

# Epistemic Sovereignty in the Brahmaputra Valley: Integrating Indigenous Knowledge into Multi-Level Governance of Climate and Resource Justice in Assam

Satabdi Patgiri<sup>1</sup>

The Research Frontline – Journal  
No.1, Vol. January (2026)  
Page Number: 127 – 143  
©The Author(s) 2025  
Reprints and Permission  
[www.trfjournal.cdfaindia.org/](http://www.trfjournal.cdfaindia.org/)  
DOI: <https://doi.org/10.5281/zenodo.18202948>

TRF - J

## Abstract

This interdisciplinary study interrogates how centering epistemic sovereignty Indigenous communities' authority over their knowledge systems can reconfigure climate governance in Assam's Brahmaputra Valley. Facing rising flood threats and cross-border hydro political conflict, Mising and Dimasa peoples are also poorly represented on policy for a despite their advanced socio-ecological knowledge: Mising stilt houses (chang ghar), community-based embankment management, and phenological predictions reported among Indigenous populations in Assam (e.g., Sonowal Kachari, Bodo). Political ecology and decolonial theories help us diagnose institutional obstacles to incorporating Indigenous relational/living waters ontologies into state tools such as the Climate Action Plan (SAPCC) in Assam. We propose co-governed knowledge-bridging institutions, operationalizing data sovereignty via CARE Principles and UNDRIP compliance to advance resource justice through decolonial governance praxis.

## Keywords

Epistemic sovereignty, CARE Principles, Indigenous data sovereignty, decolonial justice, Brahmaputra governance, Assam

## Introduction

### 1.1 Setting the Context: The Brahmaputra Valley as a Nexus of Crisis and Knowledge

Brahmaputra River is a river that flows in China, India, and Bangladesh, and its owner is the high Himalayas. It is a massive socio-ecological and geopolitical complex with great biodiversity and intense vulnerabilities. The river forms the base of livelihoods and a culture even though it forms the

1. Gauhati University, Guwahati, Assam.

venue of mounting climate and resource disasters. It has been a geopolitical issue among the riparian states, where the upstream control of China and the massive dam construction put lot of doubts among the downstream communities in India and Bangladesh on the availability of water and the potential risks associated with floods. These issues are being compounded by climate change to which the largest of the north east part of the Indian states - Assam is particularly vulnerable. Researches have consistently ranked Assam as one of the most vulnerable regions in India for the temperature projected to not only rise - but to rise even higher (inconsistent rains and more flood with more than 25 per cent of it by the mid-century). In this context, the conventional and top-down governance frameworks used to address these challenges often are not up to the task. They are often alienated from the living realities of people most dependent on the river. The core issue stems from an overwhelming and serious disconnection between prevailing and state-centric forms of governance and the highly adaptive nature of the marginalized indigenous knowledge system (IKS) of the communities in the valley. To truly attain climate and resource justice it is necessary to move away from a fragmented approach and understand the river not only as a hydrological or geo-political entity, but rather as a system that encompasses issues of "sovereignty, equity, and the future of shared rivers".

## **1.2 Theoretical Framework: Epistemic Sovereignty and Climate Justice**

This paper is anchored on the theoretical concepts of epistemic sovereignty and decolonial environmental justice. Epistemic sovereignty, at its heart, is the right of a community "to define, value, and make use of their own knowledge system, particularly regarding a number of decisions that impact on their lives and environment". This concept means, not just owning the data; it is a notion of owning the basic structure through which the knowledge is being interpreted and given meaning. It contests the phenomenon of "epistemological colonialism" throughout history and into the present day; that is to say, the imposition of dominant and often Western knowledge systems as universal and superior, while invalidating other forms of knowing. Climate and resource justice create the need for epistemic sovereignty. According to a decolonial perspective, current issues and solutions to environmental problems are based on colonial structures in the past. It is only through dismantling these colonial structures of power and knowledge and making indigenous and marginalized voices central to environmental decision-making that there will be true environmental justice. This paper argues that the Brahmaputra Valley provides a compelling case study to analyze this critical relationship, where the failure to acknowledge epistemic sovereignty perpetuates a cycle of vulnerability and injustice.

## **1.3 Thesis and Scope of the Paper**

This paper argues that the prevailing multi-level governance framework for climate and resource management in Assam suffers from a critical epistemic deficit. A more just, resilient, and effective approach requires the formal recognition and integration of indigenous knowledge as a manifestation of epistemic sovereignty, guided by principles of co-governance and decolonization. To substantiate this thesis, the report will proceed as follows. The literature review will establish the theoretical foundations of decoloniality and epistemic justice. It will contextualise the socio-ecological and geopolitics of the Brahmaputra Valley. It will then capture the indigenous knowledge systems of the Mising and Dimas communities and how the systems have served as living examples of adaptive place-based governance. This framework will be applied to a case study of mega-dam politics in the discussion section, which brings to light the severe epistemological clash between state-led and indigenous perspectives. Finally, the conclusion will propose a conceptual framework for integrating indigenous knowledge into state-led governance that respects epistemic sovereignty and facilitates a more just and resilient future for the Brahmaputra Valley.

## **Literature Review: The Politics of Knowledge and Place**

### **2.1 The Conceptual Terrain: Decoloniality and Epistemic Justice**

Decolonial theory provides a powerful lens through which to analyze environmental governance. The academic literature regards that the legacies of colonialism to this day still dominate modern forms of governance by systematically silencing and disenfranchising the voices and rights of the local people and privileging the global economic pressures. Epistemological colonialism refers to the historical means of installing the dominant and mostly Western epistemic forms as the only valid, legitimate ways of knowing, alongside reduce indigenous or traditional knowledge to the margins or branding it unscientific. This is a phenomenon that goes beyond historical contingency; it is a dynamic that has existed since then, to this time which is reflected to the present-day policy formulations and practices. Scholars are increasingly turning towards a different epistemic practicum fashioning the lived experience of the Global South in advance. It anticipates native ideas and questions the alleged dominance of Western paradigm. This argumentative logos holds that the most crucial sources of injustice, which include colonial histories of land dispossession, resource exploitation and the imposition of Eurocentric epistemic frameworks are not taken into account in canonical models of environmental justice. A critical examination of existing set of governance models on environmental management reveals a massive point of contention which lies in this epistemological split. Even though modern models often refer to the notion of sustainable development and green growth, a critical analysis shows that they might still be based on a colonial logic of resource control and extraction. As an example, large-scale projects, when placed as climate solutions, are often based on

technical, top-down approaches that ignore or erase the local knowledge and agency. The issue cannot be described as a lack of communication or consultation but as a deeper rooted structural conflict between two radically distinct modes of epistemology and ontological approaches to environmental relationship. The criticism of many modern development projects is more basic: their ultimately commercial character wherein complex socio-ecological issues are approached through measurable and quantifiable metrics and monetary rewards thus making sacred lands, neighbourhood ties, and even abstract cultural values a marketable commodity that can be traded. The following table, adapted from existing research, provides a clear conceptual comparison of the two dominant knowledge systems at play in this context.

Table 1: Comparison of Western Science (WS) and Indigenous Knowledge Systems (IKS)

	<b>Western Science (WS)</b>	<b>Indigenous Knowledge Systems (IKS)</b>
<b>Epistemological Basis</b>	Objective, empirical, and quantitative.	Subjective, qualitative, relational, and holistic.
<b>Transmission</b>	Based on academic and literate methods.	Transmitted orally from one generation to the next, often by elders.
<b>Relationship to Environment</b>	The environment is an object for study and management.	The environment is a network of relations with which humans co-exist.
<b>Purpose</b>	To generate universal, abstract knowledge for control and prediction.	To advance community self-determination and collective benefit.
<b>Values</b>	Universality, replicability, and neutrality.	Context-specific, place-based, and purpose-oriented.

## 2.2 Contextualizing the Brahmaputra : Geopolitics and Climate Vulnerability

India fears that China could use its upstream position to “weaponize water,” potentially leading to a sharp reduction in water flows during the dry season or sudden, catastrophic floods from releases during the monsoon. Indian government analyses indicate that China’s proposed mega-dam could

reduce water flows by as much as 85% during the non-monsoon months, raising alarms for regional stability and millions of livelihoods.

Beyond the geopolitical concerns, the Brahmaputra Valley is at severe risk of climate change. Assam is also one of the most susceptible states in the Indian Himalayan Region. According to Assam State Action Plan on Climate Change (SAPCC), the average maximum temperature will be 2.4 °C in the middle of the century, and the extreme precipitation might be up 5-38 percent. Those socio-economic factors can worsen all these climatic hazards: catastrophes like floods and erosion unjustly impact those population groups, which are located far below the poverty line.

### **2.3 Indigenous Knowledge Systems (IKS) as a Type of Adaptability**

The indigenous people of Brahmaputra Valley and especially the Mising and Dimas community have elaborate and centuries old knowledge structures which testify to their innate versatility to the riverine habitat. Mising tribe is located on the side of Brahmaputra River which is a watercube that touches almost every other part of their lives. The amount of knowledge that they acquired over the years allows them to live in harmony with the unpredictable flow of the river. Such adaption can be traced in their homes, called Chang Gar or Kare Okum which are the stilt houses constructed on elevated bamboo frames shielding families against flood during rainy seasons. Their agricultural practises are quite versatile: the Mising grow numerous types of paddy strains, such as Lai aam during dry season, Aamdang Arig during wet fields, thus reducing the effect of rain variation on food security. Such practises are not only part of personal cultural customs but an individual, people led approach, which increases resilience and strengthen of disasters.

On the same note, a good example of a well-established socio-ecological association of individuals with nature in India is the Dimas community living within the Dima Hassao district. Their conservation ethics are based on the belief in cosmology that forests and streams have spirits and deities which interact with humans in a reciprocal agency. The notion of Daikho which are recognised as intra-communal rangelands is based on this worldview. Managing community forests appropriately, although may not be part of a centralised governmental administration, community forests are still full reserves of biodiversity and medicinal herbs, frequently containing the type of species not found elsewhere in the forest patches. The ecosystem is maintained by traditional governance

structure which helps these patches of forests to be protected for humane purposes with little utilisation by human beings in the forms of Jhum farm or timber harvesting from forests.

## **2.4 The Multi-Level Governance Framework in India and Assam**

The Indian climate policy is based upon multi-level governance structure that connects national and local policies. Policies at the state level are drawn from the National Action Plan in Climate Change (NAPCC).

In Assam, the government introduced a State Action Plan on Climate Change (SAPCC). It discusses local impacts in eight priority areas, while paying special attention to water and disaster management. The Science and Policy Platform for Climate Change (SAPCC) is a living document that seeks to connect new and changing climate change science, policy and practice and was developed through extensive stakeholder input, including NGOs, academic institutions and individual climate experts.

Nevertheless, the Assam SAPCC is found to suffer from a critical and systemic deficiency. While the plan recognises the state's increased vulnerability to climate change and the need for well-researched strategies to address it, there is no explicit mention of, or incorporation of, indigenous knowledge systems. While the document focuses on building institutional capacity and investing in technical solutions - such as embankment reinforcement and vertical evacuation structures - it does not acknowledge that the instinctive knowledge to adapt to hundreds of years of experience in building and living with disasters is already embedded in indigenous populations. The exclusion of the indigenous in a plan that seeks to protect the most vulnerable is a telling sign of underlying epistemology deficit. This is no coincidence; it is a sign of a structural preference for a Western, technical approach to climate change and a preference for large scale infrastructure and economic development over a more dynamic and holistic approach based on social and cultural realities.. This conceptual framework, while seemingly comprehensive on paper, is rendered incomplete and ineffective for the very people it purports to protect.

## **Objectives, Data Collection Methods, and Study Area**

### **3.1 Research Objectives**

This research is framed by three main objectives :

1. To make a thorough study of the nature of epistemic injustice and scope of the same that exists in the structure of multi-level governance organised to handle climatic and resource management in Assam today.
2. To organise and explain the expressions of epistemic sovereignty as illustrated by the indigenous knowledge system of the Mising and Dimasa communities.
3. To formulate and present a conceptual framework through which indigenous knowledge may be integrated into state-led governance, and thus in support of the principles of epistemic sovereignty and the enhancement of fairer and more resilient response to climate and resource management.

### **3.2 Methodology: A Qualitative and Decolonial Approach**

This study employs a qualitative, synthesis-based methodology, which is a form of secondary data analysis. This approach is strategically chosen to overcome the ethical and logistical constraints of conducting extensive field research, particularly in a politically sensitive region. The intent of this secondary analysis is to use existing, and often disparate, data to develop conclusions and knowledge that are different from those resulting from the original analysis.

The synthesis-based approach to the methodology is a conscious practise of decolonial work. Several traditional academic research, especially in the so-called global South, is often extractive in its nature. Scholars related to mainstream institutions might collect information on minority groups, and publish results in their own academic gain without considering mutual advantages or recognition of local epistemic creation. These practises are the best examples of data colonialism. Reconfiguring and re-integrating available knowledge through a decolonial process, the current study challenges established power frameworks in knowledge production and attempt to generate a more encompassing and fairer intellectual discourse.

This methodology implies a strict cross-analysis of various secondary data sources. These include peer-reviewed journal articles, scholarly monographs about the decolonial theory, Brahmaputra hydropolitical studies, and Indigenous knowledge systems. Official government reports and policy documents, including the Assam SAPCC and project reports released by the Asian Development Bank are also the focus of the inquiry. Besides, technical and ethnographic research is built into the study to provide factual information about particular Indigenous Knowledge Systems(IKS) and community-based programmes. The reports by news media and non-governmental organisations also are to be

analysed to provide contextual and real-life evidence to the theoretical arguments. This multifaceted compilation of non-homogenous sources is both a strong and sustainable approach to the creation of a unified argument, which is empirically based.

The study is informed by principles of decolonising research that rest on ethical considerations which question the hegemony of western paradigms and prepares the voices and epistemologies of Indigenous peoples. It also aligns with the CARE Principles for Indigenous Data Governance (Collective benefit, Authority to control, Responsibility, Ethics). This ensures that the study advocates for a model where indigenous communities govern their own knowledge and data, and that all research is conducted in a non-extractive manner, designed to provide collective benefit to the communities from which the knowledge originates.

### **3.3 Study Area : The Brahmaputra Valley**

The study area is the Brahmaputra Valley in the state of Assam, with a specific focus on the Mising and Dimasa communities as representative case studies of indigenous knowledge and adaptation. To include the wider trans boundary picture of the Brahmaputra River Basin, and to give a detailed view of the forces thinkers in operation in the region, the trans boundary setting of China/India in the hydropolitical relations of these two countries is also factored in the analysis.

## **Discussion of Data and Results: Epistemic Conflicts and Assertions of Sovereignty**

### **4.1 The State's Epistemic Deficit: A Case Study in Mega-Dam Politics**

The conflict between the governmental planning and the epistemological constructs of the Indigenous communities is illustrated by the case of the Upper Siang Multipurpose Storage Dam project in Arunachal Pradesh, India. The Indian government has mostly written about the initiative with much technical and economical overtones, which is also a geo-political tool of employ. Some attempt to depict the project as a reaction to the intensive upstream projects by China, in which they were to achieve so-called water security and enable them to control floods. However, such rhetorics seem to be too simplistic and do not reflect hardships that can be observed on the ground. This argument is working with a more traditional state-centric paradigm that river water can be commodified like a resource and used as a strategic instrument to be created against geopolitical competitors.

The resistance of the local Adi villagers, in their turn, is based on the completely different value system. The community possesses alleged ancient divine rights to the river what they call Ane Siang or



Goddess Siang and do not want the dam to be built in the pretext of not killing their holy river in favour of the production of electricity. Their arguments are not simply of an economic nature, since the dam would submerge no less than sixteen villages and evict thousands of people, but rather are more spiritual and cultural in nature, based on the centrality of the river to their civilization, as well as its sacredness. As an option, they suggest smaller development projects in which they build hydro-electric power facilities on the tributaries of the river but ensuring that they do not alter the main flow in proving local contextual understanding to build on viable development.

The government response to this objection points to a deep misunderstanding. Rather than addressing the spiritual and cultural concerns that are relevant to the community, officials have focused on providing a high compensation package and livelihood programmes designed to train the displaced villagers on new skills such as horticulture and apiculture. This practice is the manifestation of transactional colonial mentality and an analogy for the measuring and expendable nature of the sacred river and our ancestral land rather than those intangible spiritual and cultural underpinnings. Consequently, the response is not addressing underlying the causes of the conflict - a clash of world-view, and is instead reproducing the epistemic injustice the communities are in conflict over.

## 4.2 Indigenous Knowledge as an Exercise of Sovereignty

The indigenous knowledge systems of the Mising and the Dimasa communities are not static traditions but living and dynamic systems that exhibit this immense assertion for epistemic sovereignty. They are frameworks for self - governance, resilience; developed over centuries of close observation and adaptation to the local environment.. The Mising community's architecture and agricultural methods are a form of applied science, a "knowledge bank" that enables co-existence with the "unpredictable 'moving ocean'" of the Brahmaputra. The construction of their Chang Ghar or Kare Okum stilt houses is a direct, community-led disaster risk reduction strategy. Similarly, their multi-crop cultivation techniques ensure food security in an unpredictable climate. The Mising's collective preparedness, including the building of raised platforms for cattle (Murong Okum), is a tangible manifestation of their right to self-govern their resource and disaster management. The Dimasa community's sacred groves (Daikho) are another powerful example of community based conservation and an assertion of sovereignty. These forests are managed by community groups, not by the government, and their preservation is guided by a belief in spirits and a reciprocal relationship with nature. This system, managed by a traditional hierarchy of priests and village headmen, is a clear assertion of the community's authority to control their own resources and knowledge. The spiritual beliefs serve as a moral and ethical framework for sustainable use, a concept that is often absent in state-led

conservation policies. The following table synthesizes these key practices and their underlying epistemological foundations.

Table 2: Community Indigenous Practice and Epistemic Underpinning

Community	Indigenous Practice	Epistemic Underpinning
Mising	Chang Ghar (stilt houses)	A deep, empirical knowledge of flood dynamics and river behavior, leading to a sophisticated form of community-led, climate-resilient architecture.
Mising	Multi-crop cultivation	An understanding of local soil-water cycles and rainfall patterns, enabling the development of climate-resilient agricultural practices for food security.
Dimasa	Daikho (sacred groves)	A holistic worldview where nature is imbued with spiritual power, leading to a community-based conservation ethic and the belief that the well-being of the people is tied to the health of the ecosystem.
Dimasa	Traditional village hierarchy	A governance structure that authorizes community leaders (Khunang, Dillik, Jonthaima) to manage resources and enforce sustainable practices in alignment with spiritual beliefs.

#### 4.3 Towards a New Paradigm: An Integrated Framework of Climate and Resource Justice.

This analysis suggests that a radical change is needed to ensure that the climate and resource problems of the Brahmaputra Valley are effectively dealt with. Neither can this be resolved by simply incorporating indigenous knowledge into the current policy framework since it would only consider this as a supplementary input as opposed to the basic worldview. Instead, it is to apply indigenous knowledge as a foundation to create a paradigm shift, shifting towards a disjointed, top-down model to one of co-creation.

The new framework should be anchored on a change towards tokenistic consultation to real and participatory engagement and co-governance. This demands a legal and ethical base to acknowledge indigenous people collective rights as stipulated in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). India was a voting member of the UNDRIP, but will officially say that

the declaration does not apply domestically (only because all citizens are indigenous). Such a contradictory stand is one of the key legal challenges that have to be overcome in case any improvement can be made.

The concept of epistemic sovereignty should be resolved with the help of a new model of managing data. The power of reference can be a strong tool, which is the CARE Principles of Indigenous Data Governance of Collective Benefit, Authority to Control, Responsibility, and Ethics. By using these principles, native ethnic groups will be in a position to have full control of their data throughout the data collection, analysis, and utilisation process; hence enabling the unparalleled level of self-determination. In this paradigm, the indigenous communities are no longer viewed as social universe of research subjects to which the outside researchers can apply, but as the holders of knowledge.

This is aimed to shift to a paradigm where the state acts as a direct provider of climate action, to a paradigm where communities are active agents of change and co-producers of policy and intervention. That is the case with indigenous and community-based projects like the North Eastern Region Community Resource Management Project (NERCORMP) and Institute of Integrated Resource Management (IIRM), the development of which has empirically proven this theory. An appealing pattern with which the governance structures can be reformed is livelihood management and resource utilisation grassroots programmes having a high level of scalability and replicability. This kind of holistic system with integrated consideration of the interconnection of different actors and systems represents the very spirit of a real multi-level governance.

## **Conclusion**

### **5.1 Summary of Findings**

The paper has substantiated that the existing crisis of climate and resource justice in the Brahmaputra Valley is fundamentally an epistemological crisis. The encounter shows that there is an acute incongruity between the state led governance, operating through a Western centric, technical and fragmented view of the world, and the native knowledge of the people like the Mising and Dimas, which is holistic, relational and place based. This lack of epistemology can be found in the Assam State Action Plan on Climate Change (SAPCC), which does not acknowledge indigenous knowledge despite its purportedly comprehensive nature, and in the transactional nature of the state in addressing mega-dam politics, which does not recognise the spiritual and cultural value of the land and the river. On the other hand, the adaptive politics of the local communities, in the form of building Chang Ghar

stilt houses and the preservation of Daikho sacred groves, are highly effective and durable claims to epistemic and resource sovereignty. They are not traditions, but dynamic systems of governance that are sophisticated and have allowed communities to co-exist with a volatile environment over centuries.

## 5.2 Recommendations for a Decolonial and Integrated Future

To resolve the long-standing epistemological tensions and come up with a more equitable and stronger future, the following paradigm shift towards a co-governance model is recommended in this report:

**a) Policy and Legal Reforms :** There should be a formal adoption and enforcement of the concepts of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) by government of India instead of its existing paradoxical approach. This would establish the legal framework that would permit indigenous people to practise their right to self-determination in making decisions about the environment. Assam SAPCC needs to be amended officially in order to incorporate indigenous knowledge where communities are no longer seen as mere victims of climate change but rather as active agents of change.

**b) Institutional Framework :** It is suggested that knowledge-bridging establishments should be established where a reciprocal non-extractive exchange exists between the traditional knowledge holders and the modern science. Such institutions would have the members of both the government and indigenous communities and thereby the design and implementation of climate solutions would be culturally sensitive and ecologically viable.

**c) Methodological Standards :** All the research and development works concerning the Brahmaputra Valley must follow a participatory and community-based approach that follows the principles of CARE Principles of Indigenous Data Governance. It ensures that the native peoples have control over their own knowledge and information, as well as the fact that all projects are planned to be carried out with benefit for the society as a whole and conducted by the highest ethical standards.

## 5.3 Areas for Future Research

This paper gives a background analysis, yet a number of avenues need further research. Future study must get to know the specific legal processes of implementing the UNDRIP principles into the federal Indian scheme. It is also necessary to have longitudinal case studies on the long term socio - economic and ecological implications of community - led co - governance schemes, based on successful

experiences of grass - roots efforts. Lastly, comparison between the adaptive approaches of different riverine societies in the Brahmaputra basin will yield desirable data towards the design of an inclusive pan-basin regime.

## References

1. Adventure River Cruises. (n.d.). *Mishing: The water man of Assam*. Retrieved September 16, 2025, from <https://adventurerivercruises.com/blog/mishing-the-water-man-of-assam.html>
2. Aged Care Quality & Safety Commission. (n.d.). *Case studies—Quality standards*. Retrieved September 16, 2025, from <https://www.agedcarequality.gov.au/providers/quality-standards/case-studies>
3. ARDC (Australian Research Data Commons). (n.d.). *The CARE principles*. Retrieved September 16, 2025, from <https://ardc.edu.au/resource/the-care-principles/>
4. Assam Science Technology & Environment Council. (2011). *Recommendations for the State of Assam's strategy and action plan on climate change*. Government of Assam.
5. Barua, A., & Bhaduri, R. (n.d.). *Brahmaputra River science: What we know, what's missing, and why it matters*. ResearchGate. Retrieved September 16, 2025, from <https://www.researchgate.net/publication/394340700>
6. BISI (British International Studies Institute). (n.d.). *Hydropolitics of China*. Retrieved September 16, 2025, from <https://bisi.org.uk/reports/hydropolitics-of-china>
7. Borrows, J. (2020). *UNDRIP for indigenous adolescents*. Heritage BC. <https://heritagebc.ca/wp-content/uploads/2020/07/UNDRIP-for-indigenous-adolescents.pdf>
8. Canadian Justice Department. (n.d.). *United Nations Declaration on the Rights of Indigenous Peoples in Canada*. Retrieved September 16, 2025, from <https://www.justice.gc.ca/eng/declaration/index.html>
9. Carroll, S. R., Rodriguez-Lonebear, D., & Martinez, A. (2021). Indigenous data governance: Strategies from United States Native Nations. *Data Science Journal*, 20(1), 1–12. <https://doi.org/10.5334/dsj-2021-034>
10. Caucasus Edition. (n.d.). *Environmental justice in the South Caucasus: A decolonial response to neocolonial exploitation*. Retrieved September 16, 2025, from <https://caucasusedition.net/environmental-justice-in-the-south-caucasus-a-decolonial-response-to-neocolonial-exploitation/>
11. CounterCurrents. (2025, July). Recognising indigenous knowledge—A missing link in India's climate-action strategy. *CounterCurrents*.

- <https://countercurrents.org/2025/07/recognising-indigenous-knowledge-a-missing-link-in-indias-climate-action-strategy/>
12. Das, T. M., Medhi, M., & Banerjee, S. (n.d.). *Indigenous knowledge systems and sustainable learning: A comprehensive regional analysis of Northeast India*. ResearchGate. Retrieved September 16, 2025, from <https://www.researchgate.net/publication/394759329>
13. David Publishing. (n.d.). *Knowledge production beyond coloniality*. Retrieved September 16, 2025, from <https://www.davidpublisher.com/Public/uploads/Contribute/68a7dac040dc8.pdf>
14. Deccan Herald. (2025, August 24). Arunachal tribes invoke ‘divine ties’ with Siang River to oppose dam to counter China threat. *Deccan Herald*. <https://www.deccanherald.com/india/arunachal-pradesh/arunachal-tribes-invoke-divine-ties-with-siang-river-to-oppose-dam-to-counter-china-threat-3695162>
15. Economic Times. (2025, August 25). China’s new mega dam triggers fears of water war in India. *The Economic Times*. <https://m.economictimes.com/news/india/chinas-new-mega-dam-triggers-fears-of-water-war-in-india/articleshow/123492717.cms>
16. Global Indigenous Data Alliance. (2024, March). *CARE principles for indigenous data governance: One-pagers*. [https://www.rd-alliance.org/wp-content/uploads/2024/03/CARE20Principles20for20Indigenous20Data20Governance\\_OnePagers\\_FINAL20Sept2006202019.pdf](https://www.rd-alliance.org/wp-content/uploads/2024/03/CARE20Principles20for20Indigenous20Data20Governance_OnePagers_FINAL20Sept2006202019.pdf)
17. Government of Assam. (2021). *Assam State Action Plan on Climate Change (Version 2.0)*. <https://documents1.worldbank.org/curated/en/099307303292335604/IDU0a9a7774208020b3fa0eb1485d1fe25.docx>
18. IIAS (International Institute for Asian Studies). (n.d.). *Entangled sphere: Dimasas’ socio-cultural life and its implications—Water*. Retrieved September 16, 2025, from <https://www.iias.asia/the-newsletter/article/entangled-sphere-dimasas-socio-cultural-life-and-its-implications-water>
19. IMC2025. (n.d.). Integrating indigenous knowledge and modern strategies for climate resilience and disaster-risk reduction in Western Ghats, India [Conference abstract]. Retrieved September 16, 2025, from <https://imc2025.info/imc25/abstract/integrating-indigenous-knowledge-and-modern-strategies-for-climate-resilience-and-disaster-risk-reduction-in-western-ghats-india/>
20. Institute of Integrated Resource Management. (n.d.). *About IIRM India*. Retrieved September 16, 2025, from <https://www.iirmindia.org/>
21. Journal of Social Sciences. (2018). Performance of North Eastern Region Community Resource Management Project for Upland Areas (NERCORMP) in Assam: A study based

- on respondents' perspective. *Journal of Social Sciences*, 54(1–3), 1–11.  
<https://www.researchgate.net/publication/328989157>
22. Medwin Publishers. (n.d.). *A study on the cowrie shells of the Dimasas in Assam*. Retrieved September 16, 2025, from <https://medwinpublishers.com/AEOAJ/a-study-on-the-cowrie-shells-of-the-dimasas-in-assam.pdf>
  23. Ministry of Environment, Forest and Climate Change, Government of India. (2017). *Assam State Action Plan on Climate Change (SAPCC)*.  
<https://moef.gov.in/uploads/2017/08/ASSAM-SAPCC.pdf>
  24. National Indigenous Australians Agency. (2024, May). *Framework for governance of indigenous data*. <https://www.niaa.gov.au/sites/default/files/documents/2024-05/framework-governance-indigenous-data.pdf>
  25. Nakashima, D., Prott, M., & Roué, L. M. B. L. (2005). Western science and traditional knowledge: Despite their variations, different forms of knowledge can learn from each other. *Nature & Culture*, 1(1), 1–18. <https://doi.org/10.3167/155803505780879588>
  26. Neog, R. (2025). Decoding urban sprawl in Nagaon, Brahmaputra Valley: A Shannon entropy and Gini coefficient analysis. *Environmental Monitoring and Assessment*, 197(8), 955. <https://doi.org/10.1007/s10661-025-07012-9>
  27. Newsweek. (n.d.). *Water war? China–India hydropower disputes over Brahmaputra*. Retrieved September 16, 2025, from <https://www.newsweek.com/water-war-china-india-brahmaputra-hydropower-2119192>
  28. Observer Research Foundation. (n.d.). *Northeast India's unequivocal right to climate justice*. Retrieved September 16, 2025, from <https://www.orfonline.org/expert-speak/northeast-indias-unequivocal-right-to-climate-justice>
  29. Oxford Research Data. (n.d.). *CARE principles for indigenous data governance*. Retrieved September 16, 2025, from <https://researchdata.ox.ac.uk/care-principles>
  30. Phayul Newsdesk. (2025, August 28). India fears 85% drop in Brahmaputra after China's mega-dam in Tibet. *Phayul*. <http://www.phayul.com/2025/08/28/52870/>
  31. Practical Bioethics. (n.d.). *Case studies*. Retrieved September 16, 2025, from <https://www.practicalbioethics.org/search-results/case-studies/>
  32. Press Information Bureau, Government of India. (n.d.). *Climate vulnerability assessment for the Indian Himalayan region using a common framework*. Retrieved September 16, 2025, from <https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=1907725>
  33. Provincia Journal. (n.d.). *Chang Ghar or Chang Ukum*. Retrieved September 16, 2025, from <https://www.provinciajournal.com/index.php/telematique/article/view/1182>

34. Santos, B. de S. (n.d.). A new epistemology of the South: The role of knowledge in social struggles. *Revue de la Chaire UNESCO pour la Paix, la Démocratie et les Droits de l'Homme*. <https://journals.openedition.org/rccsar/165>
35. Shiladitya. (2017). Exploring sub-national state-led responses to climate change: A case study of the Assam State Action Plan on Climate Change. *Media and Cultural Research Group*. [http://www.mcrg.ac.in/6thCSC/6thCSC\\_Full\\_Papers/Shiladitya.pdf](http://www.mcrg.ac.in/6thCSC/6thCSC_Full_Papers/Shiladitya.pdf)
36. Sustainability Directory. (n.d.). *Epistemological sovereignty*. Retrieved September 16, 2025, from <https://climate.sustainability-directory.com/term/epistemological-sovereignty/>
37. Taylor & Francis Online. (2025). Anti-colonial environmental justice in, of, and from Abya Yala. *Environmental Politics*, 34(5), 725–742. <https://doi.org/10.1080/17442222.2025.2518709>
38. The Print. (n.d.). *With Arunachal's Siang dam project facing delays, protests—How Centre plans to win over local residents*. Retrieved September 16, 2025, from <https://theprint.in/india/governance/with-arunachals-siang-dam-project-facing-delays-protests-how-centre-plans-to-win-over-local-residents/2698105/>
39. The Straits Times. (n.d.). *India plans mega dam in Arunachal Pradesh with eye on China's hydropower station in Tibet*. Retrieved September 16, 2025, from <https://www.straitstimes.com/asia/south-asia/india-plans-mega-dam-in-arunachal-pradesh-with-eye-on-chinas-hydropower-station-in-tibet>
40. Tribal Research Institute. (2017). *The Mising tribe of Assam: A monograph*. Government of India. [https://repository.tribal.gov.in/bitstream/123456789/74070/1/AIRT\\_2017\\_0003\\_report.pdf](https://repository.tribal.gov.in/bitstream/123456789/74070/1/AIRT_2017_0003_report.pdf)
41. United Nations. (2018). *United Nations Declaration on the Rights of Indigenous Peoples*. [https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP\\_E\\_web.pdf](https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf)
42. University of Canterbury. (n.d.). *Managing research data: CARE principles*. Retrieved September 16, 2025, from <https://www.canterbury.ac.nz/research/eresearch-at-canterbury/managing-research-data/care-principles>
43. UN System Staff College. (n.d.). *Tackling climate change through multi-level governance: Systems thinking and policy coherence*. Retrieved September 16, 2025, from <https://www.unssc.org/news-and-insights/blog/tackling-climate-change-through-multi-level-governance-systems-thinking-and>
44. Urban-LEDS. (2020). *Urban-LEDS country factsheet: India*. <https://urban-leds.org/wp-content/uploads/2020/06/Urban-LEDS-Country-factsheet-India.pdf>



45. Wikipedia. (n.d.). *Dimasa people*. Retrieved September 16, 2025, from [https://en.wikipedia.org/wiki/Dimasa\\_people](https://en.wikipedia.org/wiki/Dimasa_people)
46. Wikipedia. (n.d.). *Stilt house*. Retrieved September 16, 2025, from [https://en.wikipedia.org/wiki/Stilt\\_house](https://en.wikipedia.org/wiki/Stilt_house)
47. World Bank Group. (2018). *World development report 2019: The changing nature of work*. World Bank Publications.