When the Hills Remember: Unearthing Poumai Naga Indigenous Knowledge from Seed to Spirit through the Paoki Festival

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Abstract

In the face of global ecological crises and cultural marginalization, Indigenous Knowledge Systems (IKS) have emerged as crucial frameworks for sustainability, resilience, and epistemic justice. Yet, within India, particularly the Northeast, minor Indigenous communities like the **Poumai Nagas** remain critically underrepresented in academic and policy discourse. This study centers on the **Paoki Festival**, a sacred agricultural ritual of the Poumai people, as a living archive of ecological intelligence, ancestral timekeeping, and intergenerational transmission of environmental ethics. Grounded in **Indigenous Epistemology, Ecocriticism**, and **Biocultural Memory Theory**, this paper examines the festival's embedded knowledge through qualitative, interpretive methods. Rituals such as ginger divination, lunar observation, gendered labor, and symbolic hospitality are analyzed not as cultural performances, but as epistemic systems rooted in land, spirit, and community. Drawing from the works of Smith (1999), Berkes (2018), and Jessen et al. (2021), the paper presents the Paoki Festival as a pedagogical and ecological framework that holds untapped relevance for climate resilience and cultural sustainability. The study addresses the pressing problem of epistemic invisibility faced by smaller Indigenous groups and argues for the inclusion of Poumai IKS in broader discourses on education, policy, and environmental governance. **By foregrounding the Paoki Festival, this research not only contributes to the growing archive of Indigenous ecological thought, but also affirms that the enduring spirit of the Poumai Nagas who are rooted in land, ritual, and remembrance,**

offers essential pathways for reimagining sustainability through ancestral knowledge.

Keyword: Indigenous Knowledge System, Cultural Preservation, Poumai Nagas, Traditional practices

Introduction

In an era of mounting ecological disruption and cultural displacement, the relevance of Indigenous Knowledge Systems (IKS) has gained renewed attention. These systems, forged through generations of close interaction with the land, reflect holistic understandings of ecology, spirituality, community, and time. While mainstream knowledge frameworks often separate science from culture, Indigenous epistemologies treat land, life, and language as interwoven and sacred. Yet despite their sophistication and sustainability, IKS remains marginalized, particularly in regions like Northeast India, where colonisation, modernisation, and religious transformations have altered traditional life. Marked by ecological degradation, cultural erosion, and the dominance of Western knowledge systems, **Indigenous Knowledge Systems (IKS)** emerge as vital repositories of ecological wisdom, communal ethics, and spiritual cosmologies. These systems, woven into oral traditions, rituals, environmental practices, and linguistic heritage, offer models of relational living that remain largely marginalized in mainstream academia.

The Poumai Naga community of Senapati district, Manipur, one of the largest Naga tribes nestled in the hills of Northeast India, exemplifies the resilience and sophistication of Indigenous epistemologies. With a cultural landscape that integrates sacred ecology, seasonal festivals, folktales, and ancestral governance structures, the Poumai Nagas sustain a holistic worldview wherein land, language, and life are interwoven. Their Indigenous Knowledge System, passed down through generations via storytelling, song, farming practices, ritual observances, and spiritual guidance, offers a blueprint for sustainable living. One that modern societies can learn from, especially in the face of climate crises and cultural erosion. Festivals are not merely celebratory events in Indigenous communities; they are lived philosophies, ecological calendars, and mnemonic devices for transmitting

ancestral wisdom. Despite the prevalence of Christianity, the Poumai Nagas maintain rich cultural traditions, including agriculture-rooted festivals like Thounii, Laonii, and notably **Paoki**, which marks the commencement of paddy transplantation and reinforces ecological stewardship.

Among the Poumai Nagas of Manipur, the **Paoki Festival** is more than a tradition; it is a living manifestation of the community's Indigenous Knowledge System (IKS), deeply entwined with their relationship to land, time, spirit, and social cohesion. Indigenous festivals like Paoki offer alternate frameworks for understanding sustainability, memory, and identity in a modern world marked by climate change, cultural fragmentation, intellectual homogenization. Yet, these knowledge systems remain peripheral in mainstream academic, policy, and development discourses.

This paper, therefore, centres on the Paoki Festival of the Poumai Naga community in Manipur, which is a rich repository of Indigenous ecological and cosmological knowledge. The **Paoki Festival**, celebrated annually in early May till late May, varying with different Poumai Naga villages in Senapati, is more than an agricultural ceremony. It encompasses rituals like symbolic sapling transplantation, communal wrestling and feasting, guest hospitality, and ancestral blessings with each element functioning as a **cultural encoding** of environmental knowledge. As documented in Purul village, Paoki begins with ritual gatherings, communal food preparation, and wrestling contests, culminating in collective rice transplanting that honours the water cycle, land fertility, and social unity. Ritual practices such as ginger divination, lunar observation, intergenerational knowledge sharing, and integrated aquaculture reflect what Jessen et al. (2021) describe as biocultural memory, a dynamic system of ecological intelligence passed through ritual and community observance. The festival is not merely performative; it is pedagogical, transmitting values, knowledge, and ethics across generations (Donato-Kinomis, 2016). Through the lens of the Paoki Festival, this research investigates how the Poumai Nagas encode ecological principles, seasonal wisdom, intergenerational teaching, and spiritual ecology in their cultural practices. This research also examines the Paoki Festival as a site of living Indigenous Knowledge advocating for its recognition in environmental and cultural policy frameworks. The paper further revises Poumai IKS not as a folkloric past, but as **living systems**

of resilience with global significance for intergenerational transmission of ecological ethics and sustainable practices.

Significance of the Study

In the face of climate uncertainty, ecological degradation, and growing disconnection between people and place, Indigenous Knowledge Systems (IKS) offer holistic, community-rooted frameworks for sustainability, biodiversity conservation, and ethical environmental governance. In India, where indigenous communities constitute over 8.6% of the population, there is increasing recognition of the need to document, protect, and integrate IKS into national dialogues on climate resilience, education, and cultural preservation. However, this recognition has yet to translate into substantial scholarly representation or policy implementation, particularly in the diverse and underrepresented region of Northeast India.

This study holds significance by centring the Paoki Festival of the Poumai Naga community as a living repository of Indigenous ecological intelligence. By analyzing the festival within an academic and decolonial framework, this research contributes to the broader effort to reposition of Indigenous worldviews not as peripheral cultural expressions but as core contributors to environmental and epistemic sustainability. Furthermore, this study aligns with contemporary efforts in India to promote community-based conservation, ethnoscience, and knowledge pluralism in both environmental and educational policy. It serves as a critical intervention in affirming that Indigenous lifeways are not relics of the past but vital, resilient systems of knowledge that can shape more sustainable futures.

Literature Review

The field of Indigenous Knowledge Systems (IKS) has gained renewed scholarly and policy attention due to its capacity to address contemporary ecological crises with culturally embedded wisdom. Berkes, Colding, and Folke (2000) framed Traditional Ecological Knowledge (TEK) as adaptive and co-evolutionary, rooted in generations of observational precision, spiritual ecology, and sustainable land practices. Their framework makes Indigenous knowledge as an essential complement to scientific paradigms of environmental management. Building on this, Battiste (2005) argued that Indigenous knowledge is not a monolithic remnant of the past but

a dynamic, decolonial epistemology that preserves cultural integrity and ecological relationships. In her view, Indigenous people should not be treated as cultural informants but as intellectual partners, capable of guiding both the philosophical and practical applications of sustainability.

In the Indian context, especially the Northeast region, several studies recognize Indigenous festivals as ecological calendars. Taishya and Das (2022) provide a vital ethnographic account of the *Paoki* festival of the Poumai Naga community, emphasizing its structured rituals of lunar timekeeping, seasonal divination, and intergenerational land ethics. Their work shows how rituals like *Paoki* encode ecological indicators and farming strategies specific to micro-climatic contexts. Jessen, Ban, Claxton, and Darimont (2021) offer a meta-synthesis on how Indigenous Knowledge informs ecological and evolutionary sciences. They promote a "two-eyed seeing" approach, encouraging knowledge coexistence and complementarity between IK and Western science.

Furthering the pedagogical value of IKS, Donato-Kinomis (2016) emphasized the importance of embedding IKSPs (Indigenous Knowledge Systems and Practices) within formal education. She identified how rituals, such as agricultural festivals, promote intergenerational learning, ecological monitoring, and cultural renewal. Such insights portrays why *Paoki* is not merely a seasonal celebration but an Indigenous pedagogical tool. Additionally, the work of Agrawal (1995) dismantles the binary between scientific and Indigenous knowledge by asserting that both systems can offer valuable perspectives on sustainability if decolonial ethics and equitable partnerships are honored. Reid et al. (2020) and Berkes (2018) echo this view, calling for culturally sensitive co-research models that respect Indigenous sovereignty and localized epistemologies. From a methodological standpoint, Smith's (1999) *Decolonizing Methodologies* remains foundational. Her principle of "research as ceremony" insists on a respectful, reciprocal, and participatory approach to studying Indigenous knowledge, especially when working with oral traditions, ritual spaces, or sacred ecological knowledge.

Theoretical Framework

This study is guided by a **decolonial and interdisciplinary theoretical approach** that draws from *Indigenous Epistemology*, *Ecocriticism*, and *Biocultural*

Memory Theory. These frameworks offer the necessary conceptual lens to understand the **Paoki Festival** not as a folkloric tradition, but as a living, knowledge-generating practice embedded in ecological, cosmological, and cultural continuity.

Indigenous Epistemology

Rooted in the works of Linda Tuhiwai Smith (1999) and Marie Battiste (2005), Indigenous Epistemology emphasizes the validity of knowledge systems derived from oral tradition, community experience, and land-based spirituality. It asserts that Indigenous Knowledge Systems (IKS) are holistic, relational, and deeply embedded in specific cultural contexts. In the context of Paoki, this framework enables a reading of rituals, seasonal markers, and ecological practices as epistemic acts- ways of knowing, remembering, and adapting to the environment.

Ecocriticism and Sacred Ecology

Ecocriticism, as developed by Buell (1995), Glotfelty and Fromm (1996), and later expanded by Berkes (2018) through the lens of *Sacred Ecology*, provides an ecological literary and anthropological lens. It allows for the interpretation of *Paoki* as a site where nature and culture are not separated but co-constitutive. The sacredness of land, lunar calendars, and symbolic rituals such as ginger divination align with Berkes' concept of traditional ecological knowledge as adaptive, resilient, and spiritually rooted.

Biocultural Memory and Two-Eyed Seeing

The concept of *biocultural memory*, as discussed by Jessen et al. (2021), frames Indigenous festivals like Paoki as repositories of ecological data, cultural practices, and spiritual relationships with land. Paoki functions as both a ceremonial and environmental event, storing generational knowledge in its structure and performance. The principle of *Two-Eyed Seeing*, promoted by Reid et al. (2020), invites a balanced approach that values Indigenous and Western ways of knowing as complementary rather than oppositional. It further establishes the transition from indigenous to modern perspectives, especially in the context of rites and rituals, which are shifted with the coming of Christianity.

Paoki: A Living Model of Indigenous Knowledge in Motion

The **Paoki Festival** unfolds over a carefully observed calendar, guided not by printed almanacs but by ecological signs and ancestral wisdom. In early May, **village elders** gather to consult the **King (Ve),** who, with his assistants, performs **ginger divination (pou souyu)** to determine the auspicious date for planting. This ritual involves slicing a sacred ginger root and interpreting its moisture, colour, and texture to predict agricultural outcomes. It functions as an **Indigenous environmental forecasting.** This practice functions as an Indigenous meteorological method, reflecting both **spiritual discernment** and **environmental observation.**

The Poumai Nagas follow a **lunar-solar timekeeping system**, where days are **named according to seasonal events, clan-based traditions, and ecological cues.** During the Paoki cycle, day names often reflect what is expected from nature or society- such as "Butchering Day/ *Ranai*" "Seed Day/ *Thaopaiyu*" and "Transplanting Day/ *Khanaiyu*,". These names are not arbitrary; they constitute a **semantic calendar**, blending observation, spirituality, and communal memory. This **indigenous naming of days** reflects a cosmological worldview in which **time is not linear but cyclical,** and deeply intertwined with **seasonal activities, ancestral rituals, and moral obligations.** It functions as a cultural mnemonic, preserving agricultural timing and social ethics without reliance on Western chronological systems.

Once the date is declared, preparations begin. On the eve of Paoki, **young men clean the village courtyard**, collect wood, and prepare for the arrival of guests-symbolizing the importance of **communal hospitality and ritual purity**. The village can be seen with village men firing warrior gun shots to the sky and whooping as they walk around the village landmarks to mark the beginning of the festival. Simultaneously, **women prepare traditional food** curry wrapped in banana leaves, porridge, and fermented wine. At nightfall, **ancestral stories and clan histories are presented for the people to imbibe cultural curiosity** and reinforce intergenerational memory.

The next day, a wrestling match takes place among the youth, not merely as sport but as a performative rite of strength and fertility, connecting human vitality to the earth's fecundity. After the match, rice transplantation begins at designated fields. Throughout the planting, **ritual**

chants and blessings are whispered, invoking ancestral spirits and the fertility of the earth. **Raokhutoh Hill**, believed to house the spirit that watches over the valley's plantation abundance, is seen as a symbolic representation of honouring nature, showing land is not inert but it is **animated, responsive, and sacred.**

An integral yet under-documented aspect of the festival is the **Paoki fish**, a local species bred and consumed during the celebration. The fish is typically raised in **terraced rice fields**-an example of **integrated Indigenous aquaculture**, where fish and rice coexist in a symbiotic system. This practice showcases Indigenous agroecological intelligence: fish waste fertilizes the rice, while rice plants offer shade and habitat. Beyond nutrition, the fish holds **symbolic meaning**-it is believed to bring **blessing, balance, and ancestral favor** when shared in the post-transplanting meal. Children are often taught to catch it carefully, honoring its life and contribution. In this way, the fish becomes both a **pedagogical tool** and a **sacred offering**, embodying the IKS principle that every element of the environment has spiritual and ecological worth.

A highlight of the festival's **communal ritual** is the practice of **young men expressing romantic interest by asking for the hand of a girl in the fields.** This symbolic request, made respectfully during communal rice transplanting reflects a **deep-rooted understanding of land as a relational space**, where personal bonds are formed in tandem with collective labor. **Marriage proposals tied to agricultural rituals** encode social norms, courtship ethics, and the spiritual expectation that love must grow where seeds are sown. These elements show that **Paoki is more than a seasonal event**, it is a **knowledge institution**, is not only a marker of the paddy planting cycle but a **social ecosystem in itself**, binding ecological rhythms with spiritual belief, kinship, governance, and ancestral memory. This structure resonates and reflects with **Indigenous Research Methodologies (Smith, 1999), Ecocritical frameworks (Glotfelty & Fromm, 1996)**, **Biocultural Memory (Jessen et al., 2021)** and **Sacred Ecology (Berkes, 2018)**, all of which emphasize the **holistic, living, and participatory nature of Indigenous Knowledge.**

Methodology

This study adopts a **qualitative, interpretive approach** rooted in **Indigenous Research Methodologies (IRM)** and supported by principles of **Ecocriticism and Ethnographic Inquiry.** Given the cultural depth and sacred nature of the *Paoki Festival*, the methodology prioritizes respectful engagement, community-centered knowledge, and relational ethics over extractive data collection. The researcher herself was a respectful witness and listener, acknowledging the sovereignty of the Poumai Naga people in interpreting their own knowledge systems. The study relies on a)**Primary oral narratives** and community knowledge drawn from past field visits and recorded ethnographic materials, b) **Cultural documentation** such as descriptions of the Paoki Festival from Taishya & Das (2022), c) **Scholarly literature** and theoretical texts on Indigenous epistemologies and ecological knowledge (e.g., Berkes, Smith, Jessen et al.) d) **Interpretive textual analysis** of Paoki-associated rituals, seasonal cycles, and oral metaphors as ecological texts.

Discussion

Despite the increasing global attention toward Indigenous Knowledge Systems (IKS) as models for sustainable living and cultural resilience, India's academic and policy frameworks continue to reflect significant gaps, especially concerning Indigenous communities in the Northeast. Much of the scholarship has historically prioritized either mainstream environmental science or anthropological documentation, often failing to interpret Indigenous festivals and rituals as **knowledge systems in their own right.**

The agricultural festivals, particularly the **Paoki Festival** of the Poumai Nagas exemplifies such overlooked epistemologies. As this study has shown, Paoki is not merely a ceremonial celebration, it is a **multifaceted knowledge archive** where ecological observation, spiritual ecology, land-based ritual, and communal pedagogy converge. Practices such as **ginger divination, lunar-solar timekeeping, and community-led transplantation** reveal a sophisticated Indigenous science rooted in environmental ethics. There is also another agricultural festival which is celebrated for the successful plantation of paddy known as *Laonii*, which also present the embodiment of seasonal intelligence, and intergenerational transmission. However, these

intricate knowledge systems are rarely integrated into formal educational curricula or development discourse in India.

The **absence of IKS in Indian education and sustainability policy**, particularly in tribal-majority states of Northeast India, poses a double threat. It contributes to cultural erosion among Indigenous youth and simultaneously ignores viable models for localised environmental stewardship. As Donato-Kinomis (2016) notes, rituals like Paoki function as **eco-pedagogical tools**, engaging younger generations in learning through doing, storytelling, and celebration. Similarly, Jessen et al. (2021) emphasise that Indigenous rituals globally encode **biocultural memory**, offering invaluable lessons for biodiversity, water management, and adaptive climate knowledge. Paoki also reflects the **cosmological dimension** of IKS, something modern science often fails to engage. The sacred geography of hills, rivers, and fields, the symbolic acts of hospitality, and the spiritual invocation of ancestors all testify to a worldview where land is not a resource but a living entity. This aligns with the principles of **Sacred Ecology** (Berkes, 2018) and **Indigenous Epistemology** (Smith, 1999), both of which call for re-centring Indigenous cosmologies in academic discourse and development policy.

Given these dimensions, Paoki must be recognized as a **contemporary Indigenous framework of sustainability**. Its under-recognition reflects a larger epistemic gap that needs immediate redress. The Northeast, despite its rich linguistic and ecological diversity, remains **grossly underrepresented** in national IKS policy, curriculum reforms, and conservation models. This discussion thus reinforces that acknowledging and investing in IKS, particularly as seen in festivals like Paoki is not a nostalgic or culturalist endeavour. It is a critical pathway toward **climate justice, cultural survival, and ecological resilience** in India and beyond.

Conclusion

This study has sought to bring visibility and critical attention to the **Paoki Festival of the Poumai Nagas** as a living, dynamic expression of **Indigenous Knowledge Systems (IKS)** in Northeast India. Through rituals like **ginger divination, whooping, marking landmarks, lunar calendaring, communal transplantation**, and **symbolic hospitality**, the Paoki Festival encodes Indigenous ecological intelligence, relational

cosmology, and sustainable agricultural practice. Yet, as the discussion has highlighted, the lack of academic engagement, policy recognition, and educational integration of such systems, especially in the **Northeast Indian context**, continues to marginalise knowledge that is deeply relevant to contemporary crises. The festival of Paoki is but one of many Indigenous lifeways that offer viable frameworks for **climate resilience, biodiversity conservation, and cultural continuity.** Ultimately, the Paoki Festival reminds us that the path to sustainability may not lie in innovation alone, but in **ancestral wisdom**, still alive in the rituals, songs, and seasons of Indigenous communities.

Call to Action

As we confront urgent environmental challenges and cultural disintegration in tandem, the revitalisation and rightful recognition of **Indigenous Knowledge Systems (IKS)** must become more than academic interest; it must become **an ethical imperative**. This paper calls upon **academics** to move beyond extractive research toward **collaborative scholarship** that amplifies Indigenous voices, honours cultural sovereignty, and treats festivals like Paoki as epistemic and ecological systems. To **educators and curriculum developers**, this study recommends integrating local Indigenous knowledge into classroom content, particularly in tribal regions such as Northeast India. The pedagogical potential of festivals like Paoki, with their performative, intergenerational, and seasonal structure, aligns with experiential and place-based learning models that foster deeper ecological consciousness among youth.

Policy-makers and environmental planners are urged to recognise community-led rituals, festivals, and land-based practices not as peripheral culture but as essential components of biodiversity governance, climate adaptation, and socio-ecological resilience. Supporting Indigenous communities through inclusive policy frameworks, legal protections, and knowledge-sharing platforms is both a constitutional and ecological necessity. The wisdom carried in the Paoki Festival is not just cultural heritage but a living blueprint for healing fractured relationships between humans and nature. The way forward is not only technological or institutional but it is ancestral. It begins by listening, remembering, and learning from those who have always known how to live with the land, not against it

References

Agrawal, A. (1995). Dismantling the divide between Indigenous and scientific knowledge. *Development and Change*, 26(3), 413–439. https://doi.org/10.1111/j.1467-7660.1995.tb00560.x

Atleo, R. E. (2011). *Principles of Tsawalk: An Indigenous approach to global crisis*. Vancouver: University of British Columbia Press.

Battiste, M. (2005). Indigenous knowledge: Foundations for first nations. In J. G. Friesen & V. Friesen (Eds.), *Aboriginal Education in Canada: A Study in Decolonization* (pp. 88–99). UBC Press.

Berkes, F. (2018). *Sacred Ecology* (4th ed.). Routledge. https://doi.org/10.4324/9780429493898

Berkes, F., Colding, J., & Folke, C. (2000). Rediscovery of traditional ecological knowledge as adaptive management. *Ecological Applications*, 10(5), 1251–1262. https://doi.org/10.1890/1051-0761(2000)010[1251:ROTEKA]2.0.CO;2

Buell, L. (1995). *The environmental imagination: Thoreau, nature writing, and the formation of American culture*. Harvard University Press.

Donato-Kinomis, X. G. (2016). Indigenous knowledge systems and practices in the teaching of science. *13th National Convention on Statistics*, Mandaluyong City, Philippines. https://psa.gov.ph/sites/default/files/2.3.3%20Indigenous%20Knowledge%20Systems%20and%20Practices%20%28IKSP%29%20in%20the%20Teaching%20of%20Science.pdf

Glotfelty, C., & Fromm, H. (Eds.). (1996). *The ecocriticism reader: Landmarks in literary ecology*. University of Georgia Press.

Jessen, T. D., Ban, N. C., Claxton, N. X., & Darimont, C. T. (2021). Contributions of Indigenous knowledge to ecological and evolutionary understanding. *Frontiers in Ecology and the Environment*, 20(2), 93–101. https://doi.org/10.1002/fee.2435

Karki, M., Hill, R., Xue, D., Alangui, W. V., Ichikawa, K., & Bridgewater, P. (Eds.). (2017). *Knowing our lands and resources: Indigenous and local knowledge and practices related to biodiversity and ecosystem services in Asia* (Vol. 10). Paris: UNESCO.

Lungphi, P., Das, A. P., & Singh, A.V. (2022). Ethnomedicinal knowledge of Tangsa community from Patkai Hills region of Changlang District in Arunachal Pradesh, India. In Rashid, A. Z. M. M., Khan, N. A., & Hossain, M. (Eds.), *Non-Wood Forest Products of Asia – Knowledge, Conservation and Livelihood* (pp. 71–101). Springer Nature.

Reid, A. J., Eckert, L. E., Lane, J.-F., Young, N., Hinch, S. G., Darimont, C. T., & Ban, N. C. (2020). "Two-Eyed Seeing": An Indigenous framework to transform fisheries research and management. *Fish and Fisheries*, 22(2), 243–261. https://doi.org/10.1111/faf.12516

Smith, L. T. (1999). *Decolonizing methodologies: Research and Indigenous peoples*. Zed Books.

Taishya, P., & Das, A. P. (2022). Following the footprints of tradition: The paddy plantation festival of Poumai Nagas in Purul Village of Senapati District in Manipur, India. In A. P. Das, S. Tangjang, & T. Wangpan (Eds.), *Diversity of Plants and Microbes: Conservation and Traditional Uses* (pp. 347–357). Bishen Singh Mahendra Pal Singh.

Tuhiwai Smith, L. (2012). *Decolonizing methodologies: Research and Indigenous peoples* (2nd ed.). London: Zed Books.