

Integrating Santali Language and Indigenous Knowledge Systems in Higher Education: A Pedagogical Roadmap for Inclusive Nation Building towards Viksit Bharat@2047

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Abstract

The vision of Viksit Bharat@2047 is to make India a developed, inclusive, knowledge-driven and culturally-rich country by the 100 years of Independence. To realize this vision, the Higher Education system must be transformed to embrace and accept linguistic diversity, cultural plurality and traditions of indigenous knowledge as assets to sustainable development and nation building. The Santali language is a notable language among the tribal languages of India, and it is highly rich in oral literature, ecological knowledge, governance by the community and cultural heritage. Although it has been mentioned in the Eighth Schedule of the Indian Constitution, and is now found in academic institutions, Santali continues to be marginalized in mainstream higher education. The need to incorporate Santali language and Indigenous Knowledge Systems (IKS) into higher education teaching-learning processes and institutional operations is explored in this paper. It builds upon the National Education Policy (NEP) 2020 and current debates on inclusive education and proposes a pedagogical journey that will help integrate the knowledge of Santali into teaching and learning, research, innovation and community engagement. The study argues that this synergy can help in cultural sustainability, social justice, multilingual education, and can contribute immensely towards the realization of Viksit Bharat@2047. The paper advocates for the use of transformative pedagogies with H.E.I that view and engage with indigenous communities as producers of knowledge and active partners in national development.

Keywords: *Santali Language, Indigenous Knowledge Systems, Higher Education, NEP 2020, Tribal Education, Viksit Bharat@2047, Inclusive Development, Multilingual Education*

1. Introduction

India is witnessing a change in the educational system, with the focus of policies on inclusion, multilingualism, and knowledge democratization. The slogan of Viksit Bharat@2047 aims to build an equitable and knowledge-based society that fosters collective development, honouring diversity and recognising multiple identities. Indigenous community, especially tribal communities, is a significant component of the socio-cultural fabric of India, but their language and epistemologies have been on the periphery of higher education. *Addressing this marginalization is essential for a true national renaissance, as the incorporation of tribal wisdom—ranging from ecological stewardship to community-based ethics—can fundamentally enrich the academic landscape* (Dash, 2025).

Santali is an Austroasiatic language of eastern India and is one of the major indigenous languages of the region. The emergence of the Olchiki script had a significant impact on the building of a language sense and expansion of education for Santali-speaking populations. Indigenous language recognition and academic institutionalization are emerging possibilities as Santali is now constitutionally recognized in the Eighth Schedule. *This constitutional status provides a strategic foundation for integrating Santali-based epistemologies into formal curricula, thereby aligning with the National Education Policy 2020's mandate to embed indigenous knowledge systems within mainstream higher education* (Barman, 2025). The introduction of the Santali language and the Indigenous Knowledge Systems in higher education aligns with the current educational policy which focuses on multilingual education and community involvement and local knowledge. There is a clear emphasis in the National Education Policy 2020 on regional languages and multilingual education system, and embedding of indigenous knowledge.

2. Indigenous Knowledge Systems and Higher Education

Indigenous Knowledge Systems are defined as knowledge, practices, beliefs and innovations that have been developed in the local community over time. These types of knowledge are commonly being passed on verbally and are firmly rooted in culture, social practices and ecosystems. Increasingly, indigenous knowledge is being embraced as a useful addition to scientific knowledge in today's scholarship. Indigenous knowledge is part of the biodiversity, sustainable agriculture, climate adaptation, NRM, traditional medicine and social resilience of Indigenous peoples. By framing these languages as vital resources for academic rigor and epistemological development, universities can empower students to bridge the gap between traditional wisdom and modern intellectual discourse. *Furthermore, the development of the Ol Chiki script in the twentieth century serves as a critical milestone in strengthening the linguistic and cultural identity of the Santali people, providing a formal mechanism for preserving and disseminating their literature and social consciousness* (Jasimuddin, 2026).

UNESCO and other international organizations have pointed out the importance of integrating Indigenous Knowledge into learning and policy for sustainable development. HEIs are very important in preserving, documenting, validating and disseminating Indigenous Knowledge. The university is a place where traditional knowledge and scientific research can dialogue and interact beneficially. This integration would contribute to interdisciplinary education, inclusion and research and innovation. NEP 2020 makes it clear that there is a need to mainstream Indian Knowledge Systems into curricula, research and pedagogy.

3. Santali Language and Indigenous Knowledge Traditions

Santali language is an Austroasiatic language and one of the major tribal languages of South Asia. In 1925, Pandit Raghunath Murmu developed Olchiki script, which played an important role in the area of literary and educational development of Santali people. In addition to language, Santali is also a repository of Indigenous Knowledge Systems. The traditional Santal society has a long knowledge on the following issues:

3.1 Ecological Knowledge

The Santals have an intimate connection with forests, rivers, biodiversity and natural resources. The traditional ecological practices highlight conservations, sustainable harvesting and community stewardship. *These ecological frameworks, embedded within the community's language and rituals, function as dynamic repositories of traditional knowledge that guide sustainable development and social resilience (Laxmiram Gope, 2017).*

3.2 Agricultural Knowledge

The Santal people have learnt to grow their own crops in the environment. The traditional seed preservation, mixed cropping systems and agricultural calendar play a role in sustainable agriculture.

3.3 Traditional Health Practices

Medicinal plants, herbal medicine and community-based healing practices are an important part of Santali knowledge traditions.

3.4 Cultural and Oral Traditions

The children acquire and share traditional values through both culture and oral tradition. Oral traditions, such as folktales, myths, songs, customs, and oral histories, provide ways to maintain a community's memory, moral guidelines, and worldview.

3.5 Community Governance

Traditional institutions like Manjhi-Pargana system illustrate indigenous practices for participatory governance, conflict resolution and collective decision making.

These knowledge systems have modern relevance for the issues of sustainability, environmental education, social cohesion and community development. *The knowledge traditions of the Santhal community are rooted in a balanced coexistence with nature. These knowledge systems are deeply connected to modern discourses on sustainable development and environmental conservation (Carrin, 2022).*

4. Need for Integration in Higher Education

The need for integration in higher education. The cultural erosion, language endangerment and epistemic inequality caused by the marginalisation of indigenous languages and knowledge systems in formal education. There are several challenges that can be tackled through the integration of SKs and Santali Knowledge Systems into HE. Some of these challenges can be addressed through the integration of SKs and Santali Knowledge Systems in HE.

4.1 Promoting Inclusive Education

There are language and cultural challenges for students from tribal communities in higher education. The use of Santali language and culture helps in making education accessible and equitable. *Mother-tongue-based education improves students' learning levels and enhances their academic achievements. Higher education can become more accessible and effective for Santali-speaking students (Das, 2017).*

4.2 Preserving Cultural Heritage

The Universities should play a role in preserving endangered languages and cultural tradition. Academic recognition enhances cultural identity and the passing down of intergenerational knowledge. Folk literature, myth, history, folk songs and cultural identity can be preserved in the Santali language.

4.3 Enhancing Research Diversity

The use of indigenous approaches to research methods can add value and innovative solutions to the current challenges.

4.4 Supporting Sustainable Development

A lot of indigenous practices are in line with sustainable living, conservation and resilience of communities.

4.5 Advancing Social Justice

The marginalization of knowledge systems contributes to epistemic justice and democratization of knowledge production. *By validating these marginalized epistemologies, academic institutions can actively dismantle colonial pedagogical hierarchies, ensuring that Santali intellectual traditions are recognized as legitimate contributors to national progress* (Barman, 2025; Srivastava, 2026).

5. Theoretical Framework

This study is informed by three interconnected theoretical perspectives:

5.1 Decolonizing Education

De-colonial perspectives challenge to the Western epistemologies and call for recognition of other knowledge systems.

5.2 Multicultural Education

Multicultural education values cultural diversity and is for the representation of various communities in educational institutions in an equitable manner.

5.3 Transformative Learning Theory

Transformative learning involves critical reflection and assimilation of different points of view, which gives learners integrated understandings of society and knowledge. Both of these frameworks should complement each other to facilitate meaningful integration of Santali language and Indigenous Knowledge Systems in higher education.

6. A Pedagogical Roadmap for Integration

A broad pedagogical approach is needed for higher education institutions to be able to realize the potential of the Santali language and Indigenous Knowledge Systems.

6.1 Curriculum Transformation

The universities need to develop interdisciplinary courses on Santali language and literature: •
Indigenous environmental knowledge

- Development of various arts in Indigenous communities
- Traditional governance systems
- Indigenous health practices
- Oral tradition and traditional songs, dances, and/or art forms

Courses should be woven into other disciplines such as education, environmental studies, anthropology and sociology, literature, public policy, and sustainability studies.

6.2 Multilingual Pedagogy

The use of multilingual teaching-learning practices in higher education is to be encouraged. Adopting Santali as a medium of instruction in some of the programs can help in better understanding and participation and better academic outcome among tribal learners. Incorporation of Bharatiya Bhasha activities in higher education shows the increasing realization of the value of linguistic diversity as a national asset.

6.3 Community-Based Learning

In collaboration with the Santal communities, universities should create partnerships that enable:

- Field-based learning
- Participatory research
- Knowledge documentation
- Community internships

The partnerships guarantee authenticity and mutual benefit.

6.4 Faculty Development

For effective integration, faculty needs to be trained in:

- Indigenous research methodologies
- Culturally responsive pedagogy
- Multilingual education
- Community engagement practices

Regular workshops and capacity building programmes should be set up.

6.5 Digital Knowledge Repositories

Digital technologies can help to protect and share indigenous knowledge. Universities should develop:

- Digital archives
- Oral history repositories
- Multimedia learning resources
- Indigenous language databases

These initiatives can enhance accessibility and long-term preservation.

6.6 Research and Innovation Centres

The establishment of centres of Santali Studies and Indigenous Knowledge systems should be encouraged for the following:

- Interdisciplinary research
- Documentation projects
- Policy studies
- Innovation based on indigenous knowledge

Applying innovation based on traditional knowledge. Implementing innovation using traditional knowledge.

6.7 Experiential Learning

Experiential learning opportunities should involve:

- Ethnographic fieldwork
- Community immersion programs
- Traditional ecological knowledge mapping
- Indigenous entrepreneurship projects

This is in line with the thrust of NEP 2020 of experiential and multidisciplinary learning.

7. Contribution to Viksit Bharat@2047

The inclusion of Santali language and Indigenous Knowledge Systems have a great potential in achieving Viksit Bharat@2047.

Cultural Sustainability: Preservation of indigenous languages helps to reinforce the cultural diversity and cultural heritage of India.

Inclusive Human Development: Increased opportunities for tribal communities and a decrease in social inequalities are achieved through educational inclusion.

Sustainable Development: IEK is a source of valuable knowledge for environmental sustainability and climate resilience.

Knowledge-Based Economy: The opportunities for education, tourism, health care, agriculture, and cultural industries are new through the documentation and innovation based on indigenous knowledge.

National Integration: Language and culture are recognized and valued, which enhances social cohesion and democratic citizenship. Inclusive Human Resource Development, Innovation, Sustainability and Social Justice are the key elements of the vision of Viksit Bharat. Reworking the higher education system to include the direct incorporation of indigenous knowledge systems is an important component of these goals.

8. Challenges and Policy implications

However, there are a number of obstacles to overcome. There is a lack of academic resources in Santali.

- Insufficient faculty.
- Poor institutional support.
- Lack of support for indigenous research.
- The use of traditional discipline systems.

Policy interventions should thus comprise:

1. 10% increase in dedicated tribal language department funds.
2. Research awards for Indigenous Knowledge Systems.
3. The establishment of indigenous knowledge documentation repositories nationally.
4. Recruitment of faculty from indigenous communities.
5. Indigenous scholars' involvement in curriculum design.
6. Partnerships between Universities and tribal institutions.

These can help to make higher education more inclusive and culturally responsive.

9. Conclusion

The vision of Viksit Bharat@2047 requires an education system that values diversity, inclusivity, sustainability, and innovation. The Santali language and Indigenous Knowledge Systems are important intellectual and cultural assets that can contribute to enriching higher education and national development. The incorporation of Santali knowledge traditions in higher education is as much an educational as an ethical and developmental imperative, and not just a cultural preservation. This integration brings linguistic justice, diversity in research, sustainable development and active participation of indigenous people in the process of nation building. Rather than impediments to integration, a pedagogically transformative roadmap can be seen as a curriculum reform, multilingual education, community engagement, faculty development, digital preservation, and inter-disciplinary research plan. Inclusion of indigenous communities as knowledge holders and partners in the process of educational transformation will help in creating a more inclusive higher education system in India that will bring

1. Barman, D. M. (2025, December 1). Reviving Indigenous Knowledge: NEP 2020 and the Road to Integration. *Zenodo SUSAMĀ: Multidisciplinary Research Journal*, 1.

2. Carrin, M. (2022, October 5). Santal indigenous knowledge, cultural heritage, and the politics of representation. *Cambridge University Press*, 56(5). doi:<https://doi.org/10.1017/S0026749X2100024X>
 3. Das, R. (2017, January 1). Mother Tongue in Indigenous Script as Medium of Instruction: Discourses among Migrant Santals of Kolkata. *Sage Journals*, 14(1). doi:<https://doi.org/10.1177/0973184916678699>
 4. Dash, D. K. (2025). Integrating Indian Knowledge Systems into Higher Education: Pathways for NEP 2020 Implementation in Rural and Tribal India. *International Journal for Multidisciplinary Research (IJFMR)*, 7(6).
 5. Jasimuddin, S. (2026, March 20). Santali Language and the Importance of the Ol Chiki Script. *International Journal of Linguistics Applied Psychology and Technology (IJLAPT)*, 4.
 6. Laxmiram Gope, S. K. (2017). Identification of Indigenous Knowledge Components for Sustainable Development among the Santhal Community. *American Journal of Educational Research*, 5(8). doi:10.12691/education-5-8-8
- Srivastava, D. S. (2026). Integrating Indian Languages and Knowledge Systems to Decolonize Legal Education in India. *International Journal of Judicial Law*, 5(1). doi:<https://doi.org/10.54660/IJL.2026.5.1.17-25>

Bibliography

1. it closer towards Viksit Bharat@2047.
2. Government of India. (2020). *National Education Policy 2020*. Ministry of Education.
3. Khan, N., Mishra, M., & Soni, R. (2025). Reviving Indian Knowledge Systems in Higher Education: Alignment with the National Education Policy 2020. *ShodhVarta Journal*.
4. Kumar, S., & Gautam, D. (2026). Bridging Knowledge Systems through Higher Education for Sustainable Development in Viksit Bharat 2047. *Advanced International Journal of Multidisciplinary Research*, 4(1). <https://doi.org/10.62127/aijmr.2026.v04i01.1187>
5. Ministry of Education. (2023). *Indian Knowledge Systems Framework*. Government of India.
6. Murmu, R. (1936/2002). *Ol Chemed*. Mayurbhanj: ASECA Publications.
7. Saren, J. (2017). *Indigenous Knowledge and Santali Cultural Heritage*. New Delhi: Tribal Research Institute.
8. Science Direct. (2025). Stakeholder perspectives on integrating Ayurveda and Indian Indigenous Knowledge Systems into higher education: An exploratory study. *Journal of Ayurveda and Integrative Medicine*.
9. UNESCO. (2017). *Indigenous Knowledge and Sustainable Development*. Paris: UNESCO.
10. UNESCO. (2021). *Reimagining Our Futures Together: A New Social Contract for Education*. Paris: UNESCO.
11. Venkatesan, A., Begay, D., Burgasser, A. J., Hawkins, I., Kimura, K., Maryboy, N., & Peticolas, L. (2020). Towards Inclusive Practices with Indigenous Knowledge. arXiv:2009.12425.
12. Venkatesan, A., Begay, D., Burgasser, A., Hawkins, I., Kimura, K., Maryboy, N., et al. (2019). Collaboration with Integrity: Indigenous Knowledge in 21st Century Astronomy. arXiv:1908.02822.