

Documentation and Conservation of Indigenous Knowledge System: A Study of the Darlong Tribe of Tripura

H. Theresa Darlong

Abstract

This article examines the Indigenous Knowledge Systems (IKS) of the Darlong tribe in Tripura, Northeast India. The Darlong IKS serves as a thorough reference tool, encompassing ecological knowledge derived from decades of lived experience, including sustainable farming techniques, spiritual beliefs, oral traditions, and community governance. These knowledge systems not only embody a significant ecological orientation but also serve as a foundation for cultural identity and social cohesiveness. Nonetheless, the accelerating rate of industrialization, deforestation, and socio-economic transformation jeopardizes the viability of these activities and their significance in communal life. This research, based on ethnographic fieldwork and qualitative analysis, seeks to chronicle the fundamental elements of Darlong Indigenous Knowledge Systems (IKS) and assess their significance regarding current environmental and sustainability issues. It examines the function of indigenous institutions, particularly the Darlong Hnam Inzom (Darlong Apex Court), in facilitating cultural continuity and knowledge transmission. This research contextualizes the Darlong IKS within broader theoretical frameworks, drawing on the sociological viewpoints of Émile Durkheim, Clifford Geertz, and Max Weber, which highlight the interrelation of belief systems and social structures about cultural resilience. The study illustrates the significance of Indigenous Knowledge Systems (IKS) and outlines objectives for their conservation and revitalization, advocating for their incorporation into modern conservation and development programs as a key pathway to sustainable futures.

Keywords: *Indigenous Knowledge Systems (IKS), Darlong Tribe, Tripura, Cultural Preservation, Environmental Conservation, Oral Traditions, Shifting Cultivation, Sustainable Development, Traditional Governance, Biodiversity, Rituals, Modernization.*

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I. Introduction

Indigenous Knowledge Systems (IKS) are crucial for environmental protection and cultural sustainability, particularly in tribal societies where natural ecosystems are intricately woven into their way of life. The Darlong tribe of Tripura, an indigenous people in Northeast India, has a profound repository of ecological knowledge, transmitted orally through generations and manifested in their ceremonies and sustainable agricultural methods.

However, rapid modernization, urbanization, and socio-economic transformations are diminishing these old behaviours. However, today, the younger generations are increasingly distancing themselves from the profound wisdom of their parents, while a cultural and environmental knowledge base recedes into the background. This study sought to investigate, record, and analyse the Indigenous Knowledge Systems of the Darlong tribe, highlighting its significance in contemporary environmental conservation and socio-cultural sustainability.

II. Objectives of the Study

The objectives of the study are as follows:

1. To document the Indigenous Knowledge Systems of the Darlong tribe, including their rituals, festivals, oral traditions, and ecological knowledge.
2. To analyse the relationship between spiritual beliefs and conservation efforts within the Darlong community.
3. To examine the challenges faced by the Darlong tribe in preserving their Indigenous Knowledge Systems amidst socio-economic and environmental changes.
4. To investigate strategies for the revitalization and conservation of the Darlong tribe's IKS.

5. To demonstrate the contribution of the Darlong tribe's IKS to contemporary environmental challenges and sustainable development.

III. Previous Work on Indigenous Knowledge Systems (IKS)

The intersection of culture, ecology, and knowledge transmission has energised the growing interdisciplinary interest in Indigenous Knowledge Systems (IKS) in the fields of sociology and anthropology. One of the earliest books recognizing indigenous ways of knowing as rational and structured was by the sociologist Claude Lévi-Strauss, who introduced the concept of the "science of the concrete" to describe the way that indigenous peoples categorize plants, animals, and ecological interrelationships based on long-term observation and interaction (Lévi-Strauss, 1966).

In recent decades, there has been increasing scholarly attention to Indigenous Knowledge Systems (IKS) and how these knowledge systems have contributed to biodiversity conservation, sustainable agriculture, climate adaptation, and cultural preservation. According to research conducted by Warren, Slikkerveer, and Brokensha (1995), IKS is dynamic and is accumulated over generations of practical application with the environment. They grappled with the foundations of indigenous knowledge as an epistemology that had validity and value in its own right for rural and marginalized communities.

Building on this, Vine Deloria Jr., a Native American scholar and sociologist, critiqued Western scientific paradigms in his later work for ignoring indigenous cosmologies and for not recognizing the legitimacy of tribal worldviews, especially the spiritual and ecological dimensions of such worldviews (Deloria, 1997). In the same vein, Boaventura de Sousa Santos promotes the "epistemologies of the South", positing indigenous knowledge systems as alternative ways of knowing which counter the predominance of Eurocentric science (Santos, 2014).

Within the Indian context, the role of traditional knowledge in agrarian societies, especially among tribal communities, was explored by the rural sociologist D.N. Dhanagare. He spoke about how knowledge is predicated by its culture and social institutions. Another scholar who made significant contributions to traditional ecological knowledge in the Indian context was Ravindra Gadgil, who presented a detailed analysis of traditional ecological knowledge systems around bamboo (Gadgil, Berkes, & Folke, 1993) and which have been especially recognized in the field of forest management and sustainable utilization by tribal communities.

In India, Agrawal (2002) argued for the integration of IKS into formal scientific research, policy formulation, research, and development—particularly in natural resource management. Agrawal critiques this divide between "traditional" and "scientific" knowledge and calls for a pluralist approach that is respectful of indigenous worldviews. In Northeast India, a few ethnographic studies have illustrated the ecological wisdom of various tribes such as the Khasi, Mizo, and Darlong related to forest resource management, shifting cultivation, and medicinal plants knowledge (Zothanchhingi, 2019).

Sociologists such as Émile Durkheim assert that rituals and religious practices form a foundation for social cohesion and collective consciousness. For the Darlong tribal culture, community life is united through communal festivals such as *Tharlak Kut*, ritual farming practices, and spiritual observance that not only binds the community but also re-establishes the ideas of shared environmental ethics and traditional values. According to Durkheim, the rituals serve the function of creating a sense of community and collective responsibility to nature (Durkheim, 1912/1995).

Geertz regarded culture as a system of meaning, comprising symbols that impart value to actions. These mythological accounts, oral traditions, and festivals of the Darlong are instances of such symbolic systems. In the process of transmitting ecological and spiritual knowledge, these traditions also serve to reinforce cultural and group identity. Drawing on Geertz's interpretive approach, we can help explain how legitimate forms of indigenous cultural expressions become "texts" that come with layers of meanings, forming a part of the worldview of the community (Geertz, 1973).

Max Weber considered the impact of religion and values on economic and social behaviour. For the Darlong, belief in nature spirits and the sacredness of the land governs sustainable practices such as shifting cultivation (jhum) and forest conservation. Weber's theory of the role of ideas in forming social structures helps us better understand how worldviews influence rates of environmental stewardship, and how more spiritual worldviews, in particular, contribute to these rates (Weber, 1922/1963).

IKS has been a topic of much research globally and nationally, but comparatively few studies focus on the Darlong tribe. While ethno-ecological studies on different Northeast Indian tribes have documented indigenous ecological wisdom, in the case of the Darlongs, there is a need for sociological research to understand the life history of knowledge transfer through social institutions, as well as oral transmission in the context of cultural values.

However, a lot of this experience remains undocumented or underrepresented in mainstream academic and development discourse. Newer efforts by UNESCO and Indian institutions such as the National Innovation Foundation (NIF) have sought to document IKS and popularise it in native communities. Hence, no extensive

studies have been conducted on the Darlong tribe and the specific cultural practices in their socio-religious life, and therefore any further studies on their indigenous practices contribute to the body of IKS discourse.

3.1. Nature and Spirituality

The Darlong perceive an interconnectedness between the natural world and the spiritual realm; nature is a living being with spiritual significance to them. Forests, rivers, and land are not resources, but sacred spaces that must be respected. Guidelines derived from this belief system permeate their daily lives, such as associating with agriculture, festivals, and rituals, which ensure that natural resources are used sustainably.

Before the Darlongs converted to Christianity in the early 20th century, they practiced animism and believed in 'Pathian,' a supreme being who dwelt in natural landscapes such as rivers, mountains, and forests. They assigned a specific deity to be associated with these elements.

Khawbiak: The community god

Lungtan Pathian: Rock God

Tui Tarpa: God of water

Ramhuai: Forest Deity

Khuachultenu: Goddess of natural phenomena

Fapeite: Goddess of abundance

Zingngawrtenu: Goddess of dawn

While the Darlong acknowledged a variety of deities, their spiritual practices were deeply intertwined with the worship (and appeasement) of gods and spirits through ceremonies and sacrifices.

3.2 Rituals and Ceremonies

The Darlongs conducted several rituals and organized events to maintain harmony with the spiritual realm for the welfare of the entire community. Prominent ceremonies encompassed:

Khal: A sacrifice done for the shadows of the house, known as '*In Rihli*,' that was said to dictate the family's luck;

Daibawl: The worship needs to be done to placate the spirits of the forest before any cultivation or the establishment of a site for it.

Khawpuilam Sat: A collective spirit of the villagers clearing the same path, overcoming struggles together, paving a way for abundance.

This was a Khuangchawi ceremony: a learned and, above all, costly ritual, after which it was believed that the performer would instantly enter *pialral* or hell. These rites demonstrated the Darlong's deep connection to nature and their comprehension of the link between the physical and spiritual realms.

3.3 Faith embroiled in Nature is the essence of Spiritual Beliefs

In the pre-Christian days of the early 20th century, the Darlongs practiced an animistic religion and venerated nature as sacred. They worshiped a supreme deity called *Pathian*, and a host of gods and spirits associated with forces of nature. This cosmology was centered around deities including *Khawbiak* (the protector of the village), *Lungtan Pathian* (spirit of the rocks), Tui Tarpa (water spirit), and *Ramhuai* (spirits of the forest) (Darlong, 2018). Not only were rivers and mountains and forests seen as tangible resources, but they were also considered spiritual elements worthy of respect, creating a strong sense of environmental stewardship.

3.4. Rituals and Sacred Practices

The Darlong performed elaborate rituals to appease these spirits. Khal, for example, was a sacrifice ritual for the well-being of household spirits (*In Rihli*) and *Daibawl* before engaging in cultivation to appease the spirits of the forest (Darlong, n.d.-a). Other rituals such as *Khuangchawi*, a revered festival complete with bounteous feasts, dances, and offerings were thought to guarantee a place in *Pialral* (the paradise) upon dying. These ceremonies focused on communal cooperation and reaffirmed their spiritual connection to the earth.

IV. Oral Tradition and Knowledge Transmission

The Darlong had no script of their own traditionally and their indigenous knowledge was passed on orally from generation to generation. Ecological wisdom, spiritual beliefs, and oral histories were passed along as educational tools through folktales, chants, and myths (Darlong, n.d.-a). For example, tales about refraining from cutting particular trees or trespassing in sacred groves were based on environmental ethics, supported by spiritual fear and moral codes.

The Darlong people did not have a written script, placing a high reliance on oral narratives to express and pass on their indigenous knowledge. Stories, songs, and chants were the media through which cultural values, historical events, and spiritual beliefs were transmitted. Myths, for example, stories of trees or water bodies inhabited by spirits, served as explanations for natural phenomena and as lessons to respect the environment. This oral tradition served as an educational system, keeping the wisdom of the community alive for each generation.

4.1 Ethnomedicinal Practices

The Darlongs knew a great deal about the healing properties of local plants. They used all sorts of plants to heal; a practice grounded in their intimate knowledge of the environment. Some common examples include the use of various herbs to treat digestive disorders, respiratory infections and disorders, and skin diseases. This ethnomedicinal knowledge was traditionally transmitted across generations through apprenticeship and oral teaching.

4.2 Indigenous knowledge conservation

However, with modernization and Christianity, there is a change in the traditional practices of the Darlong. Although various rituals and beliefs may have faded, there is an increasing acknowledgment of the need to document and preserve indigenous knowledge. Researchers and locals are working to document oral histories, ceremonies, and plants that are useful to preserve this cultural heritage. Such initiatives are intended to preserve the Darlong's distinct identity and provide lessons on sustainable living practices based on a deep respect for nature.

V. Agricultural Methods and Sustainability

For the Darlong, agriculture transcends mere economic activity; it is a sacred practice that aligns with nature's regular cycles through spiritual interaction. Each milestone of the agricultural cycle is commemorated by rituals and festivities. The Darlongs invoke ancestor spirits and local deities to bestow blessings upon their harvest and to achieve peace with the spiritual realm before planting. Similarly, ceremonies are performed post-harvest to express thanks for nature's abundance.

Tharlak Kut, signifying the commencement of the agricultural season, is a prominent farming event. This holiday serves not just as a celebration of gratitude but also as a means of reinforcing communal ties. During Tharlak Kut, villagers unite to cleanse walkways, restore communal infrastructure, and engage in collective farming. The event fosters collective accountability for sustainable land utilization and enhances social unity via collaborative labor and communal dining.

5.1 Agricultural System and Sustainability

The art of monsoon paddy plantation is rooted in the tribal community of the Darlong tribe of Tripura, who are noted indigenous residents in the hilly terrains here and practice a sustainable system of traditional agriculture. Their practices are based on an intimate knowledge of the local ecosystem that is centuries old and embedded in indigenous knowledge systems.

Shifting Cultivation (Jhum)

The Darlong tribe practises jhum cultivation, a form of shifting cultivation which is common among the tribal people of Northeast India. In this process, patches of forest land are cleared by controlled burning, cultivated for some years, and then left fallow to regenerate naturally. Practised in long fallow cycles it is sustainable, improving soil fertility and biodiversity.

Darlong traditionally practices a rotational cycle of 7 to 10 years, utilizing the cyclical burning practices to limit the degree of environmental degradation, laying emphasis on soil conservation measures. Community efforts are carried out for clearing, sowing, and harvesting which strengthens social cohesion and equitable sharing of labour (Lalramliana, 2015).

5.2 Mixed Cropping and Crop Diversity

Mixed cropping being a practice carried out by the Darlongs, they have done a commendable job of exhibiting an innate knowledge of agrobiodiversity. In a single plot, rice, maize, millet, sesame, beans, and other root vegetables are grown together. Not only does this polycultural system reduce risks of crop failure from pests or climatic variation, but it also maintains soil health and moisture retention (Debbarma & Tripura, 2020).

In traditional Darlong farming, chemical fertilizers and pesticides are rarely used. Instead, they use organic compost, animal manure, and natural pest deterrents. This system is based on low-input techniques and greatly helps in environmental sustainability by decreasing reliance on exogenous agricultural inputs (Das & Nath, 2013).

5.3 Sacred Landscapes and Conservation Ethics

Darlong agriculture has deep-seated spiritual roots as well. Some groves, watering holes, and forest patches are considered sacred and protected from exploitation. Such sacred landscapes are important for the conservation of biodiversity and ecological framework (Bhaumik, 2012). Their farming-related taboos and rituals often serve as traditional ecological governance systems limiting the overexploitation of natural resources.

Challenges facing the Darlongs in recent years include shrinking jhum cycles, deforestation, and declining soil productivity, due to population pressures and policy shifts. However, there are attempts by the government and NGOs to rejuvenate Shakti from a modern sustainable perspective through agroforestry, terrace farming, and soil conservation programs (Chakraborty, 2019).

VI. Oral Traditions the Repository of Knowledge

For centuries the Darlong tribe has relied on oral traditions to preserve and transmit traditional knowledge. The oral tradition the conveyance of cultural memories via storytelling, proverbs, chants, and songs and serves as a highly effective reservoir of environmental, medicinal, spiritual, and social knowledge, particularly in the absence of written language until comparatively recently. These traditions form the foundation of the tribe's cultural history and impart lessons on sustainable practices and ecological balance.

6.1 Ecological and medicinal information is present in oral traditions

The Darlongs' oral narratives frequently possess dual interpretations, intertwining folklore with relevant ecological insights. Senior individuals impart wisdom through myths and proverbs regarding the attributes and optimal applications of indigenous flora. Specific plants, roots, and herbs are recommended in songs or chants as remedies for fevers, digestive issues, and wounds, for instance (Deb, n.d.). These accounts offer insights into seasonal collecting, preparation techniques, and spiritually grounded protocols associated with healing activities, indicating that knowledge is both technical and culturally embedded.

Similarly, proverbs and cautionary tales impart community-focused regulations for hunting and fishing, underscoring moderation and awareness of breeding seasons. For instance, narratives on the supernatural repercussions of excessive hunting or fishing during spawning seasons underscore the peril and hence the ethical treatment of nature that aligns with contemporary conservation policies.

Although this oral tradition is rich, indigenous knowledge in the Darlong is increasingly threatened. Although formal education is significant for social mobility, it can marginalize indigenous languages and traditional activities within the landscape. Curricula tend to be anchored in national or global schemas, and local knowledge systems tend to be relegated to the margins. Younger Darlongs are spending significant amounts of time in schools or consuming digital media, and thus lose a lot of their exposure to traditional oral forms (Darlong).

Much of digital culture prioritizes visual and fast-moving material over the depth and interactivity common to oral storytelling. As a result, younger generations of the tribe may see traditional stories and practices as obsolete or unnecessary. This is compounded by the migration of youth to cities, resulting in less intergenerational contact, and breaking the oral transmission chain.

6.2 Documentation and Revitalization: The Need

Hence, to prevent the corrosion of this invaluable pool of knowledge, there is first, the necessity to document oral traditions in audio-visual formats; to have them integrated within educational resources; and further, to nurture forums for elders and youth to come together in meaningful engagement. Community-based participatory research and digital storytelling projects can connect tradition with technology. Finally, economic events that promote local heritage schools can to expand pride in indigenous knowledge and thus make them more modern.

VII. Challenges to Indigenous Knowledge Systems

Indigenous Knowledge Systems (IKS), the history of the production of knowledge, practices, and views of the world developed over generations by indigenous people as they engage with the natural and social environments. While they hold immense importance in domains ranging from sustainable agricultural practices, human health, preservation of biological diversity, and cultural heritage, such systems of knowledge are becoming increasingly challenged on multiple fronts. These challenges are unique to each community but are interlinked, as is the case with the Darlong tribe of Tripura.

7.1 Erosion of Cultural Heritage and Loss of Language

The major medium for the passage of indigenous knowledge is through language. The gradual erosion of these languages among the young population would severely affect the vertical transfer of traditional knowledge, especially skills to identify indigenous edible plants and animals, as well as the therapeutic value of such species. As linguistic context for oral traditions, songs, rituals, and the terminology used in these forms of expression fall away, so too does the nuanced understanding embed in these forms (UNESCO, 2020). If we do not make deliberate attempts to preserve the languages of the original culture, we cannot preserve the systems of knowledge that come with those languages.

7.2 Formal Education and Exclusionary Curriculum

Formal education systems based on national and global curricula are imposed and indigenous knowledge is sidelined. Indigenous children seldom learn in their mother tongue and seldom learn about local history and cultural practices in schools. However, the insistence on opening their minds to Western scientific knowledge but not traditional ways of knowing has drawn them into this hierarchy of knowledge in which indigenous knowledge is always inferior or less scientific. Not only does this distance indigenous youth from their heritage, but it also decreases the worth of indigenous knowledge (Battiste, 2002).

7.3 Impact of Globalization and Digital Media

Digital technology also creates new avenues of interaction, but it has been critically ascribed to the loss of formal knowledge systems. Global content on social media and online entertainment has increasingly supplanted local storytelling, communal or group rituals, and interactions between the elder and the youth that frame oral knowledge transmission. For instance, for Darlong youth digital engagement often equates to spending less time in learning through traditional lived life, including agriculture, and in ritual participation.

7.4 Land Displacement and Environmental Degradation

Indigenous knowledge is contextually embedded in the ecological milieu of a people. Deforestation, mining, infrastructure development, and climate change threaten the ecosystems that sustain indigenous practices. To the Darlong tribe, diminishing availability of forest land for jhum cultivation, gathering medicinal plants, and performing rituals is of course undermining the very basis of their knowledge system. Forced displacement from ancestral lands due to large-scale development projects or conservation initiatives creates further disconnect between communities and the environments that define the context of their knowledge (Das, 2019)

7.5 Appropriation of Knowledge and Intellectual Property

External actors, like pharmaceutical companies and researchers, also misappropriate and commercialize indigenous knowledge without fair compensation or recognition, which is another growing threat. When corporations take and patent knowledge of medicinal plants, for instance, Indigenous communities not only lose control of their heritage, but they also risk being exploited and marginalized. This is aggravated by the absence of any legal structure to safeguard indigenous intellectual property.

As societies modernize, divisions within indigenous communities themselves can undermine knowledge transmission. Capitalistic tendencies may drive families to move away from traditional craftsmanship and farming, resulting in a generational loss of knowledge and wisdom. Younger members, especially if elders are not included in formal leadership and decision-making, may consider indigenous knowledge to be outdated or irrelevant.

VIII. Breakdown of Traditional Systems of Governance

In the case of indigenous peoples, such governance models are based on traditional structures that have historically located central importance in the organization of the society itself, not only guiding political decision-making but also the management of resources and conflicts as well as the preservation of culture. Among the Darlong tribe of the Indian state of Tripura, for example, these structures were rooted in customary laws and collective consensus, and institutions like the *Darlong Hnam Inzom* played dual roles as cultural and administrative bodies. The emergence of Western legal systems and state-centric models of governance, however, has gradually sidelined these indigenous methods.

8.1 Loss of Authority Among Elders and Chiefs

The introduction of Western systems of law has diminished the role of traditional councils (e.g. *Darlong Hnam Inzom*) in resource management. Traditional leaders were often the custodians of knowledge and moral values within contemporary indigenous societies, and holders of land-based wisdom. But, in light of modern education, religious conversion, and migration, the authority and influence of these elders have waned. In the Darlong community, that meant converting from animism to Christianity (one of the significant religious transformations of the 19th century), which on the one hand disrupted the spiritual undercurrent of leadership, undermining traditional positions in which authority resided in the village priest or shamans (DebBarma 2021) The weakening of these roles affects, among other things, conflict management, land use, and the generational transfer of traditional customs. The authority of the tribe, in this sense, increasingly becomes implicit as young people go outside the tribe, turning toward external authorities—political leaders, religious figures, government officials—and bypassing the traditional authority of tribal governance.

8.2 Legal and Administrative Marginalization

This shift has also undermined the legitimacy of traditional councils in the eyes of the younger generation. The elders' considered judgment on issues of governance and culture is replaced by legal systems reliant on written documentation and codified rules. However, in the areas where statutory law is implemented, as a cultural and social entity, the *Darlong Hnam Inzom* continues to exist, but it does not have control over managing common resources or solving conflicts.

And younger Darlongs, who have been exposed to modern education, urban lifestyles, and global media, tend to see traditional governance as either outdated or ceremonial, not functional. This has created a significant generational divide, eroding the transmission of the customary laws and communal ethics once seen as fundamental to everyday life.

IX. Absence of Document and Policy Support

Narratives of IKS face the imminent threat of loss mainly due to the lack of systematic documentation accompanied by enabling policy frameworks. This is most notable for the Darlong tribe of Tripura, whose oral traditions and ecological wisdom are often excluded from formal education systems, legal codes, and development planning. But IKS is primarily passed down orally over generations—through oral histories, through storytelling and rituals and daily lived experiences—and thus it is vulnerable to erosion, as younger generations move away, assimilate to dominant cultural paradigms, or break away from traditional lifestyles.

Yet IKS remains largely unrecognised by political and legal institutions in terms of its contributions to sustainability, biodiversity conservation, and cultural resilience. Policies at the national and state levels rarely acknowledge indigenous methods of conservation or spiritual relationships with the land, thus marginalizing indigenous voices from environmental decision-making (UNESCO, 2020).

The *Darlong Hnam Inzom* (Darlong Apex Court), a traditional and semi-institutional authority, is at the forefront of preserving Darlong culture and identity. This body plays several interconnected roles in supporting Indigenous Knowledge Systems:

The *Darlong Hnam Inzom* general way of family arbitration which where cases are presented in front of tribal judicial and ethical code-have been applied and administered rather than formal statutory laws. This includes issues around land, marriage, inheritance, and communal conflict. As a result, decisions are generally based on restorative justice principles, focusing on restoring balance and reconciliation rather than punitive measures.

Aside from legal functions, the *Hnam Inzom* also serves an important role in preserving intangible cultural heritage. It serves as an organizing and preserving tool for indigenous festivals such as *Tharlak Kut* (signifying the commencement of agricultural practices), and for traditional rituals that elaborate Darlong cosmology, kinship structures, and veneration of nature.

Crucially the *Hnam Inzom* work together alongside elders, ritual specialists, and local scholars to document oral histories, proverbs, folk medicine practices, and spiritual worldviews. These also work against intergenerational knowledge loss and for intergenerational learning.

An Indigenous Institution of Multi-Dimensional Purpose. The *Darlong Hnam Inzom* can be defined in two ways as the *Hnam* trumpets above are generally seen as an indigenous institution serving a multi-dimensional purpose.

However, as to preservation and revitalization, the methodologies of approaches and processes to employ will need to be adjusted and adapted based on the specific community and cultural context; Especially for minority tribes, the most vulnerable to cultural extinction such as the Darlong, where in the face of such prevalent negative external influences towards their Indigenous Knowledge Systems (IKS) and cultures these holistically devised and community-oriented frameworks will only sustain it, promote preservation and revitalization. Proposed strategies include some combination of:

Steps should be taken to document the knowledge, folklore, and healing practices of Darlong systematically. This may also include documenting oral narratives through digital archiving, conducting elder interviews, and developing multilingual repositories (translated not only to English, but also Kokborok).

Schools in Darlong villages should teach the history of the Darlong people and enshrine Darlong cultural values, agricultural knowledge, and functioning traditional governance structures, spurring the youth to take pride and get involved. Today, preservation not only serves academic ends — creating the possibility of bilingual and bicultural education models — but also political ones.

The state government and local administration should push for the legal recognition of traditional institutions like the *Darlong Hnam Inzom* so that they may be integrated as part of institutions in rural governance. This would allow IKS to be incorporated into biodiversity management, sustainable development, and conservation policy.

Cultural festivals, storytelling sessions, and indigenous media (radio, community film projects) can create platforms for visibility and pride. Documentaries and cultural showcases can create understanding between communities while preserving heritage through engaging formats.

Community gatherings, workshops, and mentorship programs that have youth interact with the elders of the community are an integral part of keeping the flow of Indigenous Knowledge alive. Youth should be empowered as cultural apprentices second to traditional healers, farmers, artisans, and storytellers.

According to the Darlong tribe, its Indigenous Knowledge Systems represent a living library of ecological relationships, cultural practices, and social governance. Yet this knowledge is quickly disappearing without a documented cadre, policy recognition, and community engagement to keep it alive. These revitalization processes can be grounded in culturally legitimate institutions, such as the case of the Darlong Hnam Inzom. Through the interplay of traditional governance, contemporary tools, and platforms, the Darlong are better poised to not only preserve their heritage harmoniously but also provide a rich context for the evolving conversation around sustainability and cultural diversity.

X. Preservation and Revitalization Strategies

The IKS of the Darlong tribe in Tripura is an intricate system of ecological knowledge, spiritual practice, and cultural identity. But those traditions are increasingly threatened by modernization, loss of oral transmission, and waning interest among younger generations. As such, the preservation of these heritage places and their continued vibrancy is critical to both their survival and the sustenance of the community and wider society as a whole.

10.1 Community-Based Documentation

A key strategy is the participatory documentation of oral traditions, folk medicine, agricultural practice, and spiritual ritual. These involve documenting elders' stories, protecting indigenous songs and proverbs, and establishing digital archives in both the Darlong language and other languages that can be accessed by others. This can have the unique advantage of determining the authenticity and role of the community in a local hub of institutions like the *Darlong Hnam Inzom*.

10.2 Educational Integration

The youth can be made to appreciate our own culture through the respect of the traditional knowledge if we blend IKS in our formal and informal form of education systems. Darlong culture and content, bicultural education programs, integrated with the state curriculum, can enhance cultural literacy and academic performance. Cultural clubs and heritage workshops at schools can also keep the gaps between the older and younger generations closed.

10.3 Legal and Policy Support

Implementing customary practices within state-level policies, especially provisions to protect indigenous institutions like the *Darlong Hnam Inzom*, can also help cement the place of indigenous systems and institutions. Policies must reinforce land rights and traditional ecological knowledge for conservation activities, and the committee must respect the Darlong people's right to their heritage as well as to their practice and transmission.

10.4 Programs for Cultural Revitalization

Cultural expression and knowledge exchange about things like Tharlak Kut, which signifies the start of the agricultural season, should be promoted and encouraged. Strategies like using media tools (community radio, short documentaries, social media) to attract younger generations can be a fun and engaging way to revive dying customs.

10.5 Intergenerational Knowledge Exchange

If elders can be offered structured opportunities to mentor youth in storytelling, traditional farming, medicine, and crafts, oral transmission can be revived. Such interactions also strengthen community cohesion and identity.

Overall, the preservation and revitalization of the Darlong tribe's Indigenous Knowledge Systems requires a multifaceted, community-based approach that integrates documentation, education, policy advocacy, and cultural expression. This allows the community to strengthen the roots of their existing knowledge through guided, firm but flexible mentoring for future generations.

10.6 Policy Advocacy and Government Support

The preservation of Indigenous Knowledge Systems (IKS) of the Darlong tribe needs effective policy advocacy and continuous government support. There is a need to recognize, incorporate, and indigenize traditional ecological knowledge, customary laws, and cultural practices into environmental, educational, and developmental planning; recognize the value of indigenous knowledge in achieving sustainability; and advance efforts towards biocultural heritage conservation. Thus, a legal framework is required to empower indigenous governance and to

recognize such institutions as Darlong Hnam Inzom. Funding for documentation, cultural preservation, and capacity-building programs to support intergenerational transmission hätte have also been allocated. This can be achieved through collaborative efforts between the government, tribal leaders, scholars, and non-governmental organisations (NGOs) to create culturally sensitive policies for IKS that support and maintain IKS in nurturing national development.

XI. Conclusion

Indigenous Knowledge Systems, such as the one practiced by the Darlong tribe, are a form that needs the effort from the community as well as external policy support to survive. Acknowledging these systems as legitimate knowledge systems, incorporating them into formal school curricula, recording oral traditions, safeguarding indigenous intellectual property, and encouraging youth involvement are all important steps in preserving this priceless cultural heritage. Without intervention of this kind, we risk not only losing multiple ways of relating humans to the environment but also finding other, more sustainable ways to develop other than the business-as-usual approach.

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The breakdown of traditional governance systems such as the *Darlong Hnam Inzom* illustrates the broader challenges faced by indigenous communities in maintaining autonomy and cultural integrity within the framework of modern nation-states. Reinvigorating these structures through legal recognition, community empowerment, and integration with contemporary governance models is vital for the preservation of Indigenous Knowledge Systems and sustainable resource management.

Indigenous Knowledge Systems of the Darlong tribe are invaluable in synergies with modern-day sustainability and biodiversity conservation. However, modernization poses several challenges, and to overcome this, they ensure the survival of this rich heritage through strategic documentation, policy support, and cultural revitalization efforts. Merging IKS with contemporary conservation paradigms has the potential to connect the past with the future in finding a sustainable path.

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