is found from the study that out of 82 male sample, 18 students (21.95%) have very high level of parental involvement, 21 students (25.61%) fell under high level of parental involvement, 14 students (17.07%) have average level of parental involvement, 14 students (17.07%) have low level of parental involvement and 07 students (8.54%) fell under the very low level of parental involvement. Furthermore, out of 68 female sample, 43 students (63.24%) have very high level of parental involvement, 13 students (19.12%) fell under high level of parental involvement, 07 students (10.29%) have average level of parental involvement, 12 students (17.65%) have low level of parental involvement and 01 students (1.47%) fell under the very low level of parental involvement.

III. The present study revealed that there is no significant difference between male and female 12th class

students with respect to their parental involvement.

11.0 Conclusion

Parents' good attitudes toward their children's education play a crucial role in determining their academic and career achievement. Based on the analyses of the above research results, it can be concluded that there is no significant difference between male and female students of 12th-class senior secondary school students. It is found that parents are more involved with female students than male students. The current study would have been more comprehensive with addition of other variables like academic achievement, career aspirations, values, adjustment and emotional intelligence could have been studied to examine the influence.

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Muga Silk of Assam : A Fabric of Hope

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Abstract

Muga Silk, known as the golden thread of Assam is the rare, ecofriendly, exquisite and expensive, durable fabric which has been emerged as the source of income and sustainable livelihood for rural communities, specially for women. This product tagged with geographical indication (GI) promotes export and cultural heritage of Assam. Muga Silk farming is not free from challenges. To strengthen this industry, government of Assam has taken various initiatives through financial support, setting up infrastructure, introducing modern techniques in production etc. This paper aims to study the production trend of muga silk in Assam along with income and employment generation. It is also tries to highlight some issues and remedial measures taken by the government.

Keywords : Muga Silk, production, employment, income

1. Introduction

Muga is a unique and luxurious variety of silk that originates from Assam, a state of North East India Muga Silk is a rare, exceptionally durable wild silk, known for its natural golden sheen and native to Assam. The silk fibre is a very strong organic natural fibre and is derived from semi cultivated silk worm named 'Antherae a assamensis'. One of the most significant properties of the fabric is its longevity, as it has been seen time and again to outlive the wearer thus making it an heirloom piece for every owner.

The origin of Muga Silk date back over a thousand years, with reference in ancient Assamese texts and chronicles. It is believed that Muga Silk was exclusively worn by Ahom royalty and aristocrats, symbolizing wealth and status. The production of Muga Silk flourished under the Ahom dynasty (1228-1826), with weaves enjoying royal patronage. The silk was considered so precious that it was often gifted to foreign dignitaries.

Studying about the Muga Silk cultivation is significant from the economic, social and cultural perspectives. Muga is produced only in Assam due to its specific climate and host plants like som and soalu. That is why this product has got GI tag in 2007. Muga Silk production involves multiple stages - silk worm rearing, cocoon production, spinning, dyeing and weaving. It provides direct and indirect employment to thousands of families, specially in rural and semi urban areas.A large proportion of workers are women and they become self employed and empowered. Employment in this sector sustains indigenous knowledge and skills. Muga Silk industries play an important role in generating income through domestic sales and experts. Moreover, it promotes balanced rural development and preservation of cultural heritage.

The study of the Muga Silk industry in Assam is significant because it combines economic viability with social impact.

2. Objectives of the study & methodology :

2.1 The objectives of this study are –

i. To study about the production trend of Muga Silk in Assam.

ii. To study about the employment and income generation status of Muga industry of Assam.

iii. To find out the challenges relating to Muga

cultivation and to highlight the government policies to strengthen this indigenous industry.

2.2 Data sources :

The study is based on secondary data sources and collected from Department of Sericulture, Government of Assam, Central Silk Board of India, books, journals, news papers and internet.

3. Study findings :

3.1.1 Production of Muga Silk during 2004-05 to 2013-14

Table : 1 Production of Muga Silk during 2004-05 to 2015-16 in Assam

Year	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
Production (in MT)	98	98	107	105	105	93	117	119	108	126

Source : Central Silk Board of India

3.1.2 i) Assam produces 90-95 percent of total Muga Silk in India, maintaining a global monopoly on this golden silk.

ii) The production of Muga Silk in Assam during 2004-25 to 2013-14 shows a fluctuating trend with moderate growth shown in Table No. 1

iii) The production of Muga cocoons has increased from 6,361 lakh in 2013-14 to 10,439.94 lakh in 2022-23.

iv) Almost 1385.8 hectors of land are used for Muga cultivation in Assam.

3.2 Employment status of Muga Silk production in Assam

3.2.1 i) This production sector has provided employment of thousands of rural house- holds between 2011 and 2025. From plantation of Som trees, Silk worm rearing to weaving etc., there exists various employment avenues relating to Muga cultivation.

ii) Assam has over 1.26 million hand loom weavers engaged in over 93,22000 hand looms. Almost 2.32 million people are engaged in Muga trade as farmers, laborers and sales persons.

3.2.2 Phase wise employment trends of last 10 years :

i) According to the report of Directorate of Handloom and Textiles, Government of Assam, employment has shown a declining trend for the period of 2015 to 2018 due to fall in income and irregular work. The main cause was the climate change which badly affected silk worms and supply of raw materials (cocoons)

ii) During 2018-2025, there has been gradual recovery and skill based employment growth has been seen.

3.2.3 Nature of employment :

The nature of employment has also been changed from traditional structure with household based weaving to cluster based production (e.g Sualkuchi the Manchester of Assam). The productions are carried out by women led co-operatives that result in value added designer textile.

3.3 Revenue Earning from Muga Textile Industry :

Handloom and Sericulture sector, famous for Muga Silk and Eri Silk plays a vital role

in both revenue earning, rural development and cultural identity.

3.3.1 Sources of Revenue Generation :

i. Sale of Raw Silk and cocoons :

Muga Cocoons and yarn are sold in domestic and international markets at a very high price for its rareness and durability. Annual production ranges around 1.4 laks kilogram to 1.6 lakh kilogram, indicating a strong revenue base.

Table – 2 Year wise production and revenue (in crs of Rs.)

Year	Production (MT	Revenue (Crs of Rs)
2020-21	150-200	150-200
2021-22	180	180-200
2022-23	200	200-250
2023-24	202.83	220-300
2024-25	220	250-350

Source : Central Silk Board of India

An individual Muga farmer can earn Rs. 20-25 lakhs annually through cocoon production and related activities

i. Value added products :

Revenue from finished product increases significantly. In the current scenario, the cost of Muga yarn has risen to as much as Rs. 21000/- per k.g. as compared to Rs. 800/- during nineties various ethnic attire of female and male. Cost of a Muga Mekhela Chador ranges from Rs. 35000/- to Rs. 1,50,000/-.

ii. Revenue earning by using byproducts :

During the production process, a lot of waste materials are also produced such as pupa, cocoon or silk waste etc. which can be utilized for making handicrafts items. These items generate handsome returns. An amount of Rs. 1500/- can be earned from one kg of cut cocoon as there is a good demand of cocoon crafted items in the market (Kaul et al. 2014). Around Rs. 23 crore revenue can be generated from 10,000 kg of yarn from wastes (ghisa) indicating hidden potential within the industry.

4. Highlight of some problems of Muga Silk of Assam

i. Climate change and environmental fluctuations like extreme temperature, increased rainfall etc. cause high mortality rates for the silk worms and have negative impact on production.

ii. There exists gap between demand and supply of raw materials due to limited plantation of Som and Soalu trees which affect rearing of Muga Silk worms. Deforestation & changes in land use also reduce the availability of these plants that reduces employment opportunities in rearing activities.

iii. Due to fluctuating nature of prices of silk yarn and cocoons, workers often earn low wages. The existence of middle man also reduce the profit share of primary producers.

iv. Insufficient access to modern training reduces productivity and quality of product.

v. The handloom industry is basically unorganized cottage industry. So lack of infrastructure leads to low productivity and it restricts the employment opportunity.

vi. Another important issue of this sector is that poor market access, limited exposure to national and international markets restricts job expansion.

5. The government policies for strengthening Muga Silk industry

The Central Silk Board (CSB) implements various policies and schemes to support Muga Silk industry. These are –

i) Muga Mission (2017-2026) aimed at expanding Som plantation and establishing nurseries.

ii) Swanirbhar Naari scheme aimed to empower women weavers by enabling the direct procurement of handloom items.

iii) 'Silk Samagra' – a central sponsored scheme to improve quality of cocoons, reduce relevance on imported silk.

iv) North East Region Textile Promotion Scheme.

v) Muga Raw Material Bank etc.

vi) For promotion of Assam Muga Silk at national and international levels, GI tag certification is provided.

6. Mission Senehjori

The center and the Government of Assam recently launched a missive programme in the name of "Mission Senehjori" a comprehensive Rs. 411 crore programmed designed to strengthen the entire Muga Silk value chain.

The mission unveiled in the presence of union Minister of Development of North Eastern Region (DoNER) Mr. Jyotiraditya Scindia, is expected to directly support over 8,000 households which strengthening livelihoods across the wider Muga ecosystem, which currently sustains nearly 2.6 lakh rearers and weavers in Assam. At its core, Mission Senehjori aims to substantially increase the earnings of Muga rearers of the state . The total project outlay of Rs.411 crore includes :

Name of the funding agency	**Amount to be invested**
Ministry of DoNER –	Rs.151 crore
Government of Assam –	Rs. 46 crore
Ministry of Textiles –	Rs.21 crore
ICAR –	Rs.14 crore
Ministry of Environment –	Rs.6 crore
NERHDC –	Rs. 10 crore
APEDA –	Rs.5 crore
DRDO –	Rs 3.5 crore
Private sector Investors –	Rs. 90 crore
Contributions from rearers and weaver households	Rs.8 crore--

Chief Minister Dr. Himanta Biswa Sarma termed the launch a historic moment for Assam.

7. Conclusion

Muga, the golden thread is the pride of Assam. It stands as a powerful symbol of traditional, resilience and hope. The Muga Silk industry is not only source of livelihood, it is deeply woven into the cultural and economic fabric of the region. Despite challenges, such as change in climate, market competitions, lack of credit facilities declining host plants, the industry continues to sustain thousand of artisans and farmers, especially in rural communities.

With increasing global appreciation for sustainable and natural textiles, Muga Silk holds immense potential for growth.Government support,innovation can further strengthen this sector and make it a fabric of hope, preserving tradition while promising a sustainable future.

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Informal Education and Moral Instruction through Bhakti Traditions in Assam: A Study. (BASED ON IKS)

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Abstract

The Bhakti movement in Assam, initiated and systematized by Srimanta Sankardeva in the 15th–16th centuries, represents one of the most influential socio-religious transformations in the region's history. While the movement is primarily recognized for its religious and cultural contributions, its role as a medium of informal education and moral instruction has received comparatively less scholarly attention. This paper seeks to examine how Bhakti traditions functioned as an alternative educational system that reached the masses beyond the boundaries of formal schooling.

Using a qualitative and descriptive methodology, the study relies on secondary sources such as books, research articles, and historical texts to analyze the role of institutions like Namghar and Satra, and cultural forms such as Borgeet, Bhaona, and Ankia Naat. These institutions and practices not only transmitted religious knowledge but also imparted moral values such as equality, compassion, discipline, and social harmony.The findings suggest that Bhakti traditions democratized knowledge by making it accessible to all sections of society, irrespective of caste, gender, or literacy levels. The movement

emphasized experiential learning through participation, performance, and collective worship, thereby fostering a sense of community and shared identity. In contemporary times, the relevance of these traditions continues, especially in promoting ethical values and cultural cohesion. Thus, Bhakti traditions in Assam can be understood as a powerful model of informal education that integrates spirituality, morality, and social development.

Keywords : Informal education, bhakti movement , assam, moral values , namghar, satra ….

1. INTRODUCTION

Education is a fundamental process that shapes human behavior, values, and social relationships. While formal education systems are structured and institutionalized, informal education operates outside these frameworks and plays an equally significant role in shaping individuals and communities. Informal education includes learning that occurs through daily interactions, cultural practices, traditions, and social institutions .

In the context of Assam, the Bhakti movement emerged as a transformative force during the medieval period. Led by Srimanta Sankardeva, this movement was part of the broader Bhakti movement in India that emphasized devotion (bhakti) to a personal god, simplicity in religious practices, and rejection of rigid caste hierarchies. Sankardeva propagated Ekasarana Dharma, a form of Neo-Vaishnavism that focused on devotion to Lord Krishna as the supreme deity.



The socio-cultural environment of Assam during that period was characterized by caste divisions, ritualistic practices, and limited access to formal education. In such a context, the Bhakti movement served as an effective means of educating the masses through accessible and engaging methods. It utilized local language (Assamese), music, dance, drama, and community institutions to communicate complex philosophical and moral ideas in simple ways.

Thus, the Bhakti movement in Assam can be viewed not only as a religious reform movement but also as a system of informal education that contributed significantly to moral development and social cohesion. This paper explores this dimension in detail.

2. CONCEPTUAL FRAMEWORK

Informal Education :

Informal education refers to the lifelong process of learning that occurs outside formal educational institutions. It is unstructured, spontaneous, and often unconscious. Unlike formal education, which follows a prescribed curriculum, informal education is flexible and context-based

Key characteristics of informal education include:-

i. Learning through experience and observation
ii. Absence of formal curriculum and assessment
iii. Integration with daily life and cultural practices
iv. Emphasis on values, attitudes, and skills
v. Inclusivity and accessibility

In traditional societies, informal education plays a crucial role in transmitting cultural knowledge, moral values, and social norms from one generation to another.

Bhakti Tradition in Assam:

The Bhakti tradition in Assam is rooted in Neo-Vaishnavism, established by Srimanta Sankardeva. It emphasized:-

i. Devotion to one God (Krishna/Bishnu)
ii. Rejection of idol worship and elaborate rituals
iii. Equality of all human beings
iv. Use of vernacular language for communication
v. Collective participation in religious activities

This movement was inclusive and aimed at uniting people across social divisions. It laid the foundation for a distinct Assamese cultural identity.

3. LITERATURE REVIEW

The Bhakti movement in Assam has attracted the attention of historians, sociologists, educationists, and cultural scholars because of its deep influence on religion, society, culture, and education. Several studies have examined the contribution of Neo-Vaishnavism to Assamese society, particularly through the teachings of Srimanta Sankardeva and Madhavdeva. However, the role of Bhakti traditions as a medium of informal education and moral instruction has received comparatively less focused attention.

Maheswar Neog, in his works on Neo-Vaishnavism, explained that the Bhakti movement in Assam was not only a religious reform movement but also a socio-cultural awakening. He emphasized that Sankardeva used literature, music, drama, and devotional practices as tools to educate the common masses. Neog highlighted the importance of Satras and Namghars in spreading ethical values, discipline, and cultural knowledge among people. His studies provide a strong historical foundation for understanding the educational role of Bhakti traditions.

Banikanta Kakati discussed the contribution of the Bhakti movement to Assamese language and literature. According to Kakati, the use of simple Assamese language in devotional songs and literary works helped ordinary people understand religious teachings and moral principles. He argued that Sankardeva democratized knowledge by making spiritual education accessible to all sections of society irrespective of caste and social status.

Studies on Satra institutions reveal their multidimensional role in Assamese society. Researchers such as S. N. Sarma observed that Satras functioned as centres of spiritual learning, moral discipline, artistic

training, and community education. Through daily rituals, scriptural discussions, and cultural activities, Satras provided an environment for character formation and social responsibility. These institutions also preserved manuscripts, music, dance, and traditional art forms, thereby contributing to cultural education.

Scholars studying Namghars have highlighted their significance as community-based educational institutions. Namghars served as centres for collective prayer, social interaction, dispute resolution, and moral guidance. Researchers point out that participation in Namghar activities helped individuals develop values such as cooperation, humility, respect, and social harmony. The democratic structure of Namghars encouraged participation from all communities, thereby promoting social integration.

Research on Borgeets and Bhaona demonstrates their educational importance in medieval Assamese society. Scholars have noted that devotional songs and dramatic performances were effective methods for communicating religious stories and ethical teachings to illiterate populations. Bhaona performances presented ideals such as honesty, devotion, courage, and righteousness in a visually engaging form. Similarly, Borgeets inspired spiritual awareness and emotional attachment to moral values.

Several sociological studies also emphasize the reformative role of the Bhakti movement. The movement challenged caste discrimination and ritualistic orthodoxy while promoting equality and humanity. Researchers believe that Neo-Vaishnavism created a socially inclusive environment that strengthened unity and cultural identity in Assam.

Despite extensive studies on Neo-Vaishnavism, there remains limited research specifically focusing on informal education and moral instruction through Bhakti traditions. Most existing works discuss religious or cultural aspects without detailed analysis of their educational significance. Therefore, the present study attempts to examine how Bhakti traditions in Assam functioned as powerful instruments of informal learning and value-based education. Furthermore, the Bhakti movement's emphasis on equality and social justice has been recognized as a progressive step towards inclusive education. It challenged existing hierarchies and provided opportunities for marginalized groups to participate in cultural and religious life.

Overall, the literature indicates that Bhakti traditions in Assam ruled as a comprehensive system of informal education that integrated spiritual, cultural, and moral dimensions.

4. OBJECTIVES OF THE STUDY

The main objectives of this study are:-

i. To examine the role of Bhakti traditions in promoting informal education in Assam

ii. To analyze the moral teachings embedded in Bhakti practices

iii. To assess the relevance of Bhakti-based informal education in contemporary society

5. METHODOLOGY

This study adopts a qualitative and descriptive research design. The methodology is based on the analysis of secondary data collected from various sources.

Data Sources :-

i. Books on Assamese culture and religion

ii. Research articles and journals

iii. Historical documents

iv. Online academic resources.

Field Study and Questionnaire Design :

Rationale for Field Study:-

While the present study is primarily based on secondary sources, incorporating a field study component enhances the depth and authenticity of the research. The Bhakti traditions of Assam are living practices, and their educational and moral dimensions can be better understood through direct interaction with participants involved in Namghars and Satra activities.

The field study aims to bridge the gap between theoretical understanding and real-life practices by collecting firsthand data from community members. It helps in understanding how informal education operates in present-day Namghars and Satras and identifying the relevance of Bhakti-based moral teachings in

contemporary society. It also captures perceptions of different age groups regarding cultural learning and observes the role of participation in religious and cultural practices .

Area of Study:

The field study has been conducted in selected areas of upper Assam where Bhakti traditions are actively practiced. Suggested locations include:

i. Rural villages with active Namghars.

ii. Satra institutions (especially in Majuli and nearby regions, Auniati Satra, Teok).

iii. Semi-urban communities where Bhaona and Borgeet are performed.

These areas provide a suitable environment to observe the functioning of informal education systems embedded in Bhakti traditions.

Target Population:

The study focuses on individuals who are directly or indirectly associated with Bhakti institutions and practices. These include:-

i. Namghar committee members

ii. Satra devotees and monks (Bhakats)

iii. Local villagers and community elders

iv. Youth participants in cultural activities

v. Performers of Bhaona and singers of Borgeet

This diverse group helped in collecting varied perspectives on informal education and moral instruction.

Sampling Method :

A purposive sampling method is suggested for this study. This method allows the researcher to select respondents who have relevant knowledge and experience related to Bhakti traditions.

Sample Size: 20–30 respondents (flexible)

Selection Criteria:-

i. Active participation in Namghar and Satra activities

ii. Knowledge of Bhakti traditions

iii. Representation from different age groups and genders

Tools for Data Collection :

The primary tool for data collection is a structured questionnaire, supported by informal interviews and observation.

Methods include:-

i. Questionnaire survey

ii. Personal interviews

iii. Participant observation during Namghar prayer or Bhaona performance

Questionnaire Designs :

Below is a sample questionnaire that used for field data collection:

Section A: Personal Information

Name (optional): ____

Age: ____

Gender: ____

Occupation: ____

Educational Qualification: ____

Section B: Participation in Bhakti Traditions

i. Do you regularly visit Namghar or Satra?
Yes / No

ii. How often do you participate in religious or cultural activities?

iii. Daily / Weekly / Occasionally

iv. Which activities do you participate in?
Prayer (Naam-Kirtan)
Bhaona
Borgeet
Festivals

Section C: Informal Education

i. Do you think Namghar and Satra helps in learning new things?
Yes / No

ii. What kind of knowledge do you gain?
Religious
Moral
Cultural
Social

iii. Have you learned values or behavior from these practices?

Yes / No

Section D: Moral Instructions

i. Which values do you learn from Bhakti traditions?

Equality

Respect

Discipline

Cooperation

Compassion

ii. Do these teachings influence your daily life?

Yes / No

ii. Can you give an example? ____

Section E: Relevance in Modern Society

i. Do you think Bhakti traditions are still relevant today?

Yes / No

ii. Should these traditions be included in modern education?

Yes / No

iii. Suggestions (if any): ____

Observation Method :

In addition to the questionnaire, observation conducted during:

i. Namghar prayer sessions

ii. Bhaona performances

iii. Satra cultural activities

Key aspects to observe:-

i. Participation of different age groups

ii. Methods of communication (songs, storytelling, drama)

iii. Behavior and discipline of participants

iii. Interaction among community members

Data Analysis Plan :

The collected data analyzed using:

i. Qualitative analysis (interpretation of responses)

ii. Simple percentage method (for close-ended questions)

iii. Thematic analysis (for open-ended responses)

This helped in identifying patterns and drawing conclusions about the role of Bhakti traditions in informal education in Assam .

Ethical Considerations :

i. Participation was voluntary

ii. Respondents' privacy fully respected

iii. Data used only for academic purposes

iv. Consent taken before interviews

Expected Outcomes of the Field Study :

The field study is expected to reveal that:-

i. Namghars and Satras still function as informal learning centers

ii. Bhakti traditions continue to influence moral behavior

iii. Cultural participation enhances social bonding

iv. Younger generations are moderately engaged but need encouragement

v. Informal education through tradition remains relevant

Identifying Educational Patterns through Data Analysis:-

We use data analysis to examine how Bhakti traditions influenced learning among different groups of people.

Survey data collected from villages around Satras and Namghars showed :-

Area of Learning	**Percentage of Respondents**
Moral Values	85%
Cultural Knowledge	78%
Religious Education	82%
Community Cooperation	74%
Artistic Skills	61%

It conclude that Bhakti traditions contributed strongly toward moral and cultural education.

Understanding the Role of Satras and Namghars:-

Data analysis helps researchers identify how Satras and Namghars functioned as centres of informal learning. Such as :-

Majority of respondents attend Namghar activities regularly.

Elderly participants transmit oral traditions to younger generations.

Cultural programmes improve social participation and ethical awareness.

Such findings indicate that Bhakti institutions played a continuous educational role in Assamese society.

Analysis of Moral Instruction :

Analysed behavioural and value-based responses to understand moral instruction through Bhakti traditions.

Common Moral Values Identified :-

Truthfulness_____83%

Discipline_____82%

Compassion _____ 78%

Equality_____72%

Cooperation _____68%

The analysis shows that Bhakti traditions strongly influenced ethical and social behaviour.

Statistical Representation of Participation in Bhakti Activities :

Participation in Informal Educational Activities :

Bhaona Performances 71%

Borgeet Learning 64%

Religious Discussions 76%

Satra Festivals 69%

This statistical representation demonstrates that community participation became a major source of informal learning.

Diagram: Data Analysis Process in Bhakti Tradition :

Data Collection

(Interview, Survey, Observation)

%

¼%

Data Classification

(Social, Moral, Educational)

%

¼%

Statistical Analysis

(Percentage, Comparison, Charts)

%

¼%

Pattern Identification

(Values, Participation, Learning)

%

¼%

Research Conclusion

(Role of Bhakti Traditions)

Visual Representation of Bhakti Educational Activities :-





Data analysis is essential in understanding the impact of Bhakti traditions on informal education in Assam. By analysing surveys, observations, participation rates, and cultural practices, researchers can identify patterns related to moral development,

community learning, and cultural preservation. Statistical representations and diagrams help simplify complex information and make findings more reliable and understandable.

Limitations of the Study:

i. The study is based on secondary data

ii. Lack of field-based empirical evidence

iii. Limited focus on regional variations

Despite these limitations, the study provides valuable insights into the educational significance of Bhakti traditions.

6. Bhakti Institutions as Centers of Informal Education :

Namghar(Community Prayer Hall):-

The Namghar is a central institution in Assamese society established by Srimanta Sankardeva. It serves as a community prayer hall and a hub for social and cultural activities.

Functions of Namghar include:

i. Conducting religious prayers and rituals

ii. Organizing community discussions

iii. Hosting cultural performances

iv. Providing a space for conflict resolution

From an educational perspective, the Namghar acts as a grassroots learning center where individuals acquire knowledge through participation and observation. It promotes values such as equality, cooperation, and mutual respect.

Satra (Monastic Institution):

Satras are monastic institutions that played a crucial role in preserving and promoting Bhakti traditions. They were established as centers of religious learning and cultural activities.

Key functions of Satras include:

i. Teaching religious texts and philosophy

ii. Training in music, dance, and drama

iii. Preserving manuscripts and literature

iv. Promoting discipline and ethical behavior

Satras functioned as informal educational institutions where learning was integrated with daily life and spiritual practice.

7. Cultural Media as Tools of Informal Education :

Borgeet (Devotional Songs):

Borgeets are devotional songs composed by Sankardeva and his disciple Madhavdeva. They convey spiritual and moral messages in a simple and melodious form.

Educational significance:-

Easy to memorize and transmit

Emotional engagement enhances learning

Reinforces moral values

Bhaona and Ankia Naat :

These are theatrical performances depicting stories from Hindu scriptures.

Educational roles:

Visual representation aids understanding

Engages audiences of all ages

Communicates ethical lessons effectively

8. Moral Instruction Through Bhakti Traditions :

Bhakti traditions in Assam emphasized moral values that are essential for individual and social development. These include:-

i. Equality: All individuals are equal before God

ii. Compassion: Emphasis on kindness and empathy

iii. Discipline: Importance of self-control and devotion

iv. Social Harmony: Promotion of unity and cooperation

v. Ethical Living: Encouragement of honesty and integrity

These values were communicated through stories, songs, and community practices, making them an integral part of everyday life.

9. Diagram : Informal Education Process :

Bhakti Movement

"!

Institutions (Namghar, Satra)

"!

Cultural Media (Songs, Drama, Dance)

"!

Informal Learning

"!

Moral Values (Equality, Compassion, Discipline)

"!

Social Harmony & Cultural Identity

10. Findings of the Study :

The study reveals that:

i. Bhakti traditions served as an effective system of informal education

ii. Learning was participatory and experiential

iv. Moral values were deeply embedded in cultural practices

v. Institutions like Namghar and Satras strengthened community bonds

vi. The movement contributed to social equality and cultural unity

11. Conclusion :

The Bhakti movement in Assam occupies a unique place in the socio-cultural and educational history of the region. Initiated by Srimanta Sankardeva and later strengthened by Madhavdeva, the Neo-Vaishnavite movement emerged not only as a religious reform movement but also as a powerful system of informal education and moral instruction. Through devotional practices, literature, music, drama, and community participation, the movement transformed Assamese society by spreading ethical values, social awareness, and cultural unity among the masses.

One of the greatest achievements of Bhakti traditions was the democratization of knowledge and spirituality. In a period marked by caste discrimination, ritualism, and social inequality, the movement emphasized equality, humanity, devotion, and social harmony. Institutions such as Satras and Namghars became centres of collective learning where people from different social and economic backgrounds gathered to participate in prayer, discussions, and cultural activities. These institutions helped individuals acquire moral discipline, spiritual consciousness, and community values outside the framework of formal education.

The educational significance of Bhakti traditions is clearly visible in the use of Borgeets, Bhaona, Ankiya Naat, and devotional literature as tools of learning. These artistic and literary forms communicated religious teachings and moral lessons in a simple and engaging manner, making education accessible even to illiterate populations. Through participation in these activities, people learned values such as truthfulness, compassion, humility, cooperation, and devotion. Thus, Bhakti traditions promoted holistic development by combining spiritual education with moral and social instruction.

The movement also contributed significantly to the preservation and development of Assamese language, literature, music, dance, and cultural identity. By encouraging collective participation and social integration, Neo-Vaishnavism strengthened unity and cultural consciousness among the people of Assam. Its influence continues to remain visible in contemporary Assamese society through the functioning of Satras, Namghars, and cultural performances.

In the modern world, where society often experiences moral decline, social conflict, and cultural disintegration, the teachings of Bhakti traditions remain highly relevant. The emphasis on ethical living, peace, mutual respect, and human values offers important lessons for present and future generations. Therefore, the Bhakti traditions of Assam should be preserved and promoted not merely as religious heritage but also as valuable sources of informal education, moral development, and cultural continuity .

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Politics of Land : Encroachment and Eviction in *Iat Ekhon Aaronya Asil*

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Abstract

Land encroachment and eviction are not new practices in Assam. Along with land encroachment, the question of citizens' land rights is also raised. However, the relationship between encroachment and eviction is not as simple as a cause-and-effect phenomenon. It is a highly complex nexus in which several other factors and agencies are involved. While understanding the process of encroachment and eviction, we must look at deeper levels to identify the underlying factors. The Assamese novel *Iat Ekhan Aaronya Asil* by Anuradha Sarma Pujari is a fictional representation of the process of encroachment and eviction that takes place in the Amchang Wildlife Sanctuary near Guwahati, Assam. In this paper, we attempt to understand how the novel represents the underlying politics behind encroachment and eviction in the Amchang Wildlife Sanctuary.

Keywords : eviction, encroachment, wildlife, politics.

Introduction

Land encroachment is a universal phenomenon. In Assam, too, land encroachment is not a new practice. As per a report published in The Hindu, the present Chief Minister of Assam, Dr Himanta Biswa Sarma, stated, "The total area under encroachment in Assam is more than the size of Goa." (Correspondent) In a reply to a question in the Assembly in 2017, the then junior revenue minister of Assam, MrPallabLochan Das, stated, "Over 49 lakh bighas, or 6,652 sq km, of land was under encroachment across Assam. The area would roughly be twice the total area of Goa and just a little less than that of Sikkim." (Kalita) The same report also stated that the total encroached area includes 3,172 sq km of forest land. These are some of the facts and figures that require serious attention. They clearly indicate how the gradual expansion of human settlements into forest areas has become a serious threat to the wildlife and biodiversity of Assam.

It is in this context that the plot of the Sahitya Akademi Award-winning Assamese novel *Iat Ekhan Aaronya Asil* by AnuradhaSarmaPujari is constructed. The plot of the novel centres around an eviction drive carried out by the Forest Department of Assam in the Amchang Wildlife Sanctuary. Amchang Wildlife Sanctuary is located near Guwahati, the capital city of Assam. It was declared a reserve forest in 2004. The sanctuary covers an area of 78.64 square kilometres.

Iat Ekhan Aaronya Asil presents a picturesque and representative account of the encroachment process that has been taking place in the Amchang Wildlife Sanctuary through the use of a first-person narrator. The narrator is a senior journalist who holds a humanitarian outlook. She is a conflicted individual who, on the one hand, sympathises with the people facing eviction and, on the other, remains sympathetic towards the wildlife and forest resources of Amchang. She pities the difficult and pathetic lives of the encroachers while simultaneously recognising the necessity of the eviction drive for the preservation of wildlife.

The journalist narrator represents the conflicting mindset of common people, who can neither support the encroachment of forest land nor oppose the eviction of helpless dwellers. With a sense of moral dilemma, the narrator observes the entire process of encroachment and eviction and discovers several facts

hidden from public view. As a professional journalist, she observes events closely and realises that the process of encroachment and eviction is not as simple as a cause-and-effect phenomenon. She witnesses a complex nexus of different agencies and factors behind the encroachment and eviction drive.

Thus, through the novel *Iat Ekhan Aaronya Asil,* Sarma Pujari attempts to foreground those hidden factors so that the problems associated with encroachment and eviction may be better understood and a more permanent solution may be envisioned.

Objectives

The objectives of the study are as follows:

1. To examine how the novel *Iat Ekhan Aaronya Asil* reflects the process of encroachment and eviction in the context of Assam, particularly in the Amchang Wildlife Sanctuary.
2. To evaluate how the novel explores the underlying factors responsible for encroachment and eviction in Assam, particularly in the Amchang Wildlife Sanctuary.

Methodology

This study is exploratory in nature. It follows descriptive and analytical methods. While conducting the study, intertextual cross-references have been employed to critically analyse the text Iat Ekhan Aaronya Asil. The novel serves as the primary source of data. In addition, unstructured interviews conducted with various people living in the Amchang area have been considered valuable sources of primary data for cross-reference. Different articles, newspaper reports, and reference books have been used as sources of secondary data.

Research Questions

1. Are there other factors behind encroachment and eviction?
2. Can literature reflect the factors underlying encroachment and eviction?
3. Which underlying factors are responsible for encroachment and eviction drives in Assam, as reflected in the novel *Iat Ekhan Aaronya Asil*?
4. How does the novel *Iat Ekhan Aaronya Asil* portray the encroachment and eviction drive carried out in the Amchang Wildlife Sanctuary?

Analysis

According to the notification published in *The Gazette of India* on 7 May 2017, the Ministry of Environment, Forest and Climate Change states:

> "Amchang Wildlife Sanctuary is situated in the Kamrup District of the State of Assam, consists of Amchang Reserve Forest, South Amchang Reserve Forest and Khanapara Reserve Forest and is located within the geographical limits of 26° 132 N to 26° 062 N latitude and 91° 502 E to 91° 582 longitude and is spread over an area of 78.64 square kilometres." (Bharat Sarkar)

The notification further states:

> "…major portion of the sanctuary is undulating and covered by hillocks which form a unique geomorphological feature with unique wildlife habitats, and the Amchang Wildlife Sanctuary represents one of the rich and ecologically diverse habitats for a wide variety of animal and plant species. Hoolock gibbons, Chinese pangolins, flying squirrels, Assamese macaques, capped langurs, slow lorises, leopards, elephants, sambars, barking deer, gaurs, etc., are the principal animals found in the wildlife sanctuary. In addition to these, a wide variety of avian fauna, reptiles, amphibians, and insects are found in the wildlife sanctuary." (Bharat Sarkar)

On page 18 of the notification, Amchang is declared an Eco-Sensitive Zone:

> "It is necessary to conserve and protect the area, the extent and boundaries of which are specified in paragraph of this notification around the protected area of Amchang Wildlife Sanctuary as an Eco-Sensitive Zone from an ecological and environmental point of view and to prohibit industries or classes of industries and their operations and processes in the said Eco-Sensitive Zone." (Bharat Sarkar)

It covers almost 109 square miles. To protect the reserve forests of India, the *Forest Conservation Act, 1980* serves as an important legal framework:

> "It is a unique piece of legislation and regulatory mechanism that reflects the collective will of the nation to protect its rich forests, biodiversity, natural heritage, and resources. The Act permits only unavoidable use of forest land for various developmental purposes. It embodies the firm commitment of the government and the department to balance the conservation of forests with the sustainable developmental needs of society, contributing to a better environment, health, and economy." (*Forest Conservation Act | Environment, Forest and Climate Change Department | Government of Assam, India*)

The main function of the *Forest Conservation Act* is to impose restrictions on the non-forest use of forest land.

The Amchang Wildlife Sanctuary is actually a combined area of three reserve forests—South Amchang, Amchang, and Khanapara. South Amchang was declared a reserve forest in 1953. Again, in 1972, Amchang and, in 1993, Khanapara were also included in the list of reserve forests. The entire area became the Amchang Wildlife Sanctuary on 19 June 2004 through a declaration by the Government of Assam. Therefore, the *Forest Conservation Act* is applicable in the case of Amchang.

However, human habitation had existed in the Amchang area long before the declaration of the reserve forest. This is the first problem. Soon after the declaration of Amchang as a reserve forest, the human population already residing there began facing difficulties. Some families of MilanpurBorobasti, a locality that later came under Amchang Reserve Forest, claim to have settled in Amchang approximately forty years ago.

Another problem is that even after being declared a reserve forest, all three parts of Amchang have continued to undergo encroachment activities. Human settlements have been constructed not only in the Eco-Sensitive Zones but also inside the reserve forest area. Old and valuable trees have been cut down, birds and animals have been killed, and, as it is a hilly area, landslides have occurred on several occasions, posing a severe threat to wildlife and other forest resources of the sanctuary.

An NGO named *Early Birds* became involved in the matter and filed a PIL in the Gauhati High Court seeking protection of the forests of Amchang. In response to the PIL, the Gauhati High Court, on 2 August 2017, "directed the state government to carry out an eviction drive in the ECZ (Eco-Sensitive Zone) of Amchang. The state government carried out a drive in August, removing 283 structures. However, the drive had stopped following an affidavit filed at the court by the state government on August 25, seeking additional time as the encroachers had 'voluntarily' agreed to evict themselves from the protected area." (Pisharoty)

The eviction drive resumed on 27 November 2017 and continued for three days. According to media reports, more than 700 families were left homeless after the eviction drive.

Anuradha SarmaPujari, in *Iat Ekhon Aaronya Asil*, reflects the eviction drive undertaken in Amchang in the following words:

> "A group of soldiers in uniform is marching with shields and helmets. Following them were bulldozers and a few domestic elephants. Side by side are the police personnel and administrative officers. Through the loudspeaker, the authorities are appealing to the people for peaceful cooperation. It is as if a modern version of the Great War of the Mahabharata is going to take place." (Pujari 41)

A similar scene is reflected in a media report, which describes it in the following words: "assisted by 2000 policemen, construction workers, a dozen elephants and two bulldozers, forest officials flattened over 400 houses by mid-day." (Pisharoty)

Unlawful occupation of forest land is not a new practice in Assam. A popular discourse suggests that unlawful occupation of land is carried out by landless common people who have no alternative but to seek shelter on land that does not belong to them. However,

this is not the only reality. Regarding encroachment, the narrator of *Iat Ekhon Aaronya Asil* states:

> "…huge parts of the waterlands and the foothills that are occupied by powerful ministers, government officers, and businessmen remain untouched, whereas on another hill in the same city, the government is taking steps for lawful eviction." (Pujari 41)

Here emerge two propositions:

1. Encroachment is also carried out by powerful ministers, government officers, and businessmen—those who possess strong political or economic influence.
2. The implementation of eviction laws is not uniform at all times. When the encroachers are common people, the law reaches them earlier and more easily. In the case of influential members of society, the law often remains silent.

Referring to the process of encroachment as a political conspiracy, the novel states:

> "…a part of this hill is linked with Khanapara. If you go there, you will cry. There, the Forest Department planted thousands of teak trees. Now you will find nothing. There you will see Manipuri Basti, MisingBasti, BodoBasti… These indigenous people were not there earlier. A minister established them. To secure his seat in the Assembly, he took that initiative." (Pujari 56–57)

During our visit to the Amchang area, we observed a similar situation to that depicted in the novel. We witnessed human settlements across the hills. We visited several places, especially Kankan Nagar and Kailash Nagar, which are believed to fall within the Amchang Reserve Forest and where eviction drives had already been conducted.

These are densely inhabited areas. The houses are built on hill slopes. The people we met living in those parts of Amchang were indigenous but not local to the area. They had migrated to Amchang from different parts of Assam, and they themselves acknowledged this during our interaction.

The earlier statement is taken from a character in the novel named Ranjan, who is also a forest officer, and it clearly hints at the connection between encroachment and politics. In his speech, he refers to the political benefits reaped by the government through the encroachers. The common indigenous people of Amchang referred to in the novel become victims of a political conspiracy. The political dimension involved in encroachment is further illustrated when the same forest officer states:

> "All roads lead to politics. The tribal people inhabiting the northern side of the hill have lodged a PIL in the High Court. The matter is now under jurisdiction. On the other hand, these tribal people are the main vote bank of the Government. Their leader has joined the ruling party. If these people remain dissatisfied, the party will lose some important seats in Upper Assam in the upcoming election." (Pujari 65)

Here, reference is made to the sudden halt of the eviction drive conducted in Amchang. The eviction was temporarily stopped following a PIL lodged by the encroachers. However, that was not the only reason. The government was also reluctant to continue the eviction drive, as the ruling party viewed these encroachers as a part of its vote bank. This vote-bank politics operates as an important force behind encroachment and eviction drives elsewhere in Assam.

In the case of Amchang, the novel suggests that the government is neither fully aligned with the interests of wildlife and forest conservation nor entirely supportive of the encroachers. Rather, in order to derive political advantage and retain power, the ruling party has made both the forest and its wildlife victims of a calculated political process.

During our visit to the Amchang area, the people living there expressed their grievances, stating that the local MLA visits them during election periods to seek votes and promises to provide a permanent solution to their problems. Political leaders also attend their

festivals and social functions. However, once the election is over, the situation changes and the promises gradually fade away.

We observed that many inhabitants of Amchang possess voter cards and Aadhaar cards and have been availing themselves of different government schemes such as Arunodoi and subsidised ration facilities through ration cards. However, they still do not possess a permanent identity in relation to land ownership and settlement rights. They claim that they have been living in the Amchang area for decades. This claim resonates with the following statement:

> "The conflict is much more complex as many of these people, considered encroachers, have been living in these areas for a long time after the flood of 1950 affected the districts of Majuli, Lakhimpur and Dhemaji."(https://geomatico.es/)

However, the *Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006* is an important legislation that was passed in India on 18 December 2006. It is concerned with the land rights of forest-dwelling communities. This Act grants certain communities the right to occupy and reside on forest land. It specifically permits individual or collective use of such land for habitation or self-cultivation as a means of livelihood by members of forest-dwelling Scheduled Tribes and other traditional forest dwellers. It also grants rights of settlement and conservation to all forest villages, old habitations, unsurveyed villages, and other villages situated within forests, whether recorded or unrecorded, by recognising them as revenue villages.

One of the primary conditions for availing these rights is that the dweller must have primarily resided in a forest or forest land prior to 13 December 2005. From this perspective, most of the dwellers inside the Amchang area should have a claim to land rights, as they settled there before the period specified in the Act.

The close connection between officials and encroachers is reflected in the novel. In a conversation with the narrator, Ranjan, the honest forest officer, states:

> "It should not have been in the forest department. We conducted an eviction drive but the senior officers restored the encroachers back. The encroachers bribe the police. A portion of the money goes to the higher-level officers too. The politicians also bring a lot of people and give them a free hand to cut trees and establish settlements. They are vote banks." (Pujari 55)

In Ranjan's comment, several other disturbing realities are revealed, including the involvement of some corrupt higher-level officers of the Forest Department and police personnel in the conspiracy. There is politics in encroachment; similarly, politics is also involved in eviction. The connection between eviction and politics is further expressed in the following words of another character, MonborDoley:

> "They establish people, they take money for the illegal cutting of trees, collect votes and drive us away. I am a witness to twenty-six such evictions ... . The revenue department confesses that they don't know where the boundary line of the forest exists ... ." (Pujari 83–84)

The plural pronoun "they" here directly refers to the nexus among politicians, middlemen, and government officials.

During our field visit, we met Ajoy Ram, who migrated to Amchang from Dhemaji in 2004 and has been living there with his family ever since. The story of Ajoy Ram finds resonance in the novel through the account of a common man living in Amchang:

> "Five years ago Gurung bought a few lechas of land from a broker on the hill near that huge rock. He built a house there with bamboo and tin. Later, he brought his family too." (Pujari 70)

Gurung represents all such families who purchased land from brokers. These brokers are shown to maintain links with authorities as well. They satisfy the officials, and encroachment continues.

It is a fact that land in Amchang has a high market value because it forms part of the Guwahati

region, the capital city of Assam. From conversations with local residents, it can be understood that land can still be purchased and sold relatively easily in Amchang. There are sellers. Here, "sellers" refers to middlemen—those who occupy land and clear forest areas in order to sell them to people in need.

> "As soon as the capital of Assam shifted from Shillong to Guwahati, people from different districts of Assam and other states rushed to Guwahati. They started occupying the lands of this forest. At that time it had not been declared a reserve forest. Still, the areas under the Revenue Department and Forest Department are not clearly demarcated." (Pujari 95)

A similar statement was heard from villagers during our visit to Kankan Village. DeboramTaid, aged 37, stated that the Forest and Revenue Departments had conducted a number of joint operations to determine the demarcation line between forest and revenue areas, but the matter remained unresolved.

The novel reflects the same issue through the words of a character, Babla:

> "The truth is that the boundary is yet to be fixed by the Forest and Revenue Department." (Pujari 65–66)

The villagers of Kankan Village stated that the demarcation line of the total forest area has yet to be finalised. This is a serious problem. Before proper demarcation between forest areas and revenue villages, eviction drives were conducted by the Government of Assam, which created confusion among the encroachers.

A character in the novel named Hiten Barman states:

> "Only after we were evicted from there was it proved that our places fall under the revenue villages." (Pujari 112)

The people in Amchang paid land taxes (khajna) until the year of eviction. Those who had been living in the Amchang area and later faced eviction also claimed that they had electricity connections registered under their residential addresses. This clearly indicates a lack of coordination between the Forest Department and the Revenue Department of Assam. As a result, ordinary people have become the worst affected.

Apart from these aspects, the novel also reflects certain other issues related to encroachment and eviction that often remain hidden and undisclosed. One such issue is discussed in the novel. It is a fact that different types of opportunists emerge during times of difficulty and crisis. Eviction is no exception.

> "Two men are collecting money from the people facing eviction. They are claiming that they will go to court. Money has been collected from every family. Some families have given two to three thousand rupees. In such a time of crisis, it is natural to see opportunists emerge." (Pujari 53)

Ultimately, the victim is always the common person. Fraudsters appear and collect large amounts of money by taking advantage of the helplessness of ordinary people. The victims remain the common people:

> "Where will we go? Why were we brought here? We will die here but will not leave the place. Let them shoot at us." (Pujari 80)

During our visit to the Amchang area, PrakahutiPegu, a widow, expressed her agony. She stated that soon after her marriage, her husband passed away. She is childless and earns her livelihood through weaving. Now, she has no place to go if another eviction takes place. She has already witnessed several eviction drives.

Ranjan is a character in the novel who sheds light on the hidden politics behind encroachment. Therefore, the narrator comments on Ranjan:

> "Ranjan has realised the hidden politics. The bottom line is votes and elections. The price has to be paid by the green trees and the animals of the forest. The innocent people who have been made refugees by politicians are paying the price with their lives…. All the wetlands of the city have been filled up and leased to big business houses. Some have constructed apartments, some have built star hotels, some have established nursing homes, and others have established boarding

schools… The poverty-ridden people are brought to live in such locations only for electoral purposes." (Pujari 65)

However, not all the people involved are poverty-ridden. In a report submitted by a high-level committee appointed by the Gauhati High Court, it was stated:

> "The high-level committee has mentioned in its report submitted to the state government recently that most of the encroachers own cars, motorcycles, costly white goods, etc. Most of them, the report said, are neither BPL (below poverty line) families nor homeless ones. The report has specifically said that the motive behind the encroachment may be to mint money, as the market value of the land is very high." (Sentinel Digital Desk, 2023)

During our field visit, we also observed such possessions among some of the encroachers in the Amchang area.

> "As soon as the capital of Assam shifted from Shillong to Guwahati, people from different districts of Assam and other states rushed to Guwahati. They started occupying the lands of this forest." (Pujari 95)

According to the Forest Rights Act, any occupation of forest land after 13 December 2005 is considered illegal. Such encroachments are subject to eviction and removal. However, it has been observed that even after the implementation of the Forest Rights Act, continuous occupation of land inside forest areas has continued. The same situation has also occurred in Amchang and is highlighted in the novel:

> "Encroachment of forest and jungle is an old practice. But after the declaration of a reserve forest, allowing illegal encroachment and illegal establishment of industries is also a crime committed by the forest department and administration. The corrupt people who were responsible for failing to protect the reserve forest properly should be brought to trial first." (Pujari 80)

The helplessness of the Forest Department is also manifested in the novel. The way in which the Forest Department is reduced to a mute spectator in the face of political conspiracy is reflected in the following words:

> "Everyone in our forest department knows everything. But we can do nothing except remain silent, overlooking all these encroachments and destruction of the forest. Sometimes I wonder what the forest department stands for!" (Pujari 57)

People in the Amchang area often question the selective nature of eviction drives. They claim that large establishments such as private hospitals, cement industries, private schools, and star hotels exist within the Amchang area. However, these structures are never subjected to eviction drives, a concern also hinted at in the novel:

> "See, a rich businessman has occupied that piece of land and constructed a wall there. He cleared that area by cutting down all the trees in the forest and built cottages. We demolished a part of the wall. But I don't know how he managed our senior officers; the result was that the eviction stopped halfway." (Pujari 99)

The role of the media is also portrayed as contradictory in the novel. On one hand, the media advocates for the protection of forest resources and criticises the government's inaction in freeing reserve forests from illegal encroachment. On the other hand, when eviction drives are conducted, the media appears to support the encroachers by foregrounding their difficult conditions. Due to political and economic influences, the media loses its neutral position, as reflected in the novel.

> "You are a journalist, a woman associated with the media. What the media has shown is only half of the truth. This forest has been destroyed by a group of brokers and middlemen. Some policemen, officers of the forest department, circle office officials, MLAs, and ministers are the main culprits. Many news stories were circulated because of their provocation… You people have power in your pen. This forest can be saved

by the media if they wish to reveal these truths." (Pujari 101)

The problems related to eviction in Amchang are summarised in the following words from the novel:

> "These landless people should get land according to the 1989 Land Act. Already these areas have been connected with electricity. Petitioners have argued that at the time of the declaration of Amchang as a reserve forest, the demarcation line between the forest area and revenue village was not settled. No indication of eviction for the families living in the Amchang Eco-Sensitive Zone was given… On the other hand, the village named Janasimalu comes under the panchayat of Amchang." (Pujari 113)

Findings:

From the analysis, the following findings have been arrived at. The novel *Iat Ekhon Aaranya Asil* realistically reflects that:

1. Encroachment in Amchang is a complex process in which politics actively participates as a double-edged sword. Political leaders use encroachers as instruments of vote-bank politics. They bring people and establish settlements. At the same time, the fear of eviction continues to generate electoral advantage.
2. There is a serious lack of coordination between the Forest Department and the Revenue Department, due to which the demarcation lines between reserve forests and revenue villages remain unclear. There is still uncertainty regarding the boundary between forest areas and revenue villages.
3. Personnel within government mechanisms, such as police and administrative officers, are also involved in the complex nexus of encroachment and eviction.
4. The government remains silent when the encroachers are influential individuals. Eviction drives are not conducted in certain other encroached areas of Guwahati, such as DeeporBeel.
5. The role of the media is also contradictory, as it often fails to maintain neutrality.

Conclusion:

To conclude, the novel *Iat Ekhon Aaranya Asil* reflects various underlying factors and agencies involved in encroachment and eviction drives in Assam, particularly through the case study of the Amchang area. From the analysis and cross-referencing of the issues reflected in *Iat Ekhon Aaranya Asil*, it can be understood that literature can realistically portray contemporary socio-political events while uncovering underlying structural problems.

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Gender Representation in Direct Recruitment of College Teachers and Librarians in Assam during 2021-2026

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Abstract

Gender representation in higher education institutions remains a critical dimension of gender equity and institutional quality as well as social development in India. Despite a steady increase in female representation in higher education institutions of India, gender disparities persist across different institution types, disciplines, and positions. The present study focuses on the gender imbalance in the appointment of assistant professors and librarians of different colleges in Assam during the years2021 to 2026. The study shows that during the last five years, the percentage share of appointed female candidates was consistently been 53% and above, while male candidates has been 45% and lower, indicating a gender imbalance among college teachers.Out of 1691 appointments over the past five years, only 691(approximately 41%) candidates are male, while 971 candidates (approximately 57%) are female candidates. This results in a ratio of 140 female teachers for every 100 male teachers in colleges of Assam. The analysis of appointments for college librarians demonstrates a similar trend of female dominance over the last five years. From 2022 to 2025, the number of female appointees exceed 57% during these three years. Overall, this study provides insights into gender representation among college teachers and librarians in differentprovincialised colleges, including PDUAM and Government Model colleges in Assam.

Keywords: Male, Female, Assistant professor, College, Gender representation, HigherEducation

Introduction

Globally, women today enjoy equal access to higher education, and over the past few decades, women's representation in higher education has rapidly increased worldwide, tripling globally between 1995 and 2018 (UNESCO GEM Report, 2020). Gender representation in higher education remains a critical dimension of gender equity, institutional quality as well as social development in India. Over the last three decades India has recorded steady increase in female representation in higher education institutions (HEI) of India. However, gender imbalances persist across different institution types, disciplines, and ranks(Ministry of Education, 2021). As reported by the All India Survey on Higher Education (AISHE) 2021-22, the number of female teachers per 100 male teachers is 77 and records marginal growth of 2% over 2016-17(Ministry of Education, 2021).

The Government of India has taken several initiatives to mitigate the gender parity across different workforcesthrough reservation and affirmative actions for women in recruitment.At the higher education policy level, RUSA (a centrally sponsored scheme) has components that focus on improving equity and access, building gender-sensitive infrastructure (such as women's hostels and toilets) and promoting institutional reforms which can indirectly influence the participation of women among staff and students (Ministry of Education, 2020). The University Grants Commission (UGC) also lays down the regulations on recruitment and service conditions of teachers with emphasis on merit, transparency and gender sensitivity. There have been long-standing attempts to improve women's representation in the legislative politics through the Women's Reservation Bill, seeking one-third reservation for women in Parliament and state legislatures(Jan, 2024).Currently, no recent studies have been found that

emphasize the trends in gender representation among faculty positions in higher education institutions of India. Despite rising women'senrollment in higher education in India, the underrepresentation of women in prominent academic positions remains a concern,making increasingly gender diverse.

A detailed analysis of the outcomes of direct recruitment in the provincialised, PDUAM and government model colleges of Assam during the period from 2021 to 2026 is currently unavailable. The existing studies primarily focus on enrollment or national faculty aggregates in higher education institutes of India. This study aims to analyze male-female representation among the faculty and librarian appointed in provincialised, PDUAM and government model colleges of Assam by the Directorate of Higher Education, Assam, through direct recruitment. The appointments include positions for Assistant Professors and Librarians across various colleges in Assam, irrespective of caste, religion, and discipline, over the last five years from 2021 to 2026. This time period has been selected as it marks the period when the appointments of selected candidates began to be uploaded on the official website of the Directorate of Higher Education, Assam.

Review of Literature

Though there are no apparent and formal divisions of labour considering genders in teaching, research and administration in HEIs of India, one of the early studies conducted by KarunaChanana highlighted that women's representation in Indian universities was only 11.6%(Chanana, 2003). The AISHE 2012-13 report highlights that there were 1.44 lakh teachers in Indian universities, out of which only 32% were female and 68% were male. At the college levels, only 40% of teachers were female out of 10.4 lakh teachers. This accounts for 47 and 66 female teachers per 100 male teachers at the university and college levels respectively. In other standalone institutions, a lower female-to-male teachers' ratio of 44:100has been reported (Ministry of Human Resource Development, 2015).

According to the University Grants Commission (UGC) report 2015, only 13 out of 725 Indian universities have ever had a female vice chancellor, which accounts for only 0.02%. This includes six women's universities, where the vice-chancellor post can only be occupied by a female (University Grants Commission, 2015), (Gandhi & Sen, 2021).A study conducted by (Banker & Banker, 2017) on 810 HEIs reported that only 54 institutes/universities have a female director or dean, which accounts for only about 6.7%. Studies also found that the share of women has increased among junior faculty but not in professorships and administrative leadership due to structural barriers (Swain, 2022), Tilak, 2015). Research on the recruitment processes underlines the importance of the design and implementation of procedures. The appointment rates of women were higher where there were transparent criteria for selection, women on selection committees and targeted outreach (French et al., 2015, Tilak, 2015).The AISHE, 2021 report displays a relatively balanced representation of gender in faculty compositions, with females constituting 43.5% and males comprising 56.5%. However, predominantly the lower-ranked academic positions are held by women. The data also portrays that females hold only 28% of professor or equivalent positions, whereas the rest of 78% are held by males (Ministry of Education, 2021).

According to the AISHE 2023–24 report, the women's representation among teachers in HEIs in India increased marginally by 1.4% over survey year 2021-22, reaching 44.9% of the total teaching workforce(Ministry of Education, 2026). The report further indicates that the number of female teachers rose to 82 per 100 male teachers in 2023–24, compared with the corresponding figure in 2021–22, reflecting a gradual improvement in the gender composition of the academic workforce in HEIs. Among the 11 states where female teachers outnumbered their male counterparts,Kerala recorded the highest female-to-male teacher ratio of 1.82:1 during the survey year 2023–24. These trends indicate a slow but steady increase in the proportion of women in the teaching workforce of HEIs in India, although significant inter-state disparities continue to exist.

In Indian universities, the majority of decision-making positions, such as membership in executive,

academic, and administrative bodies are also disproportionately held by men. A relatively low percentage (5%) of women are currently holding leadership roles in the HEIs of India (Gandhi & Sen, 2021). Research shows that despite improved access of women to HEIs, women remain underrepresented in academic positions, leadership and administrative positions, and other educational inequities for women as faculty (Khanna & Mukherjee, 2024, (Chanana, 2022).Family and household responsibilities, lack of support from men in authority, extended working hours, nonflexible office timings, insufficient leave provisions, lack of autonomy in decision-making and lack of recognition of services usually demotivate women to seek leadership positions in HEIs of India (Mayya et al., 2021). According to a recent study carried out in Telengana state, the percentage of women working as librarians in Indian colleges and universities is significantly lower than that of female teachers; at the college level, female librarians make up only 36%, and at the university level, 25.7% (Kumari&Saroja, 2023). One of the study's main conclusions was that the majority of respondents had personal obstacles, such as family responsibilities and other cultural barriers, due to which female librarians struggle to develop leadership and communication skills, and decision-making ability. Inthe context ofAssam, the only recent study report (2023) on one of the oldest state universities of Assam marked the gender imbalance with 39.2% female teachers (Vauquline et al., 2026). However, no recent study has been found addressing the gender disparities at HEIs of Assam.The existing literature also provides limited insight into the extent of gender representation, the gender composition and the trends of gender representation over time within the state. This gap calls for a systematic and comprehensive assessment of gender representation in the HEIs of Assam to understand the present scenario. Thus, the present study attempts to fill this research gap by analysing trends in gender representation among college teachers in Assam.

Research Design and Methodology

The quantitative approach has been adopted to conduct the present study. The main research instrument used in this study was the appointments and list of selected candidates for appointment for the post of assistant professors and librarians in provincialised colleges, PDUAM and Government Model colleges uploaded in the official website of the Directorate of Higher Education, Assam. The appointments and the list of selected candidates for appointment have been downloaded from the official website of Directorate of Higher Education, Assam. The appointments uploaded during the last five years from 2021 to 2026 have been considered for the present study. The downloaded appointments and the list of candidates selected are segregated year wise and post wise. The male and female candidates are identified by the salutation such as Mr, Sri, Ms, Miss, Smti, and Mrs. Where the salutation has not been provided in the appointments and the list of candidates and for candidates having doctorate degrees, the male and female candidates are identified by their names. The identified male and female candidates are verified by visiting the college websites in which the candidates are appointed to ensure the correctness of the male-female identification methodology.

Results and Discussion

The appointment letter and the list of selected candidates for the posts of Assistant Professor, College Librarian for different provincialised colleges, PDUAM and Government Model colleges of Assam, published by the Directorate of Higher Education, Assam, have been downloaded from the official website of the Directorate of Higher Education, Assam. The obtained number of appointments and identified male-female candidates for the post of assistant professor during the past five years from 2021 to 2026 have been presented in Figure 1. The gender of selected candidates was identified by the salutation,such as 'Mr', 'Sri', 'Ms', 'Miss','Smti', and 'Mrs'. When the salutations were not included in the appointment list and for candidates with a doctorate degree, their gender was determined by their names and verified by visiting the official websites of the colleges where they were appointed.The obtained number of appointments year wise has been presented in Figure 1.

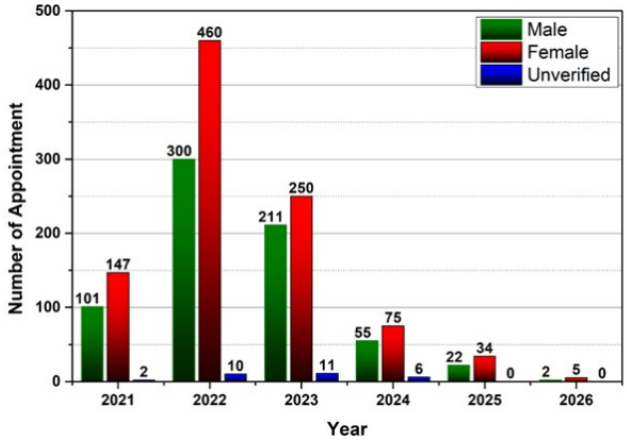


Figure 1. Plot of number of appointments and male-female candidates year wise during the last five years from 2021 to 2026.

In 2021, a total of 250 appointments for the post of assistant professor were found, out of which 147 candidates were female and only 101 candidates were male. The number of female candidates accounts for 59% and the number of male candidates accounts for only 40% of the total appointments. The gender of two candidates could not be verified. In 2022, a total of 770 appointments for the post of assistant professor were found.This year, the number of male candidates is 300, and the number of female candidates is 460, which account for 39%, and 60% of the total, respectively, indicating that the majority of appointed candidates are female. In this year, the gender of 10 candidates (approx. 1%) remains unverified. In 2023, 211 male and 250 female candidates were appointed as assistant professors out of 472 posts. The male and female candidates shared approximately 45% and 53%, respectively, out of 472posts, leaving approximately 2% of candidates unverified. In the following years, a sharp decrease in the number of appointments is observed.In 2024, 136 appointments were found, out of which 55 candidates were male, and 75 were female. The male candidates account for approximately 41% of the total, while female candidates account for about 55%. However, a total of 6 candidates could not be found on the respective college websites and remain unverified, accounting for 4% of the total appointments in 2024.

In 2025, 56 appointments were made, of which 22 were male and 34 were female. The male candidates account for approximately 39% of the total, while female candidates account for about 61%. This shows a drastic increase in the number of female candidates over the previous two years.The lowest number of appointments for the post of assistant professor was recorded in the year 2026, until June. Out of 7 appointments, only two were male, and the rest of the five appointments were made to female candidates, which account for 29% and 71%, respectively. This figure indicates a 10% increment over the previous year. Thus, during the past five years, the female candidates have been dominating the male candidates. The government of Assam has issued a total of 1691 appointments over the past five years. Among these 691(41%) were identified as male, while 971 (57%) were identified as female, indicating that the female representation as assistant professors in different colleges of Assam outnumbers the male representation. This results indicate that there are 140 female teachers for every 100 male teachers in colleges of Assam. The percentage of male and female candidates appointed as assistant professor during the last five years is presented in Figure 2.

The trend in the appointment of male and female candidates can be mathematically represented by approximate equations given below, with adjusted R^2 values of 0.757 for males and 0.792 for females.

$$y_m = 31.9 + 7.39x - 1.375x^2 \quad \text{(for male)}$$

$$y_f = 69.5 - 10.267x + 1.732x^2 \quad \text{(for female)}$$

Here, $'y_m'$ and $'y_f'$ denote the percentage of male and female candidates, respectively, and 'x' represents the years, considering 2021 as '1', 2022 as '2', and so on. If the similar trend continues, it can be projected that by 2028, female representation among college teachers could rise to approximately 98%. However, the small sample size and the limited number of appointments in 2025 and 2026 limit the reliability of the above two models.

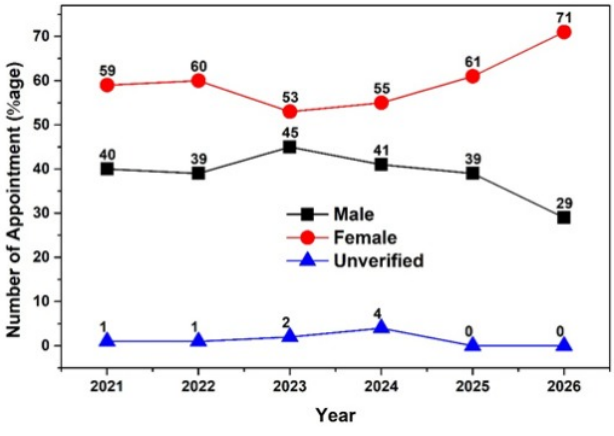


Figure 2. Percentage variation of appointments of male and female as assistant professor in different colleges of Assam.

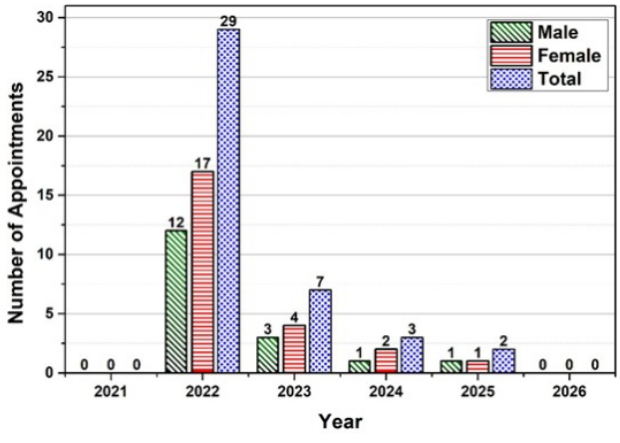


Figure 3. Number of appointments and gender representation of college librarians during the year 2021 to 2026.

The analysis of the appointment of college librarians and gender representation over the past five years is presented in the Figure 3. No appointment letters corresponding to the appointment of a librarian were found for the year 2021. However, in 2022, a total of 29 appointments were recorded, with 12 male candidates and 17 female candidates which results in approximately 41% male and 59% female representation. In 2023, out of 7 appointments, 3 were male candidates, accounting for nearly 43%, while the remaining 4 were female candidates, representing approximately 57%. In 2024, only 3 appointments were found among these, 1 (33.33%) was a male candidate and 2 (66.67%) were female candidates. In 2025, only two appointments for the librarian position were issued, with both male and female candidates sharing one post. As of June 2026, no appointments for the post of college librarian have been found on the official website of the Directorate of Higher Education, Assam. This results in a trend of female dominance in the appointment of assistant professors and librarians of colleges in Assam from the year 2021 to 2026. The investigation into the underlying reasons for the large number of appointments of female candidates for the post of assistant professors and librarians of colleges falls outside the scope of the present study.

Conclusion

In conclusion, we have studied the gender representation of teachers and librarians in various colleges across Assam over the past five years from 2021 to 2026. The gender of candidates was determined based on their salutation, name, and information from the respective college's website. The results indicate that from 2021 to 2026, appointments have been predominantly filled by female candidates. The percentage of female candidates appointed as assistant professors has increased significantly, rising from 53% in 2023 to 71% in 2026. This reflects a growing trend of female representation in colleges of Assam in contrast to the national average as described in AISHE report 2021. Moreover, the study reveals that there are 140 female teachers for every 100 male teachers in colleges of Assam, highlighting a significant gender imbalance among college teachers. Similarly, the analysis of appointments for college librarians demonstrates a similar trend of female dominance over the last five years. Thus the presentstudy provides insights into gender representation among college teachers and librarians in various provincialised colleges, including PDUAM and Government Model colleges in Assam. However, the reasons behind the declining representation of male teachers and librarians remain unknown as they require further investigation across all higher education institutions in the state.

Limitation of the Study

The present study primarily focuses on the appointments and selection lists published on the official website of the Directorate of Higher Education, Assam. Appointments that are not listed on this official website and those colleges which are governed by the autonomous councils of Assam, have been excluded from the present study. Additionally, candidates whose genders could not be verified through respective college websites are not included in the male or female count. The third gender, if applicable, has also been omitted from consideration in this study. Consequently, the results presented in this study reflect the approximate representation of male and female candidates in the colleges of Assam.

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Conflict of Interest:

The authors state that they have no conflict of interest.

Data Availability Statements:

The data that supports the findings of this study are available within the article.

Author Statements:Archana Haloi:

Investigation, Methodology, Formal analysis, Writing Manuscript; **BarshaBorgohain:** Investigation, Review & Editing; **Rajib Kumar Basumatary:** Conceptualization, Methodology, Visualization, Writing-Review & Editing, Supervision.

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Performance Evaluation of Mutual Funds through Data Envelopment Analysis (DEA): Insight from Large Cap, Mid Cap, Small Cap, and Flexi Cap Funds

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Abstract

Mutual fund industry observed a tremendous growth globally due to the rise in awarenessand better accessibility. The study is a novel attempt to analyze the performance and efficiency of Indian mutual funds with measures being used viz. Standard Deviation, Sharpe Ratio, Compound Annual Growth Rate (CAGR), and the non-parametric statistical technique, Data Envelopment Analysis. The study considered20 largest funds based on the AUM (as of March 31, 2024) covering Large Cap, Mid Cap, Small Cap, and Flexi Cap fund. The Banker, Charnes and Cooper model was employed in the study to estimate efficiency scores of the mutual funds. Pearson and Spearman correlation is employedto examine the relationship of efficiency. The study concluded that Flexi Cap and Large Cap Mutual Funds were found to be suited for risk averse investors whereas those who are willing to take risk, Mid cap and small cap categories are perfect choices for them. In terms of efficiency, small cap mutual funds were found to be more efficient in comparison to Flexi cap, large cap and Mid cap fund. The study emphasizes the significance of choosing the right type of Mutual Fund where both the performance and efficiency needs to be considered.

Keywords : Investment; Mutual Fund; Data Envelopment Analysis.

Introduction

The mutual fund industry has experienced huge growth internationally, becoming one of the primary vehicles through which individuals and most institutions invest in capital markets. (Pendaraki, 2012)[1]. With the advent of fintech, increase awareness and accessibility among the investors, the mutual fund industry in India have seen a significant growth in the present time. Moreover, the mutual fund industry has also emerged as a vital financial product, offering a variety range of schemes best suited for different investors based on their investment preference. (Afza & Rauf, 2009)[2]. Considering the increase in the investors in mutual funds, it is very much necessary to evaluate the performance of mutual fund. Evaluation of mutual funds not only ensures optimal resource allocation but also helps to build the confidence of the investors. Previous studies revealed that some of the most common tools that are used to evaluate the performance of mutual funds are Sharpe ratio, Jensen's alpha. However, these methods fail to address the impact of all the factors associated in the operations of mutual fund, such as the NAV, expenses ration, etc. **(Charnes et al., 1978).**To address the gap and have a robust analysis to measure and evaluate the mutual funds, non-parametrical statistical technique Data Envelopment Analysis (DEA) is used**. (Cooper, Seiford, & Tone, 2007).**Previous research on measuring the performance of mutual funds, suggest that data envelopment analysis (DEA) techniques can overcome some of the problems that are there with the traditional tools. (Galagedera, and Silvapulle, 2002)[3]. Moreover, the DEA approach helps to have an indebt analysis of the operational efficiency and performance of mutual funds by examining the input and output variables. **(Debnath, 2008).** Moreover, the performance evaluation of mutual funds using DEA approach is beneficial for the investors. (Guo, 2015)[4].

The primary objective of the paper is to highlight and compare the performance of mutual funds operating in India. The study used most common funds operating in India, i.e., large cap fund, mid cap fund, small cap fund and flexi cap fund.

Therefore the, study is an attempt to evaluate the performance of mutual funds schemes operating in India by employing DEA approach to investigate the efficiency of the mutual funds and identify the areas for improvement.

Review of Literature

The paper is an attempt to study and compare the performance of the mutual funds operating in India. The review of literature revealed that a good number of studies have been done on the area but very few studies have been found in Indian Context. Previous studies revealed that the rate of return served as the sole success metric and the risk component was poorly considered.Premachandra, Zhu, Watson, &Galagedera, (2016) in their study employed DEA approach to evaluatedthe mutual fund performance and revealed the best performers and highlighted the funds that improved their performance over time.[5] Alexakis & Tsolas (2011) employed Data Envelopment Analysis to measure the performance of equity mutual funds. The results demonstrate that the efficient funds form the smaller part of the examined sample of funds, the average efficiency rises over time. Moreover, the evidence from the identified sources of inefficiency suggests that fund managers should put more emphasis on the management of assets and the specification of front-end and back-end loads.[6]Sharma & Sharma (2018) made an attempt to study the performance open ended equity (diversified/large cap) funds for a five-year period 2008-2009 to 2012-2013 using the output measure as the returns and a series of input variables including standard deviation, beta and expense ratio.[7]Afza & Rauf (2009)[8] in their study revealed that the sharp growth of the mutual fund sector services and its role in making investments in the capital market, appraising its performance becomes viable research. Factors such as financial creativity, increased awareness of investors, and diverse schemes matching varying financial goals and risk appetite are attributed to the remarkable growth of mutual funds in India. Charnes, Cooper, & Rhodes, (1978)[9] revealed that the assessment of mutual funds worldwide and found that Sharpe ratio, Treynor ratio, and Jensen alpha are used extensively used but they neglect factors, such as expense ratios, timing, management efficiency etc. In their study Galagedera and Silvapulle (2002)[10] reported that DEA encompasses more variables such as net asset value (NAV), management fees, and turnover ratios resulting in a better performance analysis. another study by Debnath (2008)[11] highlighted that fund operations that are inefficient in India can be studied by DEA approach.

Significance of the study

The various shortcomings of traditional metrics as a performance measure including the difficulties faced in choosing a proper benchmark index or taking the timing of the investment returns into account or even including cost of trading stocks in the evaluation of performance lead to the introduction of a new approach in mutual fund performance assessment. The DEA was introduced as a tool for performance measurement by Charnes et al. (1978)[12]. Since then, it gained prominent importance in the mutual fund industry. Although lot many traditional tools are used yet the DEA approach to investigate the fund performance have let the investigators to dig into the others aspects that are often not considered in the traditional financial tools which focus more on the returns. Moreover, the most of the earlier studies were confined to measure the performance based on traditional tools and only for a single category of fund. Therefore, based on the literature's reviews, the researchers identified the gap and significance to study the performance of the mutual funds considering the large, mid, small and flexi cap funds operating in India for a period of 10 years. The present study contributes to this area by analysing the funds and by using the more innovative DEA methodology along with the traditional tools to assess the comparative performance of these instruments.

Objectives of the study

The objectives of the current study are as follows:

1. To assess the performance of Indian Mutual Funds using traditional measures.
2. To determine the efficiency of Indian Mutual Funds using DEA approach
3. To compare the performance of large cap, mid cap, small cap and flexi cap funds.

Hypothesis of the study

$H_0$1: There is no correlation between DEA score and AUM size of the funds

$H_0$2: There is no correlation between DEA score and Sharpe ratio of the funds.

$H_0$3: There is no correlation between DEA score and CAGR of the funds.

Research methodology

The study is analytical in nature as secondary data have been used for analyzing different types of Mutual Funds existing in India as on 31st March, 2024. The necessary data have been collected from the websites of AMFI, Moneycontrol, National Stock Exchange (NSE), Bombay Stock Exchange (BSE), the respective fund houses issuing the studied Mutual Funds, ETMoney etc.

In India, different fund houses offer different types of mutual funds depending upon the goals and choices of the potential investor. However, for the current study the 4 most preferred Mutual Fund categories among the investor community i.e. Flexi Cap, Large Cap, Mid Cap and Small Cap which have completed at least 10 years of existence (i.e. introduced in India prior to April, 2014 and continued at least uptoMarch, 2024) have been taken into consideration. As the funds offered under these categories are many in numbers, hence top 5 funds under each category with the highest AUM size as on 31st March, 2024 have been analysed to determine the performance and efficiency.

In order to identify the performance of the funds, traditional performance measures like Standard Deviation, Compound Annual Growth Rate (CAGR) and Sharpe Ratio have been used. A non-parametric technique called Data Envelopment Analysis (DEA) have been deployed to determine the efficiency of the funds. Three input variables (standard deviation, maximum drawdown and monthly downside deviation) and two output variables (profitable months percentage and compounded monthly return) as suggested by Prasanna(2012) and Gregoriou (2006) have been used in the study to calculate the efficiency score of the studied Mutual Funds.

The Banker, Charnes, and Cooper (1984) model of DEA has been deployed in the study as this model considers variable returns to scale (VRS) assumption. After calculation of each input and output variable, the analysis has been carried out using input-oriented BCC model in DEAP software to determine the efficiency scores.

Finally, in order to assess whether the results produced by the Data Envelopment Analysis have any correlation with the AUM size of the funds or traditional performance measures like CAGR and Sharpe Ratio, Pearson Correlation and Spearman's rank order Correlation have been used depending upon the normality of the data set in SPSS software.

Data Analysis and Interpretation

The collected data have been analysed for all the studied Mutual Funds for a period of 10 years starting from 30th April, 2014 upto 31st March, 2024 using traditional performance measures and Data Envelopment Analysis.

Table 1

List of Mutual Funds with AUMs and Traditional Performance Measures (Footnotes)

Fund Name	Category	AUM (in Lakhs)	Standard Deviation	Sharpe Ratio	CAGR
Aditya Birla Sun Life Flexi Cap Fund	Flexi Cap	421492	5.09206	0.18069	17.4216
HDFC Flexi Cap Fund	Flexi Cap	1313314	5.84176	0.16607	17.6066
KotakFlexicap Fund	Flexi Cap	1190148	4.69346	0.19949	17.9257
Parag Parikh Flexi Cap Fund	Flexi Cap	3605384	3.95076	0.26082	19.7381
SBI Flexicap Fund	Flexi Cap	523312	4.70165	0.1923	17.4748
Axis Bluechip Fund	Large Cap	1177228	4.25262	0.17286	15.48
HDFC Top 100 Fund	Large Cap	685897	5.16001	0.15253	15.5915
ICICI Prudential Bluechip Fund	Large Cap	1342144	4.48518	0.19075	16.9637
Mirae Asset Large Cap Fund	Large Cap	1344638	4.60781	0.18537	16.8606
SBI Blue Chip Fund	Large Cap	1170799	4.61175	0.17697	16.3409
Axis Midcap Fund	Mid Cap	819833	4.82317	0.23663	20.7446
HDFC Mid-Cap Opportunities Fund	Mid Cap	1180808	5.40503	0.23238	21.8852
Kotak Emerging Equity Fund	Mid Cap	950936	5.30946	0.25077	23.0302
Motilal Oswal Midcap Fund	Mid Cap	365442	5.47374	0.25228	23.5677
PGIM India Midcap Opportunities Fund	Mid Cap	364104	5.38119	0.19694	19.1779
Axis Small Cap Fund	Small Cap	1003898	5.11967	0.26793	23.7413
Kotak Small Cap Fund	Small Cap	420823	5.78518	0.23405	22.9652
Nippon India Small Cap Fund	Small Cap	1102568	6.41355	0.2644	27.4046
Quant Small Cap Fund	Small Cap	1082250	5.77982	0.20484	20.6732
SBI Small Cap Fund	Small Cap	850441	5.63787	0.27922	26.3419

Source: Researcher's own calculation.

In terms of Standard deviation, Parag Parikh Flexi Cap Fund has the lowest value denoting the lowest level of risk whereas Nippon India Small Cap Fund bears the highest level of risk. In case of Sharpe ratio, the fund with the lowest and highest ratios are HDFC Top 100 Fund and SBI Small Cap Fund respectively. The calculated CAGR values show that Nippon India Small Cap Fund produces the highest rate of growth while Axis Bluechip Fund remains at the bottom adding the lowest amount of growth.

Table 2

Calculated Input and Output Variables of Mutual Funds

Fund Name	Monthly Standard Deviation	Maximum Drawdown	Monthly Downside Deviation	Profitable Months Percentage	Compounded Monthly Return
Aditya Birla Sun Life Flexi Cap Fund	0.0509	0.3065	0.0409	0.6417	0.0415
HDFC Flexi Cap Fund	0.0584	0.3434	0.0414	0.625	0.0422
KotakFlexicap Fund	0.0469	0.2843	0.0377	0.6417	0.0433
Parag Parikh Flexi Cap Fund	0.0395	0.2313	0.0341	0.7417	0.0505
SBI Flexicap Fund	0.047	0.2832	0.0385	0.6667	0.0417
Axis Bluechip Fund	0.0425	0.1919	0.0321	0.6833	0.0351
HDFC Top 100 Fund	0.0516	0.3295	0.0366	0.6	0.0355
ICICI Prudential Bluechip Fund	0.0449	0.2846	0.0355	0.625	0.0399
Mirae Asset Large Cap Fund	0.0461	0.2825	0.0358	0.6167	0.0396
SBI Blue Chip Fund	0.0461	0.2849	0.0356	0.6333	0.0379
Axis Midcap Fund	0.0482	0.2286	0.0364	0.6583	0.0549
HDFC Mid-Cap Opportunities Fund	0.0541	0.3422	0.0443	0.6667	0.0603
Kotak Emerging Equity Fund	0.0531	0.3151	0.0455	0.7083	0.0662
Motilal Oswal Midcap Fund	0.0547	0.3208	0.0483	0.6833	0.0692
PGIM India Midcap Opportunities Fund	0.0538	0.2904	0.0425	0.6417	0.0482
Axis Small Cap Fund	0.0512	0.302	0.0458	0.6917	0.0701
Kotak Small Cap Fund	0.0579	0.3562	0.0478	0.675	0.0659
Nippon India Small Cap Fund	0.0641	0.4164	0.0505	0.65	0.0939
Quant Small Cap Fund	0.0578	0.4216	0.0398	0.7583	0.0546
SBI Small Cap Fund	0.0564	0.3304	0.0447	0.6833	0.0864

Source: Researcher's own calculation.

Table 3

Efficiency Scores of Mutual Funds

Fund Name	Efficiency Score
Aditya Birla Sun Life Flexi Cap Fund	0.808
HDFC Flexi Cap Fund	0.798
KotakFlexicap Fund	0.88
Parag Parikh Flexi Cap Fund	1

SBI Flexicap Fund	0.865
Axis Bluechip Fund	1
HDFC Top 100 Fund	0.878
ICICI Prudential Bluechip Fund	0.924
Mirae Asset Large Cap Fund	0.913
SBI Blue Chip Fund	0.912
Axis Midcap Fund	1
HDFC Mid-Cap Opportunities Fund	0.835
Kotak Emerging Equity Fund	0.883
Motilal Oswal Midcap Fund	0.883
PGIM India Midcap Opportunities Fund	0.795
Axis Small Cap Fund	0.952
Kotak Small Cap Fund	0.809
Nippon India Small Cap Fund	1
Quant Small Cap Fund	1
SBI Small Cap Fund	1

Source: Researcher's own calculation.

The efficiency of the funds measured in terms of DEA efficiency scores reveal that only 1 fund each from Flexi cap category, Large cap category and Mid cap categories produce efficient score of 1 whereas in the Small cap category, 3 funds have an efficient score of 1 shwowcasing their dominance in efficiency over the other categories.

However, the performance and efficiency of the Mutual Funds has also been determined on the basis of Average values produced by the funds to have a concrete idea on the categorical performance.

Table 4

Comparative Performance and Efficiency Analysis of Mutual Funds

Category of Mutual Fund	Average Standard Deviation	Average Sharpe Ratio	Average CAGR	Average DEA Score
Flexi Cap	4.855939	0.199874	18.03334	0.8702
Large Cap	4.623474	0.175692	16.24735	0.9254
Mid Cap	5.278517	0.233799	21.68112	0.8792
Small Cap	5.747215	0.250086	24.22524	0.9522

Source: Researcher's own calculation.

The average performance measures and DEA scores also suggest that Mutual Funds offered under the Small Cap categories are the most efficient and high performing funds for the investors. However, the risks

involved in this category of fund is also alarming as the average value of standard deviation is the highest for the Small cap category Mutual Funds.

Investors have an expectation that the Mutual Funds that are able to attract high amount of AUM from the investors are more efficient. Therefore, an attempt has been made to correlate the AUM of the funds with the DEA efficiency score of the funds.

$H_0$1: There is no correlation between DEA score and AUM size of the funds

Table 5

Correlation Between DEA Score and AUM Size of Mutual Funds

Correlations			
		Efficiency	AUM
Efficiency	Pearson Correlation	1	.43
	Sig. (2-tailed)		.054
	N	20	20
AUM	Pearson Correlation	.43	1
	Sig. (2-tailed)	.054	
	N	20	20

Source: Researcher's own calculation.

The calculated Pearson Correlation value indicates a moderate positive correlation between the DEA score and AUM size of the funds signifying a direct relationship between Efficiency and Assets Under Management.

Again, it is equally important to determine whether the results produced by the Data Envelopment Analysis correlate with the results produced by traditional performance measures like Sharpe Raio and CAGR.

$H_0$2: There is no correlation between DEA score and Sharpe ratio of the funds.

Table 6

Correlation Between DEA Score and Sharpe Ratioof Mutual Funds

Correlations				
			Efficiency	Sharpe
Spearman's rho	Efficiency	Correlation Coefficient	1.00	.44
		Sig. (2-tailed)	.	.051
		N	20	20
	Sharpe	Correlation Coefficient	.44	1.00
		Sig. (2-tailed)	.051	.
		N	20	20

Source: Researcher's own calculation.

The coefficient value denotes a direct positive relationship between results produced by efficiency scores of Data Envelopment Analysis and Sharpe Ratios.

$H_0$3: There is no correlation between DEA score and CAGR of the funds.

Table 7

Correlation Between DEA Score and CAGR of Mutual Funds

Correlations				
			Efficiency	**CAGR**
Spearman's rho	**Efficiency**	**Correlation Coefficient**	**1.00**	**.21**
		Sig. (2-tailed)	**.**	**.37**
		N	**20**	**20**
	CAGR	**Correlation Coefficient**	**.21**	**1.00**
		Sig. (2-tailed)	**.37**	**.**
		N	**20**	**20**

Source: Researcher's own calculation.

As the derived coefficient value is 0.21 and the p value is 0.37, hence it can be concluded that there is no significant positive correlation between Efficiency scores and CAGR of the funds.

Conclusion

Mutual Funds have evolved to be one of the most preferred investment avenues among the investors as evidenced by the huge amount of Assets UnderManagement of each fund house. However, choosing the right type of Mutual Fund becomes equally complex for the investors due to varied preferences of investor classes. All the studied categories of Mutual Funds provide good amount of return to the investors as all of them have high CAGR and satisfactory Sharpe ratios. From the perspective of performance, using the traditional risk adjusted measures, it can be concluded that Flexi Cap and Large Cap Mutual Funds are mostly suited for risk averse investors whereas those who are willing to take risk, Mid cap and small cap categories are perfect choices for them.Again, in terms of efficiency, 3 Mutual Funds in the small cap category, 1 each in the flexi cap, large cap and mid cap categories showcase small Cap categories as the most efficient class of Mutual Funds. However, investors should not blindly invest in any Mutual Fund looking at only one parameter in search of high amount of return. The investment decisions should be taken rationally by considering several factors like tenure of investment, level of risk associated, type of fund manager, goodwill of the fund house, performance on several parameters etc. for attractive returns.

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A Study on Effectiveness of Credit Delivery Institutions for Agricultural Financing

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Abstract

The development of bank credit sanctioned to agricultural sector is not up to the mark in the reform era while compared with small scale and service sector. The district is yet to catch up the national tempo of credit channelization to the sector allied to agricultural activities. The analysis found that banks have failed to achieve the target fixed in different sectors and there is a low degree of positive correlation between target fixed and achievements. A noteworthy feature of banks' lending is that, despite mounting overdues in each year, the agriculture and allied sectors enjoyed an incredible share of bank credit. The unsatisfactory performance of agricultural credit indicates a wide gap between deployment of bank credit and agricultural development in the area under study. An attempt has been made in this paper to analyze empirically the efficiency of credit delivery institutions in general and commercial banks in particular for financing of activities allied to agriculture in a less developed district viz., Karimganj district of south Assam.

Keywards : Financing, Agriculture, Banking, Bank Credit, Credit Deployment.

Introduction

Credit is an input and acts as the accelerator of development. Bank finance or bank credit may be defined as the activity concerned with the raising and administering funds from banks. Agriculture in India is central to growth strategy for socio-economic development. A sustained increase in agricultural production and productivity is vital for achieving the socio-economic objectives. In order to raise the agricultural production, Sadhu and Singh (1995) stressed the need for availability of credit to farmers at appropriate costs. Agricultural credit thus is a nucleus of the system of farm operation. In an agrarian economy like India where 79 per cent of the workforce and 64 per cent of the geographical area are under agriculture, it is necessary that desired quantum of credit should be made available in rural areas. Sufficient and timely availability of credit particularly to the small farmers is of crucial importance for a dynamic agricultural sector. However, the poor farmers often lack the accessibility to institutional sources of finance and have to obtain loans from unscrupulous money-lenders at high interest rates (Ahmad, 1998). The reform measures launched in 1991 based on Narasimham Committee (1998) indicated that timely and adequate availability of credit rather than its costs is very indispensable for intended beneficiaries. The impact of Narasimham committee recommendations with regard to lending to priority sector in general and agriculture and allied sector in particular has not been encouraging (Majumdar, 2001). The banks are not able to reach the prescribed target of lending to agriculture and weaker section. The small farmers and marginal farmers are continued to be both credit and demand constraints. The bankers have the excuse that the constraints facing by them with regard to deployment of credit in agricultural sector are lack of viable credit products, implying lack of demand for credit etc. On the other hand, there exists an informal sector which provides agricultural credit at higher rates of interest, which indicates that there are no demand constraints.

Outline of the study area

Karimganj is the southernmost district of Assam covers an area of 1809 sq. km. and shares 92 Kms.

Of International Border with neighbouring country of Bangladesh. It lies between $24^0$15'N and $25^0$55'N latitude and $92^0$15'E and $92^0$35'E longitudes. The district is bounded on the North by Bangladesh and Cachar district, on the South by Mizoram and Tripura states, on the West by Bangladesh and Tripura, and on the East by Hailakandi district. Together with two other neighbouring districts – Cachar and Hailakandi. It comprising 945 villages and 4 towns (GoA: 2024). The topography of the district is quadrilateral shape composed of high hills, low lands, level plains dotted with isolated hills called 'tillas'. The district is densely populated, industrially backward with an agrarian bias. The literacy rate in the district is 79.72 per cent which is higher than the national average (GoI, 2024). Nearly 80 per cent of the workforce and 35 per cent of the geographical area are under agriculture. The soil of the district is highly acidic in nature and is of alluvial origin. High lands within the district are generally planted with tea while plain areas are covered with rice. The rice and tea together occupy more than 90 per cent of gross cropped area of the district. Sugarcane, oil seeds, potatoes, pulses etc. are also produced. The area under high yielding variety is 39 per cent of the gross cropped area of the district. The average yield of rice per hectare was 24617356 as per 2017-2024. The climatic condition of the district is characterized by high temperature and heavy rainfall. The adequacy of finance is essential for development of a dynamic agricultural sector. The rate of growth of flow of institutional finance in the district has not shown significant rise. The district has 4.3 per cent of bank offices of state Assam (GoI, 2002). At present, 10 public sector banks with 36 branches, 1 regional rural bank (Assam Gramin Vikash Bank) with 17 branches and 2 co-operative banks with 3 branches are operating in the district. The table- 1 shows the banking network of the area under study.

Table-1

Banking Network of Karimganj District as on February 2023

Sl.No.	Types of Banks	Number of Banks	Number of Branches
1.	**Public Sector Banks:-**		
(a)	State Bank of India.	1	8
(b)	Other Nationalized Banks.	9	28
2.	**Regional Rural Banks:-**		
(a)	Assam Gramin Vikash Banks.	1	17
3.	**Co-operative Banks.**	2	3
	Total	**13**	**56**

Source:-https://karimganj.assam.gov.in & Lead Bank Office, Karimganj District , Assam.

The economy of the district is basically agrarian. The economic development of the district is highly dependent on the development of agriculture and allied sector, agro-based industries, and service sector. The agriculture in the district is mainly subsistence type which has hampered the industrial growth.

Literature reviewed

Gupta P D & Dey NB(2015)found that in spite of the expansion of formal credit networking system, the volume of institutional credit through KCC scheme is unsatisfactory as the increase in cost of inputs inclusive of labour has raised cost of cultivation, which is higher than the net income from farming. So, it is very important to identify the constraints relating to complex procedures of lending, infrastructure and other support services that are hindering the flow of ground level credit and designed the policies requirement for balanced development and developing inclusive growth. To usher the financial inclusion more and more, Commercial Banks must endeavor to popularize hassle free credit to rural and poor marginal farmers through various schemes in Hailakandi District. Kalita M(2019)finds out that agricultural sector is very backward, neglected and traditional. This is

owing to poor financial condition of farmers and financial institutions have provided loans to farmers which are not sufficient for operating their agricultural activities. Hence, government should take a positive step in this regard to develop the agricultural sector in Assam. Barman BT(2003) studied regarding institutional sources of rural credit in Assam particularly Rangia Sub-Division. She listed all the financing institutions in the field of agriculture and allied activities. In the study, she gave more importance on RRBs and found out that RRBs are the highest providers of credit for the development of 24agriculture sector. The study had limited scope only in institutional sources and non institutional sources of agricultural credit were excluded.Pal A (2004) undertook a study about rural credit delivery system through the co-operative Bank, Commercial Bank and Regional Rural Banks. He also discussed the 28role of S.H.Gs in providing finance to members for socio- economic development as well as meeting their urgent consumption needs.Gandhi J P (2014) conducted a study on the structural changes in rural credit delivery system and analyzed the deficiency of institutional credit to agricultural sector directly and loan recovery problems of agriculturists. He also suggested some positive steps to improve the rural credit delivery cum repayment system. Kumar A, Sing KM ,and Sinha S(2010)observes that the private money lender is still considered a major source of rural credit, yet, the role of institutions in the field of rural credit sector is increasing now-a-days. The rural credit structure has changed and commercial banks have emerged as the main source of institutional credit in the rural areas.Singh F (2016) studied that credit limit as well as refinancing facilities is sanctioned by National Bank for Agriculture and Rural Development (NABARD) to State Cooperative Banks, Land Development Banks, and the Regional Rural Banks to amplify their resources for short as well as medium term loans for different agriculture and non-agricultural purposes. For commercial banks, only refinancing facility is provided by NABARD against term loans that is been issued by them under simplified lending for agriculture and non-agricultural purpose as commercial banks are anticipated to meet short term needs.Deka B R (1984) has conducted a study on "Agricultural Credit in Assam-A Study of Institutional Sources from 1951-2014." He included in his study about the role and trend of finance by commercial Banks and Cooperative Banks and found out that cooperative Banks are playing very crucial role than commercial Banks in the field of agricultural credit. He also discussed the credit utilization system by the marginal farmers. In this study, the researcher completely excluded the non-institutional sources of credit in the rural areas.Barman D (2008) found that the problems of agricultural financing in Assam, particularly in Nalbari district and explained various sources of credit and various problems associated with it. But he did not pay much importance on new form of RRBs Assam Gramin Vikash Bank which reaches almost all areas of Assam.

Objectives

The objective of the Project is to study empirically the bank financing of activities allied to agriculture during economic reform era. The specific objectives of the study are -

- to study the growth of bank credit sanctioned in to the various sectors
- to study the extent of attaining the credit target fixed by the banks in the agricultural sector.
- to identify the factors affecting the deployment of bank credit in agricultural sector.

Methodology

The research methodology for this study will involve a combination of quantitative and qualitative approaches. The quantitative approach will involve the analysis of secondary data sources such as government reports, industry statistics, and academic literature. The qualitative approach will involve the collection of primary data through surveys and interviews with industry experts, government officials and Banks.

Deployment of bank credit to agricultural sector in india:

The banks played a significant role among the institutional sources of agricultural finance. The significance of bank credit in the agricultural sector can be observed against the backdrop of increasing quantum of such credit to this sector. Table-2 presents total bank credit and the deployment of bank credit to the priority sectors

in India. The advances have increased significantly during the economic reform regime. The outstanding bank credit of agricultural sector increased from Rs.23, 980 crores in March1995 to Rs.20,51,549crores in February 2024 recording a 85.55 fold increase. During the same period, the amount of bank advances to small sector increased from Rs.27, 612 crores in March 1995 to Rs.19,62,980 crores in February 2024 but the percentage share of the total bank credit has increased. There is a sudden jump of bank credit deployed to other priority sector during the period under consideration. The same has recorded an increase of 5times i.e., form Rs. 12,549 crores in March 1995 to Rs.1, 07,438 crores in February 2024. It can be argued that the growth of advances to other priority sector in absolute figure has gone over the growth of bank credit to agricultural sector although the percentage share has remained lower throughout the period.

TABLE - 2

Deployment of Bank Credit to Priority Scetor in India

SINo	Priority Sectors	March 2000	March 2001	March 2002	March 2003	March 2004	March 2012	March 2014	March 2018	March 2022	March 2023	Feb 2024
1	Total bank credit	4,00,818	4,69,153	5,36,727	6,69,534	7,64,383	4371400	5657200	7722300	11891314	13675235	16207362
2	Agriculture & allied	44381 (11.1)	51922 (11.0)	60761 (11.3)	73,518 (10.9)	90,541 (11.8)	522500 (5.22)	669400 (6.69)	1021600 (10.22)	1484923 (14.85)	1746051 (17.46)	2051549 (20.15)
3	Small scale industries	52814 (13.2)	56002 (11.9)	57199 (10.6)	60,394 (9.0)	65,855 (8.6)	519100 (5.19)	751100 (7.51)	996400 (9.96)	1377848 (13.78)	1645484 (16.45)	1962680 (19.63)
4	Other priority	34632 (8.6)	46490 (9.9)	57299 (10.7)	77,697 (11.6)	1,07,438 (14.5)	0 (0.00)	0 (0.00)	0 (0.00)	37159 (0.37)	60835 (0.61)	62553 (0.62)

Source : *Reserve Bank of India, Report on Currency and Finance, various issues*

Reserve Bank of India (rbi.org.in)

Bank Financing of Agriculture : the Analysis.

- ***Operational activities of banks in the district.***

The performance of banks in terms of branch expansions, deposit mobilization, credit channelisation, credit-deposit ratios, population served per branch etc is essential for enhancing the bank's lending capacity. The following table-3 has reviewed the agency-wise performance under annual credit plan in the area under study.

Table-3

Agency-wise Performance Under Annual Credit Plan

Agency		Commercial banks	Regional Rural Banks	Co-operative Banks	All Agencies
Year	**Basis**				
2015-2016	Target(Rs.lakh)	7858.49	3954.70	57.85	11871.04
	Achievement(Rs.lakh)	3493.17	828.40	35.02	4356.59
	Achievement (%)	44.45	20.95	60.54	36.70
2016-2017	Target(Rs.lakh)	21275	9599.00	1096.00	31970.00
	Achievement(Rs.lakh)	92137.19	9861.98	998.96	102998.13
	Achievement (%)	433.08	102.74	91.15	322.17

2017-2018	Target(Rs.lakh)	35369.34	5793.84	1044.82	42208.00
	Achievement(Rs.lakh)	40335.04	2153.23	70.34	42558.61
	Achievement (%)	114.04	37.16	6.73	100.83
2018-2019	Target (Rs.lakh)	44762.79	1000.00	750.00	46512.79
	Achievement(Rs.lakh)	48494.56	597.37	11.54	49103.47
	Achievement (%)	108.34	59.74	1.54	105.57
2019-2020	Target(Rs.lakh)	42062.14	3239.36	1211.29	46512.79
	Achievement(Rs.lakh)	53753.00	643.02	7.98	54404.00
	Achievement (%)	127.79	19.85	0.66	116.97
2020-2021	Target(Rs.lakh)	37664.77	10247.98	1078.80	48991.55
	Achievement(Rs.lakh)	46873.70	2178.52	82.23	49134.45
	Achievement (%)	124.45	21.26	7.62	100.29
2021-2022	Target(Rs.lakh)	58593.40	12046.57	3467.32	74107.24
	Achievement(Rs.lakh)	34233.79	3518.86	164.38	37917.03
	Achievement (%)	58.43	29.21	4.74	51.17
2022-2023	Target(Rs.lakh)	31048.27	5747.42	1646.27	38441.96
	Achievement(Rs.lakh)	45898.70	5145.58	164.30	51208.58
	Achievement (%)	147.83	89.53	9.98	133.21

Source:-: File records, Lead Bank Office, Karimganj District, Assam & https://www.nabard.org

It is clear from the table that the credit off take from banks in the area under study continues to remain slow and there has been a trend to attract more deposit. The analysis of bank deposits revealed that the target of Commercial banks was Rs 7858.49 lakh in 2015-2016 but the achievement was Rs 3493.17 lakh which was 44.45% of the total target whereas the target of Regional Rural banks was Rs 3954.70 lakh in 2015-2016 but the achievement was Rs 828.40 lakh which was 20.95% of the total target amount again the target of Co-operative banks was Rs 57.85 lakh in 2015-2016 but the achievement was Rs 35.02 lakh which was 60.54% of the total target amount,thus the total target of all agencies was Rs 11871.04 lakh in 2015-2016 but the achievement was Rs 4356.59 lakh which was 36.75% of the total target amount of all the agencies annual credit plan. But in 2022-2023 the target of Commercial banks was Rs 31048.27 lakh but the achievement was Rs 45898.70 lakh which was 147.85% of the total target whereas the target of Regional Rural banks was Rs 5747.42 lakh but the achievement was Rs 5145.58 lakh which was 89.53% of the total target amount again the target of Co-operative banks was Rs 1646.27 lakh but the achievement was Rs 164.30 lakh which was 9.98% of the total target amount,thus the total target of all agencies was Rs 38441.96 lakh in 2022-2023 but the achievement was Rs 51208.58 lakh which was 133.21% of the total target amount of all the agencies annual credit plan. This further may be due to the fact that the number of population served by per bank branches in the study area is much more than the national average. However, the flow of credit has not been commensurate with the quantum of deposits. It has also been observed that the average C/D ratio of banks in the district is extremely lower than the stipulated ratio of 60 per cent throughout the period which indicates siphoning of loanable funds to other places outside the district.

➢ ***Sector-wise credit deployment of commercial banks:***

The banks operating in the study area, keeping in view the aim and objectives for the economic development under the lead bank schemes have made efforts in providing financial support to agriculture and small scale industries. The sector wise credit deployment in the district is shown in table-4.

Table - 4

Sectorwise Credit Deployment as on March

Year	Agriculture & allied sector	Small scale Sector	Trade & services	Total
2000	15,977	10,571	45,025	71,573
2001	17,998	19,389	41,316	78,703
2002	18,674	10,867	42,534	72,075
2003	22,397	17,650	36,867	76,914
2004	25,345	18,945	40,976	85,266
2005	24,985	25,742	48,325	99,052
2006	16,530	10,923	46,312	73,765
2007	18,756	21,789	49,032	89,577
2008	19,870	23,470	53,219	96,559
2009	28,764	22,841	52,380	1,03,985

Source: Lead Bank Office, Karimganj, Assam.

It is observed from the table that the total loan sanctioned by the banks increased from Rs. 68.6 lakhs in March 2000 to Rs.71 lakhs in March 2009. The loan sanctioned to agricultural sector was Rs.15 lakhs in March 2000 which reduced drastically to Rs.15.4 lakhs in March 1999. The same, however, increased to Rs. 28.8 lakhs in March 2009. A wide fluctuation in sanctioning the bank loan to small scale sector has been practiced during the period under consideration. But the service sector recorded a decreased of Rs.22.8 lakhs loan amount during the same period.

The analysis reveals that the growth of bank credit sanctioned to agricultural sector is insignificant in the reform era while compared with small scale and service sector. The compound growth rate of bank credit endorsed to the sector allied to agriculture is 0.97 per cent during the period under consideration. The same is 3.67 per cent and 6.05 per cent for small scale sector and service sector respectively. This unsatisfactory performance of agricultural credit indicates a wide gap between deployment of bank credit and agricultural development in the area under study. Such practice may act as an obstacle towards achieving the goal of economic reform in this crucial sector of the economy.

➢ ***The Sector-wise performance under annual credit plans:***

The performance of banks to fulfill the target of bank credit in agriculture and allied sector vis-a-vis other sectors in the area under study are presented in table -5. It is evident from the table that the banks have sometime failed to achieve the target fixed in different sectors and there is low degree of positive correlation between target fixed and achievements in agricultural credit sector. Other sectors with time achieve their target fixed. The overall position in case of activities allied to agriculture does not present an encouraging picture.

Table - 5

Sector-wise performance under annual credit plans

Year	Total Agricultural credit			Non-Farm sector			Other priority sector			Total priority sector		
	Target (Rs. lakh)	Ach'ment (Rs. lakh)	Ach'ment (%)	Target (Rs. lakh)	Ach'ment (Rs. lakh)	Ach'ment (%)	Target (Rs. lakh)	Ach'ment (Rs. lakh)	Ach'ment (%)	Target (Rs. lakh)	Ach'ment (Rs. lakh)	Ach'ment (%)
2015-16	7783.44	2529.57	46	1238.90	757.35	61	2848.70	1069.68	38	11871.04	4356.60	37
2016-17	17091.00	7448.10	44	7625.00	9378.89	123	7254.00	147.47	2	31970.00	16974.46	53
2017-18	32942.00	14099.52	43	3373.00	23616.13	700	5893.00	4842.96	82	42208.00	42558.61	101
2018-19	38143.24	14964.71	39	3880.80	32223.85	830	4488.75	1914.91	43	46512.79	49103.47	106
2019-20	38143.24	19011.00	50	3880.80	33660.00	867	4488.75	1733.25	39	46512.79	54404.00	117
2020-21	24375.55	13854.96	56.84	21228.00	34370.28	161.91	3388.00	909.21	26.84	48991.55	49134.45	100.29
2021-22	36408.31	11371.29	31.23	34283.00	13649.41	39.81	3415.93	12896.33	377.53	74107.24	37917.03	51.17
2022-23	18741.10	11001.61	58.70	17364.00	29222.34	168.29	2336.86	10984.63	470.06	38441.96	51208.58	133.21

Source: File records, Lead Bank Office, Karimganj District, Assam & https://www.nabard.org

The percentage of target achieved decreased from 46 percent in 2015-16 to 39 percent in 2018-19 which further increased to 58.70 percent in 2022-23. There is wide variations in the credit performance of banks in agricultural sector. However, the non-farm sector and other priority sector have received progressively better treatment in respect of fulfillment of target by the banks. It has been observed that in case of non-farm and other priority sector the achievements surpassed the targets defeating the objective of giving weight age to other sectors. Thus, a check is required in this respect in the reform era otherwise agriculture and allied activities would suffer from lack of funds.

Sector-wise recovery position:

- ***Recovery performance of banks in agriculture:***

The liquidity of banks largely depends on the recovery of advances. The lower recovery indicates erosion of banks profitability and blocking up bank credit meant from developmental project of the area (Vargheese, 1994). It consequently restricts the banks lending capacity and stands in the way of dilution of funds to farm activities and hence the socio economic development of the area. Table-6 presents the recovery position of banks in agriculture vis-a-vis other sectors in the district under study

Table - 6

Sector-wise Recovery Positions of Banks

Year		Agency			
		Commercial Banks	**Regional Rural Bank**	**Cooperative Banks**	**All Agencies**
2011-12	**Total Demand**	300048	205274	3147	508469
	Total Recovery	132285	139501	2196	273982
	Recovery (%)	44.1	67.9	69.8	53.9
	Overdues	167763(55.9)	65773(32.1)	951(30.2)	234487(46.1)
2014-15	**Total Demand**	524868	100235	1300	626403
	Total Recovery	216523	58567	720	275810
	Recovery (%)	41.3	58.4	55.4	44
	Overdues	308345(58.7)	41668(41.6)	580(44.6)	350593(56)

2015-16	**Total Demand**	477624	31759	20710	546386
	Total Recovery	149598	20710	9532	179840
	Recovery (%)	31.3	65.2	46	32.9
	Overdues	328026(68.7)	11049(34.8)	11178(54)	366546(67.1)
2016-17	**Total Demand**	437372	188556	27745	653673
	Total Recovery	248934	85471	1144	335549
	Recovery (%)	56.9	45.3	4.1	51.3
	Overdues	188438(43.1)	103085(54.7)	26601(95.9)	318124(48.7)
2018-19	**Total Demand**	654354	613249	1855	1269458
	Total Recovery	436894	302698	1855	741447
	Recovery (%)	66.8	49.4	100	58.4
	Overdues	217460(33.2)	310551(50.6)	_	518011(41.6)

Source: Lead Bank Statements, Lead Bank Office, Karimganj District & https://www.nabard.org

It has been observed that the recovery performance of banks was poor in the district. It was 44.1 per cent in Commercial Banks followed by 67.9 per cent in Regional Rural Bank and 69.8 per cent in Cooperative Banks followed by 53.9 per cent in All agencies in the year 2011-12. However, the overall recovery of bank advances has been improved steadily during 2011-2019. In the year 2018-19, commercial banks accredited to 66.8 per cent recovery, regional rural bank 49.4 per cent, cooperative banks 100 per cent and all agencies 58.4 per cent leaving thereby a major chunk of bank advances as overdue.

The recovery performance in agriculture and allied activities is relatively discouraging to other sectors in the district. The severity of the situation would be cleared when we unearth Rs.436,894 thousands (66.8 per cent) was realized against the total outstanding dues of Rs.217,460 thousands under commercial banks in 2018-19. A noteworthy feature of banks' lending is that, despite mounting overdues in each year, the agriculture and allied sectors enjoyed an incredible share of bank credit. The reasons of poor recovery may be attributed to various factors such as lack of supervision of end use of fund , insufficient and under financing, deficiencies in lending policies, defective processing of loan applications, political interference for loan exemption, willful default, communication gap between bankers and customers, constant failure of monsoon, natural calamities famine flood etc. The mounting overdues restricted the bank's lending capacity. Therefore, an immediate action from appropriate authority to pick up the pace of recovery of loan in agricultural sector is needed.

➢ ***Factors influencing agricultural financing by commercial banks:***

The above analysis, therefore, shows that the bank credit support to agricultural sector is not satisfactory. Even the economic reform measures are not able to bell the cat. Thus, it is very important to identify the factors affecting bank financing of agricultural activities. For this we have used regression analysis considering independent variables like percentage of overdue in agricultural sector, interest rate on farm credit, performance of banks measured with Credit-Deposit (C/D) ratios, credit delivery centers, ie, branch expansion of banks and volume of business (deposit plus advance).

Problems Faced By Credit Delivery Institutions For Agricultural Financing:

The Problems faced by credit delivery institutions in agricultural financing demands an exploration of numerous facts. The difficult landscape of agricultural financing presents a countless of obstacles for institutions tasked with disbursing credit to farmers. This discourse will scrutinize the multifaceted issues ranging from

institutional constraints to market dynamics, regulatory frameworks, technological advancements, and socio-economic factors influencing credit delivery in agriculture.

- **Institutional Constraints:**
  - Limited institutional capacity: Many credit delivery institutions, particularly in developing countries, suffer from inadequate infrastructure, human resources, and technological capabilities, hindering their ability to effectively assess creditworthiness and manage loan portfolios.
  - Risk aversion: Financial institutions often exhibit risk aversion towards agricultural lending due to the sector's inherent volatility, susceptibility to external factors like weather conditions, pests, and diseases, as well as long gestation periods for returns on investment.
  - Lack of understanding: Some institutions lack a deep understanding of the agricultural sector, leading to mispricing of risks, inappropriate loan products, and inadequate support services for farmers.
- **Market Dynamics:**
  - Seasonal cash flows: Agriculture is characterized by seasonal income flows, making it challenging for farmers to repay loans according to conventional repayment schedules. This cyclic nature of income complicates loan structuring and repayment management for credit institutions.
  - Price volatility: Fluctuations in commodity prices expose farmers and lenders to market risks, making it difficult to accurately project cash flows and assess creditworthiness. This volatility also affects the collateral value of agricultural assets.
  - Supply chain complexities: Agricultural value chains involve multiple stakeholders, each with distinct financial needs and risk profiles. Credit delivery institutions must navigate these complexities to provide tailored financial products and services.
- **Regulatory Frameworks:**
  - Inadequate policy support: Weak or inconsistent regulatory frameworks in some regions fail to provide the necessary support for agricultural finance, resulting in limited access to credit, high interest rates, and a lack of incentives for financial institutions to invest in the sector.
  - Collateral requirements: Traditional collateral-based lending models often pose barriers to smallholder farmers who lack sufficient tangible assets to pledge as collateral. Addressing this challenge requires innovative approaches such as alternative forms of collateral or risk-sharing mechanisms.
- **Technological Advancements**:
  - Digital divide: While technological innovations such as mobile banking and digital payment systems hold immense potential for expanding access to agricultural finance, the digital divide hampers their widespread adoption, especially in rural areas where connectivity and digital literacy remain low.
  - Data challenges: Effective credit risk assessment relies on accurate and timely data. However, data collection and management systems in many agricultural economies are inadequate, leading to information asymmetry and suboptimal lending decisions.
- **Socio-Economic Factors:**
  - Rural poverty: Poverty prevalence in rural agricultural communities limits farmers' ability to access formal financial services. The lack of savings, assets, and financial literacy among rural populations further exacerbates financial exclusion.
  - Gender disparities: Women farmers often face systemic barriers to accessing credit, including limited land ownership rights, cultural biases, and discriminatory lending practices. Bridging the gender gap in agricultural finance requires targeted interventions and inclusive policies.

In conclusion, addressing the countlessproblems faced by credit delivery institutions in agricultural financing demands a holistic approach that encompasses institutional strengthening, supportive regulatory frameworks, technological innovation, and socio-economic empowerment.

Remedial Measures To Tackle The Problems:

To tackle the problems related to credit delivery institutions for agricultural financing, several measures can be taken:

- **Capacity Building:** Enhance the capacity of financial institutions by providing training and resources on agricultural financing, risk assessment, and technology adoption.
- **Policy Support:** Develop and implement policies that promote agricultural financing, including interest rate subsidies, loan guarantees, and credit insurance schemes.
- **Technology Integration:** Utilize technology such as digital platforms, mobile banking, and data analytics to streamline the loan application process, improve credit assessment, and reduce transaction costs.
- **Collaboration:** Foster collaboration between financial institutions, government agencies, agricultural extension services, and farmers' organizations to improve access to credit, share risk, and enhance market linkages.
- **Risk Management:** Implement effective risk management practices, including credit scoring models, collateral options, and monitoring mechanisms to mitigate credit risks associated with agricultural lending.
- **Incentives:** Provide incentives for financial institutions to prioritize agricultural lending, such as preferential treatment in regulatory requirements, tax benefits, and access to dedicated funding sources.
- **Market Development:** Support the development of agricultural markets, value chains, and infrastructure to increase the profitability and sustainability of agricultural activities, thereby enhancing the creditworthiness of borrowers.

By implementing these measures, credit delivery institutions can better serve the agricultural sector, improve access to finance for farmers, and contribute to agricultural growth and rural development.

Conclusion

Agriculture plays an important role in the economic development of India. Agriculture credit helps the farmers to improve the agriculture productivity. Bank plays major role in providing agriculture credit. This paper examined the problems faced by bankers while providing agriculture credit. The result of the study showed that, Identification of real cultivator, fixing prudential norms, Increasing demand for agriculture credit are the important problems faced by bankers while providing agriculture credit. Therefore, bankers should supervision and better follow up of loan after disbursement of loans.

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Srimanta Sankaradeva's Philosophy of Economic Development and Community Transformation: A Historical Perspective on Global Sustainable Development

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Abstract

Srimanta Sankaradeva (1449 CE - 1568 CE) the legendary saint-scholar, socio-cultural reformer and spiritual leader of medieval Assam was able to develop a holistic socio-philosophical model that focused on spiritual emancipation, local economic self-reliance and community welfare. Sankaradeva introduced local governance mechanisms such as Namghar (community prayer hall) and Sattra (monastic centre), micro-savings and democracy in resource distribution through early cooperative production and local governance institutions. His many initiatives starting from mass education in weaving and craft making, to health care and anti-caste social integration, paved the way for a self-reliant economy of the region, entrenched in ethical humanism (Borkakoti, 2005).

This study is aimed at assessing Sankaradeva's economic philosophy as seen in the light of the models of sustainable development in the world today. The study examines the historical texts, hagiographies, and contemporary socio-economic literature, and shows how Sankaradeva's principles clearly anticipate the United Nations Sustainable Development Goals (SDGs) which include SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), SDG 10 (Reduced Inequalities), and SDG 12 (Responsible Consumption and Production). The idea of utilizing local natural resources, establishing sustainable micro-institutions and fostering a work-for-value mindset is a sustainable socio-economic model for modern-day community transformation (Neog, 1980).

Keywords : Srimanta Sankaradeva, *Ekasarana Nama Dharma*, *Namghar*, *Sattra* Economy, Sustainable Development Goals (SDGs), Micro-finance (*Mustidan*), Inclusive Growth.

1. Introduction

The character of the discourse on sustainable economic development has changed from being based on policies oriented mainly towards growth as a purely capital-based process to a discourse based on socio-ethical and community-centric policies. In the context of contemporary economic issues of increasing inequality, environmental degradation and rural problems, a structural alternative is needed that incorporates humanistic values and economic productivity. From that perspective, the historical actions of the Indian 15th–16th century Bhakti reformers are of immense value to understand local economic governance and collective resilience. Of these reformers Mahapurusha Srimanta Sankaradeva is the most outstanding, who infused an economic perspective in his socio-cultural and spiritual revolution in the Brahmaputra Valley (Barman, 1999).

Sankaradeva's idea of Ekasarana Nama Dharma was not just a theological reform but, it was also a potent means of socio-economic reorganization. Sankaradeva eliminated caste barriers to employment, and broke the monopolies of the elite priests over resources, thus promoting an active and productive peasantry and artisanry class. The Namghar (House of God) was an institution that played the dual roles of house of worship, judicial assembly, school, and cooperative economic hub that was central to this shift. These institutions (which were cooperative in nature)

worked through collective labour, decentralized decision making and specialized vocational training, and rendered marginalised agrarian communities self-reliant economic units (Sarma, 1966).

In the modern research, the economic framework followed by Sankaradeva is in sync with the most important values in the contemporary world which are, in particular, the United Nations Sustainable Development Goals. His focus on Mustidan (a micro-savings method for saving in the family), using ecologically friendly resources (including local bamboo, wood and plant dyes) and on dignified manual labour (Kaya-Srama) set an early precedent for understanding circular economics and human resource development. The lessons from Sankaradeva's socio-economic strategies for scholars, policy makers and development practitioners are of great value in the context of finding sustainable economic growth strategies that are rooted in the community and ethical (Cantlie, 1984).

2. Background of the Study

Politically, Assam was divided into many small domains in the 15th century, socially it was stratified, feudal chieftains (Bhuyans) oppressed its population with heavy taxation and they had superstitious ritualistic practices in their country. The economic power and land ownership was mostly in the hands of the elite socio-religious classes and hence the agrarian masses and indigenous ethnic groups were left to be economic exploited and socially disenfranchised. Srimanta Sankaradeva in turn came up with the concept of a comprehensive reform movement which combined spiritual democracy with economic self-reliance. Sankaradeva knew that spiritual emancipation would be difficult to achieve, if there was no social capital, no local crafts, no group labour and no safety for the poor and weaker sections in the society, so he created community institutions like Sattras and Namghars to generate social capital, to promote local crafts, to organise group labour and to ensure the safety of the poor and weaker sections in the society.

3. Statement of the Research Problem

Though there is ample academic work available that spells out Srimanta Sankaradeva's literary, theatrical, musical and religious works, there is little work done on his systematic approach towards economic development and self-reliance of the region. It is important to note that Sankaradeva's innovations in the field of institutional development, including micro-saving models, mobilizing labour in an egalitarian manner, sustainable resource management and craft vocationalization, pre-date modern-day participatory economic models. Contemporary development studies, without a link to Sankaradeva's historical economic paradigms and the global sustainable development principles of today (in this context, the UN SDGs), miss out on a historical model of socio-economic transformation, rooted in culture.

4. Review of Literature

1. **Sarma, S. N. (1966),"*The Neo-Vaishnavite Movement and the Satra Institution of Assam",*** that deals with the origin, spread and socio-economic roles of the Sattra institution in the entire Brahmaputra Valley. The book describes the organization of Sattras in the extensive agricultural lands and utilization of disciplined labour force. It provides glimpses into the development of craft specialism as found in the monastic guilds, including woodcarving, mask-making and manuscript painting. Sarma stresses that Sattras were rural "micro-economies" which protected local arts and crafts. This is a book that is foundational linking spiritual organization with material productivity.
2. **Nath, R. M. (1978),"*The Background of Assamese Culture",*** by Shankaradeva examines the technological and artistic developments that he introduced in the fields of textiles, theater artefacts and architecture. They point to renowned historical accomplishments such as the weaving of Vrindavani Vastra, demonstrating advanced textile management and coordination of local artisans. Nath speaks on the importance of Sankaradeva bringing the act of manual labour to a spiritual level, creating a culture of craftsmanship. The book documents the impact that Sankaradeva had on local

manufacturing and skill development. It provides an important record of the medieval industrial and artistic organization.

3. **Neog, M. (1980),"*Early History of the Vaishnava Faith and Movement in Assam",*** traces the socio-cultural history of the medieval Assam in the pre- and during Vaishnavite period. The study examines how the Sattra network was engaged in administration and economics as well as its spiritual role. Neog shares her experiences on the collection of land revenues, communal farming and institutional management in the Sattras. He describes the systematic dismantling of the caste barriers to make for an inclusive work culture. It is because this source still plays a vital role in the comprehension of the institutional model of Sankaradeva's.

4. **Cantlie, A. (1984),"*The Assamese: Religion, Caste and Sect in an Indian Village",*** by E.J. G. Jones provides an ethnographic and historical background of the Namghar as a village court, treasury and socio-economic center of the village. The book demonstrates the financing of public goods in the village level with collective work and voluntary contributions. Taking a closer look at the egalitarian distribution of offerings (Prasada), Cantlie examines its function as a means of promoting social justice. She illustrates the impact of the institutional system which Sankaradeva established in the 15th century on the economy of the rural people of Assam today. The study highlights the sustainability of the institutional legacy of Sankaradeva's vision.

5. **Gogoi, L. (1988),"*The Tai-Ahom Religion and Development of Assamese Culture",*** deals with the relationship between the Ahom state economy and the simultaneously emerged parallel socio-economic institutions by Sankaradeva. It outlines Sattras' innovative practices in their agriculture and sustainable forestry management, which enabled them to make the best use of the land. Gogoi says Sankaradeva's teachings encouraged people to be self-reliant and not to be parasitic and depend on state largesse. She illuminates the complex interaction of royal political economic systems and decentralized monastic economies of the book. It is a key source of information for the economic context of the region.

6. **Dutta, B. (1990),"*Sankaradeva's Vision of Tribal Integration and Cultural Synthesis*",** that discusses how Sankaradeva brought many tribes together in a single socio-cultural and economic system. The research emphasizes the use of typical skills and materials of the tribes in the community projects and production networks of Sattra. Dutta demonstrates that economic integration was accompanied by social acceptance and built cross ethnic cooperative networks. The study shows how socio-economic integration helped to avoid ethnic conflicts and to enhance regional market networks. It gives a blueprint of the inclusive modern development.

7. **Bhattacharjee, J. B. (1994),"*Socio-Economic History of North-East India",*** highlights the macro-economic changes that took place in medieval North-East India as a result of Bhakti reform movement. It is found that Sankaradeva's Mustidan system is an early micro-finance system and rural social security system. It examines the implication of the elimination of the caste system and the emergence of labour mobility, leading to increased productivity in the agricultural sector in different parts of the region. Bhattacharjee believes that it was Sankaradeva who had helped to establish Assam's modern civil society and informal micro-economic management. The work offers a wide macro-economic analytical prism with which to consider the history of the region.

8. **Barman, S. (1999),"*Sankaradeva and the Vaishnava Movement in Assam",*** explores the democratic spirit and class transcending

characteristics of Sankaradeva's religious and economic movement. Sankaradeva relieved the poor peasantry from financial distress, by doing away with the costly animal sacrifice and complex Brahmanical rituals, the author concludes. The text goes into detail about the shift in economic resources from ritual to collective production and community welfare. Vocational empowerment is also shown to have created social mobility among the lower castes, Barman says. This reading is a thought-provoking discussion on the socio-religious economic burden in medieval times.

9. **Saikia, R. (2001),"*Social and Economic History of Assam (1853-1921)",*** deals with an economic continuity of the pre-colonial Assamese institutions with respect to the colonial era. The paper considers how the decentralised infrastructure of the village, based around the Namghars, held people together and enabled them to remain socio-economically stable in the face of external political pressures. Saikia speaks about the communal saving of grain and micro-savings in the agrarian communities in the time of economic shocks. The author sees Sankaradeva legacy as a socio-economic buffer, safeguarding the community cohesiveness. This text is a linkage of medieval socio-economic structures and modern economic history.

10. **Borkakoti, S. K. (2005)," *Srimanta Sankaradeva: a Multi-Faceted Genius",*** offers a thorough examination of Sankaradeva's system contributions, apart from the religious philosophy. The text emphasizes that Sankaradeva had introduced economic activities in the context of his everyday spiritual life in the form of institutions such as the Namghar. It emphasizes his efforts in organizing local artisans, creating weaving centres and development of natural resources in an ecologically friendly manner. The author believes that Sankaradeva was an early planner and that he had set the trend of decentralisation in Assam in motion. The book puts in place the historical context for the appreciation of Sankaradeva's socio-economic programmes.

5. Research Objectives

The main objectives of the study are-

1. To understand the historical development and institutional aspects of economic philosophy of Sri Srimanta Sankaradeva, particularly 'Namghar' and 'Sattra'.
2. To understand the impact of socio-religious reforms of Sankaradeva on inclusive economic growth, dignity of labour and social integration that breaks the caste barriers.
3. To assess the working of the micro-economic mechanisms provided by Sankaradeva such as Mustidan (micro-savings), Khanikars (development of artisans) and cooperative labour.
4. To compare Srimanta Sankaradeva's socio-economic strategies with the present UN Sustainable Development Goals (SDGs) in terms of its relevance and applicability to sustainable development of communities around the world.

6. Research Questions

1. How did Srimanta Sankaradeva develop an institutionalized economic of self-reliance and governance of the community through Namghar and Sattra networks?
2. How did the elimination of ritual expenses and casteism help in the economic inclusion and productivity of work in medieval Assam?
3. What were the micro-economic strategies (micro-finance, skill training, etc. and the utilization of resources) that were part of Sankaradeva's philosophy?
4. In what way are Sankaradeva's socio-economic models (15thcentury) similar and different with the contemporary understandings of sustainable development like the UN SDGs?

7. Research Methodology

For the present study, a qualitative research methodology has been taken which is based on the historical, descriptive and analytical approach with

philosophical contents from Srimanta Sankaradeva's Philosophy of Economic Development and Community Transformation in the context of Global Sustainable Development. The research combines historical research with an interdisciplinary approach to analysis, utilising history, economics, sociology, religious studies, philosophy and sustainable development studies. This seeks to address the issue of how Sankaradeva's notions of self-reliance, moral work, social engagement, decentralisation and social harmony influenced economic development and how these principles continue to be pertinent to the United Nations Sustainable Development Goals (SDGs). This study uses two kinds of data: primary and secondary data, with the aid of historical criticism and thematic content analysis.

Primary Sources

The primary sources are the original historical documents which can be directly linked to the life, philosophy and institutional heritage of Srimanta Sankaradeva. These include:

- Historical records such as Buranjis, copper-plate inscriptions and documents from the archives on the Neo-Vaishnavite movement.
- Records of institutions, manuscripts and administrative documents in well-known Sattras like Bordowa, Barpeta, Auniati, Kamalabari and Dakhinpat Satra.
- Enquiry with field observations are carried out at selected Namghars, Sattras and gain understanding of the current socio-economic and community functions of them.
- Interviews with the Sattradhikars, religious scholars, cultural practitioners, historians, artisans, community elders and the members of the weaving and manuscript preservation, Bhaona and community service groups etc. (traditional economic activities) through oral interviews.
- Photographic records and site notes taken on site visits.

These primary sources offer firsthand information about Sankaradeva's philosophy of ethical economics, cooperative institutions, social equality, education, cultural production and community based development.

Secondary Sources

The secondary sources are analysed in relation to the primary sources and provide a critical interpretation and context of the sources. They include:

- The books and monographs on Srimanta Sankaradeva, Neo-Vaishnavism, Assamese history, economic history and sustainable development.
- Peer-reviewed journal articles, conference proceedings, doctoral theses, dissertations and research reports.
- Government publications on the cultural heritage of Assam, Rural development and sustainable development policies of Assam.
- University publications, R&D institutions, museums, archives and cultural institutions publications.
- Economic philosophy articles and community development articles, decentralised governance and indigenous knowledge systems.
- The literature of international development, social capital, cooperative economy and the United Nations Sustainable Development Goals (SDGs).

Study Area

While the research has a global significance, the geographical focus is primarily Assam with special reference to the historical centres of the Neo-Vaishnavite movement like Bordowa, Majuli, Barpeta, Nagaon and other important Sattra and Namghar institutions where Sankaradeva's socio-economic philosophy continues to shape community life.

8. Results

8.1. Socio-Political and Economic Conditions of Medieval Assam

History, as empirical knowledge shows, was plagued by high degree of socio-political disunity, huge economic exploitation and rigid structural stratification

in 15th and 16th century Assam which infested the rural agricultural productivity to a great extent. Politically the Brahmaputra Valley was contested by rival territorial powers such as growing Ahom state, Koch kingdom, Chutiya state, Kachari kingdom and Bara-Bhuyan, the autonomous feudal chiefs which led to constant wars, land insecurity and social turmoil. From the economic standpoint, the peasantry suffered the most from the heavy feudal labour extractions (antecedents of the Paik system) and from an exploitative religious economy based on the greed of the priestly elites who demanded exorbitant fees (Dakshina), animal sacrifices and ritualistic offerings, thereby draining household agrarian savings. Socially, the population was highly polarized as the strict caste systems, untouchability and ethnic alienation excluded the lower caste and indigenous tribal groups from socio-economic activities and institutions. In this context of pervasive rural dissatisfaction and marginalization Sankaradeva launched his revolutionary egalitarian movement called Ekasarana Nama Dharma which laid the foundation of an alternative socio-economic vision which aimed to emancipate the labour of the rural masses, create a community culture of resilience and launch democratic micro institutions in the region (Gait, 1906).

8.2. Institutional Mechanics of the Satra and Namghar Systems

A study of the historical facts has shown that the socio-economic initiative of Sankaradeva was built on two new institutional frameworks that were established: the Satra (monastic centre) and the Namghar (village prayer and community assembly hall). The Namghar was a decentralized multi-purpose village centre which provided judicial dispute resolution, democratic governance, cultural production and cooperative micro-economic management services without the need for external state bureaucracies. One of the key empirical findings is the institutionalization of localized micro-saving mechanisms, in particular Mustidan, where households make small deposits of a few rice grains every day into a central grain bank to build up community pressure tanks to back impoverished households during times of flood, crop failure, and to finance public infrastructure. At the same time the Satras served as vocational training centres, each having a specialist craft guild (Khanikars) that developed particular skills in woodcarving, architecture, mask-making, natural dye production and book-making and oversaw communal agriculture land in collaboration with other members of the Satra. These two institutions, when combined, created rich social capital and made the villages in Assamese community into self-reliant and highly organized cooperative groups, which could maintain the economic health of the villages. (Sarma, 1966).

Sl. No	Institution	Primary Functions	Contribution to Economic Development	Contribution to Sustainable Development
1	Satra	Religious education and spiritual guidance	Developed skilled artisans, scribes, painters, mask-makers, musicians, and performers, creating livelihood opportunities	Preserved cultural heritage, promoted decent work, and strengthened community community resilience
2	Satra	Traditional education	Improved literacy, moral values, leadership, and human resource development	Supported quality education and lifelong learning

3	Satra	Cultural production	Encouraged manuscript painting, mask-making (*Mukha Shilpa*), music, dance, drama (*Bhaona*), and handicrafts	Sustained creative industries and safeguarded intangible cultural heritage
4	Satra	Community organization	Fostered cooperation, discipline, and collective participation	Strengthened social cohesion and inclusive institutions
5	Namghar	Community worship and dialogue	Functioned as a local decision -making and dispute-resolution centre, reducing social conflicts	Promoted peace, justice, and participatory governance
6	Namghar	Social integration	Brought together people irrespective of caste and social status	Encouraged inclusive development and reduced inequalities
7	Namghar	Cultural activities	Promoted festivals, devotional music, story telling, and traditional performances	Strengthened cultural identity and local cultural tourism
8	Satra and Namghar	Skill development	Provided practical training in traditional arts, crafts, agriculture, and community service	Enhanced employability and sustainable livelihoods
9	Satra and Namghar	Social capital	Built networks of trust, cooperation, volunteerism, and mutual support	Encouraged resilient communities and community-based development
10	Satra and Namghar	Community-based economic activities	Supported traditional crafts, cultural events, pilgrimage, local markets, and artisan livelihoods	Promoted sustainable local economies and cultural entrepreneurship

Institutional Foundations of Economic Development through the Satra and Namghar

8.3. Vocational Diversification and Craft Organization

The data on the history of Sankaradeva shows that he did himself stand up for manual labour and artisanal craft and transformed them into spiritual and economic resources by removing the monopoly of castes held on the occupation. Rejection of Ascetic Renunciation resulted in the elevation of physical labour (Kaya-Srama) and Sankaradeva mastered himself in various fields like Agricultural Engineering, Weaving Textiles, Making Instruments, Manusc-scripting and Architecture. The example of this mobilisation of craft, of a large woven fabric project, is well documented in history and was the Vrindavani Vastra, a project that involved more than a hundred families of artisans weavers of textiles from Tantikuchi, elevating the craft to a structured highly skilled industry. Sankaradeva's efforts created opportunities for upward mobility and skill and lower-caste people, as well as indigenous tribal people, to become a part of these artisans groups that were free from the feudal barriers. This was a system of reorganization of labour, which spread the economy in medieval Assam beyond subsistence agriculture, creating a strong system of cottage and artisanal production all over the valley (Borkakoti, 2006).

8.4. Convergence with Global Sustainable Development Goals (SDGs)

By analyzing Sankaradeva's institutional practices in terms of the internationally accepted indicators, we can see that there is a correlation with the United Nations Sustainable Development Goals (SDGs). His radical approach to breaking the caste barrier and systemically including the marginalised tribal groups are a direct reflection of the goals of SDG 10 (Reduced Inequalities) and SDG 16 (Peace, Justice and Strong Institutions). The social safety nets of the Namghar, which were decentralized, such as Mustidan (borrowing against grain) and communal grain storage provided the essentials of SDG1 (No poverty) and SDG2 (Zero hunger), providing basic food security and emergency cushions for vulnerable Namghar rural households centuries before the advent of modern social safety nets. In addition, Sankaradeva's principles of using locally available and renewable resources such as bamboo, wood and organic vegetable dyes were in favour of others, which were able to deplete the environment, thus reflecting SDG 12 (Responsible Consumption and Production) and SDG 15 (Life on Land). These historical findings show that Sankaradeva's interventions in the 15th century were a prototype of holistic sustainable community development, which could be considered as a very early and fully functioning model, as early as (Barman, 1999).

9. Analysis

9.1. Analytical Evaluation of Ethical Economics and Human Capabilities

The political thought of Sankaradeva becomes evident when one looks at his economic philosophy in the context of contemporary welfare economics, which has evolved away from the basic concept of economic accumulation towards the "capability approach" of Amartya Sen in which what matters is the increase of human freedom and social capabilities. Animal sacrifice, ritualistic ritual obligations and compulsory tithes to the priest were major financial burdens on the poor peasantry, who were more likely to be struggling to feed their families, keeping them healthy and investing in their livelihoods.The removal of the elaborate ritual requirements, animal sacrifice and tithes required to the priest, curtailed an important financial obligation from poor peasantry, allowing them to more effectively allocate precious resources to nutrition, health and productive investment. Santosa (contentment) was his major focus that set in a moral framework of the boundaries of greed, predatory accumulation and exploitation, whereby wealth is not a purely personal value for luxury consumption, but rather a social trust for the good of the community and infrastructure. In addition, by raising the value of physical effort (Kaya-Srama) from being a feudal disgrace to spiritual engagement, human dignity and humanity was revived among all the workers, irrespective of the type of work they do. It was an integration of moral restraint, dignity of work, capacity building that gave rise to an ethical economic paradigm which reinforced human well being and social equity through material improvement (Sen, 1999).

9.2. Structural Analysis of Micro-Finance and Communal Resource Governance

A study of the micro-economic mechanisms that are "built-in" into the Satra and Namghar system shows a very complex and sophisticated system of common pool resource management and decentralised micro-finance. Mechanisms such as Mustidan operated as an informal, low friction micro-saving and insurance scheme, based on the regular, non-coercive, but still regular and small, contributions from the households. The Namghar served as a common economic resource that enabled the members to combine resources (capital, land and labour) to undertake collective projects such as building irrigation canals, community halls and earthen dams like the old Tembuwani dam by performing all work through their own voluntary labour (Raij). This model was able to reduce transaction costs, avoid the "tragedy of the commons" and was based on thick social networks, common moral rules, and social surveillance, instead of state control. The institutional mechanisms thus offered a buffer or protective mechanism for the rural society of Assam that was resilient and self-governing and allowed for the dampening of natural disaster, political conflict and market fluctuation shocks to the system (Cantlie, 1984).

9.3. Socio-Cultural Synthesis and Economic Inclusion of Marginalized Groups

The socio-cultural dynamics of the Sankaradeva movement are analysed and it is shown that an effort was made to integrate cross-ethnically in his movement, creating labor markets and economic cooperation in the region. Sankaradeva broke down the caste divisions and ethnic and tribal barriers between people in the Namghar where they shared a meal without regard to caste, so that an equitable environment was created for people of all castes, ethnicities and tribes. This social integration allowed the exchange of indigenous technical knowledge of various aspects, including bamboo crafts, weaving methods, and medicinal knowledge, with the wider regional process of agricultural and artisanal production. Incorporation of women, and traditionally marginalised folks in socio-religious governance and economic activities led to a rise in labour efficiency and social cohesion in multi-ethnic rural spaces. This systematic synthesis, enabled a common regional identity and an economic eco-system that is inclusive and recognizes diversity as a catalyst for the collective productivity, instead of a cause of conflict (Dutta, 1990).

9.4. Environmental Ethics and Circular Resource Management

When Sankaradeva's artistic and life practices are examined in light of the principles of the circular economy, and of sustainable use of resources, one can discern his early embrace of the concept. From the preparation of manuscripts with natural material such as Sanchipat (bark of Aquilaria agallocha tree) to the construction of props and masks for theatrical performances with bamboo, wood, clay and plant dyes, the material culture within the Satras was solely based on natural resources that can be decomposed without causing damage to the environment. Such focus on the use of renewable resources helped local deforestation, avoid industrial waste and maintain the ecological equilibrium of the sensitive riverine ecosystems of the Brahmaputra Valley. Moreover, Sankaradeva's work of religious literature infused a sacredity into the non-human world, nature, and their interconnections, seeing them as an interconnected spiritual web rather than an object for exploitation. This ecological ethics gave a culturally-based basis which balanced human economic production with maintaining the environment, and was an alternative to the industrial paradigms of the modern era which are based on the extraction of natural resources (Saikia, 2001).

10. Discussion

10.1. Comparative Evaluation: Sankaradeva's Framework vs. Modern Development Models

When looking at the Sankaradeva's pre-industrial economic structure, compared to the current, development-driven top-down frameworks, there are key differences in emphasis, system and sustainability. Growth models, which are usually based on technology and capital, have a strong focus on Gross Domestic Product (GDP) measures, growth in markets and

centralized industrialization, with potential negative side effects such as environmental degradation, concentration of wealth, rural displacement and social atomization. Sankaradeva's model, on the other hand, focused on human capabilities, social capital, decentralized governance, and moral discipline, and gauged the development of each community by the extent to which it could achieve well-being and equitable access to resources. Sankaradeva's system, however, built into the Namghar, not only integrated social responsibility, by having a shared spiritual ethics and democratic consensus, but also addressed market failures in a manner which was not being done in modern market economies. This comparative perspective shows that there is a possibility of long-term stability of communities also without having to pay the high social and ecological price for unconstrained market-driven industrialization (Bhattacharjee, 1994), if there is a focus on economic frameworks that emphasize on social capital, ethical restrain and resource management at local level).

10.2. Contemporary Relevance to Rural Regeneration and Modern Policy

The solutions of Sankaradeva's socio-economic issues can be used as reference models to tackle the rural distress, unemployment, and social dichotomy in the Global South, including Assam. The reactivation of the Namghar network as contemporary nodes of cooperative rural governance, decentralized renewable energy and local micro-finance institutions, can be a good way to strengthen state-led rural development initiatives while building on existing social trust. In addition, the concept of organised artisanal guilds (Khanikars) developed by Sankaradeva is helpful in the development of sustainable creative economies in which traditional handicrafts, sustainable eco-friendly mask-making work and indigenous weaving of the traditional fabrics are linked to international markets as sustainable eco-products. Ethnic integration and voluntary labour cooperation (Raij) principles of Sankaradeva can be utilized by modern policymakers to create welfare programs for the community, which can avoid ethnic conflicts and promote inclusive economic growth bottom-up (Saikia, 2014).



Mask during the time of Sankaradeva

Source: *Photograph taken by the author at Sankardev Than, Barpeta, Assam (2022).*

The traditional Assamese mask (Mukha Shilpa) of Srimanta Sankaradeva is an indication of the development of indigenous craftsmanship, cultural industries which resulted in livelihoods and maintained the artistic heritage of Assam. It represents how the art of the neo-Vaishnavites helped in the economic development of its community, in line with principles of sustainable development.

10.3. Critical Limitations, Historical Constraints and Institutional Challenges

However, Sankaradeva's historical economic model needs to be tackled in the context of certain structural constraints and current institutional problems, if it is to be applied in the realm of policy. The Sankaradeva system of economy exists in a pre-industrial world of agriculture, limited mobility, with non-dollarized transactions and non-monetized exchanges, and does not easily fit into the globalised financial markets and digital economy. In addition, through centuries, many of the Sattras and Namghars of today have undergone different levels of institutional decay, ritualization and internal elite capture; sometimes losing their original radical egalitarian/receptive economic functions. In addition, voluntary, consensus-based community governance can come with some conflict in today's urbanized and/or polarized setting where social cohesion is lessened. While recognizing the past constraints and the present institutional weakness is crucial to avoid romanticizing the past and to have a

careful consideration of the adaptation of Sankaradeva's ideas in the light of the present institutional, regulatory and financial realities (Nath, 2012).

10.4. Synthesized Reflections and Avenues for Future Research

To sum up, this study reveals that Sankaradeva was a visionary socio-economic planner who introduced a number of institutions in the 15th century that were well ahead of their time in terms of concepts for sustainable development, circular economy and inclusive growth. His historical legacy shows that the best conditions for economic development are when it is based on community participation, moral integrity, vocational dignity and ecological stewardship. These results question the notion of sustainable economic structures as a product of modern western society and provide a wealth of examples of sustainable economics in other societies of the past. Future research should include empirical quantitative studies on the economic impact of modern Namghar based micro-savings, comparative study between ideas of Sankaradeva and other pre-industrial reformers around the globe and provide policy frameworks to incorporate traditional Namghar artisans from Assam with the current global creative industries (Goswami, 2008).

11. Contemporary Perspectives and Relevance

Srimanta Sankaradeva's economic development philosophy has taken a new twist in the twenty first century in the framework of sustainable and inclusive development. He spoke about the importance of ethical labour (srama), self-reliance, cooperation of the community, equality and participatory institutions, which are many of the principles of the United Nations Sustainable Development Goals (SDGs). Collective governance (Namghar/Sattra) fostered a culture of decision making, development of skills, entrepreneurship and cultural industries among the masses and ensured better resource utilization without affecting social harmony, thus reinforcing local economies. Community-based governance, social capital, cultural heritage, and indigenous knowledge systems have become part of the increasing focus of contemporary development discourse, and are seen as key elements of sustainable development. Sankaradeva's concept of spirituality and productive labor and social responsibility offers the alternative development paradigm that emphasizes human dignity, social inclusiveness, care for the environment and the collective welfare rather than material growth, as the sole measure of development. Thus his philosophy can provide a useful indigenous tool for solving current problems like poverty in the rural areas, social inequality, unemployment, cultural erosion and ecological degradation.

Sankaradeva's vision, from a global standpoint, illustrates that the process of realizing SDGs goals and objectives is not solely dependent on the economic growth and development of the world, but is also strongly reliant on ethical values, cultural identity and community participation. His vision of social reforms was broad and inclusive, breaking down the barriers of caste, ethnic and occupational groups, establishing institutions that promoted social cohesion, democratic engagement and economic resilience. All of the above principles are relevant in the current discourses on inclusive growth, social entrepreneurship, community resilience, localization of SDGs and the conservation of ICH. Sankaradeva's philosophy is increasingly relevant in today's world where person-centred and environmentally responsible development are the focus of government and international organisations alike, and can be seen as a tradition born from the past but with global relevance. This has led to a continued interdisciplinary scholarship and policy debate for enabling equitable, culturally sensitive and sustainable development for the current and future generations, therefore, his economic and social vision.

12. Major Findings of the Study

The major findings of the study are-

Decentralized Local Self-Governance: Sankaradeva set up the Namghar as a model of decentralized democratic administration for judicial conflicts and for community resources.

Early Micro-Finance Mechanics: Mustadan (setting aside a few rice a day on behalf of the community fund) found an inbuilt protection device for vulnerable households during emergencies.

Democratization and Dignity of Labor : Sankaradeva not only uprooted the feudal taboo against manual labour and craft-making but also gave dignity to labour by calling it Kaya-Srama "Divine Service.

Eradication of Ritualistic Financial Drainage : It was a release of expensive animal sacrifices, idol worship, and costly priesthood rituals, allowing agrarian capital to be used directly in the families and communities, instead of expensive sacrificial rituals.

Institutionalization of Vocational Training : Sankaradeva established specialized craft guilds called Khanikars, which were responsible for the development of skill in woodcarving, mask-making, painting, instrument making and architecture.

Textile Industry Empowerment: Over a hundred weaver families were trained and organized for grand projects such as the Vrindavani Vastra, and Sankaradeva catapulted the weaving trade into a commercially viable, highly-skilled industry in the region.

Inclusive Social Integration:deliberate integration of various tribal groups, lower caste groups and women groups in socio-economic activities led to economic cooperation and social integration across groups.

Eco-Friendly Resource Utilization : Sankaradeva encouraged the use of natural resources like bamboo, wood, clay and vegetable dyes exclusively from the local sources, based on the principles of sustainable production.

Public Goods Creation through Cooperative Work: Public goods creation such as building Tembuwani earthen dam was done through voluntary collective labour without the intervention of the state and state compulsion.

Alignment with UN SDG 10 (Reduced Inequalities) : In this Sankaradeva's radical socio-religious egalitarianism was working to address economic exclusion due to caste and gender way ahead of the current policy agenda set forth by the UN SDG 10.

Alignment with UN SDG 12 (Responsible Consumption) : The principle of spiritual moderation (SANTOSA) which was emphasized encouraged eco-balance based on a core philosophy that discouraged conspicuous consumption and over exploitation of the environment.

Resilience of Social Capital : The institutional arrangement put in place by Sankaradeva created a lasting social capital which helped the local communities in surviving the political changes in history and the economic jolts of the modern market.

13. Conclusion

Srimanta Sankaradeva's renaissance movement was multi-dimensional, and it laid the foundation for the complete transformation of the socio-economic structure in the medieval Assam, while at the same time promoting spiritual emancipation. Sankaradeva's philosophy was not one of world-renouncing asceticism, but was one of active civic engagement, productive manual labour, and community welfare that included everyone. He developed a decentralized and democratic micro-economic system with the aid of the Namghar and Sattra, which was able to address the issues of poverty, caste discrimination and economic vulnerability effectively (Saikia, 2014).

If viewed from the lens of the current global development paradigm, then Sankaradeva's philosophy is an early forerunner of SD paradigms. His micro-savings (Mustidan) and skilled vocational training (Khanikars) are directly related to some of the key United Nations Sustainable Development Goals, as is the cooperative management of resources and the eco-friendly local production. The economic growth without ethical humanism and social inclusion would create inequality and social disintegration, as Sankaradeva proved. (Goswami, 2008)

Sankaradeva's historical perspective provides important insights for 21st century economic planning and development of communities. His legacy offers a timeless lesson in the importance of decentralized self-reliance, moral responsibility, and radical inclusivity for sustainable economic development, for today's policy makers. Incorporating models which have proven to be successful over the years and are grounded in the community can help create an economic framework that is not only financially prosperous, but is ecologically sound and socially just (Nath, 2012).

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Economic and Social Impact of Self-Help Groups on Rural Women Empowerment in Assam: A Study of Nagaon District

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Abstract

Self-Help Groups (SHGs) have emerged as an important instrument for promoting women's empowerment, financial inclusion, and rural development in India. The present study examines the impact of Self-Help Groups on the economic, social, and personal empowerment of rural women in Assam, with special reference to Nagaon District. The study is based on primary data collected from 250 women SHG members selected from ten villages, namely Aibheti, Nij Bali Gaon, Matiapahar, Balijuri, Barhampur, Bebejia, Chalchali, Jamuguri, Kuhumtoli, and AmlakhiGaon. Secondary data were collected from reports of the Assam State Rural Livelihoods Mission (ASRLM), NABARD publications, government documents, books, journals, and research articles.

Descriptive and inferential statistical tools, including percentage analysis, mean analysis, correlation analysis, and the Chi-Square test, were employed to analyze the data. The findings reveal that 79.2 percent of the respondents experienced an increase in household income, 88 percent developed regular savings habits, 82 percent reported greater participation in household decision-making, and 86 percent experienced enhanced self-confidence after joining SHGs. The mean monthly income increased from ¹ 6,850 before joining SHGs to ¹ 11,920 after joining SHGs, representing a 74.01 percent increase. The Chi-Square test indicated a statistically significant relationship between educational status and income improvement ($\div^2 = 11.70$, $p < 0.05$), suggesting that education plays a crucial role in maximizing the benefits of SHG participation.The study concludes that SHGs have significantly contributed to the economic empowerment, social inclusion, and personal development of rural women in Assam. Strengthening capacity-building programmes, financial literacy, entrepreneurship training, and market linkages can further enhance the effectiveness of SHGs in promoting sustainable rural development and gender empowerment.

Keywords: Self-Help Groups, Women Empowerment, Rural Development, Microfinance, Financial Inclusion, Assam, SHGs.

Introduction

Self-Help Groups (SHGs) have emerged as one of the most effective instruments for promoting women's empowerment, poverty alleviation, and rural development in India. The concept of SHGs is based on collective action, mutual support, savings mobilization, and access to microcredit, enabling economically weaker sections, particularly rural women, to improve their socio-economic conditions. Over the past few decades, the SHG movement has gained significant momentum through various government initiatives, especially under the National Rural Livelihoods Mission (NRLM), which seeks to enhance livelihood opportunities and financial inclusion among rural households.

Women constitute a substantial proportion of the population of Assam and contribute significantly to agriculture, handloom, livestock rearing, and various household economic activities. Despite their contribution, many rural women continue to face challenges such as poverty, limited access to financial resources, low educational attainment, unemployment, and social exclusion. In this context, Self-Help Groups have become an important mechanism for empowering women by facilitating access to credit, encouraging savings habits, promoting entrepreneurship, and strengthening their participation in social and economic decision-making.

In Assam, the Assam State Rural Livelihoods Mission (ASRLM) has played a crucial role in promoting SHGs among rural women. Through savings and credit activities, skill development programmes, bank linkage initiatives, and livelihood support services, SHGs have contributed significantly to enhancing women's economic independence and social status. Participation in SHGs has enabled women to undertake income-generating activities such as weaving, dairy farming, poultry farming, piggery, fishery, bamboo and cane crafts, and small-scale trading, thereby improving household income and living standards.

The present study seeks to examine the impact of Self-Help Groups on women's empowerment in Assam with special reference to rural women. The study focuses on various dimensions of empowerment, including economic empowerment, social empowerment, and personal empowerment. It also investigates the reasons for joining SHGs, the utilization of microcredit, and the challenges faced by SHG members. By analyzing these aspects, the study aims to assess the effectiveness of SHGs as a tool for improving the socio-economic status of rural women and promoting sustainable rural development in Assam.

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improving the socio-economic status of rural women and promoting sustainable rural development in Assam.

Objectives of the Study

1. To examine the reasons for joining Self-Help Groups in Assam.
2. To assess the impact of SHGs on the economic status of women.
3. To evaluate the role of bank finance and microcredit in women empowerment.
4. To study the social and personal development of SHG members.
5. To identify the problems faced by SHGs in Assam.

Review of Literature

Dwarakanath (2002) examined the role of Self-Help Groups in rural development and observed that SHGs significantly contributed to mobilizing savings among rural women. The study found that participation in SHGs enhanced women's involvement in community development activities and improved their economic conditions.

NABARD (2006) reported that the SHG-Bank Linkage Programme had become one of the most successful microfinance initiatives in India. The report highlighted that SHGs facilitated access to institutional credit, reduced dependence on informal moneylenders, and promoted financial inclusion among rural women.

Swain and Wallentin (2009) investigated the impact of microfinance on women's empowerment in India. Their findings revealed that SHG participation positively influenced women's decision-making power, economic independence, and social status within the household and community.

Mahanta (2012) studied the status of microfinance in Assam and found that SHGs played a significant role in poverty reduction and livelihood enhancement. The study emphasized that access to microcredit encouraged women to undertake income-generating activities and improve household welfare.

Deininger and Liu (2013) analyzed the long-term effects of SHG programs in rural India and observed substantial improvements in household income, asset creation, and women's participation in economic activities. The study concluded that SHGs contributed to sustainable rural development.

National Rural Livelihoods Mission (2015) highlighted that SHGs have become a major instrument for empowering rural women through collective action, entrepreneurship development, and financial inclusion. The programme strengthened women's capacities through training and skill development initiatives.

Kumar and Mishra (2016) examined women's empowerment through SHGs and reported significant improvements in self-confidence, leadership skills, and participation in local governance. The study emphasized the importance of capacity-building programmes for SHG sustainability.

Assam State Rural Livelihoods Mission (2019) reported remarkable growth in SHG formation and livelihood activities across Assam. The report revealed that SHG members actively participated in agriculture, handloom, livestock rearing, and small-scale enterprises, contributing to household income generation.

Reserve Bank of India (2020) emphasized the role of financial inclusion in promoting socio-economic development. The report noted that SHGs serve as an effective channel for extending banking services and credit facilities to rural women.

Das and Sharma (2022) examined the socio-economic impact of SHGs in Northeast India and found that SHG participation significantly improved women's income, savings behaviour, entrepreneurial abilities, and social awareness. The study recommended strengthening market linkages and skill development programmes to enhance SHG effectiveness.

Research Gap

A review of the existing literature reveals that numerous studies have examined the role of Self-Help Groups (SHGs) in promoting women's empowerment, financial inclusion, and rural development in India. Previous studies have highlighted the contribution of SHGs towards income generation, savings mobilization, access to microcredit, and poverty reduction. However, limited empirical research has been conducted

specifically on the economic and social impacts of SHGs among rural women in Nagaon District of Assam. Most studies have focused either on economic empowerment or microfinance, while comparatively less attention has been given to the combined assessment of economic and social empowerment, including income improvement, savings behaviour, participation in household decision-making, social awareness, and self-confidence. Furthermore, there is a lack of recent district-level studies examining the effectiveness of SHGs in the context of Assam's rural livelihood programmes. Therefore, the present study seeks to bridge this gap by providing a comprehensive analysis of the economic and social impact of SHGs on rural women empowerment in Nagaon District, Assam.

Limitations of the Study

The study is limited to 250 women SHG members selected from ten villages of Nagaon District, Assam, and therefore the findings may not be generalized to the entire state.The study follows a cross-sectional approach and does not capture long-term changes in empowerment. It focuses only on SHG members and does not include non-members for comparison. Moreover, the study mainly uses percentage analysis, mean analysis, and the Chi-Square test, which may not fully capture all factors influencing women's empowerment. Time and resource constraints also restricted broader field coverage and larger sample selection.

Research Methodology

The present study adopts a descriptive and analytical research design to examine the impact of Self-Help Groups (SHGs) on the empowerment of rural women in Nagaon District of Assam. The study focuses on evaluating the economic, social, and personal dimensions of empowerment among women SHG members.The study was conducted in ten selected villages of Nagaon District, namely Aibheti, Nij Bali Gaon, Matiapahar, Balijuri, Barhampur, Bebejia, Chalchali, Jamuguri, Kuhumtoli, and AmlakhiGaon. Both primary and secondary data were used for the study. Primary data were collected from 250 women SHG members through a structured questionnaire, personal interviews, field observations, and group discussions. Secondary data were obtained from reports of Assam State Rural Livelihoods Mission (ASRLM), National Bank for Agriculture and Rural Development (NABARD), National Rural Livelihoods Mission (NRLM), government publications, books, journals, research articles, and official websites.

A purposive sampling technique was adopted for selecting the respondents. Twenty-five SHG members were selected from each of the ten villages, making a total sample size of 250 respondents.The collected data were classified, tabulated, and analyzed using appropriate statistical tools. Percentage analysis was used to study the distribution of respondents across different socio-economic and empowerment-related variables. Mean analysis was employed to assess changes in the average monthly income of respondents before and after joining SHGs. The Chi-Square ($\div^2$) Test of Independence was applied to examine the relationship between educational status and income improvement among SHG members. The level of significance was fixed at 5 percent. These statistical techniques helped in assessing the impact of SHGs on the economic and social empowerment of rural women in the study area.

Results and Discussion

The present study examined the impact of Self-Help Groups (SHGs) on the empowerment of rural women in Nagaon District of Assam. The analysis was conducted using percentage analysis, mean analysis, and the Chi-Square test to assess the economic, social, and personal dimensions of empowerment among SHG members.The findings indicate that participation in SHGs has significantly contributed to improving the socio-economic status of rural women. Out of the 250 respondents surveyed, 198 women (79.2%) reported an increase in household income after joining SHGs, while only 20.8 percent indicated no significant change in their income. This finding suggests that SHGs have been successful in generating livelihood opportunities and enhancing the earning capacity of rural women through various income-generating activities such as

weaving, dairy farming, poultry farming, piggery, fishery, bamboo and cane crafts, and small-scale trading.

The study also reveals a substantial improvement in the savings behaviour of SHG members. A large majority of respondents (88%) reported developing a regular savings habit after joining SHGs. This demonstrates the effectiveness of SHGs in promoting financial discipline and encouraging women to accumulate savings for future needs and emergencies. The promotion of savings culture among rural women contributes significantly to financial security and reduces dependence on informal sources of credit.Another important dimension of empowerment examined in the study was participation in household decision-making. The findings show that 82 percent of the respondents experienced greater involvement in household decisions after becoming SHG members. This reflects an enhancement in women's bargaining power and autonomy within the family. Increased participation in decision-making regarding household expenditure, children's education, healthcare, and investment activities indicates a positive shift in traditional gender roles and strengthens women's position within the household.

Personal empowerment was also found to have improved considerably among SHG members. About 86 percent of the respondents reported increased self-confidence after joining SHGs. Regular participation in group meetings, financial transactions, training programmes, and community activities has enabled women to develop leadership qualities, communication skills, and confidence in dealing with social and economic matters. This improvement in self-confidence has enhanced their ability to participate actively in community development initiatives and public affairs.The mean analysis further supports the positive economic impact of SHGs. The average monthly income of respondents increased from ₹ 6,850 before joining SHGs to ₹ 11,920 after joining SHGs, resulting in an average increase of ₹ 5,070. This represents a growth of approximately 74.01 percent in monthly income. The substantial increase in income indicates that SHG participation has contributed significantly to livelihood enhancement and economic self-reliance among rural women. The availability of microcredit and access to financial resources enabled members to invest in productive activities and diversify their income sources.To examine the relationship between educational status and income improvement, the Chi-Square Test of Independence was applied. The calculated Chi-Square value was 11.70, which exceeded the table value of 9.488 at a 5 percent level of significance with four degrees of freedom. Consequently, the null hypothesis was rejected, confirming the existence of a statistically significant relationship between educational status and income improvement among SHG members.

The results suggest that women with higher educational attainment benefited more from SHG participation than less educated members. Educated women were found to utilize SHG loans more effectively for productive economic activities and demonstrated better financial management, record-keeping, and entrepreneurial skills. They also had greater access to information regarding government welfare schemes and market opportunities. In contrast, illiterate and less educated women experienced comparatively lower levels of income improvement. These findings highlight the critical role of education in enhancing the effectiveness of SHG programmes and maximizing economic benefits.

Overall, the study confirms that Self-Help Groups have emerged as a powerful instrument for women's empowerment in rural Assam. SHGs have positively influenced economic conditions, savings behaviour, decision-making capacity, and self-confidence among women. In addition to improving household income, SHGs have enhanced social participation, leadership abilities, and awareness regarding education, health, sanitation, and government development programmes.However, the study also identified several challenges affecting the performance of SHGs, including inadequate training, limited market access, poor infrastructure, insufficient financial literacy, and vulnerability to natural disasters such as floods. Addressing these challenges through capacity-building programmes, entrepreneurship development, digital literacy initiatives, and improved market linkages

can further strengthen the contribution of SHGs to women's empowerment and sustainable rural development in Assam.

Percentage Analysis

Percentage analysis was employed to examine the responses of 250 Self-Help Group (SHG) members from selected villages of Nagaon District, Assam. This technique facilitates the understanding of the distribution of respondents across different socio-economic and empowerment-related variables.

Increase in Household Income

Out of 250 respondents, 198 women reported an increase in household income after joining SHGs, while 52 respondents reported no significant change.

Response	Frequency	Percentage (%)
Yes	198	79.2
No	52	20.8
Total	250	100.0

The findings indicate that 79.2 percent of the respondents experienced an improvement in household income after joining SHGs. This suggests that participation in SHGs has positively contributed to the economic well-being of rural women in Nagaon District.

Improvement in Savings Habit

Response	Frequency	Percentage (%)
Yes	220	88.0
No	30	12.0
Total	250	100.0

The analysis reveals that 88 percent of the respondents developed a regular savings habit after joining SHGs. This demonstrates the effectiveness of SHGs in promoting financial discipline and **encouraging savings among rural women.**

Participation in Household Decision-Making

Response	Frequency	Percentage (%)
Yes	205	82.0
No	45	18.0
Total	250	100.0

The results show that 82 percent of the respondents reported increased participation in household decision-making processes. This reflects a significant improvement in women's autonomy and empowerment within the family.

Improvement in Self-Confidence

Response	Frequency	Percentage (%)
Yes	205	82.0
No	45	18.0
Total	250	100.0

The findings indicate that 86 percent of the respondents experienced enhanced self-confidence after joining SHGs. Participation in group activities, financial transactions, and community interactions has contributed substantially to personal empowerment.

Mean Analysis

To assess the economic impact of SHG participation, the mean monthly income of respondents before and after joining SHGs was calculated.

Mean Monthly Income Before and After Joining SHGs

Particulars	Mean Monthly Income (Rs)
Before Joining SHG	6,850
After Joining SHG	11,920
Increase	5,070

The analysis reveals that the average monthly income of respondents increased from ¹ 6,850 before joining SHGs to ¹ 11,920 after joining SHGs. Thus, the mean monthly income increased by ¹ 5,070.The results indicate that the average monthly income of SHG members increased by **74.01 percent** after joining SHGs. This substantial increase demonstrates the significant role played by SHGs in enhancing income-generating opportunities and improving the economic status of rural women in Nagaon District.

Interpretation

The percentage and mean analyses collectively reveal that SHGs have significantly contributed to the economic and social empowerment of rural women. A large majority of respondents reported improvements in income, savings behavior, participation in household

decision-making, and self-confidence. The considerable increase in average monthly income further confirms that SHGs serve as an effective mechanism for promoting women's economic empowerment and sustainable rural development in Nagaon District, Assam.

CHI-SQUARE TEST ANALYSIS OF EDUCATIONAL STATUS AND INCOME IMPROVEMENT AFTER JOINING SELF-HELP GROUPS (SHGs)

To examine whether educational status has any significant influence on income improvement among Self-Help Group (SHG) members, the Chi-Square (÷²) Test of Independence was applied. The test helps determine whether there exists a statistically significant association between educational attainment and improvement in income after joining SHGs.

Formulation of Hypotheses

Null Hypothesis (H€):

There is no significant relationship between educational status and income improvement after joining SHGs.

Alternative Hypothesis (H):

There is a significant relationship between educational status and income improvement after joining SHGs.

Observed Frequencies

Educational Status and Income Improvement of SHG Members

Education Level	Income Increased (Yes)	Income Increased (No)	Row Total
Illiterate	20	12	32
Primary	42	16	58
Secondary	60	14	74
Higher Secondary	40	6	46
Graduate and Above	36	4	40
Column Total	198	52	250

Source: Field Survey, 2026.

Calculation of Expected Frequencies

The expected frequencies were calculated using the following formula:

E = (Row Total × Column Total) / Grand Total

For example:

For Illiterate–Yes:

E = (32 × 198) / 250

= 25.34

For Illiterate–No:

E = (32 × 52) / 250

= 6.66

Similarly, expected frequencies for all cells were computed.

Expected Frequencies

Education Level	Yes (E)	No (E)
Illiterate	25.34	6.66
Primary	45.94	12.06
Secondary	58.61	15.39
Higher Secondary	36.43	9.57
Graduate and Above	31.68	8.32

Calculation of Chi-Square Value

The Chi-Square statistic was calculated using the formula:

$\chi^2 = \Sigma [(O - E)^2 / E]$

where,

O = Observed Frequency

E = Expected Frequency

The calculated values for each cell are presented below.

Chi-Square Calculation

Education Level	Yes (E)	No (E)
Illiterate	1.125	4.281
Primary	0.338	1.288
Secondary	0.033	0.125
Higher Secondary	0.349	1.330
Graduate and Above	0.589	2.242
Total χ^2		11.70

Therefore,

Calculated $\chi^2 = 11.70$

Degrees of Freedom

The degrees of freedom were calculated as follows:

df = (r-1)(c-1)

Where,

r = Number of rows = 5

c = Number of columns = 2

Therefore,

df = (5-1)(2-1)

df = 4

Test of Significance

At the 5 percent level of significance and 4 degrees of freedom, the table value of ÷² is 9.488.

Comparison:

Calculated $\chi^2 = 11.70$

Table $\chi^2 = 9.488$

Since the calculated value of ÷² (11.70) is greater than the table value (9.488), the null hypothesis is rejected.

11.70 > 9.488

Decision:

Reject Ho and accept H_1• .

Interpretation of Results

The Chi-Square test reveals that there is a statistically significant relationship between educational status and income improvement among SHG members in Nagaon District, Assam.

The analysis indicates that women with higher educational qualifications experienced greater improvement in income after joining Self-Help Groups. Educated women were more capable of utilizing SHG loans for productive economic activities such as weaving, agriculture, dairy farming, livestock rearing, and small-scale businesses. Higher educational attainment also contributed to better financial management, record keeping, entrepreneurial decision-making, and access to information regarding government development programmes.

In contrast, illiterate and less educated members exhibited comparatively lower levels of income improvement. The findings suggest that education acts as an important enabling factor in maximizing the benefits derived from SHG participation.

Statistical Conclusion

Particulars	**Result**
Calculated χ^2 Value	11.70
Table χ^2 Value (5%, df = 4)	9.488
Degrees of Freedom	4
Decision	Reject H€
Result	Significant Relationship Exists

Thus, the hypothesis stating that "there is a significant relationship between educational status and income improvement after joining SHGs" is accepted for the study area of Nagaon District, Assam.

The results reveal that:

1. Women with higher educational qualifications benefited more from SHG participation.
2. Educated women were better able to utilize loans for productive activities such as weaving, agriculture, dairy farming, and small businesses.
3. Higher educational attainment enhanced financial management, record-keeping, and entrepreneurial skills.
4. Illiterate and less educated members showed comparatively lower levels of income improvement.
5. Education acts as an important enabling factor in maximizing the benefits derived from SHG membership.

Statistical Conclusion

Particular	**Result**
Calculated χ^2	11.70
Table Value χ^2 (5%, df=4)	9.488
Decision	Reject H€
Result	Significant Relationship Exists

Role of SHGs in Assam

SHGs in Assam undertake various activities such as:

- Weaving and handloom production
- Bamboo and cane craft
- Dairy farming
- Poultry farming
- Piggery
- Fishery
- Small-scale trading
- Food processing

These activities provide supplementary income and improve household living standards.

Impact of SHGs on Women Empowerment

Economic Empowerment

- Increased household income.
- Development of savings habits.
- Access to institutional credit.
- Reduction of dependence on moneylenders.
- Promotion of entrepreneurship.

Social Empowerment

- Increased participation in community activities.
- Improved social status.
- Greater awareness regarding education, health, and sanitation.
- Enhanced leadership and communication skills.

Personal Empowerment

- Increased self-confidence.
- Better decision-making ability.
- Improved mobility and public participation.
- Greater awareness of rights and entitlements.

Challenges Faced by SHGs in Assam

Despite significant achievements, SHGs face several challenges:

- Limited access to markets.
- Lack of technical training.
- Inadequate financial literacy.
- Poor infrastructure in rural areas.
- Marketing difficulties for SHG products.
- Natural disasters such as floods affecting livelihoods.

Findings

1. Most women join SHGs to access credit and develop savings habits.
2. SHGs have improved the economic conditions of rural households.
3. Members have developed leadership qualities and social awareness.
4. Bank linkage programmes have enhanced financial inclusion.
5. Income-generating activities have contributed to poverty reduction.
6. Marketing and training remain major challenges.

Suggestions

1. Strengthen capacity-building programmes for SHG members.
2. Improve market linkage support.
3. Increase access to low-interest credit.
4. Promote digital literacy among SHG women.
5. Encourage value-added production and entrepreneurship.
6. Strengthen government support through ASRLM and NABARD.

Conclusion

The findings of the study clearly demonstrate that Self-Help Groups have emerged as an effective mechanism for empowering rural women in Assam. Through collective savings, access to microcredit, and participation in income-generating activities, SHGs have significantly improved the economic conditions of women and their households. The study reveals that a majority of respondents experienced increased household income, improved savings habits, enhanced participation in household decision-making, and greater self-confidence after joining SHGs.The statistical analysis further confirms the positive impact of SHGs on women's empowerment. The substantial increase in average monthly income indicates that SHG participation has contributed to economic self-reliance and livelihood enhancement. The Chi-Square test establishes a significant relationship between educational status and income improvement, suggesting that education plays a crucial role in enabling women to derive greater benefits from SHG activities. Educated women were found to utilize financial resources more effectively and engage more

successfully in entrepreneurial ventures and livelihood activities.

Beyond economic benefits, SHGs have strengthened women's social participation, leadership abilities, communication skills, and awareness regarding health, education, sanitation, and government welfare programmes. These achievements reflect the broader role of SHGs as institutions of social transformation that foster confidence, collective action, and community development among rural women.Despite these positive outcomes, certain challenges continue to affect the performance and sustainability of SHGs. Marketing difficulties, inadequate training facilities, limited financial literacy, poor infrastructure, and vulnerability to natural disasters such as floods remain significant constraints. Addressing these challenges requires coordinated efforts from government agencies, financial institutions, non-governmental organizations, and local communities. Strengthening capacity-building programmes, expanding market linkages, promoting digital and financial literacy, and improving access to low-cost credit can further enhance the effectiveness of SHGs.In conclusion, Self-Help Groups have made a substantial contribution to women's empowerment and rural development in Assam. They have not only improved the economic status of rural women but have also enhanced their social recognition, decision-making capacity, and self-esteem. Therefore, continued support and strengthening of the SHG movement can play a vital role in achieving inclusive growth, gender equality, poverty reduction, and sustainable development in rural Assam.

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Digital Financial Literacy, Capability, and Economic Empowerment among Tribal Women in Rural Assam: Evidence from South Kamrup District

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Abstract

Digital financial inclusion in India has expanded rapidly, yet tribal women in rural Assam continue to face a gap between having access to digital financial services and being able to use them with confidence. This study asks whether digital financial literacy and capability shape economic empowerment among tribal women in South Kamrup District, Assam. Between May and July 2025, structured questionnaires were administered face-to-face in Assamese to 279 tribal women selected through purposive sampling. A Digital Financial Literacy and Capability Index (DFLCI) and an Economic Empowerment Index (EEI) were built using the mean-score method, and both instruments showed strong internal consistency (DFLCI: á = 0.882; EEI: á = 0.944). DFLCI and EEI were strongly and positively correlated ($r = 0.789$, $p < .01$), and multiple regression confirmed DFLCI as the strongest predictor of economic empowerment ($\hat{a} = 0.759$, $p < .001$), with the full model accounting for 71.4% of variance ($R^2 = 0.714$). Drawing on Sen's Capability Approach and Kabeer's Empowerment Framework, the study questions financial inclusion strategies built mainly around access and argues for structured capability-building as the policy priority for tribal women across Northeast India.

Keywords : digital financial literacy; economic empowerment; tribal women; financial inclusion; capability approach; self-help groups; Assam

1. Introduction

Since 2015, India's digital financial system has been transformed by initiatives such as the Unified Payments Interface (UPI), Pradhan Mantri Jan Dhan Yojana (PMJDY), and the broader Digital India programme, each chipping away at the barriers that once kept rural populations outside the formal financial fold. Cheaper data and wider mobile coverage have only quickened this pace, pushing India toward the front ranks of digital finance globally (GSMA, 2024). The gains, though, have not landed evenly. In Assam's rural districts, scheduled tribal communities still contend with patchy infrastructure, limited digital skills, geographic isolation, and socio-cultural constraints that national policy frameworks rarely engage with in any detail.

For tribal women, these obstacles compound. Studies show that even where digital financial services (DFS) are technically accessible, women's ability to use them with confidence and independence, what scholars call digital financial capability, differs sharply across social groups (Showkat et al., 2024). Holding an account or owning a smartphone counts for little if a woman lacks the knowledge or confidence to operate it on her own; access by itself rarely converts into financial autonomy or a real say in household economic decisions. Understanding why financial inclusion programmes have produced such mixed empowerment outcomes for tribal women begins with this distinction between access and capability.

South Kamrup District offers a fitting setting for this question. Its tribal population, comprising Rabha, Boro, Garo, and Karbi communities, sits alongside an active Self-Help Group (SHG) network built under the Assam State Rural Livelihoods Mission (ASRLM). Kabeer (2012) frames women's economic

empowerment around financial autonomy, control over household resources, and a voice in economic decisions. Digital financial services could, in principle, advance all three by cutting reliance on male intermediaries, lowering transaction costs, and opening direct routes to formal savings and payments (Heath & Riley, 2024; Suri & Jack, 2016). Yet adoption on its own rarely delivers these gains; what matters is whether women can engage with DFS purposefully (Saranya & Chandrasekar, 2025).

Much of the existing research on tribal women and digital financial inclusion in India centres on Jharkhand, Odisha, and Chhattisgarh. Assam's tribal communities differ in ways that matter: linguistic diversity, seasonal labour patterns, and a different relationship with institutions, none of which these central Indian studies capture (Sarma & Das, 2020). Evidence on digital financial behaviour and empowerment outcomes among tribal women in Northeast India remains thin, leaving a clear gap in the literature.

This study has two aims: to map patterns of DFS adoption among tribal women in South Kamrup District, and to test whether digital financial literacy and capability (DFLCI) significantly predict economic empowerment. The hypothesis under examination (H1) holds that DFLCI exerts a positive and significant influence on economic empowerment. By constructing and validating composite indices for both constructs, and by framing the analysis through Sen's Capability Approach alongside Kabeer's Empowerment Framework, the study offers empirical insight into how literacy mediates the path from access to empowerment in a tribal setting, with practical relevance for ASRLM, financial institutions, and NGOs designing capability-building programmes for tribal communities in Assam.

2. Literature Review and Theoretical Foundation

2.1 Theoretical Framework

Two theoretical traditions underpin this study. Amartya Sen's (1999) Capability Approach treats development as the expansion of people's substantive freedoms, what they are genuinely able to do and be, rather than as a matter of income or utility maximization. Within this framing, financial capability is not simply a means to empowerment but part of what empowerment consists of: it allows people to make informed economic decisions, manage resources with confidence, and take part meaningfully in household and market financial life. Naila Kabeer's (1999, 2012) empowerment framework adds a complementary structure, separating resources (the preconditions for choice), agency (the act of deciding), and achievements (the outcomes that follow). For Kabeer, genuine empowerment depends on the capacity to make strategic life choices, a capacity historically denied to women in marginalized communities. Digital financial literacy sits squarely within the agency dimension, turning mere access into autonomy. The pathway examined here follows accordingly:

> Digital Financial Literacy'! Financial Capability '! Financial Autonomy'! Economic Empowerment.

Read together, these frameworks suggest that access-based interventions alone will fall short unless capability is built alongside them.

2.2 Digital Financial Services, Women's Empowerment, and Financial Literacy

The empirical record on DFS and women's empowerment points in a fairly consistent direction. Suri and Jack's (2016) study in Kenya, now something of a benchmark, found lasting poverty-reduction effects for female-headed households, driven by secure transfers and the precautionary savings that mobile money made possible. Findings from India tell a more mixed story: Shankar (2024) found that digital wage payments improved financial autonomy among female tea workers in Assam but left broader decision-making and resource control largely unchanged. Datta and Singh (2023) report a similar pattern among tribal women, whose DFS accounts are often opened but rarely used, with financial decisions still passing through male household members. Across this body of work, capability is the recurring explanatory thread: DFS

access without digital financial literacy tends to produce weaker empowerment outcomes.

Using PLS-SEM with rural women in North India, Showkat et al. (2024) showed that digital financial literacy mediates the link between mobile phone access and financial autonomy, and that expanding access without building literacy yields consistently weaker results. A systematic review of 62 studies by Saranya and Chandrasekar (2025) identified digital financial literacy as the central determinant of women's economic empowerment across developing-country contexts, shaping savings behaviour, financial independence, and participation in household financial decisions. Heath and Riley (2024) add that mobile money's empowerment effects are most pronounced among lower-income women, a point that bears directly on the low-income tribal households examined in this study.

2.3 Tribal Women in Northeast India and the Research Gap

Tribal communities in Assam carry a compounded disadvantage: caste-analogous social hierarchies, linguistic marginalization, and physical distance from financial infrastructure (Sarma & Das, 2020). The SHG model promoted under ASRLM has proven capable of building social capital and collective financial behaviour in this setting, though its bearing on individual digital financial capability has not been examined directly. The broader literature has established the value of digital financial literacy for women's empowerment, but mostly through evidence drawn from non-tribal settings or Sub-Saharan Africa. Work on the capability-empowerment link specifically among tribal women in Northeast India remains rare, and few studies have built multidimensional capability and empowerment indices suited to tribal contexts. The present study speaks to both gaps.

3. Methodology

3.1 Research Design, Study Area, and Sampling

This is a quantitative, cross-sectional study. Fieldwork took place in South Kamrup District, Assam, chosen for its sizeable tribal population and the institutional reach of ASRLM's SHG-based financial inclusion network. The district's Rabha, Boro, Garo, and Karbi communities offered enough intra-tribal variation to examine differences in empowerment outcomes. Data collection ran from May to July 2025 through face-to-face administration of structured questionnaires.

Purposive sampling was the natural choice here, since the study specifically targeted tribal women who had already used digital financial services, a precondition for assessing capability-related outcomes in any meaningful way. The final sample of 279 women was drawn from SHG members and DFS users identified through ASRLM records and village-level surveys. The questionnaire, administered in Assamese, captured socio-demographic characteristics, DFS usage patterns, six digital financial literacy items (DFLCI), and 16 economic empowerment indicators (EEI). Government reports and published literature provided contextual background but played no role in index construction or the econometric estimation.

3.2 Index Construction and Reliability

Both composite indices were built using the mean-score method. The DFLCI draws on six items covering confidence in managing digital savings, independent use of banking platforms, knowledge of financial products, the ability to invest in savings schemes, awareness of risk and return, and overall digital finance capability. The EEI spans 16 items covering financial autonomy, savings behaviour, income control, participation in household decisions, access to formal financial products, and capacity for income-generating activity. Cronbach's alpha confirmed that both instruments meet recommended thresholds for internal consistency (DFLCI: á = 0.882; EEI: á = 0.944). Content validity drew on a review of existing instruments adapted from the digital financial literacy and women's empowerment literature, and the questionnaire was piloted on a sub-sample before the main survey. Table 1 summarizes index structure and reliability.

Table 1

Measurement of DFLCI and EEI

Index	Items	á	Dimensions Captured
DFLCI	6	0.882	Confidence in digital savings management; independent use of banking platforms; knowledge of digital financial products; ability to invest in savings schemes; risk and return awareness; overall digital finance capability
EEI	16	0.944	Financial autonomy; savings behaviour; income control; household financial decision-making; access to formal financial products; capacity for income-generating activity

Note. DFLCI = Digital Financial Literacy and Capability Index; EEI = Economic Empowerment Index. Both á values exceed recommended thresholds (á e" 0.80 = good; á e" 0.90 = excellent).

3.3 Analytical Approach

Descriptive statistics were used to profile respondents and DFS adoption patterns. Pearson correlation tested the bivariate association between DFLCI and EEI, while multiple linear regression estimated DFLCI's net effect on economic empowerment after controlling for socio-demographic variables. The model took the form:

EEi = â0 + â1DFLCIi + â2AGEi + â3EDUi + â4INCi + â5OCCi + â6TRIBEi + â7MARi + â8HHi + åi

Multicollinearity diagnostics returned VIF values between 1.231 and 1.478 and tolerance values between 0.677 and 0.812, comfortably within acceptable limits (VIF < 5; tolerance > 0.20). All analyses were run in SPSS.

4. Results

4.1 Respondent Profile

The 279 respondents were drawn from across South Kamrup District. Most (72.8%) fell between 26 and 55 years of age. Household incomes clustered toward the lower end, with 82.4% reporting monthly earnings of INR 5,001 to 15,000. Education levels varied widely: matriculation was the most common level (22.6%), yet 21.1% had received no formal schooling at all. Agriculture (29.7%), self-employment (27.2%), and daily wage labour (25.1%) accounted for most occupations. By tribal group, the sample comprised Rabha (49.8%), Boro (28.3%), Garo (19.0%), and Karbi (2.9%) women. A little over half (53.4%) were married, while 20.4% were widowed. Average household size stood at 4.16 members (SD = 1.20). Table 2 sets out the full respondent profile.

Table 2

Respondent Profile (N = 279)

Characteristic	Category	n (%)
Age	18–25 years	47 (16.8%)
	26–35 years	90 (32.3%)
	36–45 years	82 (29.4%)
	46–55 years	41 (14.7%)

	>55 years	19 (6.8%)
Education	No formal education	59 (21.1%)
	Below matriculation	52 (18.6%)
	Matriculation	63 (22.6%)
	Higher secondary	55 (19.7%)
	Graduate and above	50 (17.9%)
Occupation	Agriculture	83 (29.7%)
	Self-employment	76 (27.2%)
	Daily wage labour	70 (25.1%)
	Other/unemployed	50 (17.9%)
Tribal Affiliation	Rabha	139 (49.8%)
	Boro	79 (28.3%)
	Garo	53 (19.0%)
	Karbi	8 (2.9%)
Marital Status	Married	149 (53.4%)
	Unmarried	55 (19.7%)
	Widowed	57 (20.4%)
	Separated/divorced	18 (6.5%)
Monthly Income (INR)	Up to 5,000	35 (12.5%)
	5,001–10,000	132 (47.3%)
	10,001–15,000	98 (35.1%)
	>15,000	14 (5.0%)
Household Size	Mean = 4.16 (SD = 1.20); range 1–8	

Note. N = 279. Percentages may not sum to 100 due to rounding.

4.2 DFS Adoption Patterns

DFS adoption was close to universal, with 98.2% of respondents reporting some use. Debit cards (49.1%) and UPI (47.3%) were the most common instruments, and 3.6% used both. Frequent users made up 60.2% of the sample, against just 22.9% who described their use as rare. Only 20.8% used DFS solely for money transfers, while 33.0% combined transfers with shopping and bill payments. Mobile phones served as the main access point for 74.6% of respondents, and 58.1% described their internet usage as frequent. Taken together, these figures suggest that DFS has become part of routine financial life for this population, which shifts the relevant policy question away from access and toward the quality of use.

4.3 Descriptive Statistics and Reliability

The mean DFLCI score came to 2.405 (SD = 0.836), pointing to moderate digital financial literacy and capability overall. The mean EEI score was 2.153 (SD = 0.777), reflecting a similarly moderate level of economic empowerment. The fairly wide standard deviations on both indices point to real variation across respondents, in keeping with the sample's mixed socio-demographic makeup.

4.4 Correlation Analysis

DFLCI and EEI were strongly correlated ($r = 0.789$, $p < .01$, $N = 279$). Women who reported greater confidence in managing digital savings, more independent use of digital banking, and stronger awareness of financial risk also tended to report greater financial autonomy, steadier savings habits, and a larger role in household financial decision-making. Table 3 presents the correlation matrix.

Table 3

Descriptive Statistics and Pearson Correlation Matrix

Variable	Mean	SD	1	2
1. DFLCI	2.405	0.836	—	
2. EEI	2.153	0.777	0.789**	—

Note. DFLCI = Digital Financial Literacy and Capability Index; EEI = Economic Empowerment Index. **p < .01 (two-tailed). N = 279.

4.5 Regression Analysis

The regression model performed well: $R = 0.845$, $R^2 = 0.714$, Adjusted $R^2 = 0.706$, $F(8, 269) = 83.983$, $p < .001$. DFLCI, together with the control variables, accounted for 71.4% of the variance in economic empowerment. Table 4 reports the regression coefficients.

DFLCI emerged as the strongest predictor by a wide margin (â = 0.759, p < .001). Tribal affiliation (â = 0.246, p < .001) and household size (â = 0.177, p < .001) also showed positive effects worth noting. Monthly household income, by contrast, was negatively associated with empowerment (â = "0.199, p < .001). Occupation (â = 0.091, p = .013) and marital status (â = 0.078, p = .038) reached conventional significance levels, while age (p = .655) and education level (p = .240) did not predict empowerment in any meaningful way.

Table 4

Multiple Regression Coefficients (Dependent Variable: Economic Empowerment Index)

Predictor	B	SE	â	t	p
Constant	"0.035	0.204	—	"0.171	.864
DFLCI*	0.707	0.037	0.759	19.154	< .001
Age	"0.011	0.024	"0.017	"0.447	.655
Monthly Household Income	"0.205	0.038	"0.199	"5.439	< .001
Occupation	0.057	0.023	0.091	2.514	.013
Tribal Affiliation	0.225	0.035	0.246	6.400	< .001
Education Level	"0.025	0.021	"0.045	"1.177	.240
Marital Status	0.077	0.037	0.078	2.085	.038
Household Size	0.115	0.024	0.177	4.786	< .001

Note. $N = 279$; $R^2 = 0.714$; Adjusted $R^2 = 0.706$; $F(8, 269) = 83.983$, $p < .001$. B = unstandardized coefficient; SE = standard error; â = standardized coefficient. VIF range: 1.231–1.478. * Dominant predictor.

5. Discussion

5.1 DFLCI as the Primary Driver of Empowerment

What stands out here is just how much weight DFLCI carries (â = 0.759). Even with eight socio-demographic controls in the model, capability still explains the lion's share of variance in empowerment, a pattern that fits what Showkat et al. (2024) and Saranya and Chandrasekar (2025) report elsewhere. Read through Sen and Kabeer together, DFS access supplies the raw material, the resource precondition, but literacy is what turns that material into agency: the confidence, knowledge, and skill to act on it. A woman who can manage digital savings on her own and weigh financial risk is operating from a different position entirely than one who merely holds an account. With over 70% of empowerment variance explained and DFLCI doing most of that work, the implication is hard to avoid: capability outweighs the conventional socio-demographic factors that empowerment research has tended to focus on.

5.2 Tribal Affiliation and Household Size

The positive coefficient for tribal affiliation (â = 0.246) is a reminder that 'tribal women' is not a single category. Rabha, Boro, Garo, and Karbi communities differ in social capital, in how deeply SHGs have taken root, and in the cultural latitude women have for economic agency. Programme design that treats these groups as interchangeable risks missing what actually drives outcomes on the ground. The household size effect (â = 0.177) fits with Datta and Singh's (2023) observation that larger, extended-family households in tribal settings can work in women's favour: shared responsibilities and pooled resources support economic agency rather than constrain it, which runs against assumptions often imported from non-tribal research.

5.3 The Negative Income Coefficient

The negative relationship between household income and empowerment (â = "0.199, $p < .001$) is the finding that most invites careful reading. A few explanations seem plausible, and they are not mutually exclusive. Tribal household economies often rely on seasonal income and subsistence activity that categorical income brackets capture poorly, so a higher reported income bracket may not mean what it appears to mean. It is also possible that in wealthier tribal households men retain control over income to a greater degree, leaving women's financial agency unchanged or even diminished as household earnings rise (Sarma & Das, 2020). A third possibility, consistent with Heath and Riley (2024), is that digital financial literacy simply does more for women who had less to begin with, the marginal gain being steeper at the bottom of the income distribution. Sorting out which of these mechanisms, or what combination of them, is at work would require qualitative follow-up research.

5.4 The Non-Significance of Age and Education

Perhaps the most consequential result for policy is what did not turn out to matter: once digital financial capability is accounted for, neither age nor years of formal schooling predicts economic empowerment. Capability built through SHG training and community-based digital literacy programmes appears to carry more weight than the credentials usually assumed to count. Older women and those with little or no formal education prove just as capable of reaching strong empowerment outcomes, provided the right capability-building reaches them. This cuts against the common assumption that formal education is the primary lever for women's financial empowerment, and it widens considerably who can realistically be reached by capability-focused interventions.

6. Policy Implications

The near-universal rate of DFS adoption (98.2%) suggests that the infrastructure piece of the puzzle is largely settled in South Kamrup District. What remains is capability, and three recommendations follow from that.

First, ASRLM's SHG network is well placed to carry structured digital financial literacy training to where it is needed. Training should focus on the platforms women already use, namely UPI and debit cards, delivered in Assamese and local tribal languages, and designed with low-literacy and older participants in mind, given that neither education nor age predicts empowerment in this sample.

Second, the negative income coefficient points to the lowest-income tribal households as the group most likely to benefit. Pairing digital literacy training with savings linkages, microinsurance products, and support for digital entrepreneurship is likely to pay off most where baseline vulnerability is highest.

Third, the tribal affiliation effect argues against one-size-fits-all programming. Needs assessments run through existing SHG structures, conducted separately for Rabha, Boro, Garo, and Karbi women, would help identify the financial behaviours, platform preferences, and language requirements specific to each community, and would build interventions around the actual diversity of South Kamrup District rather than around an assumed average.

7. Conclusion

This study set out to examine how digital financial literacy and capability (DFLCI) relate to economic empowerment (EEI) among tribal women in South Kamrup District, Assam, and the results leave little ambiguity. DFLCI is by far the strongest predictor of economic empowerment ($R^2 = 0.714$; $\hat{a} = 0.759$, $p < .001$); tribal affiliation and household size add further positive effects, while monthly income works in the opposite direction. Age and formal education drop out as predictors once capability enters the picture, which points toward SHG-based, community-level digital literacy work as a route to empowerment that does not depend on a woman's schooling or stage of life.

Theoretically, the findings support reading digital financial literacy as a substantive capability in Sen's sense, the element that converts financial access into genuine economic agency, and as the agency resource in Kabeer's framework that decides whether access becomes meaningful choice or remains unused potential. The study adds something that has largely been missing: systematic, index-based evidence from the tribal context of Northeast India.

For policy, the main takeaway is a shift in where the problem now sits. Infrastructure is mostly in place; capability is the binding constraint. ASRLM, financial institutions, and NGOs working in this space would do well to prioritize structured, tribe-specific literacy programmes delivered through SHG channels, with low-income households as the first call.

A few limitations are worth flagging. The cross-sectional design means these are associations rather than causal claims. A single-district sample drawn through purposive sampling limits how far the findings travel. Self-reported data carries the usual risk of social desirability bias. Future work might follow respondents over time, extend coverage to other tribal districts such as Dhemaji, Karbi Anglong, and Baksa, and use structural equation modelling to trace the underlying pathways more directly. Qualitative work, in particular, could help explain the income coefficient and show how SHG-mediated literacy training builds capability in practice, over time.

Ethical Statement

Participation in the study was entirely voluntary. All respondents were informed about the purpose of the study and assured of anonymity and confidentiality before enrolment. Informed consent was obtained before data collection commenced. No personal identifying information was retained in the final dataset.

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The Impact of Unified Payments Interface (UPI) on the Growth of Cashless Transactions in India

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Abstract

The development of digital technology has altered the nature of financial transactions, resulting in the emergence of cashless transactions. This paper examines several techniques of cashless transactions and the critical role that the Unified Payment Interface (UPI) has played in their growth. Credit and debit cards, mobile wallets, online banking, and UPI are all examples of cashless transactions. Each technique has distinct features and benefits that contribute to the growth of the cashless environment. However, in the Indian context, UPI stands out as a game changer, revolutionizing the way transactions are performed. Its ease of use, user-friendliness, quick financial transfers, minimal transaction costs, and broad platform accessibility have fueled the expansion of cashless transactions. UPI has promoted more digital transactions, reduced dependency on cash, and developed a digital payment culture. This study examines the influence of UPI on the growth of cashless transaction, emphasizing its role in promoting financial inclusion and accelerating economic digitalization.

Keywords: Cashless transactions, Digital payment system, UPI, Financial inclusion, Economic digitalization

Introduction

In India, the drive towards a cashless economy gained its formal recognition in 2012, when the Reserve Bank of India issued its 'Payment System Vision Document 2012-15 and advocated the concept of a 'Less-Cash Society'. The transformation accelerated significantly after the demonetization policy of November 2016, which limited the circulation of high-value currency notes and encouraged digital payments. The initiatives by the Government of India such as Digital India, BHIM App, Jan DhanYojna, RuPay cards, and Unified Payments Interface (UPI) have further expanded digital transactions across urban and rural areas. Now, India has become one of the world's fastest-growing digital payment economies. The Nation's digital payment scenario has undergone a change because of National Payment Corporation of India (NPCI)'s Unified Payment Interface (UPI). With the introduction of UPI in 2016, India has become the global leader in instant payments due to amazing growth in digital transactions in the country. With features like its instant single-click app-based transfer, Quick Response (QR) code scanning, bank interoperability, 24×7×365 utility features, and strong customer protection through two-factor authentication system, UPI has democratized and ensured universal access to financial services for everyone with a mobile phone and a mobile number linked to their bank account. The UPI (Unified Payment Interface) payments system is simply the Indian invention that has garnered international attention in recent times. The rise of UPI has not only resulted in a major displacement of cash payments but also in the displacement of other digital payment systems. For example, the use of debit cards for merchants' payments has been decreasing annually, and UPI has also altered the way that people currently access prepaid wallets. India's digital future will probably be significantly shaped by UPI as it develops and innovates more. UPI's incredible rise from humble beginnings in 2016 to its current state of widespread acceptance and use is a unique tale that is unparallel in

scope and influence. With over 30 crore users and over 5 crore businesses using UPI, over 40 percent of all payments made in India today are made digitally. UPI has had a phenomenal increase in digital payments over the years; in May 2023 alone, 9.41 billion transactions totaling INR 14.89 lakh crore were handled. This is a 58 percent increase in transaction volume year over year to about 3600 transactions per second.

Need of the Study

Digital Payment service is playing a key role in enabling the economy go cashless. The currency in circulation has reduced after the commencement of digitalization.The rise of digital technology has introduced various methods of cashless transactions, including debit cards, credit cards, mobile wallets, internet banking, and the Unified Payment Interface (UPI). While these methods provide ease and flexibility, it is critical to evaluate their influence on the growth of cashless transactions and comprehend the special role of UPI in this shift. As a result, the task at hand is to access the success of various modes of cashless transactions and evaluate UPI's distinctive contribution to the expansion of cashless transactions. This study aims to investigate the various methods of cashless transactions, with a particular emphasize on UPI, and to give insights into maximizing the potential of UPI to further accelerate the acceptance and growth of cashless transactions in India.

Review of Literature

The introduction of the Unified Payments Interface (UPI) by the National Payments Corporation of India (NPCI) in 2016 has transformed the digital payment ecosystem of India and significantly accelerated the growth of cashless transactions. Several researchers have examined the adoption, usage, and impact of UPI from different perspectives. Mukhopadhya (2016) analyzed the transition towards a cashless economy in India and highlighted the importance of digital payment systems in reducing dependence on cash. The study emphasized that technological advancement, financial inclusion, and consumer awareness are critical factors in promoting cashless transactions.

Sahu, Chakraborty and Banerjee (2025) explored the role of UPI in rural India. Their findings indicated that UPI has improved ease of doing business for small entrepreneurs by ensuring quick transactions, wider customer reach, and transparent financial dealings. The study emphasized that UPI has played an important role in extending digital payment benefits to rural areas and promoting financial inclusion.The use of reward and cash back offers from applications like phonepe and Google pay was done in the starting days of growth of UPIto ensure that the platform seems enticing and habit forming. This positive cycle usually gathers up its momentum once it is started, which is precisely what happened with UPI after 2019-20. The academic research on UPI has significantly increased since to the year 2018. Sharma and Verma (2022) claim that UPI's zero cost strategy, compatibility with all banks and the availability of several apps were the main reasons for its rapid adoption. Garg and Panchal(2022) raised worries about market concentration pointing out that around 85% of UPI transactions are handled by Phonepe and Google pay combined this dominance races concern about data governance and competitiveness. Kapoor (2021) claimed that the Covid-19 epidemic permanently accelerated UPI's growth by drawing new users from rural and semi urban areas who had never used digital payments before. As observed in different studies conducted in different parts of the world it is found that digital payment systems plays an important role in expansion of financial inclusion. Digital financial services enhance economic outcomes, especially in developing nations (Ozili, 2018; Demirguc-Kunt et al., 2018). According to comparative studies (Singh et al., 2023; BIS, 2022), India's UPI is a paradigm for other emerging countries because to its size, open-platform concept, and clear objective of reaching the financially excluded.

Objectives

The study is confined to the following objectives:

1. To analyze the different modes of cashless transaction prevailing in India.
2. To study the growth of cashless transaction in the economy.

3. To explain the contribution and impactof UPI in the growth of cashless transactions in India.

Methodology

The study is descriptive in nature and is based on the secondary data that are collected from many sources, including books, article published in various magazines and newspapers, RBI annual report, NPCI annual reports, and government publications related to digital payments and financial inclusion and websites etc. In order to achieve the objectives of the study journal articles, reports and websites are thoroughly searched, and a relevant conclusion is drawn. The secondary data associated to various modes of cashless transactions are collected from the Annual Report of the Reserve Bank of India published on its official website.

Modes of Cashless Transactions

With the advancement of digital technology and government initiatives like Digital India, cashless transactions have become increasingly popular in India. The different modes of cashless transactions can broadly be classified in paper-based and electronic methods. The paper-based modes are-

Cheque and Demand Draft: A Cheque is financial instrument that acts as a written instruction from an account holder to a bank to pay a specified amount of money to the person or organization indicated on the cheque. It is a method of payment that allows customers and businessmen to conduct transactions without the need of actual cash. A demand draft, on the other hand, is a payment instrument issued by a bank on a customer's behalf. It is a guaranteed and pre-paid type of payment that is typically utilized for large or outstation transactions. The consumer gives the bank the amount to be paid as well as the name of the receiver.

The electronic methods of cashless transactions are-

Aadhar-enabled payment system (AePS): Using the 'Aadhar' number and online UIDAI verification, the National Payment Corporation of India offers banks and other financial institutions a new cashless solution. The AePS uses low-cost, interoperable access devices, called Micro ATMs that are owned by business correspondents to offer banking services, such as cash deposits, balance inquires, cash withdrawals and transfer.

BHIM Aadhar Pay: BHIM Aadhaar Pay enables retailers to take digital payments from consumers over the counter. By verifying the customer's biometrics, it allows any merchant associated with an acquiring bank that is actively using BHIM Aadhaar Pay to accept payments from customers of any bank. The merchant needs an Android phone running the BHIM Aadhaar application and a verified biometric scanner attached to a tablet, smartphone, or kiosk via a USB port or Micro-ATM/ POS in order to do this. The Aadhaar number of the customer and the merchant must be linked to the same bank account.

Credit Cards: A credit card is a piece of plastic one may use to borrow credit from the credit card company in order to pay for goods. It is issued by Visa or another network. When buying goods from a retailer who takes credit cards, payment requires a credit card reader.

Debit Cards: Prepaid cards are debit cards, sometimes referred to as ATM cards. To make a purchase, a person must first register an account with the issuing bank, which will provide a debit card with a unique ID number. He or she must then input the pin number on the shop pin pad. The banking system verifies the pin when the card is swiped through the electronic terminal and decides whether or not the issuing bank will allow the transaction. As the system will reject any transaction that exceeds the customer's account balance therefore the consumer will never overspend.

National Electronic Funds Transfer (NEFT): The Reserve Bank of India (RBI) launched National Electronic financial Transfer (NEFT) as a method of online financial transfer. It instantly transfers funds across banks across India. A bank branch must be NEFT-enabled in order for a customer to transfer funds to another party.

Immediate Payment Service (IMPS): IMPS offers a powerful and real-time fund transfer service that is available 24x7 through different channels such as mobile, internet, ATM, and SMS. An IMP is a strong

service that allows payments to be transferred immediately between banks in India, which is not only safe but also cost-effective. Currently, 713 participants are active on IMPS, which includes banks and PPIs.

Unified Payments Interface (UPI): Unified Payments Interface (UPI) allows any participating bank's mobile apps, such as Phonepe, Paytm, Google Pay, and others, to be connected to multiple bank accounts. Customers may pay a variety of retail stores, online and offline straight from their bank account with UPI, eliminating the need to enter credit card details, IFSC codes, or net banking or wallet passwords. It brings together a variety of financial services under one roof, including seamless fund transfer and merchant payments. Since its establishment by the NPCI in April 2016, users have found it to be a popular option for transferring and receiving money. Additionally, it manages "Peer to Peer" collection requests, which may be scheduled and funded based on convenience and necessity.

The volume of transactions through different modes of cashless payment systems are shown with the help of the table 1.

Table 1: Volume of transactions of different modes of Cashless Payments (In Lakh)

Years	AePs	Credit Card	Debit Card	Bhim Aadhar Pay	NEFT	IMPS	UPI	Paper-based Instruments
2017-18	6	14,052	33,434	20	19,464	10,098	9152	11,713
2018-19	11	17,626	44,143	68	23,189	17,529	53,915	11,238
2019-20	10	21,773	50,611	91	27,445	25,792	125,186	10,414
2020-21	11	17,641	40,146	161	30,928	32,783	223,307	6704
2021-22	10	22,399	39,387	228	40,407	46,625	459,561	6999
2022-23	6	29,145	34,179	214	52,847	56,533	8,37,144	7,109
2023-24	4	35,610	22,860	194	72,640	60,053	13,11,295	6,632
2024-25	4	47,741	16,120	230	96,198	56,250	18,58,660	6,095

Source: Reserve Bank of India - (Annual Report of RBI)

Table 1 presents the volume of transactions through various cashless payment modes in India from 2017–18 to 2024–25. The data reveal a significant expansion of digital payment systems, reflecting India's rapid transition towards a cashless economy. Among all payment modes, **Unified Payments Interface (UPI)** recorded the most remarkable growth. The transaction volume increased from 9,152 lakh in 2017–18 to 18, 58,660 lakh in 2024–25, demonstrating the widespread adoption of Smartphone-based instant payment systems. UPI has emerged as the dominant mode of digital payment due to its convenience, speed, and interoperability. **National Electronic Funds Transfer (NEFT)** transactions also exhibited steady growth throughout the period, rising from 19,464 lakh transactions in 2017–18 to 96,198 lakh in 2024–25. This indicates increasing reliance on electronic fund transfers for both personal and business transactions. Similarly, **Immediate Payment Service (IMPS)** transactions expanded from 10,098 lakh to 56,250 lakh transactions, reflecting growing acceptance of real-time payment facilities. The use of **credit cards** increased consistently from 14,052 lakh transactions in 2017–18 to 47,741 lakh in 2024–25. In contrast, **debit card** transactions initially increased from 33,434 lakh to 50,611 lakh during 2019–20 but declined thereafter to 16,120 lakh in 2024–25. This decline may be attributed to the substitution of debit card usage by UPI-based payments. Transactions through **BHIM Aadhaar Pay** increased from 20 lakh in 2017–18 to 230 lakh in 2024–25, although the overall volume remained relatively small compared

to other digital payment modes. **AePS (Aadhaar Enabled Payment System)** transactions remained negligible and showed fluctuations, declining from 11 lakh in 2018–19 to only 4 lakh in 2024–25. Overall, the data highlights the rapid growth of electronic payment systems in India, with UPI emerging as the principal driver of cashless transactions.

Growth of UPI in India

Table 2:Growth of UPI in India since 2017-18 to 2023-24 (In crores)

Year	P2P Transaction	P2M Transaction	Total Transaction
2017-18	81.10	10.40	91.50
2018-19	422.20	113.10	535.30
2019-20	806.10	445.80	1251.90
2020-21	1303.90	929.20	2233.10
2021-22	2656.20	1940.60	4596.80
2022-23	4115.00	4260.10	8375.10
2023-24	5299.60	7816.80	13116.40

Source: RBI, NPCI & Banks

India's digital payments ecosystem is evolutionary mature, as seen by the thorough division of UPI transactions into Person-to-Person (P2P) and Person-to-Merchant (P2M) from FY2017–18 to FY2023–24. UPI's primary function in its early years was peer-to-peer money transfers. Due to a lack of digital merchant infrastructure and consumer confidence in digital commerce, the system was initially dependent on interpersonal usage, as evidenced by the fact that P2P accounted for 81.10 crore of the 91.50 crore UPI transactions in FY2017–18, while P2M contributed only 10.40 crore. While P2M witnessed steady increase, reaching 445.80 crore transactions by FY2019–20 as smart phones, QR codes, and fintech apps became more widely available, this pattern persisted in FY2018–19 and FY2019–20. The pivotal moment occurred in FY2020–21 and FY2021–22. In FY2021–2022, P2P transactions increased significantly to 2,656.20 crore, while P2M transactions also expanded quickly to 1,940.60 crore, driven by the shift in consumer behavior toward contactless payments brought on by the pandemic. During this time, vital services, energy bill payments, and supermarket purchases—areas where cash has historically been the primary method of payment—were increasingly handled digitally. P2M growth was made possible by initiatives like the Digital India framework's deployment of UPI QR codes, 0% MDR (Merchant Discount Rate) for small companies, and the on boarding of street vendors through programs like PM SVANidhi. For the first time in UPI's history, P2M transactions (4,260.10 crore) surpassed P2P transactions (4,115.00 crore), indicating a significant structural shift from a person-centric to a commerce-driven digital system. When P2M transactions (4,260.10 crore) surpassed P2P transactions (4,115.00 crore) for the first time in UPI's history in FY2022–2023, it marked a significant structural shift and the beginning of a larger transition from a person-centric to a commerce-driven digital payment platform. When P2M transactions increased to 7,816.80 crores in FY2023– 2024, accounting for approximately 60% of all UPI transactions, this trend acquired even more traction. P2P transactions, on the other hand, grew steadily but more slowly, reaching 5,299.60 crore. According to the changing trend, UPI has surpassed personal convenience transfers to become the most widely utilized payment mechanism in a number of industries, including e-commerce, retail, utilities, and services.

Contribution of UPI in the growth of Cashless transactions

User-friendly and convenient: UPI is incredibly user-friendly and convenient to use. Users can link their bank accounts to a virtual payment address known as a UPI ID. This removes the need to provide bank account information or credit card data while doing transactions.

Instant transfer of funds: UPI allows for the quick transfer of funds between bank accounts, 24 hours a day, and seven days a week. This makes it appealing to those who need to transfer and receive money instantly.

Low transaction fees: When compared to older methods such as NEFT or RTGS, UPI charges relatively minimal transaction fees. As a result, it has become an appealing choice for small enterprises and individuals.

Availability on numerous platforms: UPI is available on a variety of platforms, including mobile applications, websites, and even feature phones. As a result, it is now available to a vast number of individuals throughout India

Encouragement of digital payments: UPI has played an important role in increasing digital payments in India. It has made it simpler for users to conduct transactions without the need of cash. This has resulted in a decrease in the use of cash and a rise in digital transactions.

Impact of UPI on the Growth of Cashless Transactions

Increase in Digital Transactions: The use of UPI has resulted in an enormous rise in the number of digital transactions in India. According to a Reserve Bank of India (RBI) research, in the financial year 2024-2025, the Unified Payments Interface (UPI) covered its position as the dominant payment method in India, accounting for approximately **81% of the total retail digital payment transactions by volume**. Within the UPI ecosystem, major fintech apps dominate the market, with **PhonePe** leading with about 46.7% market share, followed closely by **Google Pay** and **Paytm.**

Reduction in Cash Transactions: UPI has also resulted in a decrease in cash transactions in India. According to the RBI, the value of currency in circulation as a proportion of GDP fell from 12.5% in the fiscal year 2017-18 to 11.11% in the fiscal year 2024-25. This can be linked to a growth in the usage of digital payments, with UPI playing a significant role.

Impact on Digital Payments Ecosystem: UPI has had a significant impact on the digital payments ecosystem in India. It has consolidated numerous payment mechanisms, including bank transfers, mobile wallets, and payment banks, onto a single platform. Users' payment processes have been streamlined, eliminating the need for several payment apps. UPI has also provided new opportunities for businesses, allowing them to quickly offer digital payment solutions to their customers.

Encourage Small Value Transactions: UPI has been very successful in encouraging small value transactions. Because of the cheap transaction costs and ease of usage, consumers have begun to utilize UPI for small-value transactions such as paying for groceries, gas or utilities. This has reduced customers' dependency on cash for daily transactions, making them more convenient.

Increasing Digital Payments in Rural regions: UPI has been instrumental in encouraging digital payments in rural regions. People in rural places have found it simple to implement digital payments due to UPI's simplicity and accessibility.

Financial Literacy Promotion: UPI has also played a role in developing financial literacy in India. People have become more aware of financial concepts such as digital payments, bank transfers, and the significance of saving as a result of their usage of UPI. This has aided in the promotion of financial literacy, which is critical for the economy's long-term success.

Facilitating Government Initiatives: UPI has aided in the implementation of several government projects, including Digital India and the Jan DhanYojana. The government has been encouraging individuals to register bank accounts and has promoted digital payments as a measure of financial inclusion. UPI has played a critical role in assisting these activities by making digital payments available to everyone, regardless of socioeconomic status.

Conclusions

UPI has played a significant role in promoting cashless transactions in India. UPI has transformed the payments environment by boosting digital payments, lowering cash transactions, and promoting financial inclusion. UPI has pushed consumers to use digital payments, reducing their dependency on cash. Its ease

of use, minimal transaction costs, and convenience have made it a popular option for both people and businesses. UPI has also had a larger influence on the digital payments environment, encouraging financial literacy and aiding government programmes while increasing digital payments in rural regions. However, there is still scope for improvement, and efforts should be made to raise awareness, promote security measures, improve merchant acceptance, develop new use cases, and improve interoperability in order to significantly grow digital payment usage in India. Overall, UPI has been a game-changer in the payments industry in India with a bright future, and its impact is expected to grow further in the future.

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Reviving Roots: NEP 2020 and the Preservation of Traditional Language and Culture

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Abstract:

The National Education Policy (NEP) 2020 marks a paradigm shift in India's educational landscape, departing from a colonial-legacy framework towards an indigenous, holistic and multidisciplinary system. A cornerstone of this policy is its robust emphasis on the preservation, promotion and revitalization of traditional Indian languages, arts and cultural heritage. This paper critically examines the mechanisms, implications and challenges of NEP 2020 concerning linguistic and cultural preservation. Utilizing a qualitative methodology and combining a critical policy discourse analysis (CPDA) of NEP 2020 documentation, legislative framework and secondary literature, the study investigates how the policy operationalizes the "three language formula," integrates classical and tribal languages and embedded indigenous knowledge system (IKS) into modern curricula. The discussion highlights the dual imperatives of fostering global competitiveness while anchoring learners in local ethos. The paper indicate that while NEP 2020 offers a visionary blueprint for decolonizing Indian education, its success hinges on pragmatic implementation hurdles, including teacher training, material development and the management of socio-political and linguistic dynamics. The paper concludes with actionable recommendations to ensure equitable and effective cultural-linguistic revitalization.

Keywords: NEP 2020, Linguistic Preservation, Cultural Heritage, IKS, Mother Tongue Instruction.

Introduction:

Education is not merely a mechanism for economic productivity; it is the primary vassal through which a civilization transmits its values, philosophies, linguistic nuances and historical consciousness from one generation to the next. Education historically served as a mechanism for transmitting cultural, philosophical and religious values through established indigenous framework (Kambala & Mathe, 2025; Verma, 2015; Kundu et al, 2024). Prior to colonial intervention, Indian education was characterized by holistic system such as *Gurukulas,* Buddhist monasteries, and Hindu *Tolas,* which provided instruction in philosophy, mathematics, medicine and astronomy (Kambala & Mathe, 2023; Kundu et al, 2024). These traditions were deeply rooted in the environment, fostering continuity in cultural identity and intellectual development (Mujeeb, 1953). For centuries, India's educational architecture was shaped by a complex interplay of indigenous pedagogies, medieval Islamic traditions, and most profoundly a British colonial apparatus designed in the words of Thomas Babington Macaulay, to create a class of persons "Indian in blood and color, but English in taste, in opinions, in morals, and in intellect" (Macaulay, 1835). Beyond Macaulay, the broader political and ideological framework of education in colonial India influenced curriculum development, the status of indigenous knowledge and nationalist demand for equitable and culturally reflective education, showing the complex institutional reality beneath simplistic views of colonial education as solely anglicizing (Kumar, 2015). The 1835 Minute on Indian Education by T.B. Macaulay remains the pivotal document in the shift toward Anglicist policy (Verma, 2025; Batra, 2015; Caton, 2011). While some modern scholarship has debated the extent of his influence, his discourse provided the ideological justification for

prioritizing English over Sanskrit, Persian, Arabic and vernacular languages, thereby cementing the dominance of Western knowledge in the Indian subcontinent (Verma, 2015; Caton, 2011).

Following independence in 1947, successive Indian education commissions- such as the Kothari Commission (1964-66) and National Policies on Education in 1968 and 1986- made incremental efforts to indianize the curriculum. These efforts were aimed at integrating indigenous knowledge system, regional languages, and cultural values into the academic framework, moving away from colonial legacies. However, despite these policy interventions, English language education maintained its dominant position as the primary vehicle for elite social mobility. This enduring preference for English has, over time, contributed to the gradual erosion of regional languages, tribal dialects and traditional systems of knowledge that are crucial to India's rich linguistic and cultural diversity (Jolad and Rajpuria, 2024; Sridhar, 1996). However, English remained the undisputed currency of elite social mobility, leading to the gradual erosion of regional languages, tribal dialects and traditional knowledge system (Bhattacharya, 2021).

On the contrary, the National Education Policy (NEP) 2020 serves as a transformative framework for India's educational landscape, explicitly prioritizing multilingualism to foster equity, cognitive development and cultural rootedness (Singha & Kathuria, 2024; Verma, 2025; Ghosh, 2024). This shift is designed to align instruction with students' linguistic backgrounds, thereby improving comprehension and academic performance (Singh & Joshi, 2024). The promulgation of National Education Policy (NEP) 2020 represents the first major overhaul of India's educational paradigm in 21st century. It explicitly critiques the historical neglect of India's indigenous cultural and linguistic wealth and presents a roadmap to reposition education as a tool for national self-awareness, unity and global citizenship. At the heart of the NEP 2020 lies a profound recognition; the preservation of India's linguistic diversity, home to hundreds of languages and thousands of dialects, is inextricably linked to the survival of its vast cultural landscape. Scholars have proposed innovative frameworks, such as the 'Language for Learning' (LFL) model, which offers a flexible, culturally sensitive, and economically viable blueprint aligned with NEP 2020. The framework moves beyond the monolingual-centered notion of "medium of instruction" towards a translanguaging approach that recognizes the fluid multilingual realities of Indian classrooms. It aims to ensure first language support while promoting cognitive independence, thus fostering equity and inclusivity in education (Mahapatra and Anderson, 2022).NEP 2020 positions mother tongue-based education as a cornerstone for both foundational literacy and the preservation of India's linguistic and cultural heritage (Singh, 2020; Verma, 2025; Ghosh, 2024). By integrating local languages into the curriculum, the policy seeks to protect endangered languages and maintain a connection to indigenous epistemologies and traditions. This approach is supported by cognitive theories, such as Cummins' Interdependence Hypothesis, which suggests that foundational literacy in the mother tongue facilitates more effective acquisition of additional languages (Verma, 2025). Moreover, the integration of Indian Knowledge Systems (IKS) into pedagogy allows for the inclusion of folk narratives, local arts, and indigenous knowledge, which serves to counter the alienation often experienced by students in Western-centric educational models. The LFL framework can serve as a practical road map to implement NEP's multilingual education by addressing socio-cultural challenges unique to India's linguistic landscape. Hence, this paper investigates how NEP 2020 seeks to operationalize this vision, balancing the demands of a globalized knowledge economy with the urgent imperative of traditional language and cultural preservation.

Objectives:

The primary objectives of this paper are:

- To analyze the policy provisions within NEP 2020 that pertains to the preservation and promotion of traditional Indian languages, classical languages and tribal languages.
- To examine the integration of Indigenous Knowledge System (IKS) and traditional arts into the contemporary school and higher education curricula.

- To evaluate the methodological frameworks utilized by NEP 2020 to foster multilingualism through the "three-language formula" and early childhood mother tongue instruction.
- To identify the systematic challenges, socio-political complexities and implementation bottlenecks associated with the policy's linguistic and cultural agendas.
- To offer evidence-based recommendations for policymakers, educators and institutions to optimize the outcomes of NEP 2020 regarding cultural-linguistic preservation.

Methodology:

This study adopts a qualitative research design based on critical policy discourse analysis (CPDA) to examine the provisions of the national Education Policy (NEP) 2020 concerning linguistic diversity and cultural preservation in India. It provides a suitable framework for analyzing the ideological assumptions, power relations and socio-cultural values embedded within educational policy texts. The primary data source is the official NEP 2020 document published by the Ministry of Education, Government of India. Secondary sources include peer-reviewed journal articles, books, conference proceedings, policy reports, linguistic studies and relevant publications of linguistic organizations, primarily from 2020-2024. Earlier education policies, particularly the National Policies on Education of 1968 and 1986/92, are also examined for comparative purposes. The documents are thematically analyzed through systematic coding of key concepts, including mother tongue, regional languages, classical and tribal languages, Indigenous Knowledge System (IKS) and cultural heritage. The analysis evaluates the policy's conceptual framework, ideological orientation and practical applicability in preserving India's linguistic and cultural diversity.

Discussion:

1. The Pedagogical Imperative of Mother Tongue and Home Language Instruction

The National Education Policy (NEP) 2020 establishes a framework for multilingualism that prioritizes the mother tongue, local language, or regional language as the medium of instruction (Mishra & Mishra, 2024; Singh & JOSHI, 2024). Specifically, the policy recommends that wherever possible, the medium of instruction until at least Grade 5, but preferably up to Grade 8 and beyond, should be the home language, mother tongue, local language, or regional language (Singh & JOSHI, 2024; Verma, 2025; Behera et al, 2025). While the policy aims to foster multilingualism and honor linguistic diversity, its successful execution is contingent upon addressing systemic challenges, including the need for specialized teacher training, the development of bilingual instructional materials, and the mitigation of socio-economic inequities in resource distribution (Pal, 2024; Singh & JOSHI, 2024; Verma, 2025). Hence, One of the most radical departures in NEP 2020 is its uncompromising stance on the medium of instruction in early childhood and primary education. Citing extensive research in cognitive science, neuroscience, and linguistics (e.g., Cummins, 2000; UNESCO, 2053), the policy mandates that, wherever possible, the medium of instruction until at least Grade 5, but preferably till Grade 8, should be the mother tongue, local language or regional language.

Cognitive & Cultural benefits of Mother Tongue Education in 2020

Cognitive Advantages

- Accelerated Learning
- Enhanced concept grasp
- Reduced cognitive load

Cultural Preservation

- Continuity of heritage
- Validation of identity
- Survival of dialects

Historically, the rush toward English-medium education among marginalized and middle class

populations alike created a cognitive disconnect for young learners, who are forced to master complex concepts in an alien linguistic code (Agnihotri, 2007). NEP 2020 addresses this by recognizing that children learn and grasp complex concepts most quickly in their home languages. Research indicates that forcing students to learn, think, and express themselves in a foreign language without adequate proficiency can result in significant academic and professional disadvantages (Verma, 2025). Research indicates that forcing students to learn, think, and express themselves in a foreign language without adequate proficiency can result in significant academic and professional disadvantages (Verma, 2025). Conversely, utilizing the mother tongue (L1) allows children to develop "cumulative bilingualism," where existing knowledge networks facilitate the comprehension of subjects in other languages and enhance overall intellectual development(Behera et al, 2025). From a cultural preservation standpoint, this provision is revolutionary. Language is not merely a tool for communication; it is a repository of cultural memory, folk wisdom, ecological knowledge and worldview (Skutnabb-Kangas, 2000). When a child is educated in their mother tongue, they remain anchored in their cultural ecosystem. By validating local languages in formal classrooms, the policy combats linguistic imperialism and elevates the status of regional and endangered mother tongues.

1. The Three-Language Formula and the Revitalization of Classical and Tribal Languages:

The three-language formula is a central pillar of the NEP 2020, intended to promote multilingualism and national unity (Mishra &Mishra, n.d.). While the policy framework emphasizes flexibility, it has faced criticism and concerns regarding the potential for linguistic imposition, particularly in states like Tamil Nadu and Karnataka, where it is sometimes perceived as a mechanism for mandating Hindi (*रषटरय शकष नत 2020 म भष क सबल* , 2025). NEP 2020 reaffirms the commitment to the "three-language formula," with a renewed emphasis on flexibility, ensuring that no language is imposed upon any State. Students are expected to learn three-languages, at least two of which are native to India.

Furthermore, the policy places special emphasis on Classical Languages of India. Sanskrit, recognized for its monumental contributions to science, philosophy, literature and art, is to be offered at all levels of school and higher education as an important, enriching option. Furthermore, the policy emphasizes the preservation of South Asian intellectual heritage by integrating classical languages-including Sanskrit, Tamil, Telugu, Kannada, Malayalam, Odia, Pali, Persian, and Prakrit-into both school and higher education curricula (Adhikari, 2025; Kumar, 2025). These languages are positioned as repositories of ancient wisdom and essential components of the Indian Knowledge System (IKS). The inclusion of classical languages is framed not as a revivalist religious agenda, as some critics contend (Menon, 2021), but as an engagement with the vast classical intellectual heritage of South Asia, which contains non-translated treatise on mathematics astronomy, medicine and ethics.

The NEP 2020 includes commitments to support tribal and indigenous languages through various pedagogical resources (Raj & Tandi, 2025). Secondary literature notes the policy's intent to utilize mother-tongue-based instruction and suggests the need for instructional support, though it highlights that successful implementation remains challenged by infrastructural deficits and the digital divide (Ray et al., 2023). Therefore, NEP 2020 addresses the precarious state of tribal and indigenous languages. India hosts hundreds of tribal languages, many of which are critically endangered due to lack of written scripts and instructional support. The policy recommends that high-quality textbooks, workbooks and bilingual dictionaries be developed in tribal languages to preserve them from extinction.

2. Integration of Indigenous Knowledge System (IKS)

The National Education Policy, 2020 suggests to integrating the Indian Knowledge System (IKS) into all levels of the Educational System, intending to promote Holistic development, cultural heritage and Regional language, Vocational Education (Jadon et al., 2025). Cultural preservation under NEP 2020 extends far beyond linguistic syntax into epistemology-

specifically, the integration of Indigenous Knowledge System (IKS). The policy asserts that Indian Knowledge was lost, obscured or subjugated during the colonial era and modern education must restore this continuity. Moreover, the NEP, 2020 encourages experiential learning through local crafts, traditional technologies and community knowledge. To acquire all these things, the integration of IKS pedagogy in teacher education programs (Mandal, 2026), is a primary concern.

IKS Integration Spans Multiple Disciplines:

- **Science and Mathematics:** The integration of IKS into science and mathematics is marked by profound and diverse contributions that extend far beyond the commonly recognized domains. Ancient India's pioneering developments in mathematics, metallurgy, astronomy, and medicine symbolize a knowledge tradition that is both rich and deeply intertwined with cultural and philosophical foundations, forming a legible bridge to modern scientific disciplines. In mathematics, India's seminal introduction of the concept of zero and the decimal positional number system represents a revolutionary milestone that fundamentally transformed numerical computation worldwide. The discipline of Vedic mathematics, derived from sixteen sutras-concise aphoristic formulas-exemplifies this legacy, offering efficient algorithms that are actively applied in contemporary mathematical computations and technological innovations. Notably, these ancient techniques have contemporary practical applications in the design of digital circuits, exemplified by advancements such as high-speed ASIC complex multipliers and optical computing components, which leverage Vedic sutras like "*Urdhva Tiryagbhyam*" (Vertically and Crosswise) to reduce computational latency and energy consumption. Such synthesis of traditional mathematics with modern hardware design results in significant performance improvements, including a reported 25% speed enhancement in multiplier circuits compared to conventional architectures, demonstrating the practical utility of ancient Indian mathematical knowledge in today's technology-driven world (Saha et al., 2011; Sinha et al., 2024; Tiwari et al., 2008). Incorporating ancient Indian contributions to the metallurgy, astronomy, mathematics (e.g., Vedic mathematics, the concept of zero), and medicine (Ayurveda, Yoga). The field of astronomy similarly showcases the dynamic and cumulative nature of Indian scholarly traditions. Classical Sanskrit mathematical astronomy, embedded in the Jyoti%úâstra tradition, intricately fused Vedic calendric and cosmological models with Hellenistic and later Greco-Islamic astronomical insights. These cross-cultural interactions underscore the active agency of Indian scholars in modifying and enriching astronomical knowledge rather than passively receiving foreign concepts (Plofker, 2022). In the realm of traditional medicine and holistic health, Indian Knowledge Systems present a sophisticated understanding of human physiology and wellness exemplified in Ayurveda and Yoga. Ancient texts articulate detailed doctrines concerning the bodily winds ("vâta") and the science of respiration, which not only reveal advanced medical and physiological theories but also constitute a foundation for mental and spiritual practices (Zysk, 1993).
- **Arts & Humanities:** Incorporating traditional Indian art forms-including classical and folk music, dance, theater, weaving, pottery, and architecture-not merely as extracurricular activities but as integral elements of a holistic liberal arts education offer profound educational benefits. Embedding practices such as storytelling, traditional songs, language acquisition, and ritual arts can strengthen intergenerational bonds within communities, fostering cultural continuity and wellness. These practices not only transmit artistic skills but also the cultural values and identities that underpin them, enriching students' sense of belonging and personal identity. For example, Indigenous crafting practices in Canada have been shown to promote cohesion and wellbeing across generations by enabling learners to acquire cultural teachings through hands-on activities like basket weaving, beading, traditional dance, and storytelling (Sydora et al., 2023). In the like way,

the weaving traditions of the Hill Karbi in Assam exemplify how textile ecology conveys gendered labor, environmental knowledge, and social memory, illustrating that contemporary adaptations sustain cultural resilience while engaging with ecological realities (Zaman and Gogoi, 2026). Moreover, studies of indigenous folk art highlight both the opportunities and challenges of sustaining folk traditions amid market pressures, underscoring the importance of integrating these forms in education to reinforce cultural and ecological sustainability (Carruthers, 2001).

- **Ethics and Philosophy:** The integration of classical texts, tribal worldviews, and environmental philosophies such as *Vasudhaiva Kutumbakam* ("the world is one family") can profoundly contribute to fostering sustainable development and global citizenship by nurturing a sense of interconnectedness, responsibility, and ethical stewardship toward the environment and society. Philosophies like *Vasudhaiva Kutumbakam,* rooted in ancient Indian thought, emphasize the unity of all life forms, underscoring that humanity is not separate but integrally connected within the ecological and social fabric of the world. This worldview aligns with African indigenous ethics, particularly the Ubuntu philosophy, which encapsulates values such as compassion, mutuality, and solidarity (Assibey et al., 2024). Several environmental philosophies emphasize ethical responsibilities toward ecological balance grounded in religious teachings. These tenets emphasize humanity's role as guardians of the Earth, responsible for maintaining harmony and justice within creation (Basri et al., 2024; Zuhdi et al., 2024; Islamy et al., 2025). Drawing these philosophies together highlights a shared ethical orientation that champions collective wellbeing, ecological balance, and justice-cornerstones for global citizenship and sustainable development. Education plays a pivotal role in bridging these values with the United Nations Sustainable Development Goals (SDGs). Islamic education frameworks, for example, can incorporate concepts of stewardship and community welfare to nurture responsible citizens equipped for ethical engagement with environmental and social challenges (Mufid et al., 2024).

This curricular shift challenges the Eurocentric hegemony of modern scientific and humanities education, offering students a pluralistic perspective that honors both Western scientific rigor and indigenous empirical traditions (Raina, 2019).

Findings:

The critical analysis of NEP 2020 and its implementation trajectory yields several key findings regarding the intersection of educational policy, language and cultural preservation:

1. **Decentralization vs. Standardization Tensions:** NEP 2020 reflects an asymmetrical form of decentralization. Although it expands the formal recognition of regional and local languages, it situates multilingual education within a broader national framework that promotes shared civilizational references, including Sanskritic traditions and pan-Indian cultural narratives. This produces tension in linguistically assertive states such as Tamil Nadu and West Bengal, where language policy is closely connected to regional identity and political autonomy. The central issue is therefore not simply a contradiction between decentralization and standardization, but the language distribution of authority: states may receive flexibility in language implementation, while the symbolic foundations of national culture remain largely defined at the centre.
2. **Severe Resource and Pedagogical Deficits:** Although mother-tongue instruction is pedagogically promising, its implementation is hindered by inadequate learning materials, limited teacher preparation, multilingual classroom realities, and weak language-transition and assessment systems. These constraints suggest that the policy requires phased, context-sensitive implementation rather than a uniform language model.
3. **The Socio-Economic Hegemony of English Language:** Despite the policy's cultural and linguistic aspirations, the socio-economic

structure of the global labour market continues to privilege English proficiency. Across socio-economic groups, parents often associate English-medium education with upward mobility, white-collar employment, international migration, and access to higher education. This creates a persistent tension between the policy ideal of mother-tongue education and parental aspirations for English-medium schooling. The issue is therefore not simply a matter of language preference; it reflects the unequal distribution of economic opportunities associated with different languages. Unless mother-tongue education is accompanied by credible pathways to employment, higher education, and social mobility, families may continue to regard English as the safer educational investment.

4. **Institutionalization of Tribal and Endangered Languages:** The National Policy (NEP) 2020 establishes mother tongue-based multilingual education (MTB-MLE) as a core strategy to enhance cognitive development, pot-comprehension, and school engagement for tribal students. By prioritizing instruction in the mother tongue at least up to grade five, the policy aims to bridge the gap between home environments and formal schools systems, thereby fostering educational equity. While the policy is recognized as a progressive framework for preserving linguistic diversity and protecting tribal identity, empirical observations indicate a significant gap between policy intent and ground-level execution. This disparity is characterized by different administrative commitment across regions and a lack of dedicated government bodies to oversee the institutionalization of endangered languages.

Conclusion:

The national Education Policy (NEP) 2020 represents a watershed moment in the intellectual and cultural history of independent India. By positioning traditional language preservation, multilingualism, and Indigenous Knowledge Systems at the vanguard and educational reform, the policy seeks to heal the lingering fractures of colonial education and restore civilizational self-confidence. The philosophical underpinning of this reform acknowledges that true intellectual sovereignty can only be achieved when knowledge is disseminated in the linguistic frameworks indigenous to the learner.

However, as this paper has demonstrated, the journey from policy formulation to grassroots implementation is fraught with formidable challenges. The tension between local linguistic autonomy and pan-Indian cultural narratives, the scarcity of pedagogical resources in regional and tribal tongues and the unyielding global hegemony of English demand pragmatic, sensitive, and well-resourced interventions. Relying solely, on administrative mandates without building the requisite computational and infrastructural support system will inevitably lead to the stalling of these critical educational reforms.

To successfully preserve India's rich linguistic and cultural mosaic, the state must treat NEP 2020 not as a rigid dogma but as a dynamic, adaptive framework. Investment in teacher training, collaborative digital archiving of endangered dialects and transparent linguistic policies that respect regional sensitivities will determine whether NEP 2020 fulfills its promise of decolonizing Indian education and safeguarding its irreplaceable cultural heritage for prosperity. By anchoring technological innovation in community stewardship, India can successfully transform its linguistic diversity from an administrative hurdle into its greatest educational asset. Harnessing generative AI and large language models within a community-governed framework can accelerate corpus creation and transcription for endangered dialects while addressing ethical and cultural concerns.

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Medicinal Vegetable Plants Found in Barpetaroad Howly Area of Assam

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Abstract

The present studyreveal that Barpetaroad –Howly area is very much rich in medicinal plant species and about 30 species ofherbs and fruit plants are enlisted which are used for their medicinal properties but also consume as vegetables. These vegetable plants areused traditionally from ancient times mainly for treatment ofcough and fever, indigestion, anemia, diarrhea, asthma, stomach trouble, intestinal worms, gastritis,constipation, tonsillitis, body pain piles etc.and being used for both external and internal.

Keywords: Medicinal property, vegetable,traditional, ailments

Introduction

Vegetables are excellent source of nutrients, vitamins, antioxidants, phytosterols,minerals and dietary fiber and thereby play a vital role in human health and nutrition. Majority of the cultivated and wild vegetables have medicinal properties and can be used to treat commonailments(Kulkarni and Kulkarni,2021). Nature has its own ways of curing diseases. Proper utilization of common vegetable can prevent many human ailments and retain health and vigor(De and Parikh1985).Some compounds as are present in medicinal plants maybe found in vegetables (Fritz *et al*1993).Lycopene, indoles, tannins, polyphenols, carotenoids anthocyanin etc. are some medicinally important natural bioactive compounds present in vegetables offers wide scope for prevention of cancer, cardiovascular diseases andalsotheypossess anti diabetic and anti-obesity properties. Vegetables and fruits are good source of vitamins and minerals but low in fat and calories(Poobalan V.*et.al.2019)*.Some of our vegetables had originally been used as medicinal plants.The use of plants as medicine is rooted in an antiquity.Some plants have been used to treat and prevent many types of disease from ancient times. People of China, India,Egypt and Greece used plants as medicine long before the beginning of the Christian era. From ancient time the tribal and rural population from different corners of Assam used plants for curing different ailments and according to WHO almost 80 percent of earth inhabitants relied on traditional medicinal system for their primary health careneed.North east India is indicated as store house of medicinal and aromatic plants. The medicinal importance of these plants has already been reported (Kalita and Borthakur 2009, Sharma and Baishya 2003, Gogoi and Borthakur 2001).

Method and Materials

An explanatory field trip was conducted at Barpetaroad Howly area which is situated in the middle point of Barpeta road and Howly on the western side of N.H.37 during October,2022 to Aril, 2023. It is situated at Hala pakuri N.H.37, Howly with the Latitude of N260.27 28 and Longitude $E90^0.5756^0$.The plants were collected and information about its use and vernacular name was gathered from nearbyvillagers who have enough knowledge on it.

Result and Discussion

Numerous traditionally used wild vegetables with medicinal value has been reported.(Nyaka Bherigi H 2019.Thirty one species under twenty eight families of

wild and cultivated medicinally used vegetables are recorded from greater Barpeta Road Howly area.Althoughall vegetables are healthy and an excellent source of nutrition but some pack an extra strong boost of nutrition. Because ofover exploitation and use of chemical herbicides and weedicides some important medicinal herbs are now in a state of extinction. Therefore it is necessary to conserve important species in natural or artificial habitat.

The list of medicinal plants use as vegetable found in Barpeta road Howly Area

The vegetable plants and herbs are enumerated in tabular form. In the first column of the table botanical names and family, in second column local names (Assamese), in third column parts used as vegetable and traditional use is enumerated in column four.

Scientific name Family	**Local name (Assamese)**	**Parts use as vegetable**	**Traditional Use**
*Boerhaaviadiffusa.***L** Nyctaginaceae	Purnanaba	Tenderleaf& stem	Used in anemia liver disease, wound, kidneydisease.
Paederia scandens **(Lour)MerrSyn.P.foetida** Rubiaceae	Bhedai lota	Leaf	Leaf juice is used for dysentery and diarrhea and rheumatic affection.
Bacopa monnieri **Linn.** Scrophulariaceae	Brahmi	Stem and leaf	Take for long term memory. Treatment of dementia, asthma etc.
*Murrayakoenig*ii**(L.) Spreng** Rutaceae	Narasingha	leaf	Use in dysentery and diarrhea
*Mentha spictata***Linn.** Lamiaceae	Pudina	Stem and leaf	Use in high blood pressure. Relieve from indigestion and gas, reduce abdominal pain.
*Oxalis corniculate***.L.** (Oxalidaceae	Tengesitenga	Stem and leaf	Used in high blood pressure, diabetic, dysentery, fever and loss of appetite
*Nictanthesarbor-tristis***L.** Nyctaginaceae	Shewaliphul	Leaf and flower	Use against Intestinal worm, liver trouble and fever,
Vitex negundo **L.** Verbenaceae	Posotia	Tender leaf	Used in cough and throat sore,back and body pain,.
Zingiber officinale **Roscoe** Zingiberaceae	Ada	rhizome	Used in cough, fever,motion sickness,Cold, nausea, arthritis,indigestion, bronchitis stomach trouble.
*Leucas plukenetii***(Roth.) Spreng**Lamiaceae	Durun	leaf	Used in intestinal worm, headache, cough,sinusitis, pharyngitis, tooth decay
*Ipomea batata***(L.) Lam.**Convolvulaceae	Kolmou	Leaf and stem	Used in anemia

*Centella asiatica***(L)** Apiaceae	Bormanimuni	Leaf and stem	Leaves are used to cure dysentery.
Moringa oleifera **Lam.** Moringaceae	Chajina	Flower, Fruit and tender leaf	Use to reduce body pain.
*Solanum nigrum***L.** Solanaceae	Pichkoti/ Lachkochi	Stem and leaf	Used in constipation, liver trouble
Terminalia chebula **Retz.** Combretaceae	Hilikha	fruit	Used as appetizer and also applied against small pox
*Dillenia indica***L.** Dilleniaceae	Outenga	fruit	Use in cough, arthritis,diebetic
Dioscorea alata **L.** Dioscoreaceae	Kathalu	corm	Tuber is used in diarrhea and piles
*Enhydra flauctuans***Lour.** Asteraceae	Helochi	Tender stem and leaf	Leaves are used to treat ring worm.
*Curcuma longa***L.** Zingiberaceae	Haladhi	rhizome	Use paste on bone fracture, swellings or muscular inflammation, powdered form with milk for muscular or bodily,rheumatic pain
Emblica officinalis **Geartn.** Euphorbiaceae	Amlakhi	fruit	Used in hemorrhagediarrhea and dysentery,vomiting
Sillanthus acmella **(L.)L.** *Euphoebiaceae*	Bhui amlokhi	Whole plant	Used to treat toothache, mouth ulcer, fever, cough. Improve digestion.
Bryophyllumpinnatum **Lam. Oken**Cassulaceae	Duportenga	leaf	Leaf juice is used for kidney stone, burns,Ulcers, diarrhea piles and to lower cholesterol.
Azadiracta indica **A. Juss.** Meliaceae	Neem	leaf	Used in diabetic, high blood pressure, skin and oral treatment, burns, sores,wound, fever and rheumatism,
*Colocasia esculenta***(L.) Schott** Araceae	Kola kachu	Leaf and corm	Corms and runners are used to treat piles and tonsillitis.
*Spondius pinnata (***L.f)Kurz.** Anacardiaceae	Amora	fruit	Used in diarrhea, dysentery,inflammation, to prevent vomiting and joint pain.
Adhatodavasica **Nees** Acanthaceae	Bahektita	Tender leaf	Used in cough, tonsititis, fever, influenza, head ache, as an antiseptic
Houttuynia cordata **Thunb** Sauraceae	Mosondori	Stem and leaf	Used in dysentery, indigestion.
*Hydrocotylesibthorpioides***L.** Araliaceae	Xaru manimuni	Stem and leaf	Leaves are used in cough and cold, stomach problem and healing wound.

Spilenthes paniculate **Wall,exDC**Asteraceae	Xuhani bon	Tender leaf	Use to cure mouth and tongue ulcer.
Tamarindus indica **L.** Caesalpiniaceae	Teteli	fruit	Used in rheumatism, high blood pressure
Averrhoa carambola **L** Oxalidaceae	Kordoitenga	fruit	Use in diabetic
*Lycopersicon esculentum***L**. Solanaceae	Bilahi	fruit	Protect against cancer
*Basella alba***L.** Basellaceae	Puroisak	Leaf	Use for the relief from constipation.
*Hibiscus sabdariffa***L.** Malvaceae	Tenga mora	Tender leaves, fruit	Cooling drinks, rich in Vitamin –C, anthocyanin and other anti oxidants.
Musa paradisiacal **L.** Musaceae	Kol	Whole plant	Fruit used to relieve stomach disorders like dysentery, diarrhoea. Traditionally used for menstrual health and post partum nutrition. Treatment of kidney stone
Portulaca oleracea **Lin.** Portulacaceae	Malbhogshak	Tender leaves and stem	Used for intestinal disorder. Folk medicine for diarrhoea, dysentery and inflammation.
Smila perfoliata LourSmilacaceae	Bagh anchora	Tender leaves and stem	Used in rheumatism, fever, skin diseases, used as anti inflammatory,diuretic and detoxificants.
*Typhoniumtrilobatum(***L***)* Aracaceae	Sama kachu	Leaves and corm	Used in treatment of piles, rheumatism and joint pain, respiratory problems, inflammation.
*Preperomiapelucida***Kunth** Piperaceae	punounua	leaves	Immunity booster,improve health
Alpinia galangal **(L.)Willd** Zinziberaceae	Tora	Rhizome	Used in indigestion, stomach pain, inflammation,nausea.
*Xanthium strumarium***L**. Asteraceae	Agara	Newborn seedling	Used in sinusitis, rheumatic pain and certain skin diseases, As the xanthium contain toxic compounds; it should be used with caution.
Pogostemonbenghalense **(Burm.f.). Ktz.** Lamiaceae	Xukloti	Tender leaves and stem	Use indigestive disorder likeindigestion, diarrhoea,fever,cough and cold

Oroxylum indicum(L)**Benth. Ex Kurz**Bignoniaceae	Bhat ghila	flower	Used in gastric ulcer, jaundice, diabetes, respiratory problem,rheumatic pain and arthritis and also used in dysentery and diarrhoea
*Citrus limon***(L.) Nurm.f.** Rutaceae	Nemu	Leaves and fruits	Used in sore throat, hypertension and stomachic.
Solanum Indicum **L**. Solanaceae	Bhekuri	Fruits	Treatment of respiratory disorders like cough, asthma, bronchitis, reduce fever,indigestion, constipation, abdominal pain, liver disorder, rheumatism etc.
Smilex purfoliata **Lour.** Smilaceaceae	Tikoni barua	Tender leaves	Used as anti inflammatory, used in skin diseases, blood purifier,
Persicaria perfoliata **L.(H. Gross)**Polygonaceae	Modhu suleng	Tender leaves	Used as anti inflammatory, diuretic, detoxificants, digestive disorders, treatment of fevers etc.
Hedyotis corymbosa **(L.)Lam.**Rubiaceae	Bonjaluk	Whole plant	Treatment of jaundice and liver disorder, blood purifier, gastric problem, urinary disorder and anti inflammatory.
Stellaria media **L.** Caryophyllaceae	Morolia	Whole plant	Used for the treatment of gastrointestinal problem, jaundice, measles, diarrhoea etc.
Tetrastigma angustifolia **(Roxb.) Planch**Vitaceae	Nol tenga	Tender leaves	Used to improve digestion and stimulate appetite, indigestion, mild diarrhoea and as anti inflammatory.
Andrographis paniculata **(Burm.f.) Wall. Ex. Nees** Acanthaceae	Kalmegh	Whole plant	Used to treat gastro intestinal disorders, respiratory problems such as sore throat, cough, swollen tonsil, bronchitis, for infection like pneumonia, leprosy, tuberculosis.
Calamus tenuis **Roxb** *Aracaceae*	Bet	Young shoots	Treatment of stomach disorder and indigestion.
Nympheae nouchali **Burm.f.**Nymphaceae	Boga vet	Petiole	Treatment of indigestion, diarrhoea, dysentery, fever and skin diseases.

Conclusion

There are many vegetables with important medicinal propertiesare distributed through every corner of Assam which could be utilized in the diet having medicinal and nutritional value. But due to lack of scientific

approach People exploit these plants for their own benefit. These are needed to be preserved and for this some conservational strategies are most essential.There is a need to survey and documentation of wild edible vegetable with medicinal properties. In present study there listed 52 species under 39 families. Some of them are easily available in our surroundings, some important herbs and shrubs are cultivated in by the farmers.

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A Qualitative Assessment of Drinking Water of Villages in Sadiya

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1.Abstract

This study assesses the physicochemical quality of groundwater from eight villages in Sadiya Sub-Division, Assam, using parameters such as pH, total dissolved solids (TDS), hardness, calcium, magnesium, alkalinity, and chloride. Water samples were analyzed using standard laboratory methods and compared with Bureau of Indian Standards (BIS) guidelines. The results showed that pH, TDS, chloride, and alkalinity values were generally within permissible limits, indicating overall suitability for drinking purposes. However, elevated calcium and magnesium concentrations in several locations contributed to increased water hardness. Although no immediate health risks were identified, regular monitoring and appropriate treatment measures are recommended to maintain water quality and ensure sustainable access to safe drinking water.

Keywords: Groundwater, Bureau of Indian Standards, Safe drinking water

2. INTRODUCTION

The quality of life we live is closely linked to the quality and availability of safe drinking water. Among the various sources of freshwater, groundwater serves as one of the most important and reliable resources for drinking, domestic, agricultural, and industrial purposes.[1,2] Water quality is a critical determinant of public health, particularly in regions where groundwater and surface water constitute the primary sources of potable water. Access to clean and safe water is essential for preventing waterborne diseases and ensuring overall human well-being. In developing countries such as India, rapid population growth, urbanization, industrialization, and intensified agricultural activities have significantly increased the demand for water resources.[1–3] The expansion of developmental activities, although necessary for economic growth and societal progress, has placed tremendous pressure on available water reserves. As a result, the quality of groundwater is deteriorating continuously due to the infiltration of contaminants from industrial effluents, agricultural runoff, domestic sewage, and improper waste disposal practices. This progressive degradation of groundwater quality has emerged as a major environmental and public health concern worldwide. Furthermore, the growing gap between water demand and the availability of safe drinking water forces billions of people across the globe to rely on contaminated water sources for their daily needs. Such exposure to polluted water increases the risk of numerous health problems and poses a serious threat to sustainable development. Therefore, the protection, monitoring, and effective management of groundwater resources have become imperative to ensure the long-term availability of safe and potable water for present and future generations.

Groundwater has increasingly been recognized as a vulnerable freshwater resource, with its quality and purity facing significant threats from both natural and anthropogenic activities.[3–6] The situation is particularly critical in remote and rural regions, where excessive extraction of groundwater, coupled with limited recharge, has led to severe depletion of available water resources. In many areas, residents are compelled to travel considerable distances to obtain safe and potable water for their daily needs. Recognizing the importance of access to clean drinking water, governments and various non-governmental organizations (NGOs) have undertaken numerous initiatives aimed at ensuring the supply of contaminant-free water to communities. Despite these efforts, groundwater contamination remains a major environmental and public health concern. Previous studies have reported that a wide range of contaminants, including heavy metals, pesticides, and various organic and inorganic pollutants, adversely affect water quality and pose serious health risks to humans. Prolonged exposure to such contaminants has been associated with several health disorders, including hypertension, hypocalcaemia, kidney stone formation, gastro-renal complications, arterial calcification, and thrombosis.[1,3,7-9] In addition to heavy metal contamination, elevated concentrations of nitrogen-containing compounds in drinking water have also emerged as a significant threat to water quality. Excessive levels of nitrogen species, particularly nitrates and nitrites, can adversely impact human health and have been identified as important indicators of groundwater pollution.[10–12]

The increasing deterioration of groundwater quality has made it imperative to investigate its chemical characteristics and assess its suitability for drinking and other domestic purposes. Comprehensive evaluation of groundwater quality is essential for effective water resource management and the protection of public health. To achieve this, several assessment approaches, including the Groundwater Quality Index (GWQI), the Fuzzy Comprehensive Evaluation Method, and the Health Risk Weight Method (HRWM), have been extensively employed by researchers worldwide.[12–14] Among these techniques, the Water Quality Index (WQI) has emerged as one of the most widely adopted tools for groundwater quality assessment. Its popularity can be attributed to its simplicity, ease of computation, practical applicability, and ability to integrate multiple water quality parameters into a single representative value. Consequently, the WQI method has been extensively utilized by researchers and water resource managers for evaluating, comparing, and communicating groundwater quality status across different regions.

The Groundwater Quality Index (GWQI) is a mathematical tool widely used to evaluate and classify groundwater quality across different geographical regions. It provides a comprehensive assessment by integrating multiple water quality parameters into a single numerical value, thereby facilitating the interpretation of complex water quality data.[15,16] The GWQI concept has been extensively applied worldwide to monitor groundwater conditions and assess its suitability for various uses, particularly drinking purposes. Furthermore, it serves as an effective decision-support tool for policymakers, environmental managers, and water resource planners in identifying areas requiring remediation and selecting appropriate management strategies. Consequently, GWQI has become an indispensable component of modern water quality assessment and monitoring programs.

Numerous studies conducted across India have reported the presence of various contaminants in drinking water sources, including elevated concentrations of chloride, magnesium, calcium, arsenic, and other potentially harmful elements. Previous investigations have also indicated that drinking water quality in several parts of northern India is unsuitable for human consumption due to contamination by toxic elements and other pollutants. Of particular concern is arsenic contamination, which has emerged as a major public health issue in the region. Reports suggest that approximately 35 districts across India have been affected by varying degrees of arsenic toxicity, highlighting the urgent need for continuous monitoring and effective management of groundwater

resources to safeguard public health. In addition, several investigations have documented fluoride concentrations exceeding the World Health Organization (WHO) recommended limit of 1.5 mg L{ [1], posing significant health concerns to local populations.[17,18]

Considering the above mentioned highlights, this study was undertaken to analyse the key parameters of safe drinking water such as pH, total dissolved solid (TDS), hardness, calcium, magnesium, alkalinity, chloride and arsenic content that directly influence water usability for drinking and domestic purposes. This study focuses on the analysis of water samples collected from the villages of *Sadiya Sub-Division namely, Nagaon Bazar and Napatiya Gaon in Sunpura, ShantipurGaon, Shantipur Bazar, Telikala, Chapakhowa Masjid Patti, Ghumtibil and Duponi Borgaon*. The study area is predominantly rural, inhabited by Assamese, Nepali, and tribal communities. Due to limited piped water supply infrastructure, most residents depend on surface water and shallow wells for domestic use. Reliance on untreated water sources, particularly during the monsoon season, increases the risk of water-borne diseases such as diarrhea, dysentery, and typhoid. Inadequate water treatment facilities, limited public awareness, and poor sanitation infrastructure further exacerbate water quality and public health concerns in the region. The analysis was carried out using standard titration techniques at Public Health Engineering (PHE) Department, Government of Assam and the results are compared with BIS standards to assess compliance with safe drinking water norms. In Assam, the Public Health Engineering (PHE) Department and academic institutions play a vital role in monitoring water safety to prevent water borne diseases and infrastructure damage due to scaling or corrosion.

3. OBJECTIVES OF THE STUDY

- To test qualitatively the key parameters of safe drinking such as pH, hardness (calcium and magnesium), alkalinity, iron, TDS (Total dissolved solid) and arsenic water in the selected groundwater samples.
- To compare the observed values with the Bureau of Indian Standards (BIS) permissible limits for drinking water.
- Interpretation of analysed data of recorded parameters.
- Results and discussion.

4. MATERIALS AND METHODS

4.1 Study Area

Sadiya lies at a unique geographical position traversed by the Brahmaputra River and its major tributaries, including the Lohit, Dibang, and Kundil rivers, which significantly influence the area's geomorphology, agriculture, and socioeconomic activities. Besides these major river systems, numerous streams, ponds, wells, and tube wells serve as important sources of water for domestic and agricultural use, particularly in rural communities. The hydrological regime of the region is strongly influenced by intense monsoonal precipitation and recurrent flooding, which affect both the availability and quality of surface and groundwater resources.Sadiya experiences a humid subtropical climate characterized by high humidity and annual rainfall exceeding 2,500 mm, the majority of which occurs during the monsoon season from May to September. Frequent flooding and prolonged waterlogging during this period alter the physicochemical and microbiological characteristics of water bodies. Floodwaters often transport large quantities of suspended sediments, organic matter, and pollutants, leading to increased turbidity, microbial contamination, and fluctuations in dissolved oxygen concentrations. Groundwater quality is also susceptible to deterioration through the infiltration and leaching of agricultural chemicals, including fertilizers and pesticides, as well as domestic wastes. Agriculture constitutes the primary source of livelihood in the region, with paddy, mustard, and vegetable cultivation being the dominant farming practices. The extensive use of agrochemicals further contributes to the potential contamination of local water resources.

From a research perspective, Sadiya is an ecologically sensitive and socioeconomically vulnerable region, making it an important area for assessing key

water quality parameters such as pH, turbidity, hardness, alkalinity, dissolved oxygen, BOD, and microbial contamination. Evaluation of these parameters provides valuable insights into the status of rural drinking water sources and generates baseline data for sustainable water resource management. The study also highlights the close relationship between environmental conditions, water quality, and public health in the environmentally fragile border region of eastern Assam.

4.2 Sample Collection

The water samples were carefully collected in clean, sterilized bottles to avoid any contamination and were properly labeled. The labeled samples were then transported to the laboratory under controlled conditions for immediate testing and analysis to ensure the accuracy and reliability of results.

4.2 Parameters Tested and Methods Used:

(i) pH: Recorded in a pH meter (ii) Total Hardness: Determined by EDTA titration method (iii) Calcium and Magnesium content: Estimatedusing complexometric titration (iv) Alkalinity: Measured by titrating the sample against a standard acid solution using phenolphthalein and methyl orange indicators (v) Chloride: Determined by Argentometric titration using silver nitrate and potassium chromate as an indicator.

4.3 PROCEDURE

The chemical parameters like Alkalinity, Hardness, Chloride, etc. can be calculated by volumetric analysis using the equation N1V1=N2V2. It is the reaction between two mutually reactive chemicals. Here a chemical of known strength is used which is termed as reagent and is titrated against titrant which is taken in the burette with the help of an indicator. The endpoint is noted. Then the value is obtained by using the formula.

Hardness Test:

Took 50mL of sample water in a conical flask and added 1mL of hydroxylamine hydrochloride solution. Adjusted the pH of the solution to 10-10.1 by adding 23 mL of ammonia buffer solution and added 2 drops of Eriochrome black-T indicator. As the solution turns into wine red colour. Noted the initial burette reading and titrated the content against EDTA solution taken in burette. As the colour changes from wine red to blue colour the end point is achieved and noted the final burette reading. The process is repeated till concordant value is obtained. The calculation is done using the following calculation:

$$[1000x (V1-V2) x CF]/V3$$

where, V1 and V2 are the initial and final value of the EDTA used in the titration, CF is the strength of the EDTA used and V3 is the volume of the sample taken

Calcium Test:

Took 50 mL of water sample in a conical flask and adjusted the pH between 12-13 by adding 1N NaOH solution.Added a pinch amount of Murexide indicator, the colour of the sample changes to pink immediately and titrated with standard EDTA solution till the colour changes from pink to purple and noted down volume of titrant used. Noted the final reading and repeated the process until the concordant value is obtained.

Total calcium present in water sample is calculated using the formula:

$$[A \times CF \times 1000 \times 0.4008]/V$$

where, A is the value of the EDTA solution used in the titration CF is the strength of the EDTA solution, V is the volume of the sample used.

Calcium Hardness = [1000 × Total Calcium] / V

Calcium lon = Total calcium hardness × 0.4004

Magnesium Hardness = Total Hardness - Calcium Hardness

Magnesium as Mg^{2+} = Magnesium Hardness × 0.243

***Alkalinity Test*:**

Took 50 mL of the sample solution in a conical flask and added 2-3 drops of mixed indicator. The colour of the sample changes to blue. It is further titrated with standard 0.02 N sulphuric acid solution till the blue colour disappears and the end point is noted. The process is further repeated till the concordant value is obtained. The alkalinity of the water sample is calculated using the equation = [A x N x 50000]/V where, A is the

volume of sulphuric acid used, N is the strength of the sulphuric acid and V is the volume of the sample taken.

Chloride Test:

Took 25 mL of collected water sample in a conical flask and added 3-4 drops of potassium chromate indicator, the solution turns yellow. The mixture is further titrated with standard $AgNO_3$ until the yellow color solution turns brick red and noted down the value of titrant used. The chloride content is calculated using the formula: [(V1-V2)x Nx 35450] where, V1 is the amount of the silver nitrate used, V2 is the value of the blank titration, N is the strength of the silver nitrate

5. RESULTS AND DISCUSSION

Physico-chemical characteristics of Groundwater samples

The recorded value of the physico-chemical analysis of groundwater samples collected from the selected sampling locations of Sadiya area are presented in the following sections in tabulated form. The data presented are obtained from laboratory analysis of the samples collected and were compared with the drinking water standards prescribed by Bureau of Indian Standards (BIS, IS 10500:2012).

Table 1. pH value of the collected groundwater sample and the BIS permissible value.

Sl No.	Sample collection area	Recorded value	BIS Permissible Limit
1	Telikala	6.4	8.5
2	Masjid Patti	6.7	
3	Napatiya Gaon	7.5	
4	Nagaon Bazar	8	
5	ShantipurGaon	7.5	
6	Shantipur Bazar	8	
7	Ghumtibil	6.8	
8	Duponi Borgaon	6.7	

Table 2. TDS value of the collected groundwater sample and the BIS permissible value.

Sl No.	Sample collection area	Recorded value (mg/L)	BIS Permissible Limit (mg/L)
1	Telikala	450	500
2	Masjid Patti	400	
3	NapatiyaGaon	164	
4	Nagaon Bazar	170	
5	ShantipurGaon	150	
6	Shantipur Bazar	144	
7	Ghumtibil	142	
8	DuponiBorgaon	116	

Table 3. Calcium content in the collected groundwater sample and the BIS permissible value.

Sl No.	Sample collection area	Recorded value (mg/L)	BIS Permissible Limit (mg/L)
1	Telikala	402	200
2	Masjid Patti	370	
3	Napatiya Gaon	106	
4	Nagaon Bazar	84	
5	Shantipur Gaon	370	
6	Shantipur Bazar	402	
7	Ghumtibil	84	
8	Duponi Borgaon	106	

Table 4. Magnesium content in the collected groundwater sample and the BIS permissible value

Sl No.	Sample collection area	Recorded value (mg/L)	BIS Permissible Limit (mg/L)
1	Telikala	170	100
2	Masjid Patti	230	
3	NapatiyaGaon	40	
4	Nagaon Bazar	106	
5	ShantipurGaon	230	
6	Shantipur Bazar	170	
7	Ghumtibil	106	
8	DuponiBorgaon	40	

Table 5. Alkalinity in the collected groundwater sample and the BIS permissible value.

Sl No.	Sample collection area	Recorded value (mg/L)	BIS Permissible Limit (mg/L)
1	Telikala	14	200
2	Masjid Patti	10	
3	NapatiyaGaon	24	
4	Nagaon Bazar	7	
5	ShantipurGaon	10	
6	Shantipur Bazar	14	
7	Ghumtibil	7	
8	DuponiBorgaon	24	

Table 6. Chloride content in the collected groundwater sample and the BIS permissible value.

Sl No.	Sample collection area	Recorded value (mg/L)	BIS Permissible Limit (mg/L)
1	Telikala	32.3	250
2	Masjid Patti	23.39	
3	Napatiya Gaon	38.99	
4	Nagaon Bazar	60.26	
5	Shantipur Gaon	23.4	
6	Shantipur Bazar	32.3	
7	Ghumtibil	60.26	
8	Duponi Borgaon	38.99	

Table 7. Total hardness in the collected groundwater sample and the BIS permissible value.

Sl No.	Sample collection area	Recorded value (mg/L)	BIS Permissible Limit (mg/L)
1	Telikala	420	600
2	Masjid Patti	600	
3	Napatiya Gaon	146	
4	Nagaon Bazar	190	
5	ShantipurGaon	600	
6	Shantipur Bazar	420	
7	Ghumtibil	190	
8	Duponi Borgaon	146	

The analysis of water samples collected from several villages in Sadiyaexhibits the parameters well within the permissible limit of BIS standard. However the calcium and magnesium content in majority of villages is above the permissible limit and is alarming. The variation in pH values of groundwater samples collected from different villages is illustrated in figure 1. The pH values ranging from 6.4 to 8 demonstrate that it is neutral to slightly acidic in nature. The fluctuations in pH are attributed to the geological characteristics of the aquifer. The overall pH values suggest that the groundwater is generally suitable for drinking purposes with respect to pH.

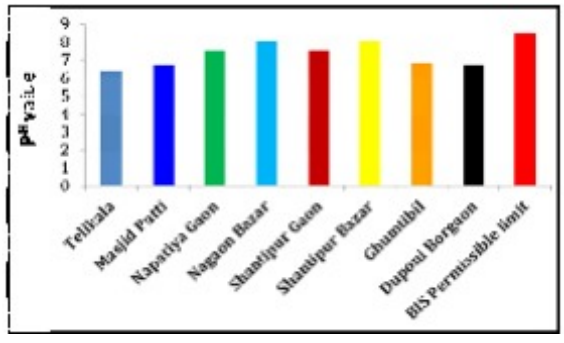


Figure 1. Comparison of recorded pH values of water samples from different villages with BIS Limit value.

Figure 2 illustrates the variation in TDS values of groundwater samples collected from the sampling locations and compared with BIS limitation. The TDS concentrations ranged from 116 to 450 mg/L with the highest concentration value of 400 and 450 mg/L at Masjid Patti and Telikala villages. It may be due to the presence of greater dissolved minerals and salts in groundwater. The calcium and magnesium content in the samples collected from majority of villages is higher than the BIS limitation value as observed in Figure 3 and Figure 4. The alkalinity values of the groundwater is well within the BIS limit indicating that the groundwater possesses low buffering capacity and is suitable for drinking purposes.Alkalinity represents the buffering capacity of water, helping it resist sudden changes in pH. As highlighted in the United States Environmental Protection Agency (USEPA, 2009) guidelines, low alkalinity increases the risk of corrosion in water distribution systems. This may cause leaching of metals like copper, lead, or iron into the water supply, which in turn poses potential health hazards if consumed over time. Therefore, the very low alkalinity in these samples is a matter of concern that requires corrective measures. Figure 5 shows variations in values in selected study area and the difference is attributed to variances in the concentration of bicarbonates, carbonates, and hydroxides present in groundwater.

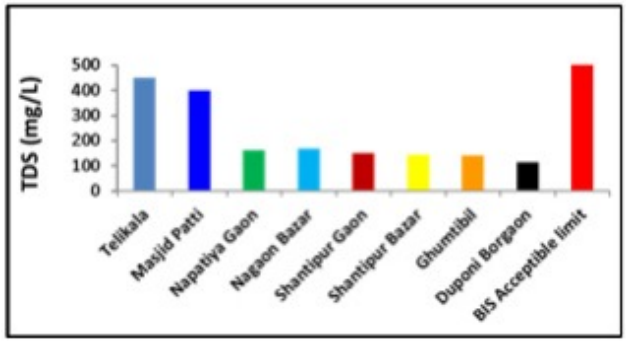


Figure 2. Comparison of TDS values of water samples from different villages with BIS Limit value.

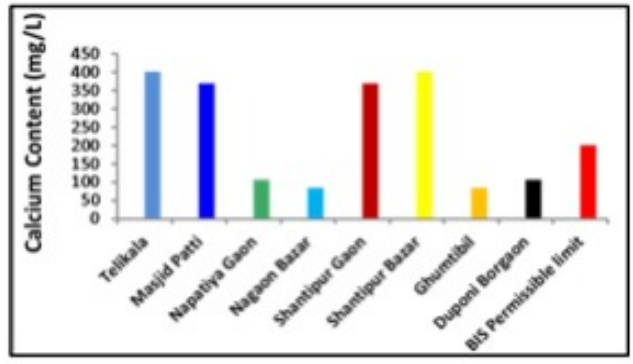


Figure 3. Comparison of calcium content in water samples from different villages with BIS Limit value.

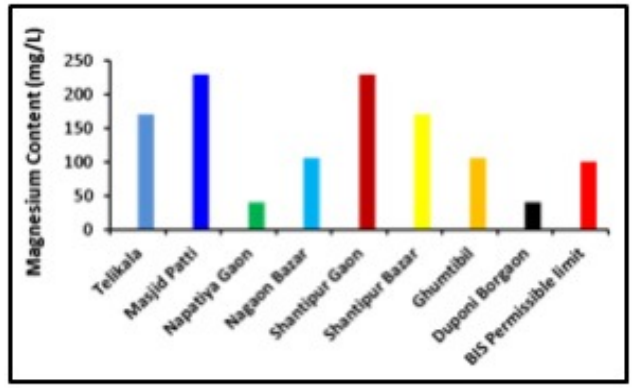


Figure 4. Comparison of magnesium content in water samples from different villages with BIS Limit value.

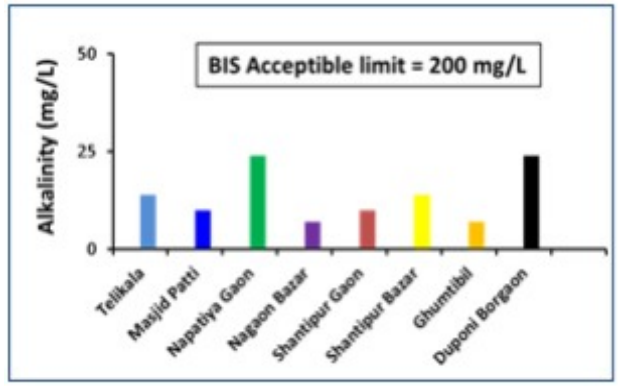


Figure 5. Comparison of alkalinity nature of water samples from different villages with BIS Limit value.

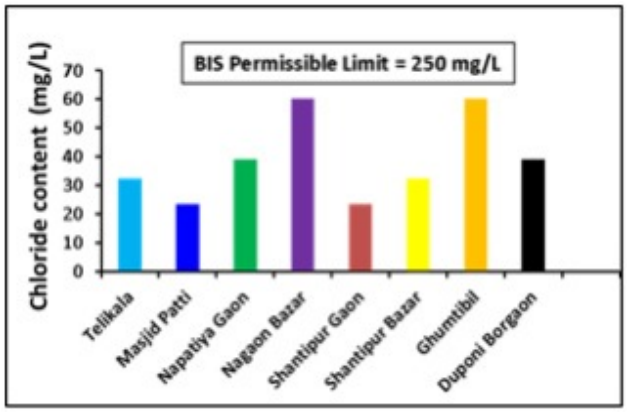


Figure 3. Comparison of chloride content in water samples from different villages with BIS Limit value.

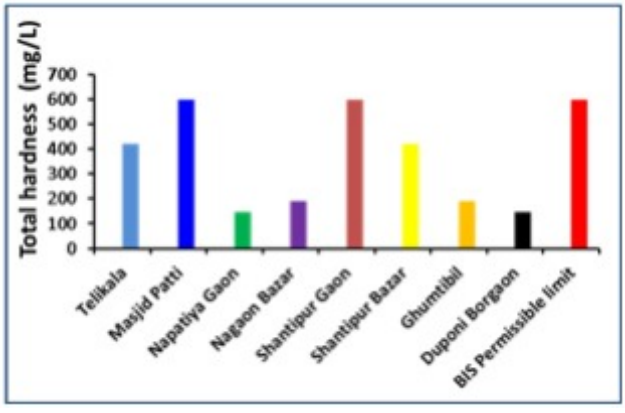


Figure 3. Comparison of total hardness in water samples from different villages with BIS Limit value.

The chloride content ranging from 23.39 to 60.26 mg/L is also well below the BIS limit of 250 mg/L indicating groundwater safe for drinking.This is a favorable result, since high chloride concentrations are often associated with salty taste and increased risk of corrosion. However the total hardness in majority of collected water close to the BIS permissible limit. Moreover, the Masjid Patti and ShantipurGaon is at bottleneck as its value is exactly at the permissible limit of BIS indicating the groundwater of those area to be hard. It may likely cause scaling problems in household water systems.

From broader perspective, the water in all studied villages of Sadiya region is safe for human consumption. However, there are some specific concerns related to hardness, calcium, magnesium, and alkalinity that need closer attention. One of the key observations and concern is that the concentrations of calcium and magnesium in majority of villages exceed the desirable limits recommended by BIS. Calcium and magnesium ions are the primary contributors to hardness in water. While moderate levels of hardness are not harmful to health—in fact, calcium and magnesium are essential minerals—the presence of these ions in higher concentrations can create several practical challenges. Excessive hardness reduces the efficiency of soap and detergents, leading to increased consumption in household cleaning. Moreover, long-term usage of hard water can cause scaling inside pipelines, water heaters, and industrial equipment, resulting in reduced efficiency and higher maintenance costs.Another important finding is the extremely low alkalinity recorded in water samples from all the selected villages. Alkalinity is a measure of water's ability to neutralize acids, and it plays a crucial role in buffering capacity. When alkalinity is too low, the water has little resistance against pH fluctuations, which can cause corrosion of metal pipes and fittings. This can further lead to leaching of metals such as iron, copper, or lead into the water, thereby posing potential health hazards.

6. CONCLUSION

The analysis of groundwater samples from villages in Sadiya indicates that, in general, the water quality lies within thepermissible limits prescribed by the Bureau of Indian Standards. However, some parameters require attention. In particular, calcium and magnesium concentrations were found to exceed the desirable limits. Since calcium and magnesium are the principal contributors to water hardness, their elevated presence makes the water moderately hard. According to the World Health Organization (WHO, 2017), hard water is not considered a direct health risk, but it can cause aesthetic and operational issues such as scaling in pipelines, boilers, and household utensils, leading to long-term maintenance problems.Another critical finding of the study is the low alkalinity value. Chloride is often associated with salty taste and aggressive corrosion when present in high concentrations, but in

present study, the results suggest no immediate concern.

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An Investigation into Pest Infestation and Management Practices in Selected Tea Estates of Sribhumi District, Assam

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Abstract

Tea cultivation is one of the most important plantation-based agricultural activities in India, with Assam being the largest tea-producing state in the country. However, tea production is frequently threatened by a variety of insect pests and mites that reduce yield and compromise leaf quality. The present study investigates pest occurrence and pest management practices in tea industries of Sribhumi District, Assam, with particular emphasis on Bhubrighat Tea Estate, SephinjuriBheel Tea Estate, Isabheel Tea Estate and Pathini Tea Estate. Field observations, stakeholder interactions, and systematic surveys were conducted to identify major pests, evaluate their impact on tea plants, and document management strategies adopted by the estate. The major pests observed included tea mosquito bug (*Helopeltistheivora*), termites (*Odontotermes obesus*), red spider mite (*Oligonychuscoffeae*), and tea looper caterpillar (*Hyposidratalaca*). Among these, red spider mite and tea mosquito bug were found to be the most economically significant pests. Most of the estates employ an integrated organic pest management approach involving cultural, biological, botanical, and mechanical control methods rather than synthetic pesticides. The study highlights the importance of biodiversity conservation, biological control agents, and regular monitoring for sustainable tea production. Findings suggest that integrated pest management (IPM) practices can effectively reduce pest populations while maintaining environmental sustainability and tea quality.

Keywords: Tea cultivation, pest management, organic tea, Assam, Sribhumi District, tea mosquito bug, red spider mite.

1. Introduction

Tea (*Camellia sinensis L.*) is among the most widely consumed beverages worldwide and serves as a major contributor to the economy of several tea-producing countries. India occupies a prominent position in global tea production, and Assam contributes a substantial share of the country's total output. The unique agro-climatic conditions of Assam, including high rainfall, fertile alluvial soils, and warm humid weather, create an ideal environment for tea cultivation.Despite these favourable environmental conditions, tea plantations are vulnerable to numerous insect pests and mite infestations. These pests attack tender shoots, leaves, stems, roots, and buds, causing significant reductions in crop yield and deterioration of tea quality. In severe infestations, economic losses may become substantial, threatening the sustainability of tea production systems.

Historically, tea estates have relied on chemical pesticides for pest control. However, increasing concerns regarding environmental pollution, pesticide resistance, biodiversity loss, and residue contamination in tea products have encouraged the adoption of integrated pest management (IPM) strategies. Organic tea estates, in particular, depend heavily on biological control agents, botanical extracts, cultural practices, and ecological balance to suppress pest populations.

The Sribhumi District of Assam contains several tea estates that contribute significantly to the regional

economy. Understanding pest dynamics and management strategies in these estates is essential for improving productivity while maintaining ecological sustainability. Therefore, the present study was undertaken to investigate major pests affecting tea plantations and to evaluate the pest management practices employed in tea industries of Sribhumi District, with special reference to Bhubrighat Tea Estate, SephinjuriBheel Tea Estate, Isabheel Tea Estate and Pathini Tea Estate.

2. Objectives of the Study

The study was conducted with the following objectives:

i) To identify major insect pests and mites affecting tea plantations in Sribhumi District.

ii) To assess the nature and extent of damage caused by these pests.

iii) To document existing pest management practices adopted in tea estates.

iv) To examine the role of biological control agents and natural predators in pest suppression.

v) To evaluate the effectiveness of organic and environmentally sustainable pest management strategies.

3. Materials and Methods

3.1. Study Area

The study was conducted at Bhubrighat Tea Estate, SephinjuriBheel Tea Estate, Isabheel Tea Estate and Pathini Tea Estatelocated in Sribhumi District, Assam. Each tea estate coversapproximately 800 hectares on an average and is managed under a fully organic cultivation system. The plantation is characterized by fertile soils, abundant rainfall, and favourable climatic conditions suitable for tea cultivation.

3.2. Field Survey

Regular field visits were conducted throughout different sections of the tea estates. Tea bushes were visually inspected for signs of pest infestation, including leaf discoloration, necrotic spots, web formation, chewing damage, wilting, and defoliation. Observations were recorded systematically across different plantation zones.

3.3. Pest Identification

Pests were identified based on morphological characteristics and symptoms of plant damage. Particular attention was given to economically important pests commonly reported from tea plantations in Assam.

3.4. Predator Assessment

Natural predators present in the estate were observed and documented. Beneficial organisms such as spiders, predatory insects, birds, frogs, and lizards were recorded to understand their contribution to biological pest control.

3.5. Stakeholder Interaction

Discussions were held with estate managers, field supervisors, and plantation workers. These interactions provided valuable information regarding seasonal pest occurrence, management challenges, and practical control measures employed within the estate.

3.6. Data Analysis

Collected observations were categorized according to pest species, damage characteristics, and management methods. Comparative assessments were made to identify major threats to tea production and evaluate the effectiveness of existing pest management practices.

4.Results and Observations

4.1. Major Pests Observed

4.1.1.Tea Mosquito Bug (*Helopeltistheivora*)

Tea mosquito bug was found to be one of the most destructive pests affecting tea bushes. The insect feeds by piercing tender shoots, buds, and young leaves and sucking plant sap.The damage appears as small brown or black lesions that gradually enlarge and cause drying of shoots. Heavy infestations lead to poor flushing, reduced shoot growth, and significant yield loss. Since the pest preferentially attacks tender pluckable shoots, tea quality is also adversely affected.Control measures adopted include pruning of affected shoots, regular monitoring, installation of light traps, and the use of organic pest management strategies to suppress population build-up.

4.1.2. Termites (*Odontotermesobesus*)

Termites were observed attacking roots and collar regions of tea bushes. The insects remain

concealed beneath the soil surface, making detection difficult during the early stages of infestation.Affected plants exhibit yellowing leaves, poor growth, wilting, and eventual decline. Root damage reduces nutrient uptake and weakens the structural stability of tea bushes. Severe infestations may result in complete plant mortality.Management practices include field sanitation, removal of dead plant materials, soil management, improved irrigation, and regular inspection of vulnerable plantation sections.

4.1.3 Red Spider Mite (*Oligonychuscoffeae*)

Red spider mite emerged as one of the most economically important pests observed during the study. Infestations were particularly severe during hot and dry periods.Mites feed by sucking cellular contents from leaf tissues, resulting in reddish-brown discoloration, bronzing, and eventual leaf drying. Heavy infestations reduce photosynthetic activity, weaken tea bushes, and significantly decrease productivity.The estate controls mite infestations through shade regulation, moisture conservation, irrigation management, and application of neem-based botanical formulations. Maintenance of ecological balance is considered crucial in preventing severe outbreaks.

4.1.4. Tea Looper Caterpillar (*Hyposidratalaca*)

Tea looper caterpillars are major defoliators of tea plants. The larvae feed voraciously on leaf tissues, producing irregular holes and, in severe cases, complete skeletonization of leaves.Defoliation reduces the photosynthetic surface area available to the plant, resulting in slower growth and decreased yield. Young tea bushes are particularly susceptible to damage.Control measures include hand collection of larvae, conservation of natural enemies, biological control using *Bacillus thuringiensis* (Bt), and maintenance of field sanitation.

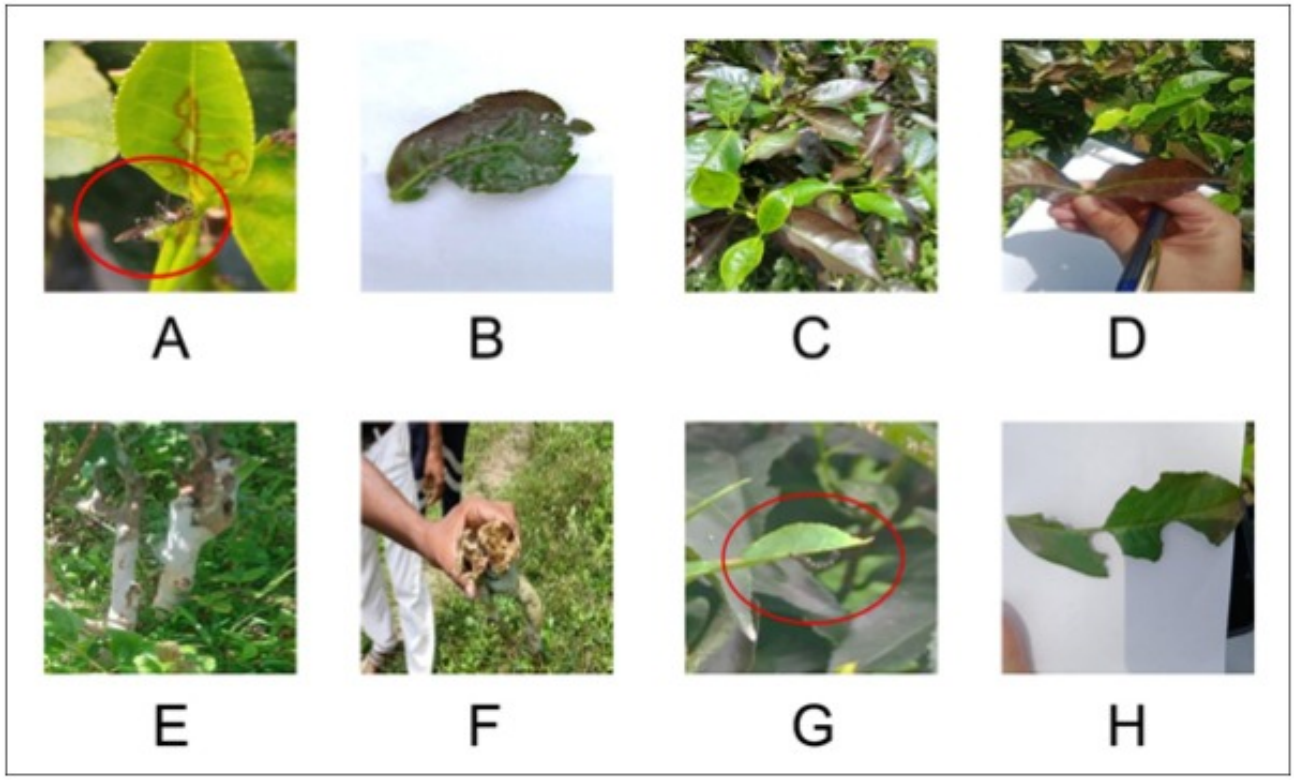


Figure 1: Photographs taken from the study sites (A) A mosquito bug clinging to the tea leaves. (B) Formation of burnt patches on the leaves due to sucking of the leaf sap by mosquito bugs. (C) Red Spider Mite infestedleavesturnreddish-brown as photosynthesis reduces (D) A pair of leaves turned completely brown due to red spider mites (E) Stemsofteaplants heavily affectedbytermites (F) A termite-affected stem

shown in high magnification (G) Looper caterpillar attached to the bottom surface of a tea leaf (H) A tealeaveaffectedbylooper caterpillar.

1.1. Role of Natural Predators

The study revealed the presence of diverse natural enemies that contribute significantly to pest suppression in the organic tea ecosystem.

1.1.1. Spiders

Spiders were among the most abundant predators observed. They feed on various insect pests, including tea mosquito bugs, thrips, and small caterpillars. Their presence helps maintain ecological balance within the plantation.

1.1.2. Ladybird Beetles

Ladybird beetles act as important biological control agents by feeding on soft-bodied insects and pest eggs. Their role is especially significant in reducing pest populations without chemical intervention.

1.1.3. Birds

Several insectivorous bird species were observed foraging within the plantation. Birds consume caterpillars, beetles, and other insect pests, thereby contributing to natural pest regulation.

1.1.4. Frogs and Lizards

These vertebrate predators help reduce insect populations by feeding on various pest species present in the tea ecosystem.The conservation of predator populations forms a key component of organic pest management at Bhubrighat Tea Estate.

Predator / Hazard	**Location / Source**	**Health Risks to Workers**
Snakes (cobra, krait, viper, rat snake)	Tea fields	Envenomation (snake bite), psychological stress, possible fatality
Scorpions & Centipedes	Leaf litter, root areas	Stings, dermatitis, allergic reactions
Leeches & Ticks	Shaded, moist plantations	Irritation, infections, vector-borne diseases (e.g., Lyme-like fevers)
Wild animals (wild boar, elephants, monkeys)	Plantations near forests	Physical injuries, crop damage, stress, reduced efficiency
Wasps, hornets, bees	Nesting in shade trees	Stings, allergic reactions, urticaria, fear-related stress
Mosquitoes	Stagnant water/ plantation areas	Vector-borne diseases (malaria, dengue)
Other Common Mites	Tea leaves/shaded areas	Vector-borne diseases (scrub typhus), dermatitis, itching
Other Plantation Hazards	Thorny shrubs,uneven terrain	Cuts, abrasions, falls, physical injuries, dermatitis etc. reduces efficiency

1.1. Pest Management Strategies

1.1.1. Cultural Control Methods

Cultural practices constitute the first line of defence against pest infestations.

These include:

1. Regular pruning of infested shoots.
2. Timely plucking operations.
3. Weed management.
4. Removal of fallen leaves and plant debris.
5. Shade tree regulation.
6. Soil enrichment using organic manures and compost.

Such practices improve plant growth and reduce breeding habitats for pests.

1.1.2. Monitoring and Early Detection

Regular surveillance enables early identification of pest outbreaks. Field workers routinely inspect tea bushes for symptoms such as discoloration, webbing, curling, and necrotic lesions.Light traps and sticky traps are employed to monitor flying insect populations and facilitate timely intervention.

1.1.3. Biological Control

Biological control forms a cornerstone of pest management in the estate.Important biological agents include:Predatory insects, Predatory mites, Spiders, Ladybird beetles, *Bacillus thuringiensis, Beauveria bassiana.*These organisms suppress pest populations while preserving environmental health.

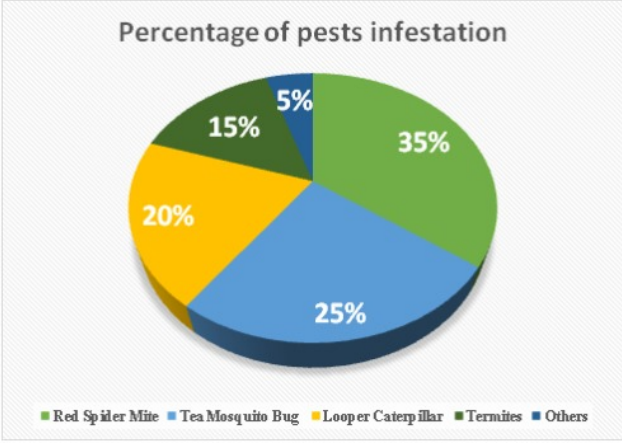


Figure 2: A pie chart showing the average percentage of pest attack in tea plantation in the Various Tea Estates.

1.1.1. Botanical Pesticides

Neem-based formulations are extensively used due to their insecticidal, repellent, and growth-regulating properties.Additionally, locally prepared botanical extracts derived from garlic, chili, and medicinal plants are utilized as environmentally friendly pest deterrents.

1.1.2. Mechanical Control

Mechanical methods include:

1. Hand-picking of caterpillars.
2. Destruction of infested plant parts.
3. Installation of light traps.
4. Use of sticky boards.

These methods are particularly useful in localized infestations.

1.1.3. Habitat Management

Habitat manipulation promotes biodiversity and strengthens natural pest control.Measures include planting flowering species around tea fields, maintaining mixed vegetation, installing bird perches, and, conserving shade trees.Such practices support pollinators and natural enemies while enhancing ecosystem resilience.

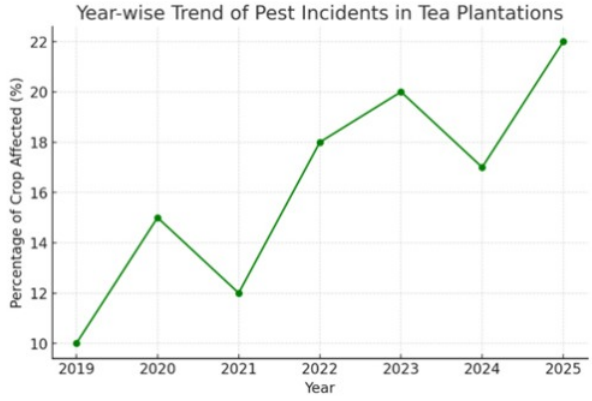


Figure 3: A line diagram showing the average percentage of crop affected in the selected Tea Estates between 2019 to 2025 due to different types of pests.

1. Discussion

The present study demonstrates that pest management in tea plantations is most effective when approached through an integrated ecological framework rather than sole reliance on chemical pesticides. The major pests observed during the study are consistent with previous reports from tea-growing regions of Assam, where tea mosquito bug, red spider mite,

termites, and looper caterpillars are recognized as economically significant pests.

Red spider mite and tea mosquito bug were found to cause the greatest damage due to their direct impact on photosynthesis and pluckable shoots, respectively. Their prevalence highlights the importance of continuous monitoring and timely intervention.The organic management system practiced at Bhubrighat Tea Estate, SephinjuriBheel Tea Estate, Isabheel Tea Estate and Pathini Tea Estate, illustrates the practical feasibility of sustainable pest control through biological and cultural approaches. Unlike conventional pesticide-dependent systems, organic management promotes ecological balance and biodiversity conservation.

Natural predators play a critical role in regulating pest populations. Conservation of spiders, birds, ladybird beetles, and other beneficial organisms reduces dependence on external pest control inputs. Habitat diversification further enhances biological control by providing shelter and food resources for beneficial species.The integration of cultural, biological, botanical, and mechanical control methods reflects the fundamental principles of integrated pest management. Such approaches not only minimize environmental risks but also contribute to the long-term sustainability of tea cultivation.

2. Conclusion

Tea cultivation remains a vital component of Assam's agricultural economy, yet pest infestations continue to pose serious challenges to sustainable production. The present study identified tea mosquito bug, red spider mite, termites, and tea looper caterpillar as the principal pests affecting tea plantations in Sribhumi District.The findings reveal that organic tea estates can successfully manage pest populations through integrated pest management strategies that combine cultural, biological, botanical, and mechanical approaches. Conservation of natural predators and maintenance of biodiversity are essential for effective pest suppression and ecological stability.

The pest management model practiced at various Tea Estates demonstrates that sustainable tea production can be achieved without excessive reliance on synthetic pesticides. Continued research, farmer training, and adoption of integrated pest management practices will be essential for ensuring the future productivity and environmental sustainability of Assam's tea industry.

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Plants, Spirituality and Ecological Wisdom: Ethnobotanical Insights from the Neo-Vaishnava Traditions of Srimanta Sankardev and Sri Sri Madhabdev

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Abstract:

Mahapurush Srimanta Sankardev and his foremost disciple Sri SriMadhabdev played a transformative role in shaping the cultural, spiritual, and social life of Assam. Beyond their contributions to religion and literature, their teachings reveal a profound awareness of nature and its importance in human wellbeing. Many of the plant species incorporated into Neo-Vaishnava religious practices, including offerings such as *Mah Prasad* and *Nirmali*, possess significant nutritional, medicinal, and ecological value. This study examines the plant resources associated with these traditions and explores their scientific relevance through a review of available literature. The findings suggest that several ritual plants used in Neo-Vaishnava practices contain bioactive compounds with nutritional, antimicrobial, antioxidant, and therapeutic properties. These observations indicate that traditional religious practices may have served not only spiritual purposes but also contributed to community health and environmental stewardship. The study highlights the need for further interdisciplinary research to document, validate, and conserve these culturally significant biological resources.

Key words: ***Sanchi pat, Bhaona, Antimicrobial,Binomial name, Phytochemical Highlights***

1.0 Introduction:

Srimanta Sankardev (1449–1568) and his foremost disciple Sri SriMadhabdev were the principal architects of the Neo-Vaishnava movement in Assam and are regarded as pioneers of Assamese social, cultural, literary, and religious renaissance (Hussain, 2021; Nath & Konwar, 2022). Sankardev, often referred to as "Jagat Guru" by scholars such as Maheswar Neog, was a multifaceted personality who excelled as a religious reformer, poet, playwright, musician, social philosopher, and educator (Neog, 1962).

Beyond his spiritual contributions, Sankardev demonstrated a remarkable awareness of nature and ecological harmony. His literary works, manuscripts, and philosophical teachings frequently contain references to biodiversity, ecosystems, and the relationship between humans and nature (Das, 2024; Das & Das, 2019). Through his writings and teachings, he emphasized the importance of plants and other living organisms in sustaining life and spiritual wellbeing.

The ecological worldview of Sankardev is reflected in the following verse:

"Jatajivajangamakitapatangama,
Aga nagajagateri kaya."

This verse expresses the belief that all living organisms are manifestations of the divine and deserve respect and protection (Bormudoi, n.d.).

The use of plants and plant-based products in Neo-Vaishnava customary and spiritual practices contributes not only to spiritual enrichment but also to physical and mental wellbeing. Furthermore, Satras (Vaishnavite monasteries) and Namghars (community prayer halls) have historically played a significant role in preserving local biodiversity through sacred groves, ritual-linked species protection, temple plantations, and community-based conservation practices (Nath & Konwar, 2022).

One of the most scientifically relevant aspects of Sankardev's Neo-Vaishnava tradition is the practice of distributing "Mah Prasad," a nutritionally balanced

plant-based food served after devotional gatherings and prayer sessions. Similarly, the concept of "Nirmali," introduced by Sri SriMadhabdev, involves the use of specific plant materials as sacred blessings distributed among devotees. Many of these plants possess nutritional, medicinal, antimicrobial, and therapeutic properties that warrant scientific investigation (Ajayi et al., 2013; Choudhury et al., 2023; Rashed et al., 2024).

2.0 Objectives:

1) Validation of nutritional status of plant base product use in "Mah Prasad".
2) Proper recognition of all plants and plant parts in a systematic way which are used in many customary beliefs like "Nirmali".
3) Indexing those plants that are used for chemical elucidation and further study.

3.0 Methodology:

The present study is based on secondary data collected from books, research journals, manuscripts, online databases, and other scholarly sources. The study follows a descriptive and analytical approach to identify and evaluate plant species associated with Neo-Vaishnava religious practices.

Plant identification and nomenclature were verified using standard botanical references and the International Plant Names Index (IPNI) framework (Baruah & Ahmed, 2014). Information regarding nutritional composition, medicinal properties, antimicrobial activity, and cultural significance was compiled from peer-reviewed scientific literature and relevant ethnobotanical studies (Ajayi et al., 2013; Choudhury et al., 2023; Kirve, 2024; Rashed et al., 2024).

4.0 Results:

Plants and plant base products use for spiritual belief are very common in different societies of the world with further documentation and scientific study is needed for exploring and characterization of such data. Following are some listed data of plants and plant products (Table: 1) that are used in Sankardev'sVaisnavareligious practices such as "Mah Prasad" and other plant base offering like "Nirmali" in sacred places likes Satras and Namghars with their binomial name, family, and vernacular name, with description and characterization.

4.1 As "Mah Prasad":

Mah Prasad is the spiritual food mixture that can offerafter "Nam Kirton" or prayer in Satra's and NamGhar's that has been implemented by MahapuroshSrimantaSankardev. Some plant base product for such practices is mention in Table no.-01

Table no.-: 01

Sl. No	Scientific Name	Common Name	Family	Vernacular Name	Nutritional & Phytochemical Highlights	Traditional /Functional Use	Research Notes
1	*Musa* sp.	Banana Leaf	Musaceae	Kol Pat	Rich in phenolic acids, hydroxybenzoic acid, hydroxycinnamic acid, and related polyphenols with antioxidant and anti-inflammatory activities.	Traditionally used as a natural serving plate or wrapper for spiritual food items.	Studies indicate that banana leaves contain bioactive phenolic compounds capable of scavenging free radicals. Traditional serving on banana leaves may also reduce

							the use of synthetic packaging materials and promote eco-friendly food practices.
2	*Vignaradiata* (L.) R. Wilczek	Green Gram (Mung Bean)	Fabaceae	Mogu Mah	Excellent source of plant protein, dietary fiber, B-complex vitamins (riboflavin, niacin, folate, vitamin B6), iron, magnesium, phosphorus, and potassium. Low in fat and cholesterol-free.	Principal ingredient of "Mah Prasad" and an important protein source in spiritual meals.	Scientific studies have demonstrated antioxidant, antidiabetic, antihypertensive, and lipid-lowering properties. Germination further enhances nutrient bioavailability and reduces anti-utritional factors.
3	*Cicerarietinum* L.	Chickpea	Fabaceae	Boot Mah	Contains approximately 20% protein and is rich in calcium, phosphorus, iron, dietary fiber, and complex carbohydrates.	Sometimes mixed with green gram as a major component of spiritual food preparations.	Raw chickpeas contain anti-nutritional compounds such as trypsin inhibitors, chymotrypsin inhibitors, haemagglutinins, saponins, and phytates that can impair nutrient absorption. Cooking or soaking significantly reduces these compounds and improves digestibility.
4	*Musa* sp.	Banana Fruit	Musaceae	Kol	Rich in dietary fiber, phenolic acids, flavonoids, carotenoids, phytosterols, and biogenic amines. Provides carbohydrates, potassium, and essential	Consumed as a supplementary fruit to improve dietary balance and palatability.	Research highlights banana fruit as a functional food with antioxidant activity, prebiotic potential, and beneficial effects

					micronutrients.		on gastrointestinal health and energy metabolism.
5	*Cocosnucifera* L.	Coconut Fruit	Arecaceae	Narikol	Mature endosperm is energy-rich and contains medium-chain triglycerides, particularly lauric acid, along with manganese, copper, selenium, and dietary fiber.	Traditionally consumed as a supplementary food item in religious offerings.	Medium-chain fatty acids are rapidly metabolized and may contribute to energy production. Coconut-derived compounds have shown antimicrobial and antioxidant properties in experimental studies.
6	*Zingiber officinale* Roscoe	Ginger	Zingiberaceae	Aada	Contains gingerols, shogaols, zingerone, saponins, glycosides, and other phytochemicals known for digestive and therapeutic properties.	Consumed in raw or mixed form to enhance flavor and digestion.	Extensive research supports ginger's anti-inflammatory, antioxidant, antiemetic, and gastroprotective activities. It is widely used in traditional medicine for managing nausea and digestive discomfort.
7	*Oryzas ativa* L.	Rice	Poaceae (formerly Gramineae)	Arroi Chawal	Major source of carbohydrates and dietary energy. Contains zinc, iron, and varying levels of fiber depending on processing; brown rice retains more fiber and micronutrients than polished rice.	Small quantities may be used in raw form during ritual preparations; serves as a staple dietary component.	Rice contributes approximately one-fifth of the global dietary energy supply. Whole-grain rice consumption has been associated with improved gastrointestinal health and reduced risk of certain chronic diseases due to its higher fiber and phytochemical content.

In addition to these primary ingredients, seasonal fruits and common salt are often incorporated. Salt facilitates the release of nutrients from plant tissues and enhances palatability. Collectively, the ingredients provide carbohydrates, proteins, minerals, vitamins, antioxidants, and dietary fiber, making *Mah Prasad* a nutritionally balanced food offering (Choudhury et al., 2023).

4.2 As Nirmali:

The term *Nirmali* refers to sacred blessings distributed to devotees following worship. Sri SriMadhabdev institutionalized this practice, and several plant species possessing medicinal and symbolic value are commonly used.

Table no.-02

Sl. No	Scientific Name	Common Name	Family	Vernacular Name	Nutritional & Phytochemical Highlights	Traditional /Functional Use	Research Notes
1	*Ixoracoc cinea* L.	Jungle Geranium	Rubiaceae	Rongialphul	Leaves contain flavonoids, phenolic compounds, and anthocyanins from red flowers. These compounds have antioxidant, anti-inflammatory, and wound-healing properties.	Leaves are used as "Nirmali" in spiritual rituals; often mixed with holy basil leaves and oil for religious purposes.	Studies indicate Ixora leaves have antimicrobial, anti-inflammatory, and hepatoprote ctive effects. Anthocyanin-rich extracts are being explored for natural colorants and nutraceuticals.
2	*Mimusop selengi* L.	Bullet Wood	Sapota ceae	Bokul	Flowers are highly fragrant; plant contains triterpenoids, flavonoids, and essential oils with antioxidant and antimicrobial properties.	Dried flowers are tied as necklaces during rituals; believed to aid spiritual focus and understanding of Neo-Vaishnavism philosophy.	Research highlights the use of flower extracts in oral hygiene, aromatherapy, and stress relief due to fragrant essential oils. Traditionally considered a symbol of purity and auspiciousness.
3	*Ocimumt enuiflor um* (Holy Basil / Tulsi)	Holy Basil	Lamiaceae	Tulsi	Leaves are rich in eugenol, ursolic acid, rosmarinic acid, camphene, cineol, and vitamin K. Known for antimicrobial,	Fresh leaves are used as "Nirmali" in spiritual rituals and as herbal medicine for multiple health benefits.	Widely studied in pharmacology for immunomodu latory adaptogenic, cardioprote ctive, and neuroprotective

					anti-inflamm atory, analgesic, and hepatopro-tective effects.		properties. Essential oils have proven antibacterial and antiviral effects.
4	*Santalum album* L.	Sandal wood	Santala ceae	Chandan	Stem contains á-santalol, a sesquiterpene with antimicro bial, skin-conditi-oning, cooling, and stress-redu-cing properties. Regulates body temperature and promotes relaxation.	Paste applied on forehead, ears, and neck ("Phut") during rituals; also used in cosmetics for cooling and skin care.	á-Santalol exhibits anti-inflammatory, antimicrobial, anxiolytic, and sedative effects. Clinical studies highlight its role in aromatherapy for stress and anxiety reduction.

The use of Tulsi and Sandalwood demonstrates a remarkable convergence of spiritual symbolism and medicinal utility. Both species possess scientifically documented therapeutic properties while retaining profound religious significance (Anwar et al., 2017; Kirve, 2024).

4.2 Other Spiritual beliefs and practices:

Several additional Neo-Vaishnava customs involve plant species with recognized ethnobotanical importance.

Table no.-: 03

Sl. No	Scientific Name	Common Name	Family	Vernacular Name	Nutritional & Phytochemical Highlights	Traditional /Functional Use	Research Notes
1	Sesamum indicum L.	Sesame	Pedalia ceae	Til	Sesame seeds contain bioactive compounds and volatile oils reported to exhibit antimicrobial activity against bacteria such as Escherichia coli.	Sesame seeds are mixed with black lentil, Bermuda grass, gold, silver, and milk to prepare a sacred mixture known as "SamahJal", traditionally used as a ritual disinfectant and purification medium.	The inclusion of sesame in SamahJal may reflect traditional recognition of its preservative and antimicrobial properties, supporting ritual cleanliness and purification practices.
	Vignamu ngo (L.) Hepper	Black Lentil	Fabaceae	MatiMah	Seeds contain cysteine-rich peptides with reported antifungal	Used as a constituent of SamahJal during Neo-Vaishnava	The antifungal properties of black lentil suggest a functional role

					activity against several phytopathogenic fungi.	religious ceremonies.	in maintaining the hygienic quality of ritual preparations, demonstrating a possible empirical basis behind its ceremonial use.
	Cynodond actylon (L.) Pers.	Bermuda Grass	Poaceae	Dubori Bon	Extracts of C. dactylon have demonstrated inhibitory effects against several pathogenic microorganisms.	Included in the preparation of SamahJal for ritual purification.	Widely regarded as a sacred grass in Indian traditions, its documented antimicrobial potential may have reinforced its symbolic association with purity and protection.
2	*Aquilaria malaccensis Lam.*	Agarwood Tree	Thymelaeaceae	Sanchi / Sansi	Agarwood bark contains glycosides and other phytochemicals that contribute to antimicrobial activity and protection against microbial degradation, insect attack, and environmental stress.	The bark is processed into traditional writing material known as "Sanchipat", historically used for recording religious manuscripts and scriptures.	The durability and resistance of agarwood-derived materials may have aided the long-term preservation of sacred manuscripts, reflecting a convergence of cultural tradition and practical utility.
3	*Musa spp.*	Banana	Musaceae	Kol	Banana pseudostems are lightweight, biodegradable, and structurally suitable for temporary constructions.	Used in constructing ceremonial stages and decorative frameworks during traditional Neo-Vaishnava performances such as Bhaona.	The use of banana plants demonstrates the adaptation of locally available and eco-friendly resources for ritual and cultural infrastructure.
	Bambusa balcooa Roxb.	Bamboo	Poaceae	Bholuka Bah	Bamboo possesses high tensile strength, flexibility, and durability,	Used as the primary structural component in temporary stages and	Bamboo exemplifies indigenous engineering knowledge, offering a

					making it a valuable construction material.	performance arenas for Bhaona.	sustainable and renewable material for large community gatherings and cultural performances.
	Ricinusco mmunis L.	Castor	Euphorbi aceae	Era	Castor seeds contain oil with excellent combustion properties, historically used as lamp fuel.	Castor oil is traditionally used for lighting lamps and illuminating performance stages during nighttime religious dramas.	The use of castor oil as a traditional illuminant highlights the practical application of plant-derived energy resources in cultural and religious events before the advent of modern lighting systems.
4	*Aeschyno meneasp era L.*	Shola Plant	Fabaceae	Kuhila	The pith is lightweight, soft, and easily carved, making it suitable for artistic and decorative crafts.	Used in the preparation of traditional ritual masks (Mukha) and decorative items associated with Neo-Vaishnava cultural performances.	The unique physical properties of shola pith have facilitated the development of intricate ritual art forms, contributing to the preservation of traditional craftsmanship.
	Bambusa spp.	Bamboo	Poaceae	Bah	Provides structural support due to its strength and flexibility.	Used as the framework for crafting traditional masks (Mukha).	Bamboo serves as a renewable and durable material, ensuring structural stability in traditional mask-making practices.
	Diospyr osmelano xylonRoxb.	Indian Ebony	Ebenaceae	Kendu Goch	Ground seeds mixed with wheat flour produce an adhesive paste useful in handicraft	The paste is used as a natural binding agent in the manufacture of traditional	The utilization of plant-based adhesives demonstrates indigenous knowledge of natural

					production.	masks (Mukha).	materials and sustainable craft technologies.
5	*Areca catechu L.*	Areca Nut (Betel Nut)	Arecaceae	Tamul	Traditionally used as an antiparasitic agent; however, extensive studies have linked habitual consumption to carcinogenic and toxicological effects.	Offered as a sacred item during Nam-Kirtan and other auspicious religious occasions.	Despite recognized health concerns, areca nut retains deep ceremonial significance, symbolizing respect, hospitality, and devotion within Neo-Vaishnava traditions.
	Piper betle L.	Betel Leaf	Piperaceae	Pan	Leaves contain hydroxyc havicol, eugenol, and other phenolic compounds with antimicrobial, antioxidant, and digestive properties. However, combined consumption with areca nut is associated with increased oral cancer risk.	Along with areca nut, betel leaves are offered as an important ritual and symbolic offering during Neo-Vaishnava ceremonies and devotional gatherings.	The continued ritual use of betel leaf reflects its cultural and medicinal importance, illustrating the intersection of traditional healthcare practices and religious symbolism.

These practices demonstrate the integration of ecological knowledge, traditional technology, cultural aesthetics, and spiritual symbolism within Neo-Vaishnava society.

5.0 Data analysis:

Number of Species

8 | ●●●●●●●●

7 |

6 |

5 | ●●●●●●

4 |

3 | ●●●

2 | ●●

1 | ●

0 +————————————————————

Food/Prasad (8) Ritual Purification(5) Cultural Arts (3) Medicinal/Health (2), Other(1)

Figure1. Functional Categorization of Plant Species Used in Neo-Vaishnava Traditions

Interpretation:

Food-related species constitute the largest category, followed by medicinal and cultural-art species, indicating that Neo-Vaishnava traditions integrate nutrition, health, and cultural practices through plant use.

Antimicrobial	●●●●●●●●● 10
Antioxidant	●●●●●●●● 8
Anti-inflammatory	●●●●●● 6
Structural Utility	●●●●● 5
Nutritional Value	●●●●●●●● 8
Digestive Benefits	●●●● 4
Energy/Fuel Source	●● 2

Figure2. Distribution of scientific properties among recorded plants

Interpretation:

Antimicrobial and antioxidant properties are the most frequently reported scientific attributes, suggesting that many ritual plants may have contributed indirectly to hygiene and health promotion.

Spiritual Offering	●●●●●●●●● 9
Mah Prasad Preparation	●●●●●●● 7
Purification Rituals	●●●●● 5
Mask Making (Mukha)	●●● 3
Bhaona Stage Construction	●●● 3
Manuscript Preservation	● 1
Medicinal Use	●●●● 4

Figure3. Comparative Analysis of Traditional Functions

Interpretation : Spiritual offerings and food-related applications dominate, highlighting the central role of plants in devotional and community practices.

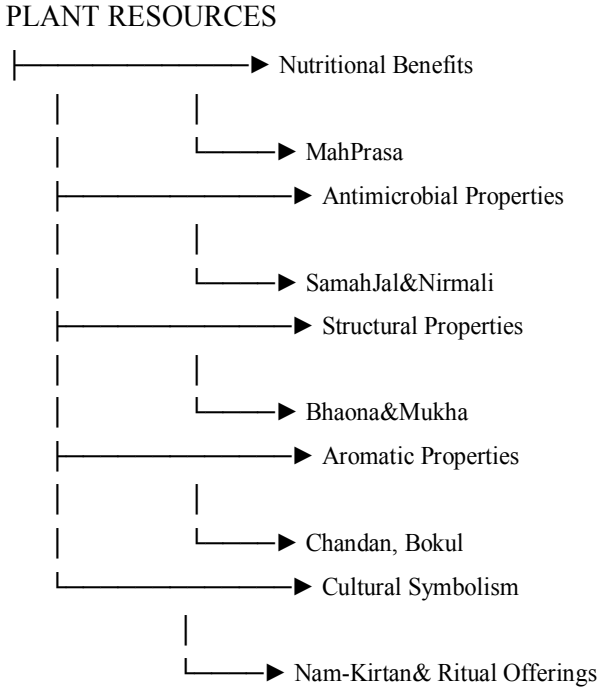


Figure4. Conceptual Flow Diagram

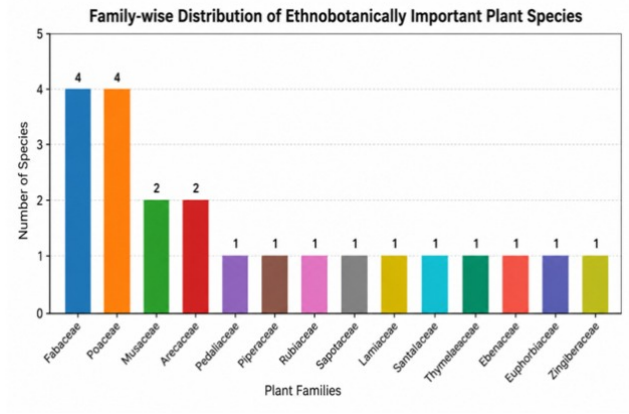


Figure5. Family-wise Representation of Plant Species

The graph demonstrates that **Fabaceae** and **Poaceae** are the most represented plant families, accounting for approximately 31% of the total documented species. Their dominance may be attributed to their multifunctional roles in food preparation, ritual purification, cultural performances, and traditional crafts. The presence of twelve additional families, each represented by one or two species, reflects the broad ethnobotanical diversity maintained within Neo-Vaishnava traditions.

6.0 Discussion:

The findings of this study demonstrate that the plant species employed in Neo-Vaishnava religious practices are far more than symbolic ritual objects. Many possess scientifically recognized nutritional and medicinal properties, suggesting that traditional knowledge systems may have incorporated practical health considerations alongside spiritual values. The composition of *Mah Prasad*, for instance, reflects an understanding of balanced nutrition through the combination of protein-rich legumes, carbohydrate sources, fruits, and medicinal herbs.

Equally significant is the use of plants such as Tulsi (*Ocimumtenuiflorum*) and Sandalwood (*Santalum album*) as *Nirmali*. These species are revered within the Neo-Vaishnava tradition, yet modern scientific studies also confirm their antimicrobial, anti-inflammatory, and therapeutic properties. Such convergence between traditional belief and contemporary scientific knowledge illustrates the depth of indigenous ecological wisdom embedded within Assamese religious culture.

The study further reveals that Neo-Vaishnava institutions such as Satras and Namghars have historically functioned as informal centres of biodiversity conservation. Through the continued cultivation, protection, and ritual use of culturally important plant species, these institutions have contributed to the preservation of both biological and cultural heritage. In this sense, Neo-Vaishnava practices may be viewed not merely as religious customs but as community-based mechanisms for sustaining ecological awareness and environmental responsibility.

At the same time, the study highlights the need for scientific caution regarding certain ritual materials. Species such as areca nut and raw chickpea contain compounds that may pose health risks under specific conditions. Therefore, a balanced approach that acknowledges both the benefits and limitations of traditional practices is essential for future research and public awareness initiatives.

One of the most meaningful insights emerging from this study is that the Neo-Vaishnava traditions established by MahapurushSrimantaSankardev and Sri SriMadhabdev embody ideas that resonate strongly with contemporary concepts of sustainability and ecological stewardship. Although these principles were articulated centuries before the emergence of modern environmental discourse, they reflect a deep understanding of the interconnectedness between human life and the natural world. Through their teachings and religious practices, Gurujanas encouraged people to live in harmony with nature and to value plants and other living organisms as integral components of both spiritual and everyday life.

The use of locally available plant resources in practices such as *Mah Prasad*, *Nirmali*, *Bhaona*, and the preparation of *Sanchi Pat* illustrates a tradition rooted in simplicity, resource efficiency, and respect for nature. Rather than exploiting natural resources, these practices promoted their thoughtful and purposeful use while maintaining their cultural and spiritual significance. Equally important, Satras and Namghars served not only as centres of worship but also as spaces where knowledge about useful plant species was preserved, shared, and transmitted across generations. By encouraging the cultivation and protection of culturally significant plants, these institutions indirectly contributed to the conservation of local biodiversity and ecological balance.

Viewed from a contemporary perspective, many of these traditions reflect principles that are now central to sustainable development, including responsible resource use, community participation, biodiversity conservation, and the preservation of traditional ecological knowledge. Thus, Neo-Vaishnava practices may be understood not merely as religious customs but as a holistic way of life that fostered environmental awareness, social responsibility, and a sustainable relationship between people and nature. Their continued relevance offers valuable lessons for addressing present-day environmental challenges and promoting a more sustainable future.

7.0 Conclusion

The present study highlights that the plant species and plant-derived products associated with the Neo-

Vaishnava traditions of MahapurushSrimantaSankardev and Sri SriMadhabdev represent much more than ritual elements of religious practice. They embody a rich legacy of indigenous knowledge in which spirituality, human wellbeing, and environmental awareness are closely interconnected. The widespread use of locally available plants in practices such as *Mah Prasad*, *Nirmali*, *Bhaona*, and the preparation of *Sanchi Pat* reflects a tradition that recognized the value of natural resources not only for spiritual fulfilment but also for nutrition, health, and community life.

The scientific evidence reviewed in this study suggests that many of these plants possess significant nutritional, antimicrobial, antioxidant, anti-inflammatory, and therapeutic properties. Such findings demonstrate that several Neo-Vaishnava customs were rooted in practical wisdom that contributed to both physical wellbeing and cultural continuity. At the same time, these traditions encouraged a respectful relationship with nature and fostered the conservation of plant resources through their continued cultivation and ritual use.

In an era marked by environmental degradation, biodiversity loss, and the erosion of traditional knowledge systems, the ecological insights embedded within Neo-Vaishnava practices acquire renewed relevance. The teachings and customs propagated by Sankardev and Madhabdev offer a valuable perspective on sustainable living, emphasizing harmony between human society and the natural world. By preserving and transmitting knowledge of culturally significant plant species across generations, Neo-Vaishnava institutions have contributed not only to the safeguarding of Assam's cultural heritage but also to the conservation of its biological diversity.

Future interdisciplinary research involving botany, ethnobotany, pharmacology, microbiology, environmental science, and cultural studies is essential to further document, validate, and conserve these valuable bioresources. Such efforts will deepen our understanding of the scientific foundations of traditional practices while ensuring that this unique blend of cultural wisdom and ecological consciousness continues to inspire future generations. Ultimately, the study reaffirms that the legacy of Sankardev and Madhabdev extends beyond religion and culture, offering enduring lessons on health, sustainability, and humanity's responsibility toward nature.

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Rubber Cultivation in Assam (As a Non-Traditional Crop): A descriptive note on prospects and problems

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Abstract

Natural rubberis grown in the tropical regions of Asia, Africa and America. The colonial powers initiated a scheme for introducing rubber as a wonderful plantation crop in Southeast Asia. A newly popularised plantation crop in Assam that is placed next to 'Tea' is Natural Rubber. As a perennial tree crop, production differs from that of an annual crop by the long gestation period between initial capital investment and the first output, a long and continuous period of output.From an economic point of view, the growers' decision to invest in a rubber plantation can be an outcome of the maximisation of the present value of the net return from the investment. *Ficus Elastic* in Northern India yields a product known as Assam Rubber.Commercial-scale plantations were raised by the Soil Conservation Department, Assam and a state's public sector corporation, Assam Plantation Crops Development Corporation Ltd., from 1974-75. Both primary and secondary data are collected, and it studied approximatelythe last three and a half decades from the 1980s to 2016.Rubber cultivation is gaining popularity due to congenial agro-climatic conditions and its remunerative, eco-friendly activity.The rubber farming community is spread over 16 states in India; Assam is also one of them.The demand for the natural rubber grown in the state is basically derived from outside the state because the state has no such industrial units that can use this cash crop extensively. More than 93 per cent of the total area in the smallholding sector is occupied by small holdings and high-yielding cultivarsin Assam.Rubberplantation requires a lesser amount of inputs like water, chemical fertiliser, insecticides and pesticides when compared with other cash crops.

Keywords: Natural Rubber,agro-climates and soil conditions, *Heveabrasiliensis, Ficus Elastic,* tapping, economic viability.

Introduction:

An important and relatively newly popularised plantation crop in Assam that is placed next to 'Tea' is Natural Rubber (NR). Rubber is the youngest and most recently domesticatedcrop on Earth, whose cultivation started around 150-200 years ago.It is grown in the tropical regions of Asia, Africa and America. The colonial powers initiated a scheme for introducing rubber as a wonderful plantation agricultural crop in Southeast Asia (Nath, 2009).It is one of the most versatile industrial raw materials of plant origin; a unique raw material for the production of a wide variety of strategic, industrial, agricultural and household goods. From a simple pencil eraser to an aircraft tyre, the basic raw material for over 50000 products is natural rubber (Lalnunmawia, 2014).The auto-tyre manufacturing industry accounts for around 70 per cent of the global demand for NR. In addition to tyres, a modern automobile has more than 300 components made out of rubber. Use of NR in hoses, footwear, foam mattresses, cushions, sports goods, balloons, toys, and insulated material for cable, tube, etc., is well-known. In addition to this, NR is extensively used for soil stabilisation, vibration absorption and road making (Rubber Grower's Companion, 2016).

The rubber tree grows in a wide range of agro-climates and soil conditions if it has well-distributed rainfall of about 250cm and 125 to 150 rainy days per annum. *Hevea* tree grows well in areas, with high temperatures from 21^0C to 35^0C and a minimum of

about 20^0C. Cultivation of rubber is comparatively labour intensive and requires high investment at the starting.

Natural Rubber is a perennial tree crop, whose production differs from that of annual crop by the long gestation period between initial capital investment and the first output (six to seven years), a long and continuous period of output (economic life of about 30-32 years) and finally a gradual decline in yield (Lalnunmawia, 2014). Due to its long gestation period, followed by extended period of output flow, choice and decision of the growers has to be seen as a dynamic inter-temporal optimization exercise. From an economic point of view, the growers' decision to invest in rubber plantation can be an outcome of maximization of present value of net return from the investment. Latex, the economic produce is harvested by controlled wounding, termed as tapping, on the bark of the tree, from which it flows out and is collected.[1] Natural rubber has been found in the latex of over 2000 species of plants, however, improved varieties of the *Heveabrasiliensis* in South Eastern Asia remain the major source of natural rubber. *Ficus Elastic* (other sources of natural rubber), in Northern India yields a product known as Assam Rubber.

In this paper, I would like to discuss the emergence of rubber plantations in Assam, along with a brief discussion on India's scenario in natural rubber. We discuss the activities related to rubber plantation, input requirements, institutional support, cost-benefit analysis, probable constraints, etc.

Review of Literature:

Rubber cultivation was introduced to tropical Asia and Africa by the efforts of the British Government during the latter part of the 19th century. The modern age natural rubber plantation actually started during the 1870s when the British successfully transported *Hevea* seeds from Brazil for planting in British India (Thomas and Pannikar, 2000). The supply of wild rubber was not sufficient to meet the ever-increasingdemand. Therefore, efforts were made to introduce *Hevea* in other parts of the World and to cultivate it on estates.

In 1763, two Chemists of France mentioned the usefulness of rubber for surgical treatment in medical science. English Chemist Joseph Pristlee (1733-1804) surprisingly discovered that rubber can erase pencil marks.Schurer (1957) said that "long before the discovery of the American continent, rubber was known to the native civilisations of Tropical America.At present, South-East Asian countries dominate the world's natural rubber production.

Historical Background of Rubber Plantation in Assam:

Although rubber plantations have emerged as a recent agricultural venture in the state, there has been a long historical presence of wild rubber, *Ficuselastica,* in the state forest and its exploration. In the early fifties of the 19th century, export of rubber was gaining ground. A European-owned rubber press was set up at Tezpur to process the juice collected from wild rubber trees (Guha, 2015). Thomas and Panikkar (2000) mentioned that long before the introduction of the Para rubber tree to India and other South East Asian countries, indigenous rubber yielding trees were tapped on a commercial scale in Assam. The recorded average annual production of rubber during 1882 to 1887 was 207 tons (Schurer, 1957).

Royal Botanical Gardens, Kew (1896) mentioned in the Bulletin of Miscellaneous Information that, the Assam rubber plant is a large evergreen tree found in damp forests from the base of the Sikkim Himalaya eastward to Assam and Arracan. It was stated that the imports into England of Assam and Rangoon rubber in 1891 amounted to 350 tons.

The Government of India issued directions in May 1884 that for five years from that date the Assam plantations should be increased by 200 acres a year. At the same time, endeavours should be made to induce private persons to plant Indian-rubber trees on their estates and also suggest that the Forest Department undertake the experimental planting of *Ficuselastica*. The Government of India also desired that in order to test the financial results of rubber cultivation, 50 mature trees were experimentally tapped annually.

There is another important point of Assam rubber is that "in spite of the abundance of the tree under cultivation in the tropics of both the Old and New World

it has nowhere proved valuable for the production of rubber except in the mountainous parts of Assam"(Kew, 1896). To meet the rising demand of rubber and to maintain its supply, it was essential for the government to start artificial cultivation of *Ficaselastica*. In 1873, plantations were begun simultaneously at Kulsi in Kamrup district and at Charduar near Tezpur in the Darrang district.[2]The quantity of rubber exported annually from Assam to Calcutta was 3500 *maunds*, worth Rs.3.5 lakhs and Government earned royalty at Rs.12/- a *maund* amounts to Rs.42,000/- a year.

Goswami (2001) states that the waste land policies in 1838 open up the waste lands in Assam initially for the cultivation of all special crops such as tea, rubber, sugarcane, coffee, etc. Rubber cultivation proved profitable initially; but owing to certain difficulties it was eventually abandoned. The destructive methods of tapping had led to the killing of many old rubber trees,and non-availability of skilled labour, the length of time involved in getting back returns, etc. virtually affected its production. It was the main deterrents that stopped the European capitalists from investing in rubber plantations in Assam.

In the post-independence period, the initial trial plantations of *Hevea* rubber on experimental basis were laid out from as early as 1957 in various locations of Assam, like KarbiAnglong, Cachar, Neli (Ouguri), Kaki, Baithalangso, Darrang, Kohora, Matia (Goalpara), etc. The plantations in the above localities proved very successful, and the yield performance were also very encouraging. Commercial scale plantations were raised by the Soil Conservation Department, Assam (Krishna Kumar, 1990) and a state's public sector corporation, Assam Plantation Crops Development Corporation (APCDC) Ltd., from 1974-75. APCDC planted rubber under government scheme for rehabilitating the *jhum* cultivators of KarbiAnglong and North Cachar districts of Assam[3]. The Corporation successfully created 1033 hectares of rubber plantation of 1110 *Jhumiya* familiesunder Integrated *Jhumiya* Development Programme (IJDP) scheme.

In the Assam State Gazetteer (1999) it was mentioned that lac, rubber, gum, *katha*or *khoir* can be extracted from forests and production can be continued and expanded with proper plantation planning in Assam.

Objectives and Research Questions:

The objectives and corresponding research questions of the study are pin pointed as follows:

1. To analyse the performance of rubber cultivation in Assam compared to the national average. Secondary data and the existing literature will be used.

   [Research Question: What has been the performance of rubber cultivation in Assam compared to the national average?]

2. To analyse the economics of cultivation of natural rubber as a commercial crop.

   [Research Question: Whether it is profitable to traditional food crop?]

3. To spell out policy implications for the immediate and long run rubber cultivation.

   [Research question: What could be some policy prescriptions for the natural rubber?]

Rubber cultivation has great significance in the state agriculture and bear a special position in western Assam taken as an occupation by unemployed youths. Assam has a large potential area of 2,00,000 hectares out of which 57735hectares were planted in 2020-21 (The Rubber Board, 2021). During 2008-09, percentage share of Assam in all India of rubber plantation area was 3.58 percent and production share was 0.74 percent which are increased to 6.1 percent and 1.8 percent respectively in 2013-14. Until 2020-21, only 28.87 percent of the potential area has been utilized under natural rubber in the state. The prospective areas for rubber plantation in the state are Goalpara, Kamrup, Dhubri, Kokrajhar, Baksa, Chirang, Bongaigaon, Nagaon, KarbiAnglong, Darrang, Cachar and Karimganj districts and selected pockets of Lakhimpur, Sivasagar, Jorhat and Dibrugarh districts. It is pertinent to study rubber cultivation in the state as it is converting uncultivated land to farmland and adding to the total cropped area and crop production in the state. However, the demand for the natural rubber grown in the state is basically derived from outside of the state.

So the question arises at this moment whether the growers of this non-food crop are protected enough with an assured market for their produce in future.

Data Sources:

For the secondary data, the period of study is approximately confined to the last three and a half decades, from the 1980s to 2016. In the collection of secondary data, the variables we primary considered were growth rates and indices of production, area and yield; use of inputs; policies, extensions, etc., at the national and state levels. Books, theses, reports, journals, periodicals and research articles formed the preliminary source of data, which can help to build the theoretical background of the study. Various official reports, records and publications of World agencies, national agencies and state agenciesform the main source of data. District level data on area, production and yield of rubber has been obtained from the Director of Statistics & Economics, Govt. of Assam and hosts of cross-sectional and time series data on a variety of items. Relevant data are obtained from the Rubber Board of India, Rubber Growers' Companions, Regional Offices of Rubber Board, Rubber Growers' Societies, successful rubber planters, etc.

The primary data have been collected from the farm households of two districts of the Lower Brahmaputra Valley Agro-climatic Zone, viz., Goalpara and Bongaigaon, by a pre-tested questionnaire to fulfil the objectives and address the research questions.

Methodology:

The study is based on both primary and secondary data. Secondary data gives an idea about some characteristics of rubber production in Assam and India. Sometimes these data might not be sufficient to fulfil the objectives of the study. Hence, primary data have been collected to fulfil the stated objectives. Appropriate statistical tools are used to understand the trends and patterns of production andare empirically and analytically studied. The results are represented with the help of tables and graphs. Simple random sampling and purposive sampling methods were adopted during the selection of the sample. The sample size for rubber growers was 102 and was collected in 2015 and 2016. After data collection, compilation, and tabulation, the necessary statistical tools are employed to obtain results and analyse the data. An individual farm household in the field study was a unit of observation.

Rubber Production in Assam in Recent Decades:

Rubber cultivation is gaining popularity in the state due to congenial agro-climatic conditions and its remunerative, eco-friendly activity. The important consideration in the spread of rubber is the alternative that rubber provides to the *jhum*cultivation, not only for better economic use of the *jhum* lands but also for the restoration of the eco-balance (DowerahBhuyan, 2005). Rubber plantation works are exclusively labour-oriented from their inception to the productive stage, i.e., up to 25 to 30 years; hence, permanent employment as well as economic support for a large section of weaker people could be envisaged. The rubber plantation industry enables productive and economic utilization of cultivable fallows and underutilized lands, generating rural employment opportunities that provide regular employment at the rate of 1 person per hectare, etc.

The area under rubber plantation in India increased from 74,915 hectares in 1950-51 to 518,000 hectares in 2013-14. During the same period, the production increased from 15830 MT to 844,000 MT, and the average yield increased from 284 kg/ha to 1629 kg/ha (Rubber Grower's Companion, 2014).In 2013, India became the fifth largest producer and second largest consumer of NR; it accounted for 7.1 per cent of the global production and 8.5 per cent of the global consumption. India is the third in productivity, sixth in total area and fifth in mature rubber plantation area in the World. Due to rapid industrialization in the country, rubber remains a commodity that is eternally in short supply. The rubber farming community is spread over 16 states in India; Assam is also one of them.Most of the farmers in this region are new to rubber cultivation; it gained momentum only after 1985. Table 1 shows the region and state-wise growth of area and production of natural rubber in India.

Table-1: Region and State-wise Area and Production of NR from 2007-08 to 2013-14:

Regions	States	Total Rubber Area (in Ha)						Production (in MT)					
		2007-08	2008-09	2009-10	2011-12	2012-13	2013-14	2007-08	2008-09	2009-10	2011-12	2012-13	2013-14
Traditional Region	**Kerala**	**512045 (80.6)**	**517475 (78.2)**	**525408 (76.5)**	**539565 (73.4)**	**545703 (71.9)**	**548225 (70.4)**	**753135 (91.3)**	**783485 (90.6)**	**745510 (89.7)**	**798890 (88.4)**	**800050 (87.6)**	**648220 (83.8)**
	Tamil Nadu	19410 (3.05)	19355 (2.92)	19545 (2.85)	19790 (2.69)	20770 (2.74)	20890 (2.7)	23820 (2.89)	24355 (2.82)	24695 (2.97)	25220 (2.79)	25350 (2.77)	25000 (3.2)
Non-Traditional (North Eastern States)	Tripura	41165 (6.48)	50070 (7.56)	55415 (8.07)	64480 (8.78)	67730 (8.94)	71370 (9.2)	20299 (2.46)	23280 (2.69)	24880 (2.99)	30590 (3.38)	33220 (3.64)	39000 (5.0)
	Assam	**18225 (2.87)**	**23705 (3.58)**	**28102 (4.09)**	**38090 (5.18)**	**43335 (5.72)**	**47945 (6.1)**	**5108 (0.62)**	**6395(0.74)**	**6771 (0.81)**	**10310 (1.14)**	**11740 (1.28)**	**13600 (1.8)**
	Meghalaya	6830 (1.07)	7740 (1.17)	9196 (1.34)	11875 (1.62)	12865 (1.7)	13875 (1.8)	4199 (0.51)	5760 (0.67)	5045 (0.61)	6380 (0.71)	7110 (0.78)	7570 (1.0)
	Other states	5620 (0.88)	7350 (1.11)	8972 (1.3)	14025 (1.91)	17105 (2.26)	22430 (2.9)	1364 (0.15)	1805 (0.21)	1904 (0.24)	2760 (0.31)	3210 (0.35)	3520 (0.4)
Non-Traditional (Other than NER)	Karnataka	28830 (4.54)	32415 (4.9)	34777 (5.07)	41588 (5.66)	44900 (5.93)	47055 (6.1)	16450 (1.99)	18175 (2.1)	21331 (2.57)	27890 (3.09)	31250 (3.42)	35230 (4.6)
	Others	3275 (0.52)	3870 (0.58)	5100 (0.75)	5367 (0.73)	5785 (0.76)	6610 (0.8)	970 (0.11)	1245 (0.14)	1264 (0.15)	1660 (0.18)	1770 (0.19)	1860 (0.2)

Note: P Provisional; Parenthesis indicate % share of NR in India

Source: (i) Rubber Grower's Guide, 2010, (ii) Rubber Grower's Companion, 2016

From Table1, it can be inferred that the total area under rubber plantation in the traditional region has increased from 2007-08 to 2014-15, but the share in all India has decreased.In the North Eastern region, the share of area as well as production in all India has gradually increased. In case of Assam, the percentage share of NR in India has increased both in terms of area and production.

The Rubber Board of India has identified Assam as a potential state. From the productivity point of view, Assam too has ample scope of rubber plantation. Several researchers attempted to examine the economic feasibility of rubber plantation in the state. Barah (2001) argued that the general production condition in the state is fevourable for plantation crops, among which cultivation of tea, rubber and coffee are of the most commercial significance. Maibangsa and Subramanian (2000) studied the economic feasibility of small-scale rubber plantations in Goalpara, Kamrup, and KarbiAnglong districts of Assam.

In the western part of Assam rubber plantation has been taken up as an occupation by unemployed youths. Under Bodoland Rubber Cultivator Association in Chirang district of Assam, about 3000 hectares of land are used for cultivation of rubber and about 5000 people are engaged and yearly, about Rs. 2.5 crore businesses is done in Bodoland area (*AsomiaPratidin*, Feb. 2011). Out of the seven states in the north-east, Assam is second in rubber plantation area and in production after Tripura. Three types of rubber growers are therein the state - individual, group and departmental. One of the features of rubber plantation in the state is the young nature of the trees, resulting in a larger non-tappable area. New areas present opportunities in the form of a relatively young age structure of tree stock, utilizing unused land and better access to nearby markets (Nath, 2009). Table 2 states the growth trend of area, production and price of natural rubber in Assam since 1990-91.

Table-2: Plantation Area, Tapping Area, Production and Productivity of Natural Rubber in Assam and all India average since 1990-91: Area in hectare; Production in MT; Yield* in kg/ha

Year	Plantation Area	Tapping Area	Production	Average Yield in Assam	Average Yield in India
1990-91	9380	-	110	-	1076
1991-92	9740	-	148	-	1130
1992-93	9885	-	197	-	1191
1993-94	-	-	-	-	1285
1994-95	-	-	-	-	1362
1995-96	-	-	-	-	1422
1996-97	-	-	-	-	1503
1997-98	-	-	-	-	1549
1998-99	-	-	-	-	1563
1999-2000	-	-	-	-	1576
2000-01	12675	1488	2580	1580.0	1576
2001-02	12806	1600	2700	1687.5	1576
2002-03	14170	2009	2750	1368.8	1592
2003-04	13541	-	2580	-	1663
2004-05	13692	-	2700	-	1705
2005-06	14835	-	3050	1854.0	1796
2006-07	16508	-	4750	1848.0	1879
2007-08	18271	3320	6395	1926.2	1799
2008-09	20975	3518	5097	1448.8	1867
2009-10	23075	6505.03	9832	1511.5	1775
2010-11	27082.6	7686.25	10213	1328.7	1806
2011-12	32117.43	8607.96	10950	1272.1	1841
2012-13	34537.62	7633.83	11054	1448.0	1813
2013-14	49000.95	10000.63	13700.19	1369.9	1629
CAGR during 1990-91 to 2000-01	3.06%	-	37.1%	-	3.89%
CAGR during 2000-01 to 2010-11	7.89%	17.84%	14.7%	-2.63%	1.37%
CAGR during 1990-91 to 2011-12	4.78%(1.62% in India)	-	14.04% (4.78% in India)	-5.24%	0.80%

*Worked out based on tapped area. During 2013-14 and 2014-15, a portion of the mature area was kept untapped.

Source: (i) The Rubber Board, Zonal Office, Guwahati; (ii) Economic Survey Assam, 2013-14; (iii)Rubber Grower's Companion, 2016.

Table 2 shows that the area under plantation, tapping area and the production of natural rubber in Assam increased rapidly over the years. However, the average yield of natural rubber in Assam is fluctuating, although in the earlier years, the yield in Assam was higher than the all-India average, but after 2001-02, yields in Assam became lower than the national average. Purkayastha (2008) said the average yield per tree per year is about 4.7kg, which could be raised to 6kg with known technologies.

The demand for natural rubber grown in the state is basically derived from outside the state because the state has no such industrial units that can use this cash crop extensively. So the question arises at this moment whether the growers of this non-food crop are assured a market and sustain profitability for their produce in future.

District-wise Rubber Plantation in Assam:

The prospective areas for rubber plantation in the state are mainly distributed in Goalpara, Kamrup, Dhubri, Kokrajhar, Baksa, Bongaigaon, Nagaon, KarbiAnglong, Darrang, Cachar and Karimganj districts and

selected pockets of Lakhimpur, Sivasagar, Jorhat and Dibrugarh districts. All these identified areas are the uncultivated or underutilized, fallow highlands and low elevation hills used for environmentally hazardous *jhum*cultivation. However, in extension at the individual level, some of the land cultivated for *ahu*paddy, sesame, grams or vegetables was shifted for rubber. Table 3 shows district-wise area and production of natural rubber from 2009-10 to 2013-14.

Table-3: District-wise area and production of Rubber in Assam during 2009-10 to 2013-14:

District	Area (in Ha)				Tapping Area (in ha)				Production (in MT)			
	2009-10	2011-12	2012-13	2013-14	2009-10	2011-12	2012-13	2013-14	2009-10	2011-12	2012-13	2013-14
Baksa	522.0	695.0	67.9	106.4	5.0	10.0	-	-	7.0	14.0	0	0
Barpeta	36.0	36.0	22.54	32.8	12.0	12.5	11.3	14.4	18.0	19.0	16.9	25.6
Bongaigaon	1971.2	2548.5	2083.5	2944.0	242.2	350.3	174.0	462.3	334.0	380.0	475.9	321.6
Cachar	1171.0	1406.0	1535.0	2169.2	624.1	685.0	398.4	675.3	936.0	940.0	460.0	569.3
Chirang	448.4	675.0	761.5	1076.6	27.4	28.25	63.0	510.0	37.0	38.0	88.1	106.1
Darrang	306.0	406.0	165.2	243.4	20.0	25.0	20.6	32.7	30.0	36.0	25.5	49.2
Dhemaji	22.9	44.6	69.7	99.40	16.8	22.8	22.3	26.5	16.0	23.0	22.0	44.8
Dhubri	885.8	935.8	903.7	1277.4	155.8	160.4	21.0	28.1	210.0	220.0	240.7	32.6
Dibrugarh	70.0	88.0	70.60	100.7	12.3	27.0	16.1	32.0	12.0	19.0	16.0	32.6
DimaHasao	102.6	150.6	293.7	163.3	80.1	82.1	30.3	38.2	112.0	116.0	40.0	43.3
Goalpara	7045.6	8045.6	7640.2	10792.7	1006.6	1558.0	1900.0	2340.0	1625.0	1745.0	2625.8	4440.0
Golahgat	397.3	435.0	447.1	632.5	62.0	76.0	24.7	27.2	90.0	120.0	110.0	49.8
Hailakandi	942.0	1025.0	2385.0	3369.8	495.2	610.0	228.1	491.4	732.0	824.0	500.0	326.3
Jorhat	25.7	38.0	33.1	47.72	10.7	16.7	3.2	28.2	10.0	16.0	14.0	7.12
Kamrup (M)	345.0	390.0	-	51.0	130.0	185.0	-	6.0	195.0	280.0	-	7.13
Kamrup (R)	1560.0	1710.0	2125.9	3007.8	305.0	450.0	364.0	16.6	450.0	490.0	544.2	620.0
KarbiAnglong	4174.0	5172.0	6542.4	9242.1	2060.0	2355.6	2226.5	2600.2	3351.0	3439.0	3519.9	4062.3
Karimganj	3221.6	4200.7	6240.0	8815.0	826.5	1452.2	1493.2	1943.2	1074.0	1494.0	1500.0	2100.3
Kokrajhar	936.4	1833.0	1792.9	2533.4	126.4	138.4	214.0	280.4	155.0	180.0	340.7	390.14
Lakhimpur	31.24	51.24	17.7	46.9	8.6	12.0	7.7	9.5	8.0	12.0	-	12.1
Morigaon	316.0	395.0	267.8	379.3	27.0	30.0	78.6	89.5	40.0	45.0	106.0	111.8
Nagaon	502.9	850.64	181.8	257.8	89.0	130.0	108.5	124.4	156.0	255.0	176.0	193.33
Nalbari	12.0	12.0	11.5	16.5	0	0	-	-	0	0	0	0
Sivasagar	76.5	85.0	77.02	109.7	10.4	15.4	27.2	6.4	13.4	16.0	15.0	54.9
Sonitpur	295.6	445.63	198.7	330.6	108.0	132.4	178.8	198.6	171.0	180.0	186.0	53.4
Tinsukia	138.2	148.1	139.9	198.6	21.0	32.0	22.9	19.7	16.0	32.0	21.0	76.8
Udalguri	250.0	295.0	463.6	956.5	23.0	11.0	-	-	34.0	15.0	10.1	-
Assam	**25806.0**	**32117.4**	**34537.6**	**49001.0**	**6505.0**	**8608.0**	**7633.8**	**10000.6**	**9832.4**	**10950.0**	**11053.8**	**13700.2**

Note: M Metro; R Rural

Source: Statistical Hand Book Assam, 2010, 2012, 2013, 2014.

Although almost all the districts are included in the map of rubber plantation in Assam, it is significant that the districts of Goalpara, Bongaigaon, Cachar, Kamrup (R), KarbiAnglong and Karimganj have more than a thousand hectares of plantation area. Goalpara district is first in terms of plantation area and production, but second in tapping area. In the tapping area of NR, KarbiAnglong is the highest among the districts of Assam in 2013-14.

Input Uses, Institutional Support, Training, Research:

To accelerate development of agriculture and allied activities, certain basic infrastructure and support services are needed especially in cash crops. However, rubber requires a lesser amount of inputs. The following section discusses the input uses and support services in the rubber plantation sector in Assam.

Planting Materials:

Earlier rubber plantations in Assam were established from seedling trees. Such trees do not normally reproduce the distinctive characteristics of their mother trees. In *Hevea*, the modern method of multiplication of high-yielding clones is through budding. Rubber Board has supplied materials to encourage rubber plantation in Assam either free of cost or at subsidised prices.Besides, growers could collect high-yielding planting materials from Rubber Board-licensed private nurseries. However, new growers face a problem in selecting more productive planting material, and sometimes they may be misled. Availability of genuine material of recommended variety/clones is far too short vis-à-vis the demand (Lalnunmawia, 2014).

Fertilizer Use:

Rubber cultivation requires a lesser amount of chemical fertilizer than field crops. For mature rubber, the fertilizer recommendation is 35:35:35 NPK kg/ha. This can be supplied through 350kg of 10:10:10 NPK mixture either in a single dose or in two equal splits, one in April-May and the second in September-October. The lag between fertilizer application and its effect on latex yield varies from one year to three years (Viju and Prabhakaran, 1988). At the time of planting, cow dung and NPK are used 100gm to 150gm per sapling. Subsequently, after 4 years, it is increased to 1.5kg to 2kg for four saplings.

Irrigation:

To ensure vigorous growth of the young rubber plants in the nursery, in the summer season, as the rainy season is over, regular irrigation is recommended. Irrigation, sufficient to drench the nursery, once in four days, is enough. Providing irrigation as a lifesaving mechanism for the first 3 years will ensure the proper establishment of plantations. A mature rubber tree uses a maximum of 50 litresof water during summer (Debray, 2015). In the study area, we observed no irrigation in the rubber plantation; it is fully dependent on rainfall.

Investment and Credit:

Rubber is a perennial tree, and its plantation involves high investment in the planting year or during the establishment period. The main investment involved is in land preparation, collection of planting materials, fencing and labour input in the first year. In the subsequent 5-6 years, maintenance costs are involved. When the plantation becomes mature for tapping, the cost of tapping materials and materials for processing rubber sheets comes. Growers have to invest about Rs.60000/- to Rs.70000/- for preparing a hectare of rubber plantation and for that small growers seek credit from informal sources. Self-finance, subsidy received from the Rubber Board and credit from money lenders and relatives are the sources of finance.Nath (2009) found that nearly 97 per cent of the working capital is self-financed.

Institutional Support and Extension Services:

For the promotion and development of natural rubber plantations, the Government of India enacted the Rubber (Production and Marketing) Act in 1947 and set up the Indian Rubber Board, which was renamed later as Rubber Board in 1947. Rubber Board provides incentives through financial and technical assistance, and the existence of an assured market for rubber. Rubber Research Institute of India (RRII) is engaged in research, right from evolving high-yielding and disease-tolerant varieties to improving the primary processing mechanism of rubber.

RubberBoard's scheme for providing assistance for tools for tapping, sheet rollers, implements for processing, smoke houses, community processing centres, marketing, etc., is implemented in the non-traditional regions (Nath, 2009). It regularly updates the international and domestic prices of natural rubber on a day-to-day basis. Rubber is a monocrop and has perhaps the best institutional support among all the major crops in Kerala (Kannan and Pushpangadan, 1990).

However, it was reported by the respondents of Bongaigaon and Goalpara districts that the financial assistance under different schemes has not been obtained regularly, and some of them have been pending for the last couple of years, and the revised norms for eligibility for subsidies are getting harder. The current 1:4200 ratio between the Rubber Board's extension officer and growers has to grow further.

Rubber Producers' Societies (RPSs):

From the mid-1980s, the Rubber Board has encouraged and promoted the formation of Rubber Producers' Societies (RPS) in the rubber growing areas to help small growers and work jointly to acquire up-to-date know-how in the improvement of productive efficiency, group processing and competitive marketing. Besides, it also procures and distributes plantation requisites to the small growers at a reasonable price.

Working through group growers reduces their cost of processing, storage, transporting and selling, and group marketing can increasethe bargaining capacity of the farmers. Rubber growers have formed three RPSs in Goalpara district and one RPS in Bongaigaon district.

Training, Research and Development and Insurance:

The Rubber Board has identified eight sub-sectors for skill development - rubber nursery, rubber plantation, latex harvesting, latex processing, field coagulum processing, rubber sheet (RSS) processing, trading & marketing and rubber wood processing, etc., and it promotes training and skill development at different plantation centres. It has organized an orientation programme (*Sasthradarshan*) for growers from non-traditional areasto give first-hand knowledge of the plantation industry.However, research work, so far, on the rubber crop in Assam is very negligible and published results are not available. There is a gap in the evaluation of the socio-economic development of the rubber growers in the state

Since 1988, M/S National Insurance Company Ltd. has provided insurance coverage for rubber plantations against natural calamities under the Insurance Scheme for Rubber Plantations (ISRP). However, since 2008-09, no such scheme has continued, and growers face problems in obtaining compensation for damaged plantations, as reported by the respondents.

Role of Market Forces, Prices and Government Policy:

Forces of supply and demand, subject to imperfections in market structures and government interventions, primarily determine the price of rubber. Any changes in the balance of demand and supply, strikes in major rubber-consuming industries, transport difficulties and political uncertainties influence the market price of rubber (Grilli et al., 1980). Availability of substitutes, international price, foreign trade policy, technological innovations in the downstream sector, etc., also influence the price of natural rubber (Nath, 2009). The most striking feature of India's rubber market is that growers are able to realise more than 92 per cent of the terminal market price for their produce at the farm gate (Sreekumar et al., 1990).

The major determinants of yield are the prevailing price in the market and technology, which can shift production upward in the short run. Nath (2009) argued, higher expected price of rubber had a positive impact on new plantations. Again, the lower expected price of the competing crop led to an increase in rubber acreage. George (1987) observes that the statutory price regulation of natural rubber initiated in 1942 was a major milestone in the evolutionary growth ofthe area in Kerala.

The main causes of a fall in the price of rubber are that merchants can procure rubber at a low price from outside the country.Rubber Board innovate rubber sheet grading on the basis of the 'Green Book' regulation, which is the grading measure of natural rubber. But dealers collect the sheets on the basis of external quality and exploit the growers by offering lower prices for a 'visually downgraded' produce (Barua, 2016).Fluctuations in the prices of synthetic rubber have indirectly affected the price of natural rubber (Sen, 2016).

The rubber produced mostly as sheet rubber was initially marketed through a three-tier network of private traders operating as local-level dealers, town-level dealers and terminal market dealers who are rubber manufacturers or manufacturers-cum-exporters.

The government can play a key role to safeguard the interests of rubber farmers by fixing minimum and maximum prices for rubber, limiting the quantum of import or by enhancing import duty, reduction of tax for the producers (Mahesh, 1999).The East Garo Hills

district of Meghalaya administration has taken up rubber plantation under the MGNREGA programme in 2009 and 2010 (Borgoyary, 2012).

Production Economics of Rubber Plantation and Cost and Return of Rubber Cultivation:

It was estimated that, in comparison to a tea plantation, the cost of a rubber plantation is less. Tea plantation requires high recurring costs with high maintenance costs for fertiliser, watering, pesticide and insecticide, labour wage, etc.On the other hand, rubber has a low maintenance cost. According to an estimate,the cost of production of 1kg of natural rubber is approximately Rs. 30, while the price is about Rs. 110 to Rs. 140 per kg, almost 4 times more than the cost of production. It takes nearly 7 years to start tapping latex, and it continues for another 30-32 years. Besides latex, rubber wood is useful for timber and preparing furniture.

Lekshmi and George (2003) analysedthe comparative stability of prices of six selected crops,viz., paddy, coconut, tapioca, tea, rubber and cardamom in Kerala by using an instability index, where rubber had the highest growth rate of area but ranked fourth in the instability index. They found that, next to cardamom, rubber had the highest growth rate in revenue among the six selected crops.

Maibangsa and Subramanian (2000) studied the economic feasibility of small-scale rubber plantations in Goalpara, Kamrup and KarbiAnglong districts of Assam. They found that the rubber plantation is economically viable and cost-effective in these districts.Nath (2009) mentioned that rubber has contributed significantly to the betterment of the district of Goalpara by generating income and employment.

The cost of production of rubber consists of two parts: establishment cost and variable or maintenance cost. The establishment cost of a rubber plantation is spread over the first six/seven years of the plantation.Nath (2009) estimated the total establishment cost of a hectare of rubber plantation was Rs.65,620/-. Year-wise, 39.9 per cent of the total establishment cost was spent in the first year itself. In the subsequent years, the cost share hovers between 10 and 13 per cent. As soon as tapping of latex starts, the variable or maintenance costs like fertiliser and manure, cultural operation, plant protection, tapping, processing and marketing, etc., arise.The total cost of maintenance of a hectare was Rs.38,151/-, of which 82.3 per cent was labour cost, and the rest was for material cost.Thus, the total cost of plantation up to the first year of tapping was Rs.103771 in a hectare. As the maximum economic life of rubber plantations is 32 years, the annual total cost (annualized share of establishment cost, (65620/32=2050.63) + annualized maintenance cost (Rs.38151/-)) was Rs.40201.63[1]. The average yield per hectare per year of rubber found in Goalpara district was 1869kg in 2009 (Nath, 2009). Gross value of output was calculated by multiplying the average yield with the average price received by the growers. Gross value of output was Rs.161272.10/ ha and net profit per ha was Rs.1,21,070.47 has been calculated.

Risks involved in Crop Diversification towards Rubber Plantation and Constraints of Rubber Plantation in the State:

High growth of agriculture in the recent decade in Gujrat is achieved through significant diversification in cropping pattern, from low-value to high-value commercial crops (Dholakia and Sapre, 2011). Chand et al., (2009) said, Kerala is among the high agriculture productivity states of India mainly due to high share of plantation crops in the area under cultivation. However, rubber plantation is non-food crop cultivation. Entire consumption or demand of the produce is exogenously determined. If a considerably large number of farmers cultivate rubber, the price advantage of rubber plantation would likely disappear as a result of an increased supply of the product.

The constraints on full-scale development of the natural rubber sector include poor state of the growers and inadequate financial support to the planters for understanding scientific plantation. Low price realization in the wake of a glut in the international market, steep fall in prices in the last couple of years and rapid fluctuation in prices are other disincentives. Krishnakumar and Meenattoor (2000) noted that in

addition to the agro-ecological constraints, development of rubber plantations in the north-east confronts various limitations such as lack of technical knowledge, poor infrastructure, unavailability of institutional finance, relatively inadequate extension support, poor financial condition of the growers, unavailability of high yielding planting materials, shortage of skilled tapers, peculiar land tenure system, provisions of the forest conservation act preventing planting of rubber and frequent socio-political disturbances. Non-receipt of due subsidies at the time, insurance benefits, the state government's apathy towards problems of rubber cultivation in the state, etc., are raising problems.

Conclusion:

It is believed that the importance of rubber is increasing in the World in such a way that without rubber, modern civilization will be paralysed. In comparison to its consumption, the supply of natural rubber is growing less. The profitability of a rubber plantation depends primarily on the maintenance of a cheap,regular and continuous supply of labour (Selvaratnam, 1988).

In terms of extension of area, production and productivity, natural rubber has achieved the highest growth rate among the major crops in the country during the last five decades. However, Indiais still a net importer of natural rubber. The share of traditional regions in rubber plantations in all India has gradually decreased, but share in north eastern region and in Assam has been increasing. In Assam, rubber plantation basically expanded either by individual efforts or through societies. Rubber plantations created opportunities for the unarable uplands and fallow lands and checked the unabated encroachment of government land in this region.

The Rubber Board has identified Assam as a "Potential State". From the "Productivity" point of view, Assam has ample scope for rubber plantation, and the growers are encouraged by various schemes. However, rubber is a commercial non-food crop; the produce is not used for home consumption, its entire demand is exogenously determined, and thus, the price and its movement have a major significance for the growers than the price of other crops.

As a perennial crop and long gestation period, growers must possess high patience and financial resources. Providing safety nets for small-holders to protect them against price and other risks is a critical task that has to be deliberated seriously. Since the rubber plantation is very much price sensitive, a persistent downfall in the price of NR would stop its extension or would convert the rubber plantation site to alternative crops in the near future, which is also a probable question for the growers.

(Footnotes)

1. Natural rubber is the latex (juice or milk) derived from trees of the most important which is *Heveabrasiliensis*. The bark on tapping yields latex (the crud agricultural produce from rubber trees). The latex contains up to 40% natural rubber, the rest being water and other constituents (Rubber Grower's Companion, 2016).
2. A. S. R. Report on the Administration of Assam for the year 1911-12, Part-II, p.19.
3. Initially 15 plantations were started by APCDC, each plantation site have processing unit as well as smoke house, approximately 100 tone latex collected annually.
4. Excluding rental value of land, interest on fixed capital, depreciation on fixed assets, land revenue, etc. from fixed cost.

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Agriculture and Rural Development A case Study of Matia Development Block in Goalpara District, Assam

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ABSTRACT

Agriculture is the backbone of Indian economy and this sector occupies a place of pride till now. It is the largest provider of livelihood in rural India that along with allied sectors contributes about 25 per cent to the GDP **(CSO-1950-51)**. Rice is one of the prominent crops and a staple food crop of agriculture which has remarkable contribution to national food security. The farmers of Assam as well as Goalpara district of the state customarily cultivate large variety of rice basically for home consumption and also for the market depending on the volume of production and marketable surplus. However, productivity of rice has been growing with a slow and fluctuating pace since a couple of decades, yield per hectare remained low in comparison to the state and national averages. For sustenance of rice cultivation with enhanced productivity has become imperative not only to the food requirements for growing population but also to accomplish with the trend of contraction of cultivable lands.

The present scenario of rice cultivation in the state and the inflow of rice from other states of India necessitate a look into the situation and discoursing Rice Cultivation and inducting it in Goalpara district of Assam.The problem of sustaining rice cultivation to meet the need of food security, particularly, relating to staple crop like rice, the concept of increasing cultivation has become imperative and searching various pros and cons that would help agricultural development and sustenance of rice cultivation.

Key words: Agricultural Productivity, Rice Cultivation, moderinization, Food Security, Contraction of land, Cropping Patterns, etc.

Introduction

Agriculture remains the backbone of Indian Economyand despite rapid industrial and service sector development during the last couple of decades; agriculture sector occupies a place of pride till now. It is the largest provider of livelihood in rural India that along with its allied sectors contributes about 25 per cent to the GDP. According to the Central Statistical Organization **(CSO-1950-51),** its share to GDP was around 55 per cent along with allied sector that contributes about 20.19 per cent in 2021 (**Ministry of Statistics and Programme Implementation**). Agricultural sector plays a crucial role in the process of economic development of the country. It provides employment to around sixty per cent of the total workforce in the country. It is evident that increased agricultural output and productivity not only ensures food security to the people but also contributes substantially to overall economic development of the economy as a whole. Agriculture makes four major contributions to the process of development– a product contribution, a factor contribution, market contribution and a foreign exchange contribution (**Thirlwall, 2004**). Further, recognizing the steady rise in aggregate demand for food grains by the growing population, the government of India initiated a massive programme entitled "National Food Security Mission" **(NFSM)** in 2007 to increase the food grain production. The overall objective of this programme was enhancing the

productivity and production of major crops- paddy and wheat, their management on a sustainable basis to ensure food security.

Mahatma Gandhi father of the nation said that rural economy reflects the national economy. To know the Indian economy we have to study the rural economy. Development of Indian economy completely depends on the development of the rural economy. Rural economy is agro-base economy. Agriculture is the main source of income of the rural people. Increasing of per-capita income of rural people depends on the increasing of agricultural product. Agricultural productivity determines the rural development. If the agricultural productivity increases then the rural economy automatically increases. So, economic development of Indian economy cannot be imagined without the development of agriculture.

On the other hand economic development is the process whereby simple, low-income national economies are transformed into modern industrial economies.

Development is the process by which a nation or community improves the economic, political, and social well-being of its people. Through the increasing of the agricultural product it is possible to develop the rural economy.

At the dawn of India's Azadi Ka Amrit Mohotsav, the **Press Bureau of India** released that there has been a six–fold increase in food grains production and the country attained self sufficiency in it. Despite the growing agriculture and allied sector, Indian agriculture, has been suffering from low productivity, especially, in food grains production and particularly rice. The **Food andAgricultural Organization (FAO) of UN** assessed that about 71.4 percent of Indians were unable to afford a healthy diet in 2021, although it was higher at 76.2 percent in 2020, (**FAO; 2023**). Therefore, the new agricultural policy of India **2020** emphasizes on removing the causes behind the low productivity. Pursuing such issues, the India's policy perspective sets objectives to remove improper and inefficient use of natural resources, to improve cost benefit ratio and to overcome the low value agriculture.

Statement of the Problem

About 90 per cent people live in rural areas and about 70 percent people practice rice cultivation. Rice is the main cultivation in Matia Development block and followed by a random selection of Community Development (CD) Blocks- Matia Community Development Block. There are shortage of food supply in the block, though major portion farmers practices rice cultivation

Nobel laureate Gunner Myrdal, on the importance of agricultural sector stated that "it is the Agricultural sector that the battle for long term economic development will be won or loss". An agriculture-and employment based strategy of economic development requires one of the basic elements- accelerated output growth through technological change among many requirements (**Todaro and Smith, 2004**). Importance of agriculture not only lies on feeding industry and service sector but also to establish food self sufficiency and economic prosperity of farmers. Therefore, a process is necessary to develop by which traditional low productivity farms are transformed into high-productive-commercial agro-farming. It establishes a theoretical base that technological change in agriculture, in other words agricultural mechanization is necessary to fulfil economic growth of any region.

Objectives

The main objective of the study is to unearth the realities about farm mechanization in relation to rice cultivation that is customarily practiced in Assam. The specific objectives around this main objective are-

i. To study the overall scenario of agriculture.
ii. To study the present status of inputs used in agriculture in the state and the district.
iii. To study the production relation of rice cultivation
iv. To compare and contrast the productivity of rice according to farm sizes

Hypothesis

The study would try totest the following hypotheses-

i. Small land holdings lead to lower agricultural productivity compared to larger farmers due to in inefficiencies in scale, limited mechanization and reduced access to inputs.

ii. There is no significant relationship between irrigation facility and use of improved plough (Tractor and Power tiller).

iii. There is positive relation between use of improved seeds, fertilizer and productivity per hectare of land.

'It is hypothesized that 'Small size of operational holdings is the most important factor restricting the farm mechanization'.

Methodology of the Study and Data Source

The objectives of the study suggest that it is a descriptive and analytical kind of research. The research design would require both quantitative and qualitative analysis of data. Therefore, to achieve the results, it requires both secondary and primary information. Secondary information were gathered from various published sources such as books, journals, reports, periodicals, magazines, bulletins, etc. including a host of web pages. Further, the officials of Agriculture Department, Irrigation Department as well as their reports and write ups were used as sources of secondary data

Sources of Secondary Data

Following sources were used forsecondarydata**:**

i) Various publications of the Food and Agricultural Organization (FAO)

ii) Publication of Ministry of Agriculture, Government of India

iii) Directorate of Agriculture, Government of Assam

iv) Directorate of Economics and Statistics, Government of Assam

v) District Agriculture Office, Goalpara

vi) Krishi Vikash Kendra, Dudhnoi

vii) District Irrigation Office, Goalpara

viii) Community Development Offices, Matia

ix) Agricultural Development Offices of CD block

x) A host of webpages.

Selection of Sample Area and Sample Units

Matia development blocks situated in Goalpara district are completely rural in character and rice production of the villagers is inherent to their age-old culture and tradition. Since main focus of the study was to unearth the ground realities about Rice Cultivation and productivity of Matia Development Block in grassroots of Goalpara District of Assam, therefore, the study also required primary information from the field level. For this purpose, a multistage purposive random sample survey was adopted pursuing a specific statistical procedure. The survey was conducted in two phases comprised of identifying location of Matia development block, villages and the sample units i.e., heads of households in a systematic manner. In the third stage of the first phase, 19villages from selected CD block randomly were chosen followed by random selection of 93 small holders (farmers possessing 1.9 hectares of land and less than that) and 28 medium (farmers possessing 2 hectares of land or more than 2 hectares) farmers from the selected villages. Thereby, the total selected sample unit went to 121 comprising of 93 small and 28 medium holders. Proportion of small and medium farmers according to farm size was justified because incidence of small farmers ware comparatively higher in the district. In regards to the classification of farm category, small farm size includes both marginal and small category under one head, and semi medium farm size was merged with medium category, thereby, the study proposed to analyze the cases of two farm categories. Due to merely absence of large farmers in the selected CD Block, discussion of large category was excluded from the study and it is also justified on the basis of the ground reality. The total cultivated sample area comprising of both small and medium farm size constitutes 145.7 hectare sample operational holdings. The selected number of sample villages and category wise distribution of sample farmers according to the above statistical procedure is given in table-1.1.

Table 1.1

Village wise total Households in the Block

	Selected households		
Name of villages	Small	Medium	Total sample
Sutarpara	5	6	11
Pakalagi	10	6	16
Simlitola	4	1	5
Bahati	5		5
Puranpara	2	3	5
Rabhapara	4	1	5
Bamunpara	4	1	5
Poulpara	5		5
Bakaitari	5	2	7
Medhipara	5	2	7
Sonapur	5		5
Jagannathpur	5		5
Harimura	8	2	10
Dalgoma	5		5
Bhatipara	4	1	5
Mazpara	5		5
Tilapara	4	1	5
Tengabari	4	1	5
Sara para	4	1	5
Total: 93	Total: 28	Total: 121	

Note: *Small farmer range of holdings is 1.9 hectares or less than that and medium farmer range of holdings is 2 hectares or more than that.*

Imperative of agricultural productivity improvement in any economy emerged for feeding the growing population, supporting other sectors as well.Considering the importance of agriculture, the major focus of the planning commission of India was on it and it was prioritized in the first five year plan. Emphasis was given on measures like land reforms, self-sufficiency in food grains and expansion of rural employment opportunities. Focusing on productivity augmentation, the government of India initiated new agricultural strategy since 1960s equipped with modern technology, the green revolution. This strategy 'seed-fertilizer-water-machine approach' emerged to raise agricultural production, particularly food grains production. Rapid growth of population and shrinkage of holding size left nothing but to raise productivity of food grains. Therefore, the major thrust was given on the green revolution in 1960 to increase production of food grains, specifically, rice and wheat with the introduction of improved technologies with high-yielding seeds and use of chemical fertilizers. This initiative was the beginning of the mechanized mode of agriculture to replace the use of animal, minimize human labour and use of machinery tools in agriculture. Consequently, the term agricultural mechanization turned to draw the

attention of all concerned for the sake of increased productivity of agriculture. Presently, in a crucial juncture of challenges arising out of development issues in relation to contraction of holding size, in one hand, and environmental degradation on the other, has necessitated agricultural transformation. Every corner of discussion revolves around focusing agriculture to be the backbone of the Indian economy and it occupied a place of pride providing employment to the majority of the total workforce in the country. Further it supplies food and raw material to its citizens and industries respectively.

Significance

The present study is significant as it intends to search the pros and cons of farm productivity small and medium farmers in an area which remained untouched so far from such research work. Usually, increasing of agricultural productivity by the small and medium farmers is thought to be of more challengeable for a colossal of reasons. Further, these farmers are vulnerable to any paradigm shift. So, exploring the challenges for catering to increasing agricultural productivity and searching diagnostic measures for rice farming and its sustenance, the study would be helpful for all concerned.

Data Analysis

As a staple crop, rice production has immemorial history in both Matia Community Development (CD) Block. Three categories of rice cultivation *Ahu* (Aus), *Bao* (Long-stemmed rice) and *Sali* (Haimantik) occupied important place in this area of undivided Goalpara district, even these were prevalent during the colonial period (**Hunter 1879**). Mono croppingpattern is practicing till now in the block. Mono cropping patterns refers to the practice of growing a single crop once a year continuously on the same plot of land year after year. This practice of rice planting was continuing over a long period of time in the block. Under this cropping pattern, there were *Ahu, Bao* and *Sali* rice. This tradition not only created seasonal unemployment throughout most of the days during the year, but also made the farmers dependent on luck for good harvest. Complete dependence on weather and absence of technology gave rise to the subsistence farming with frequent shortage of food crops. Therefore, most of the farmers had to tread through a colossal of hardships, thereby, persisted by miserable subsistence farming.

Farming Practices and Average Yields of Rice

Since the size of operational holdings and cropping patterns have impact on average yield, so it is pertinent to make an insight to know the average yield of rice according to the distribution of operational holdings by the farmers for three categories of farming patterns. Table 1.2 shows the distribution of operational holdings, levels of technology used and average yields of rice produced by the sample households.

Table 1.2

Distribution of Operational Holdings, levelsof Technology used and Rice Production of Sample Households

Block	No of farmers		Operational Area (ha)	Average size of holding	Area under mono cropping (ha)	Area under Rotation Cropping (ha)	Area under Traditional Cropping (ha)	Total output of rice(q)	Average yield (kg)
Matia	Small	93	94.9	1.02	81.73	9.47	3.7	3625.57	3820.41
CD	Medium	22	50.8	2.30	37.41	13.39	00	2218.61	4357.34
Block	Total	115	145.7	1.26	119.14	22.86 (81.77)	3.7 (15.69)	5844.18 (2,54)	4011.11

Source: *Field Survey*

(Figures in the bracket indicate the percentage of the total)

The table 1.2 depicts the average size of holding of the households in the sample area and it is at 1.26 hectare and it is higher than the state average size of holding which is at only 1.1 hectare (**Agriculture Census Data, 2015-16).** The total operational holdings of the sample households of Matia block are 145.7 hectare and the total production of rice is 5844.18 quintal. Out of the total sample area of 119.14 hectare,22.86hectare and 3.7hectare are under mono cropping, rotation cropping and traditional cropping practices respectively as seen in the table with average yields of 4011.11 kg in Matia block. Where, average yields3820.41kg for small farmers and 4357.34 kg for medium farmers in the block.

Findings of the Field Study

The following are the major findings of the study.

1. There is an absence of large farm size in the selected sample villages and the average size of holdings for medium size farmers is 2.30 hectare and the average holding size of small farmers is only at 1.02 hectare.
2. The tradition of farming practices is on changing trend and it is seen that autumn rice (Ahu) cultivation is almost in the verge of extinction due to its low productivity and erratic weather conditions.
3. Rice cultivation patterns extended only to two types of farming say, winter (*Sali)* and summer (*Boro*) rice in the selected blocks. Out of the total operational holdings *sali* rice is planted only in 81.73 hectares whereas, 7.02 hectare is planted under *Boro* rice by the small farmers and Sali rice planted 37.41 hectare and Boro rice planted 12.39 hectare by the medium farmers.
4. Winter rice cultivation is seen occasionally to devastate by elephant, monkey and birds.
5. There is paucity of irrigation facilities that covers only 21.67 hectare of operational holdings in block.
6. The agricultural practices prevailed in a dualistic nature co-existed with both traditional and partial modern farming.
7. A kind of contract farming known as "Korhali" in local term is in practice due to growing contraction of operational holdings and marginalized farmers on one hand, and inability to bear high input costs by the owners of small holdings. .
8. Only 15.69 per cent of land is under Rotation cropping which were used to cultivate Sali and Boro rice.
9. From the total sample cropped area under in the block 65.13 per cent is occupied by the medium farmers and only 34.87 per cent is occupied by the small farmers.
10. About 28.5 per cent of the sample households are seen to use irrigation potentials for the practice of rice cultivation. Traditional plough has been leaving by the farmers and about 66.6 per cent farmers have adopted modern technology for plough.
11. A positive relationship is found between irrigation facility and the use of modern tools.
12. Matia blocks have average operational holdings at 1.26 hectare and it is comparatively higher than the state of Assam.
13. Total physical output in Matia CD block is 5844.18 quintal and average yield is 4011.11 kg per hectare and total physical output. Small and fragmented land holdings are found as the prominent responsible causes for low productivity that is not viable for adoption of modern technology.
14. There is an absence of medium or large flow irrigation projects excepting that of few small irrigation facilities in the block.
15. There is a slow pace of growth of cropping patterns with the agricultural modernization excepting only 15.69 per cent of total cultivated area under rotation cropping for rice in the district.

Actions Called for

The results of the study incorporated throughout the chapters of the study indicate to follow and execute the following actions called for.

1. Dissemination to remove farmers' mindset that confined only to single cropping patterns to be pursued by the concerned agencies and by the government machineries entrusted for agricultural development.
2. Co-operative base farming must be encouraged from among the farmers not only to overcome the defective land tenure system but also for catering to intensive rice cultivation including High Value Rice (**HVR**) such as aromatic Joha, Basmati, and Black rice varieties.
3. Ignorance of farmers must be cared seriously and the farmers must be maintained showing them the multi-faceted opportunities of modern implements. Government agencies and voluntary organizations can take initiatives for disseminating in this regard.
4. Packages for marketing facilities must be availed in all revenue villages along with packages for establishing scientific ware houses and rice-based food processing units. Further, easy disposal of bulk arrival in the post harvest period must be expedited through purchases with ensured prices of rice by the concerned agencies of the government.
5. For an effective jerk of rice farming and diversification, the farmers' co-operative society (**FCS**) may act as driving force. The FCS must mobilize a 'workers pool' from among them for monitoring and disseminating the farmers- how to use implements in proper proportion, to make arrangements for soil test, collection of seeds from authentic agencies, provide market information, to suggest for resorting to multi-cropping patterns and crop diversification, how to avoid exploitative farming, how to use agricultural implements for other purposes during off seasons, etc.

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