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Indigenous knowledge, language and sustainability: insights from the Baram and Kumal communities in Gorkha, Nepal

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Abstract

This paper explores the Indigenous knowledge, cultural values, and sustainability through the experiences of the Baram and Kumal peoples in Gorkha, Nepal. It examines how their languages, customary practices, and cultural values inform ecological governance, sustainable resource management, and community solidarity. These Indigenous knowledge systems are deeply embedded in language, rituals, and oral traditions, and reflect principles of reciprocity, cooperation, and collective responsibility that sustain both society and environment. Practices such as Parma (labor exchange) and customary forest management demonstrate how cultural values shape sustainable livelihoods. However, state policies, economic changes, and dominant socio-cultural forces such as Hinduization, Sanskritization, and formal education systems have marginalized these knowledge systems, threatening linguistic diversity and traditional ecological practices. Language, as a key repository of Indigenous epistemologies, plays a critical role in shaping concepts of sustainability and environmental ethics. The erosion of the Baram and Kumal languages due to modernization and assimilationist policies risks the loss of invaluable cultural and ecological knowledge. By centering Indigenous perspectives, this paper underscores the need to recognize, protect, and revitalize Indigenous languages and knowledge systems as essential to sustainable development and social equity. It highlights the interdependence between cultural identity, language, and environmental stewardship in the ongoing struggle for Indigenous survival and sustainability.

Key words

Indigenous knowledge, sustainability, livelihoods, indigenous concepts

Introduction

Indigenous peoples constitute 34.9 percent of Nepal's population (NSO, 2021), and are officially recognized by the Government of Nepal as *Adivasi Janajati*, encompassing 60 groups across the mountains, hills, and plains (NFDIN Act, 2002). These communities maintain deep-rooted and reciprocal relationships with land, forests, water, and other natural resources—relationships that are central not only to their material livelihoods but also to their cultural, spiritual, and social systems.

Globally and in Nepal, Indigenous peoples' knowledge systems are shaped by holistic worldviews that integrate environmental, spiritual, and communal dimensions. As the Indigenous Peoples' Council of Trustees (ICT, 2016) notes, such worldviews are formed and transmitted through lived experiences, oral traditions, rituals, and everyday interactions with the environment. These include specific beliefs, values, skills, and practices passed intergenerationally and embedded in daily life.

The *Baram* and *Kumal* are highly marginalized and socially excluded Indigenous groups in Nepal, whose concepts and values related to sustainability reflect the organizing principles of collectivity, reciprocity, cooperation, and solidarity. These sociocultural principles, long practiced in their forest management, agriculture, labor exchange systems (*parma*), and communal rituals, form the foundation of sustainable resource use and community cohesion.

This research draws on sociological theories of Indigenous knowledge and environmental sociology, particularly Bourdieu's habitus and Durkheimian functionalism. Bourdieu's concept of habitus helps explain how Indigenous practices are embodied and reproduced through daily rituals, labor, and collective memory. Meanwhile, Durkheim's ideas on social solidarity illuminate how festivals, rites, and mutual aid systems contribute to social cohesion and environmental stewardship. These perspectives help situate Indigenous sustainability practices not as static traditions but as dynamic, adaptive, and socially embedded systems of knowledge.

Language plays a critical role in sustaining these systems. As Maffi (2011) articulates, language, culture, and the environment are intricately connected. The *Baram* and *Kumal* languages encapsulate ecological knowledge, cultural identity, and spiritual connection to land. However, only a fraction of these communities speak their mother tongue: 18,435(14.2%) *Kumal* speakers out of 129,702, and only 1539 (19.6%) *Baram* speakers out of 7,859 population. This shows the rapid decrease in the mother tongue speakers due to state-led policies of assimilation, Hinduization,

and modern education. Despite this linguistic and cultural marginalization, both communities continue to practice and transmit their traditional knowledge through intergenerational socialization, particularly during communal festivals, agricultural work, and rituals surrounding life and death. These practices reflect Indigenous forms of environmental governance and community resilience.

Yet, the sustainability practices of Indigenous peoples are increasingly threatened by state policies. While Nepal's Constitution (2015) guarantees Indigenous rights, new forest and land legislation fail to recognize customary tenure systems and collective management practices. As a result, many Indigenous groups face displacement, loss of livelihoods, and cultural disintegration.

This paper critically examines the Indigenous language and values within *Baram* and *Kumal* knowledge systems, analyzing how their linguistic and cultural frameworks inform sustainable practices. It also explores how state policies, economic transformations, and shifting power relations challenge the continuity of Indigenous ecological governance.

Research Methods

This study was conducted in Masel Gairathok Ward No. 1, Bhimsen Thapa Rural Municipality, and Chorkate from Ward No. 4, Siranchowk Rural Municipality of Gorkha District. These areas were purposively selected as the ancestral homelands of the *Baram* and *Kumal* Indigenous peoples' communities, which possess rich Indigenous knowledge and sustainable practices.

The research primarily employed qualitative methods, supported by descriptive research designs. Primary data were collected through Focus Group Discussions (FGDs), Key Informant Interviews (KIIs), observation, and case studies. Secondary information was gathered from both published and unpublished articles and books. A total of 20 key informants were selected through snowball sampling. Respondents included community elders, traditional knowledge holders, political and social leaders, teachers, men, women, and youth. Six FGDs were conducted with open participation to encourage diverse perspectives. The observation method was used to document settlement patterns, housing structures, livelihoods, land and forest usage, and cultural sites. This enabled a holistic understanding of community life and ecological practices.

Data were thematically categorized to identify common values and concepts among the Baram and Kumal communities. Particular attention was given to similarities and differences in cultural rituals, festivals, and ceremonies, highlighting

the interconnection between Indigenous knowledge, language, and sustainable practices.

Results and Discussions

The study explores how the Indigenous knowledge systems of the *Baram* and *Kumal* Indigenous communities contribute to sustainability, particularly in relation to natural resource management, cultural resilience, and intergenerational knowledge transmission in Gorkha, Nepal. Drawing on the conceptual foundations that recognize Indigenous knowledge as a critical component of environmental sustainability (Trosper & Parrotta, 2012), the findings demonstrate how traditional forest-related knowledge among these communities reflects broader principles of collectivity, reciprocity, cooperation, and kinship-based solidarity.

Baram and *Kumal's* traditional forest-related knowledge not only contributes to the sustainable use of genetic resources, ecosystem health, and biodiversity (Trosper & Parrotta, 2012) but also plays a key role in climate change adaptation and mitigation (UNESCO, 2009). However, despite these contributions, such knowledge remains marginalized in mainstream academic, policy, and public discourse on climate change (Salick & Ross, 2009). This study reinforces existing literature by illustrating how local every day practices of the *Baram* and *Kumal* communities provide context-specific and ecologically sound resource management systems that are both spiritually grounded and socially embedded.

The study captured how the *Baram* and *Kumal's* traditional knowledge is embedded in daily practices and ritualized through cultural and spiritual values. The values of reciprocity and cooperation are evident in communal labor exchange systems (e.g., Parma) and customary resource-sharing rules. These systems are transmitted intergenerationally through oral tradition, ritual performance, and practical engagement in forest use and management.

However, the continuity of these knowledge systems is increasingly under threat. Several factors, such as migration, modern education, and the legal transformation of forest governance structures, hinder the intergenerational transmission of Indigenous knowledge.

Despite broader similarities, the study shows distinct trajectories in how the *Baram* and *Kumal* communities have been affected by changes in forest governance. The *Baram* of Gorkha continue to exercise collective control and stewardship over forest resources, even within the structure of community forest user groups (CFUGs). While formal forest governance has shifted to CFUGs, the *Baram* maintain a sense

of ownership and identity through elected leadership and traditional norms. Their forests remain spiritually significant and are managed according to Indigenous customary laws, maintaining both ecological sustainability and cultural continuity. In contrast, the *Kumal* community in Shiranchowk Rural Municipality-4, living in a heterogeneous community, has experienced a disconnection from traditional forest practices. The shift to CFUGs has diluted *Kumal*-specific leadership roles, eroding both their cultural identity and traditional ecological knowledge systems. Unlike the *Baram*, the *Kumal* have lost the capacity to manage and control forest areas once protected by their ancestors. This suggests that contextual factors, including demographic composition and access to collective land rights, shape the resilience or erosion of IK systems.

Indigenous social institutions: values of collectivity, reciprocity, and solidarity

The *Baram* and *Kumal* communities of Gorkha demonstrate robust Indigenous knowledge systems rooted in collectivity, reciprocity, cooperation, and solidarity — social values that are central to sustaining both cultural cohesion and resource-sharing mechanisms (Ingold, 2000 & Berkes, 2008). These values are embedded in traditional labor exchange practices, such as Parma, still widely practiced during agricultural activities, including cultivation and harvesting.

Among the *Baram*, *Parma* serves as a systematized mutual labor exchange: when a household hosts workers for farming tasks, it must reciprocate labor in equal measure. This mutual assistance model minimizes reliance on monetary labor markets and reinforces inter-household obligations. Schedules are coordinated communally to avoid conflict, and flexibility is granted for households unable to reciprocate immediately, thus preserving social harmony and obligations.

Similarly, in the *Kumal* community, *Parma* is practiced with a distinct emphasis on gender parity in labor exchanges. Labor exchanges are matched based on the gender of the workers provided, grounded in gendered perceptions of labor strength and fairness. While this may reflect patriarchal norms, it also underscores the community's nuanced social structure and labor ethics.

These communal systems reflect what Durkheim (1912) described as mechanical solidarity, wherein cohesion is based on shared traditions and collective conscience. In times of grief or celebration, such as funerals or weddings, the entire village mobilizes to provide emotional, material, and agricultural support to concerned families, reinforcing social resilience (Adger, 2000).

Customary governance and spiritual practices: Sustaining cultural and ecological relations

The *Baram* and *Kumal* communities practice ritual-based governance of their natural and social environments. Formerly guided by a Thari (elder), *Baram* customary authority has shifted to elected leaders post-1990 under the Nepal Federation of Indigenous Nationalities (NEFIN), integrating traditional leadership with modern democratic norms. Despite this shift, rituals such as *Kachahari* continue to reinforce collective decision-making (Ojha et al., 2016).

Various rituals and ceremonies *Sansari Puja*, *Bhumi Puja*, *Kul Puja*, *Nag Puja*, *Bayu Puja*, and *Chandi Puja* demonstrate the communities' spiritual stewardship over land, water, and forest resources.

Sansari puja

The concept and values of collective efforts in solidarity are found among both the *Baram* and *Kumal* communities, where they worship nature, beneath the big tree in the forest on Saturday in the month of Chaitra (March & April). They conduct workshops in the natural environment beneath a tree on a Saturday in the month of Chaitra to express gratitude to Nature for providing them food and ask for the future prosperity of the community. During the *puja*, they need the leaves of the sal tree (*Shorea Robusta*), cotton lamp (*kapoks batti*), while they slaughter the he goat (*boka/pathi*) and make sure all the villagers get even a piece of meat of the slaughtered goat as *Prasad*, a devotional offering made to a god that is shared among devotees, of the *puja*. The meat is supposed to be cooked outside the home and distributed among all villagers.

The cultural practices of *sansari puja* support the whole community to unite and perform their ceremonies together and also help them to follow their norms and values for respecting their traditional practices.

Bhumi puja

In the month of *Fagun* (February and March), when the *Baram* and *Kumal* start cultivating crops, they worship the land and forest with the hope of timely rain and healthy crop production. The practice of offering the slaughtered pigs among the *Baram* community is no longer in practice. However, in the *Kumal* community, instead of eggs, they offer milk, rice, water, and coins in expectation of good health for their cattle, crops, and good health. No matter how they worship the land and forest, the concept and values of both the *Baram* and *Kumal* show how they join hands for their collective efforts to protect their communities with timely rain for the good production of their crops.

Kul puja

Kul puja is popular among the *Baram* and *Kumal* communities. It is the way of remembering their ancestors and family god, though they have their own way of performing the *puja*. The *Baram* community pleases their ancestors by offering the slaughter of the he-goat or chicken and distributing the meat among the *Baram* communities, whereas *Kumal* performs the *puja* during the Tihar festival by offering male and female chicken, *selroti* (bread), banana, rice, and burning incense and cotton oil lamp. The *kul puja* shows the unity among the families and communities by respecting and remembering their ancestors.

Bayu puja

Bayu puja is mainly performed in the *Baram* community in memory of deceased family members. If the male family member has passed away, they offer the cock and similarly for the deceased female member, they offer hen on the completion of every year. The meat is shared among the remaining family members as devotees. The practice of remembering the deceased family member by the remaining family members shows the unity and cooperation among the family members.

Nag puja

Nag puja is popular among Indigenous communities like the *Baram* and *Kumal* to protect their water resources for the good cultivation of their rice in the rainy season and harvesting of their crops. They offer milk to the *nag* (*snake god*) as a symbol of the snake that protects the spring water. The trend of *nag puja* not only brings unity and harmony among the communities but also protects the natural resources and trees around the water sources.

Chandi puja

Chandi puja is special for the *Baram* community, where the *puja* is done by the same clan (*Khalak*) for the welfare of the community by offering chicken and distributing the meat among the families of the same clan.

During the *kul puja*, and *bayu puja*, individual family brings its own chicken or he-goats but in *sansari*, *chandi* and *bhumi puja*, *Baram* communities collectively perform the puja by slaughtering he-goats and sharing the meat among the villagers. This practice shows they have their own rules and regulations of their social and cultural practices that help the communities to continue their values of collectivity, cooperation, and solidarity among the Indigenous communities in Gorkha.

These practices are not only symbolic but functional ecological rituals that contribute to environmental conservation by marking specific trees, springs, and forests as sacred or taboo, thus limiting exploitation (Posey, 1999; Turner et al., 2000).

Environmental stewardship through cultural practices

The *Baram* and *Kumal* demonstrate Indigenous environmental governance through collective rituals and agroforestry practices. The *Aitabare* and *Bhangeri Puja* are examples of sacred tree worship. Specific trees are declared sacred and protected, and prohibitions against cutting or climbing them function as community-led conservation measures.

Agroforestry systems on farm boundaries demonstrate the integration of agriculture and ecological foresight. Tree species are maintained for fodder, fuel, and manure, exemplifying what Berkes and Folke (1998) termed traditional ecological knowledge systems (TEK), adaptive, and place-based knowledge systems that support biodiversity and livelihood resilience.

The *Kumal* practice of Home *Lagaune*, a ritual to purify newly constructed homes or aid in healing, involves the collection of diverse medicinal and symbolic plant species. However, the shift in forest governance, where community forests are now regulated by Community Forest User Groups (CFUGs), has threatened *Kumal's* access to sacred and utilitarian plants, thus undermining their cultural autonomy and ecological practices.

Community forest management: Continuity and constraints

The *Baram community* in *Kan-Kamana* illustrates successful adaptation to the new community forestry regime. Despite state formalization, the *Baram* leadership has maintained a strong role in forest governance (Case I). They manage 106 hectares of community forest, providing firewood, fodder, and timber to 197 households, with structured fines for overuse or illegal logging.

Case I: Continuation of Baram leadership in community forest

In the past, the Baram community through their leader, "elder" used to have their own governance systems of protecting the forest, the forest used to be dense and rich in biodiversity, presently, the forest is under the management of the Kan kamana community forest with their own guidelines. However, because of the presence of the majority of the Baram communities and their continued traditional leadership pattern, unlike in the Kumal community, the Baram community have not really felt the changes as they are continuously practicing their social, cultural and spiritual rituals in relation to the forests and trees. They have been continuing their

rituals, puja, ceremonies in the village that connect them to their forest, resources and land.

As *Case* illustrates, the forest not only supplies fuelwood and timber but is also a critical source of water. The construction of a local water supply system, with community-managed tap water and monthly maintenance fees, showcases sustainable Indigenous -led infrastructure development. The *Kan-kamana* forest has been the source of the drinking water for the whole village (Case II)

Case II: Forest is the main sources of water

The forest protected by the Baram community for generations has been the main sources of drinking water. There are 5 water sources such as Saupani, lahapani, dharapani, kaijelipani and Patake pani in the Kan Kamana Forest. In the earlier days, the community used to go to collect the water forhours, to collect a bucket of water, it used to take for 5 to 6 hours but after the electricity introduced in 2012, now village have water in the village. The forest becomes the main sources of the water for around 160 households. Each house has tap water in the village and has to pay NRs 300 per month to pay for the electricity and maintenance of the water. They have been continuing their rituals, puja, ceremonies in the village that connect them to their forest, resources and land.

In contrast, the Kumal community's limited access to previously stewarded forests post-1990 has eroded their capacity to maintain rituals and has contributed to cultural disempowerment (Bhandari, 2003). This case highlights the uneven impact of forest decentralization policies on Indigenous Peoples in Nepal (Shrestha & Britt, 1997).

Community forestry and the transformation of the Kumal Indigenous knowledge systems, cultural practices, and kinship structures

The introduction of community forestry, while generally celebrated for promoting forest conservation in Nepal, has had adverse effects on the Kumal community's access to natural resources, thereby undermining their Indigenous knowledge and sustainability practices (Case III)

Case III: impact of community forestry on Kumal livelihoods

However, the cases of community users' rights to the forest among the Kumal is different. Although they have been managing and conserving their forest for generations, after the conversion of the forest into community forest users' group, the free access to the forest for collecting the fodders for livestock, firewood, and wood for plough and timber for house construction is completely banned. This has

negative impacts on the Kumal community for continuation of their livelihoods that depended on the forest. One of the main reasons for this has been the absence of their presence in the community forest users' group. The forest used to be managed by the two communities: Kumals and non Kumals. When the forest was converted into community forest, the users' rights were given only to the other community and the Kumal community was forever deprived from the access to the forest as none of the Kumal community could become the member of the Annapurna Forest User's Group since almost 20 years. During the formation of community forest users' group, the Kumal community were not aware while the other villagers converted the forest into community forest. Later when they knew that were deprived of the membership and hence access to their own forest and requested to be the members, they were asked to pay NRs 20,000 to NRs 30,000 by each household. None of the Kumal villagers could afford to pay the amount, thus they are deprived forever to access to the forest. Now, they have to pay to get the timber for the construction of their house from the forest they have protected and managed for generations before it was converted into community forest

The Kumal's traditional livelihood and cultural practices, such as fishing in Daraudi and Bhusundi rivers using traditional nets, are rapidly declining. The community is unable to sustain the customary rituals like kul and pitri puja, which demand the use of specific species of white fish, due to both restricted access and ecological degradation caused by harmful fishing methods such as poisoning and dynamiting, mostly introduced by non-Indigenous outsiders (Case IV).

Case IV: Decline of traditional fishing practices and cultural significance among the Kumal Indigenous peoples

In the past, fishing was Kumal's one of the main sources of family income and livelihoods. They have been using the traditional fishing net while fishing in Daraudi river and Bhusundi river. Fish is very important from social, cultural and spiritual perspectives. While worshiping *kul* and *pitri puja*, and their ancestors, they must offer the white fish. During the *sorasradra*, mourning rituals, death anniversary of parents, they must have fish. But now trend of fishing is decreasing. One of the main reasons of decreasing of fishing culture is decreasing the fishes in the rivers. The trend of poising the fish and blasting the river by the outsiders (contractors) has killed the fish in the river. There have been also cases of killing the cow while drinking the water from the river.

This aligns with the critiques of externally imposed conservation models that displace Indigenous Peoples from their customary territories, eroding both ecological knowledge and cultural identity (Agrawal, 1995; Baviskar, 2005). As the *Kumals* lose control over their traditional resource base, their sustainability, interlinked with spiritual beliefs, reciprocity, and biodiversity, is under threat.

Despite facing similar threats, the *Baram* community has maintained some of its forest-related rituals, such as *bhangeri puja* and *aitabare puja*, which are still collectively practiced. These ceremonies reflect a deep spiritual connection with nature, where the forest is not just a resource but a sacred being, imbued with ancestral presence. However, practices like *bhumi puja*, once central to the *Baram* cosmology and sustainability ethics, are disappearing. This decline is partly attributed to urban migration and livelihood diversification, reducing the intergenerational transmission of ecological knowledge.

This finding resonates with studies on the spiritual ecology of Indigenous Peoples, where rituals are not symbolic acts alone but modes of environmental governance and resource management (Posey, 1999; Berkes, 2012). When these rituals fade, it represents not only cultural loss but also a breakdown in Indigenous ecological stewardship that had ensured sustainable resource use for generations.

The values of *parma* (reciprocal labor exchange), kinship-based cooperation, and ritual collectivity are still present but weakening among younger generations. While cultural events like *Chandi Purne* and *Paudure* dance offer opportunities for youth participation, there is a gradual detachment of the younger generation from ritual-based environmental knowledge transmission, particularly rituals that require forest interaction like sansari and *nag puja*.

This reflects a broader trend where globalization and formal education systems often marginalize Indigenous epistemologies, contributing to the intergenerational knowledge gap (Battiste, 2002; Dei, 2011). The prioritization of school performance over cultural knowledge by parents, though understandable, results in children losing familiarity with Indigenous worldviews crucial for cultural and ecological sustainability.

The contrast between the *Baram* and *Kumal* cases reveals how access, autonomy, and cultural embeddedness in nature determine the resilience of Indigenous sustainability systems. While *Baram's* partial control of forest resources through community forest committees helps retain some ritual continuity, *Kumal's* complete

alienation from forest access disrupts not only livelihoods but the cosmological grounding of sustainability.

This suggests that sustainability, from an Indigenous perspective, is not merely about environmental conservation but about protecting the epistemological and cultural systems that govern the relationship between people and nature (Whyte, 2013). Therefore, state policies and development projects must be reoriented to recognize and support Indigenous governance models and spiritual ecological practices as central to both cultural and environmental sustainability.

Hindering factors in the continuity of spirituality, traditional knowledge, customary practices, and intergenerational knowledge transmission

Among both the *Baram* and *Kumal*, traditional institutions like *Parma* (reciprocal labor exchange), *bhumi puja*, and *nag puja* reflect communal knowledge systems rooted in spiritual ecology. While the *Baram* communities continue some rituals due to continued (albeit modified) control over forests, the *Kumal* communities, excluded from community forest governance, are experiencing ritual displacement, performing nature worship in private spaces rather than in the forest, showing how loss of land access disrupts Indigenousspiritual continuity (Posey, 1999).

The erosion of collective rituals, such as *Bhangeri puja* and *Sansari puja*, is not merely symbolic but indicates the weakening of Indigenous governance systems and collective ecological stewardship (Dove, 2006). These practices historically served as Indigenous conservation mechanisms, fostering community regulation of resource use and respect for natural cycles (Ostrom, 1990).

Indigenous knowledge in the *Baram* and *Kumal* communities is transmitted through intergenerational participation in rituals, collective labor, and kin-based ceremonies. Yet, youth outmigration, modern education devoid of Indigenous content, and digital distraction have combindly weakened these transmission channels. As observed, children participate in some rituals like *Paudure* dance during *Chandi Purnima*, but not in others, especially those that require forest access or spiritual initiation.

These trends resonate with Dei (2000), who argues that the institutional marginalization of Indigenous knowledge in formal education leads to its devaluation and disinterest among youth. Similarly, the erosion of Indigenous languages, as seen in both the *Baram* and especially the *Kumal* communities, further accelerates cultural loss, as language is a key carrier of Indigenous epistemologies.

A combination of structural, institutional, and sociocultural factors impedes the effective transmission of Indigenous knowledge and cultural practices among the *Baram* and *Kumal* communities of Gorkha, Nepal. Migration for education and employment, both within Nepal and abroad, has weakened the place-based transmission of cultural knowledge by physically distancing the younger generation from their communities and elders. This is further complicated by gendered ritual roles, where although women continue to prepare for rituals, male outmigration has disrupted the performance of these culturally significant practices. The introduction of modern schooling has reinforced Western epistemologies, often marginalized Indigenous knowledge systems, and portrayed them as unscientific or outdated (Battiste & Henderson, 2000). Meanwhile, the pervasive influence of digital media has drawn youth towards global consumer culture, eroding interest in local traditions and practices. Additionally, state laws have increasingly criminalized Indigenous livelihoods such as river fishing and forest foraging—practices integral to the *Baram* and *Kumal* knowledge systems—thereby further alienating these communities from their cultural roots (Agrawal, 1995). Perhaps most critically, linguistic assimilation driven by the dominance of Nepali and English in schools and public life has severely undermined the intergenerational transmission of Indigenous languages, which are the primary vessels for carrying embedded cultural knowledge. Without sustained language use, much of the intangible heritage of these communities risks disappearing.

Conclusion

The experiences of the *Baram* and *Kumal* communities illustrate the centrality of Indigenous knowledge and language in promoting cultural continuity and ecological sustainability. Despite Nepal's rich cultural diversity, the traditional knowledge systems and customary practices of these Indigenous peoples' groups are not free from the influence of the western worldviews shaped by modern education, state policy, and social media that often devalue Indigenous languages and cultural practices.

The *Baram* and *Kumal* cultural practices have long fostered social harmony and sustainable practices through concepts such as reciprocity, solidarity, and collective responsibility. However, due to low intergenerational transmission, youth migration, and the spread of assimilative worldviews, these values and belief systems are eroding, particularly among younger generations.

Crucially, Indigenous knowledge is not just a vestige of the past but a living system of ecological stewardship, spiritual connection, and community cohesion. This study shows that the weakening of these systems leads not only to cultural loss but

to the disruption of sustainable resource management. Along with the historical development and movements of Nepal, especially after 1990, the customary institutions and practices of the *Baram* and *Kumal* communities, led by their elders, have been replaced by democratically elected leaders. The movement of converting the customarily managed forest into a community forest guided by the government of Nepal has less impact on continuing their social and cultural practices in the *Baram* community. This is reflected among the *Baram* communities who have been able to maintain continuity through leadership in community forestry groups whereas, the *Kumal* communities have faced marginalization and dispossession, losing access and control over their customary forests due to exclusion from formal community forest user groups.

These findings underscore that language is not just a tool for communication, but a vital force for Indigenous knowledge and skill transformation to new generations, identity, and ecological ethics. The erosion of language undermines sustainability itself. To fulfill Nepal's constitutional and international commitments to Indigenous Peoples' rights and biodiversity conservation, policies must actively support the revitalization of Indigenous governance systems, languages, and knowledge.

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