

Reimagining Higher Education in Northeast India: Policy and Governance Perspectives on Indian Knowledge Systems Integration

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Abstract

The integration of Indian Knowledge Systems (IKS) into higher education has emerged as a transformative priority under the National Education Policy (NEP) 2020, aiming to align education with India's cultural heritage and contemporary global needs. This paper explores the policy and governance dimensions of integrating IKS into higher education institutions (HEIs) in Northeast India—a region marked by rich indigenous traditions, linguistic diversity, and ecological knowledge systems. Using a qualitative, policy-analytical approach, the study examines national frameworks, regulatory mechanisms, and institutional responses to IKS integration. It highlights how decentralized governance, institutional autonomy, and context-sensitive curriculum design can facilitate meaningful inclusion of indigenous knowledge.

The paper identifies key challenges such as policy-practice gaps, lack of documentation of indigenous knowledge, limited faculty preparedness, and infrastructural constraints. At the same time, it underscores emerging opportunities including digital knowledge preservation, community engagement, interdisciplinary research, and global collaborations. A multi-level framework is proposed to strengthen policy alignment, governance effectiveness, and institutional capacity. The study concludes that Northeast India can become a model for culturally rooted and future-ready higher education, provided policy and governance mechanisms are effectively contextualized and implemented.

Keywords: Indian Knowledge Systems, NEP 2020, Higher Education, Governance, Northeast India, Indigenous Knowledge, Policy

1. Introduction

Higher education in India is undergoing a paradigm shift with the implementation of the National Education Policy 2020, which emphasizes holistic, multidisciplinary, and culturally grounded learning. A key component of this transformation is the integration of Indian Knowledge Systems (IKS) a broad framework encompassing indigenous traditions, local knowledge, linguistic diversity, and philosophical thought.

IKS integration seeks to decolonize education by embedding indigenous epistemologies into formal curricula and pedagogy. This approach is particularly relevant for Northeast India, a region characterized by diverse tribal communities, unique ecological knowledge, and rich oral traditions.

However, despite policy emphasis, the integration of IKS faces several structural and governance-related challenges. This paper critically examines how policy frameworks and governance mechanisms can reimagine higher education in Northeast India through effective IKS integration.

2. Conceptualizing Indian Knowledge Systems (IKS)

Indian Knowledge Systems refer to the accumulated intellectual traditions developed across centuries in fields such as:

- Agriculture and environmental sustainability; Conceptualizing IKS in agriculture reveals a sustainable, eco-centric model rooted in cultural heritage and environmental ethics. For regions like

Northeast India, where biodiversity and indigenous practices are rich, integrating IKS with modern science can create a balanced pathway toward future-ready, sustainable agriculture.

- **Traditional medicine and healing practices:** Traditional medicine under IKS represents a deeply rooted, eco-friendly, and holistic healthcare system. By combining ancient wisdom with modern science, India can develop a sustainable, inclusive, and culturally grounded healthcare model, especially relevant for diverse regions like Northeast India.
- **Linguistics and oral literature:** In Indian Knowledge Systems (IKS), linguistics is not limited to formal grammar; it includes language as a carrier of culture, identity, memory, and knowledge. Oral traditions and indigenous languages play a central role in transmitting wisdom across generations. Classical traditions like Sanskrit grammar (notably shaped by scholars like Pāṇini) coexist with rich oral and vernacular traditions across India, especially in tribal and rural communities. Linguistics and oral literature in IKS represent a living knowledge system that sustains cultural heritage, ecological wisdom, and community identity. In regions like Northeast India, integrating these traditions into modern education can foster inclusive, multilingual, and culturally responsive learning environments, essential for future-ready education.
- **Governance and community-based decision-making:** Governance and community-based decision-making in IKS offer a participatory, ethical, and sustainable model of administration. Especially in regions like Northeast India, these systems provide valuable insights for building inclusive governance structures that balance tradition with modern democratic values, ensuring both cultural continuity and sustainable development.

IKS is characterized by:

- Holistic worldview integrating science, culture, and ethics
- Contextual relevance rooted in local environments
- Sustainability orientation aligned with ecological balance
- Experiential learning through practice and observation

Unlike Western knowledge paradigms, IKS emphasizes interconnectedness and community participation, making it highly relevant for contemporary challenges like climate change and sustainable development.

3. Policy Framework for IKS Integration: A policy framework for IKS integration aims to systematically incorporate indigenous knowledge into education, governance, research, and sustainable development. It bridges traditional wisdom with modern scientific systems, ensuring cultural continuity and innovation.

In India, this vision is strongly supported by the National Education Policy 2020, which emphasizes:

- Multilingual education
- Experiential learning
- Integration of local knowledge systems

A robust policy framework for IKS integration enables a holistic, sustainable, and culturally grounded development model. By aligning traditional knowledge with modern systems, India can create future-ready education and governance structures, particularly beneficial for culturally rich regions like Northeast India.

3.1 National Policy Vision

The National Education Policy 2020 provides a comprehensive roadmap for integrating IKS into higher education. Key provisions include:

- Inclusion of IKS in curriculum across disciplines
- Promotion of regional and indigenous languages

- Establishment of research centers focused on IKS
- Emphasis on multidisciplinary and experiential learning

3.2 Regulatory Support

Regulatory bodies such as the **University Grants Commission** have introduced guidelines to:

- Incorporate IKS courses as credit-based modules
- Develop faculty training programs
- Promote research and innovation in indigenous knowledge

3.3 Policy Implications for Northeast India

For Northeast India, policy implementation must be:

- **Context-sensitive** (respecting tribal diversity)
- **Language-inclusive** (supporting multilingual education)
- **Community-driven** (involving local knowledge holders)

4. Governance Perspectives in Higher Education: Governance perspectives in higher education, aligned with IKS and the National Education Policy 2020, offer a transformative pathway toward inclusive, sustainable, and culturally rooted education systems. By combining traditional knowledge with modern governance frameworks, Indian higher education can become globally relevant while remaining locally grounded, especially in culturally rich regions like Northeast India.

4.1 Decentralized Governance: Decentralized governance refers to the distribution of decision-making powers from central authorities to local institutions and communities. In the Indian context, it is deeply rooted in Indian Knowledge Systems (IKS), where governance has traditionally been community-driven, participatory, and context-specific. Decentralized governance, rooted in IKS, offers a people-centric, participatory, and sustainable model of administration. By empowering local communities and integrating indigenous knowledge, it strengthens democracy, cultural identity, and sustainable development, making it highly relevant for contemporary India—especially in diverse regions like Northeast India.

NEP 2020 advocates for institutional autonomy, enabling universities to design curricula aligned with local contexts. This is crucial for integrating region-specific indigenous knowledge.

4.2 Participatory Governance: Participatory governance refers to a system where citizens actively engage in decision-making processes, rather than being passive recipients of policies. In the Indian context, this idea is deeply embedded in Indian Knowledge Systems (IKS), where governance has traditionally been collective, dialogic, and community-centered. Participatory governance, rooted in IKS, represents a democratic, inclusive, and sustainable approach to decision-making. By valuing community voices and indigenous knowledge, it strengthens governance systems and ensures equitable and culturally relevant development, especially in diverse regions like Northeast India.

Effective IKS integration requires:

- Collaboration between institutions and communities
- Inclusion of indigenous experts in academic processes
- Shared decision-making mechanisms

4.3 Institutional Governance Mechanisms: Institutional governance mechanisms refer to the structures, processes, and practices through which higher education institutions are directed, regulated, and held accountable. Institutional governance mechanisms, when aligned with IKS and the National Education Policy 2020, create a balanced framework of autonomy, accountability, and cultural relevance. Such governance

ensures that higher education institutions become centres of excellence, innovation, and indigenous knowledge integration, contributing to sustainable and inclusive national development.

HEIs can adopt the following:

- Establishment of IKS Centers or Cells
- Curriculum committees including local stakeholders
- Interdisciplinary research clusters

5. Northeast India: Contextual Significance: Northeast India holds immense contextual significance in the discourse of IKS due to its cultural richness, ecological diversity, and living traditions. Integrating these knowledge systems within modern frameworks like the National Education Policy 2020 can lead to inclusive, sustainable, and culturally responsive development, making the region a model for future-ready education and governance.

Northeast India comprises eight states with over 200 tribal communities, each possessing unique knowledge systems. These include:

- Sustainable agricultural practices (e.g., shifting cultivation)
- Ethno-medicinal knowledge
- Forest conservation techniques
- Oral histories and folklore

Despite their richness, these knowledge systems remain underrepresented in formal education due to lack of documentation and institutional support

6. Bridging Heritage, Language, and Pedagogy: Bridging heritage, language, and pedagogy within IKS creates a transformative educational model that is inclusive, sustainable, and culturally relevant. Supported by the National Education Policy 2020, this approach is especially crucial for regions like Northeast India, enabling education systems to be globally competent yet locally grounded.

6.1 Heritage Integration: Heritage integration refers to the systematic inclusion of cultural traditions, indigenous knowledge, and historical practices into education, governance, and development frameworks. Heritage integration within IKS provides a powerful framework for culturally responsive, sustainable, and holistic education. By embedding heritage into pedagogy and policy, India can create future-ready learners who are globally competent yet deeply rooted in their cultural identity, especially in culturally rich regions like Northeast India.

- Documentation of oral traditions and indigenous practices
- Inclusion in academic curricula and research

6.2 Language Inclusion: Language inclusion refers to the recognition and integration of diverse languages—especially mother tongues and indigenous languages—into education, governance, and social systems. Within Indian Knowledge Systems (IKS), language is not merely a medium of communication; it is a carrier of culture, knowledge, identity, and worldview. The National Education Policy 2020 strongly promotes multilingualism and mother tongue-based education, particularly in early learning stages. Language inclusion, as a core element of IKS, is essential for creating equitable, inclusive, and culturally responsive education systems. By embracing multilingualism and indigenous languages, India can ensure that education is accessible, meaningful, and rooted in local contexts, especially in linguistically rich regions like Northeast India.

- Use of regional and tribal languages in instruction
- Development of bilingual and multilingual learning materials

6.3 Pedagogical Innovations: Pedagogical innovations refer to new and transformative teaching–learning approaches that enhance student engagement, understanding, and holistic development.

Within Indian Knowledge Systems (IKS), pedagogy has always been:

- Experiential and practice-oriented
- Dialogic and reflective
- Value-based and holistic

The National Education Policy 2020 reinforces innovative pedagogy to create learner-centered, flexible, and multidisciplinary education systems. Pedagogical innovations rooted in IKS provide a transformative approach to education, making learning interactive, inclusive, and culturally relevant. By aligning with the National Education Policy 2020, these innovations can create future-ready learners while preserving India’s rich knowledge traditions—especially in culturally diverse regions like Northeast India.

- Experiential and field-based learning
- Community engagement and participatory research
- Integration of traditional and modern knowledge

7. Challenges in IKS Integration: Integrating Indian Knowledge Systems (IKS) into modern education and governance frameworks is essential for culturally rooted and sustainable development. However, this process faces multiple structural, pedagogical, and socio-cultural challenges. Despite strong policy backing from the National Education Policy 2020, effective implementation remains complex. While integrating IKS offers immense potential for holistic, sustainable, and culturally relevant development, it requires overcoming significant challenges. With strong policy support from the National Education Policy 2020 and collaborative efforts among stakeholders, these barriers can be addressed to create a balanced and inclusive knowledge ecosystem.

7.1 Policy-Practice Gap: The policy–practice gap refers to the difference between what is stated in educational policies and what is actually implemented in real institutional and classroom settings. In the context of Indian Knowledge Systems (IKS) and the National Education Policy 2020, this gap becomes significant because while policies strongly support:

- Integration of indigenous knowledge
- Multilingual education
- Experiential learning
- The policy–practice gap highlights a critical challenge in realizing the vision of IKS integration under the National Education Policy 2020. Bridging this gap requires institutional commitment, teacher capacity building, community participation, and contextualized implementation strategies, ensuring that policy intentions translate into meaningful classroom and community practices.
- Policies often lack effective implementation at the institutional level.

7.2 Documentation Issues: Documentation issues refer to the challenges involved in recording, preserving, organizing, and transmitting Indian Knowledge Systems (IKS) in written, digital, or archival forms. A large portion of IKS is oral, experiential, and community-based, which makes systematic documentation complex. Within the framework of the National Education Policy 2020, documentation is essential for integrating indigenous knowledge into mainstream education and research. Documentation issues represent a critical barrier in preserving and integrating Indian Knowledge Systems (IKS) into mainstream education and research. Addressing these challenges requires a combination of community participation, technological innovation, ethical safeguards, and strong policy support, ensuring that valuable indigenous knowledge is preserved for future generations, especially in culturally rich regions like Northeast India.

7.3 Faculty Preparedness: Faculty preparedness refers to the knowledge, skills, attitudes, and competencies of teachers and academic staff required to effectively implement educational reforms and integrate Indian Knowledge Systems (IKS) into teaching, research, and curriculum design.

In the context of the National Education Policy 2020, faculty are expected to act as:

- Facilitators of learner-centered education
- Integrators of multidisciplinary knowledge
- Custodians of cultural and indigenous knowledge systems

Faculty preparedness is a critical foundation for successful integration of Indian Knowledge Systems (IKS) in education. Strengthening faculty competencies through training, research, and institutional support ensures that the vision of the National Education Policy 2020 is effectively translated into classroom practice, particularly in culturally diverse regions like Northeast India.

7.4 Resource Constraints: Resource constraints refer to the limitations in financial, human, infrastructural, technological, and material resources that hinder the effective integration of Indian Knowledge Systems (IKS) into education and institutional frameworks.

Resource constraints remain a major barrier to effective integration of Indian Knowledge Systems (IKS) into education and governance. Addressing these challenges requires strong policy implementation, infrastructural development, capacity building, and community participation, ensuring equitable and sustainable knowledge systems, especially in resource-sensitive regions like Northeast India.

7.5 Language Barriers: Language barriers refer to the difficulties faced in communication, comprehension, teaching, and knowledge transmission when learners and educators do not share a common language or when instructional language differs from learners' mother tongue.

In the context of Indian Knowledge Systems (IKS), language barriers significantly affect:

- Transfer of indigenous knowledge
- Classroom learning outcomes
- Documentation of oral traditions

The National Education Policy 2020 strongly emphasizes mother tongue-based multilingual education to reduce these barriers.

Language barriers remain a critical challenge in integrating Indian Knowledge Systems (IKS) into education, as they directly affect knowledge transmission, cultural preservation, and learner participation. Addressing these barriers through multilingual education, teacher training, curriculum localization, and technology integration, as emphasized in the National Education Policy 2020, is essential for building an inclusive and culturally responsive education system, especially in linguistically diverse regions like Northeast India.

8.1 Digital Knowledge Preservation: Digital knowledge preservation refers to the process of capturing, storing, organizing, and disseminating knowledge using digital technologies to ensure long-term accessibility and protection of cultural, scientific, and indigenous knowledge systems. Digital knowledge preservation is a critical bridge between traditional Indian Knowledge Systems (IKS) and modern technology-driven education systems. It ensures that indigenous wisdom, cultural heritage, and ecological knowledge are not lost but are instead preserved, revitalized, and made accessible for future generations, in alignment with the goals of the National Education Policy 2020.

8.2 Interdisciplinary Research: Interdisciplinary research refers to the integration of two or more academic disciplines to address complex problems, generate new knowledge, and develop holistic solutions. Interdisciplinary research is a core requirement for meaningful integration of Indian Knowledge Systems (IKS) into modern academia. Supported by the National Education Policy 2020, it enables the creation of

holistic, innovative, and sustainable knowledge systems, particularly relevant for culturally diverse regions like Northeast India.

8.3 Global Collaborations: Global collaborations refer to the partnerships between Indian and international institutions, researchers, and organizations for knowledge exchange, joint research, academic mobility, and innovation. Global collaborations in the context of Indian Knowledge Systems (IKS) provide a platform for mutual learning, innovation, and cultural exchange. Supported by the National Education Policy 2020, they enable India to position its traditional knowledge systems within global academic discourse while ensuring ethical, equitable, and sustainable knowledge sharing.

8.4 Community Participation: Community participation refers to the active involvement of local people in planning, decision-making, implementation, and evaluation of educational, developmental, and governance processes. Community participation is a core pillar of Indian Knowledge Systems (IKS), ensuring that education and governance remain inclusive, culturally rooted, and sustainable. Supported by the National Education Policy 2020, it strengthens the relationship between institutions and society, making communities active partners in knowledge creation, preservation, and dissemination, especially in culturally rich regions like Northeast India.

9. Proposed Policy-Governance Framework: A Policy-Governance Framework for IKS integration is a structured model that connects national policy intentions, institutional mechanisms, and grassroots knowledge systems to ensure effective implementation of Indian Knowledge Systems (IKS) in education. The proposed Policy-Governance Framework for IKS integration provides a multi-layered, participatory, and decentralized model that connects national policy vision with grassroots knowledge systems. Aligned with the National Education Policy 2020, it ensures that Indian Knowledge Systems are not only preserved but actively integrated into education, research, and governance, particularly in culturally diverse regions like Northeast India.

9.1 Policy Level: The Policy Level refers to the highest level of governance where educational visions, frameworks, and directives are formulated to guide implementation across states and institutions. The Policy Level forms the foundation of Indian Knowledge Systems (IKS) integration, shaping vision, structure, and direction for the entire education system. Guided by the National Education Policy 2020, it ensures that indigenous knowledge is recognized, supported, and systematically integrated into education governance, while also requiring stronger decentralization and inclusivity for effective implementation.

9.2 Governance Level: The Governance Level refers to the middle tier of implementation structures that translate national education policies into state, institutional, and local operational actions. The Governance Level plays a crucial role in ensuring the effective implementation of Indian Knowledge Systems (IKS) by connecting national policies with institutional and community realities. Aligned with the National Education Policy 2020, it strengthens decentralization, participation, and contextualization, ensuring that education systems remain culturally responsive and regionally inclusive, especially in diverse regions like Northeast India.

9.3 Institutional Level: The Institutional Level refers to the operational core of education governance, where policies are translated into curriculum design, teaching-learning processes, research activities, and community engagement. The Institutional Level serves as the implementation backbone of Indian Knowledge Systems (IKS) by translating policy and governance frameworks into concrete educational practices. Strengthening institutional capacity, autonomy, and community linkages—guided by the National Education Policy 2020—is essential for creating a holistic, inclusive, and culturally rooted education system, particularly in diverse regions like Northeast India.

- Curriculum redesign incorporating IKS
- Faculty development programs
- Establishment of research centers

9.4 Community Level: The Community Level refers to the grassroots layer of governance and knowledge systems, where indigenous knowledge is created, preserved, practiced, and transmitted across generations. The Community Level is the foundation of Indian Knowledge Systems (IKS), where knowledge is actively lived, preserved, and transmitted. Strengthening community participation—supported by the National Education Policy 2020—ensures that education becomes culturally rooted, inclusive, and sustainable, especially in culturally rich regions like Northeast India.

10. Implications for Future-Ready Learning

IKS integration contributes to:

- Development of critical thinking and ethical values
- Promotion of sustainability and ecological awareness
- Strengthening cultural identity
- Enhancing global competencies through local knowledge

This approach aligns education with both local realities and global challenges, creating a balanced and future-ready learning system.

Conclusion

Reimagining higher education in Northeast India through IKS integration requires a strong alignment between policy, governance, and institutional initiatives. While NEP 2020 provides a robust policy framework, its success depends on effective implementation, context-sensitive governance, and institutional commitment.

Northeast India, with its rich indigenous heritage, has the potential to become a global model for culturally rooted education. By bridging heritage, language, and pedagogy, IKS-driven higher education can create a transformative and sustainable academic ecosystem.

References

- Chan, C. K. Y. (2022), *A Comprehensive AI Policy Education Framework for University Teaching and Learning*. arXiv preprint
- Corbo, J. C., et al. (2014), *A Framework for Transforming Departmental Culture to Support Educational Innovation* arXiv preprint. Das, P. (2021). Tribal Knowledge Systems in Northeast India. *Asian Cultural Studies Review*.
- Government of India. (2020). *National Education Policy 2020*. Ministry of Education.
- Gupta, R., Shukla, R., & Gupta, N. (2026), *Reimagining Education through Indian Wisdom: The Vision of NEP 2020*, International Journal of Research – Granthaalayah.
- Mujrai, P. (2025), *Transforming Higher Education Through Indian Knowledge Systems*. In *Transforming Higher Education Through Indian Knowledge Systems* (pp. 6–15).
- Mukherjee, B. B., & Kaur, G. (2025), *Reimagining Sustainability: Integrating Indian Knowledge Systems with Global Discourses on Growth, Ecology and Communication*. *Journal of Communication and Development*.
- Pillai, A. (2025), *Reimagining Learning: NEP 2020 and the Role of Assessment in Incorporating Ancient Indian Knowledge Systems*.
- Sharma, R., & Vanguri, R. (2025); *Revitalizing Higher Education through Indian Knowledge System (IKS): A Vision for NEP 2020*. *International Journal on Science and Technology*, 16(2), 1–13.
- Sen, A. (2022). Indigenous Knowledge and Higher Education in India. *Journal of Educational Policy Studies*.

- Sharma, R. (2023). Indian Knowledge Systems and Educational Transformation. *International Journal of Education*.
- Tripathy, A. B., & Mishra, S. (2025), *Bridging Tradition and Innovation: The Role of Indian Knowledge Systems in Reimagining Education Today for Gen Z Learners*. International Journal of Research and Innovation in Social Science.
- University Grants Commission. (2023). *Guidelines for Indian Knowledge Systems in Higher Education*.

