Indian Philosophical Pathways to Eco Wisdom and Sustainable Development

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Abstract:

This paper examines ancient Indian philosophical texts, including the Vedas and Upanishads, to uncover principles like Dharma and Rta relevant to contemporary sustainability. The paper argues that concepts like Dharma (righteous duty) and Rta (cosmic order) may be used as a guide for current conceptualizations of sustainability, resonating with ethical restraint, moderation of nature's limitations, and a feeling of responsibility to posterity. Linking these ideas to India's environmental policies- the study bridges classical thought and contemporary practice by analyzing how these philosophical principles resonate with, and critique, Indian's environmental policies such as the National Action Plan on Climate Change (NAPCC) and renewable initiatives. Drawing on both textual analysis and policy critique, the paper proposes a culturally rooted sustainability model that integrates Indigenous knowledge systems, ethical traditions, and adaptive ecological governance.

Moreover, viewed through this lens, the article reveals the potential of India's well-endowed philosophical heritage in the global sustainability discourse, initiating an approach to development that is as ecologically conscious as it is culturally meaningful.

Ultimately, it argues that true sustainability in India cannot be achieved through policy mechanisms alone. Instead, it requires a deeper cultural shift one that restores philosophical ethics as central to climate action and reimagines the Earth not as a resource, but as a sacred entity helping all beings to flourish.

Keyword: Eco Wisdom, Sustainable Development, Veda, Upanishad, Dharma, environmental policies, Ashtanga Yoga

Introduction:

Ramchandra Guha, in his new book Speaking with Nature (2024), cites EP Thompson's assertion that "there is not a thought that is being thought in the west or east which is not active in some Indian mind." Sustainable Development is one such idea that is found within the Indian Knowledge System. Sustainable development, as adopted by the Brundtland Commission in 1987, is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland Report, 1987:43)." While seen as a contemporary reaction to such concerns as climate change, environmental decline, and resource exhaustion, the ideals of sustainability- aligning with nature, being prudent in consumption of resources, and ensuring ecological balance- are well established in ancient Indian philosophy. Far from being recent, such ideals have been part of Indian philosophy for centuries, evident in the classical literature and traditions that advocate a harmonious coexistence between

humans and nature (Barad, 2007). This philosophical heritage indicates that sustainable practices are not only recent developments, but also universal principles inherent in cultural and moral teachings.

In exploring the philosophy of sustainability in ancient scriptures, this article relates traditional Indian values to India's pressing issues of climate change, resource scarcity, and sustainable development. The paper attempts to analyze how ancient Indian philosophy has an understanding that is not merely philosophically profound but also pragmatically applicable, offering a foundation for sustainable practices taking into account the welfare of society and nature. Notions such as Dharma (righteous duty) and Rta (cosmic order) may inform contemporary conceptions of sustainability in a way that resonates with ethical moderation, moderation of the limitations of nature, and a sense of responsibility to posterity. From this perspective, the article opens up the capabilities of India's richly-endowed philosophical tradition in international discussions of sustainability, compelling a path to development that is as ecologically aware as it is culturally significant. Embracing Earth as a force of life enhances respect for Earth's ability to heal itself and fosters ethics of care and responsibility.

This perspective is essential in addressing transnational issues like climate change, soil loss, and resource depletion (Chaturvedi & Dangwal, 2024). In India, this world perspective has shaped agricultural practices for centuries. Ancient traditional practices like crop rotation, organic farming, and conservation of land are evidently followed and are the Vedic principle of balancing land use for long-term resource sustainability (Renugadevi, 2012; Singh 2025) and with modern regenerative agriculture that restores soil vitality and biodiversity and are the world's sustainability efforts (Londhe, 2016). Ancient Indian philosophy, composed in the Vedas and Upanishads, is composed on a vision of environmental balance derived from human beings' moral obligation to the world. (Renugadevi, 2012). One of the fundamental principles here is Ashtanga Yoga, the eight-limbed way of yoga provides an integrated moral, physical, and spiritual practice that inherently consists of environmental stewardship.

Every branch Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana, and Samadhi can be interpreted as guiding principles for reconciling people's needs with environmental limits. The theory postulates that human beings are not only consumers of nature capital but also trustees who are responsible for sustaining ecological balance. This "response-ability," as termed by Donna Haraway in her book Staying with the Trouble explains, is that human behavior must be for the benefit of all living beings, rather than a symbiotic relationship with nature that is exploitative (Haraway, 2016:13). All these entanglements are also remarked upon by philosophers like Bruno Latour, Karen Barad and Jane Bennett, highlighting the significance of such responses which consider the human as well as the non-human agents in environmental governance. Spiritual writings like the Rig Veda and Atharva Veda lend support to this vision, viewing Earth as a caring, motherly being who sustains all life (Renugadevi 2012; Singh 2025). This respect for nature as an integral entity invites reflection on modern environmental concerns and the ethical dimensions of climate action (Singh, 2025).

In traditional Indian philosophy, the principles of Dharma (moral obligation), Rta (cosmic order), and the Upanishadic teachings all come together to express an ecological responsibility vision that is fundamentally still contemporary in the Anthropocene. These principles were far

from abstract ideals but were the ethical framework for sustainable living as they situated human activity in a larger matrix of interdependence that encompasses non-human entities, future generations, and cosmic order itself (Radhakrishnan, 1923; Jamieson, 2014).

Rta, as it is explained in the Vedic hymns, is the law of harmony that regulates natural cycles and ethical action (Sen, 1961). It teaches that human beings should harmonize their lives with the rhythms of the cosmos, respecting the balance between consumption and production. This later developed into Dharma, where responsibility and justice are the guiding principles for the maintenance of life (Sharma, 2000). Defying these principles, either through excess or environmental abuse, upsets the cosmic balance and solicits retribution defined in the law of Karma, whereby injurious acts sooner or later bounce back onto society (Easwaran, 2007).

The Upanishads endorse this ethos by disavowing greed and inviting moderation. The Isha Upanishad eloquently advises: "Enjoy the resources placed at your disposal by avoiding greed; do not covet other people's belongings" (Easwaran, 2007, p. 47). This ethic turns restraint into something positive, framing simplicity as not deprivation but a way to balance (Radhakrishnan, 1923). Modern interpreters like Jamieson (2014) have made the point that this appeal to moderation is not an ascetic exercise, but a deep ecological ethics that sets bounds to consumption and upholds the welfare of the whole in preference to the gratification of the individual.

Collectively, Rta, Dharma, and the Upanishads establish a relational ethics philosophy one that places human existence within an relational cosmic structure. They foretell what contemporary sustainability texts define as intergenerational justice and environmental stewardship (WCED, 1987; Rockström et al., 2009), but they place these principles within a religious construct that renders restraint, reciprocity, and awe for life sacred responsibilities instead of policy options.

Indian Philosophical Pathways to Eco-Wisdom

The concept of Ahimsa, or non-violence, is perhaps the most important and persistent of Indian philosophy's insights into ecological ethics. Grounded firmly in Jainism and Buddhism and subsequently reinterpreted by Mahatma Gandhi in political resistance, Ahimsa goes far beyond forbidding bodily harm. It is an ethic of self-restraint, kindness, and respect for all living beings. Under this regime, the natural world is not conceived as a resource to be controlled but as a community of beings with agency and inherent worth.

Ahimsa is elevated in Jain philosophy as supreme virtue (paramo dharmah). Jain monks and laymen created careful practices to reduce harm to even the tiniest of organisms sweeping the floor prior to walking, refraining from root vegetables in order to avoid harming soil organisms, and being vegetarian as an ethic of care (Chapple, 2002). Though these practices seem ascetic, they embody an ecological awareness of the interconnectedness of all beings and the vulnerability of ecological systems. In an age of biodiversity loss and mass extinction, radical sensitivity of this kind represents a counter-narrative to utilitarian exploitation of ecosystems.

Buddhism also places Ahimsa in its karuna (compassion) principle and first precept avoiding the killing. The Jataka stories frequently represent the Buddha as an animal, symbolizing kinship with all species. This symbolic literature not only sanctifies non-human life but also

instructs an ethic of co-existence. In contemporary eco-discourses, Buddhist ecologists like Thich Nhat Hanh have recast this ethos as "interbeing," or what Haraway (2016) refers to as 'string figures' (2016) highlighting the relational web of life that connects humans, animals, forests, rivers, and climatic systems.

Gandhi's interpretation of Ahimsa expanded its reach to the socio-political and ecological domain. For Gandhi, non-violence was not only a strategy against colonialism but also a mode of living lightly on the earth. His advocacy of voluntary simplicity, spinning cloth, and rejection of industrial excess reflected an ecological ethic of restraint (Guha, 1993). Gandhi cautioned against the dangers of untrammelled industrial expansion in his writings, which he posited would culminate in moral and ecological devastation. His statements presaged today's ecophilosophical arguments regarding ecological footprints and degrowth.

In all of these cultures, Ahimsa is not so much a moral dictate but an exercise in ecological self-control. It demands that human behavior be assessed not just for its short-term consequences on human society but also on other species and on the unborn. In contrast to contemporary environmental policy, which tends to be based on cost-benefit analysis or carbon meters, Ahimsa makes self-restraint a holy duty, not a political option. As a philosophical route to eco-wisdom, it thereby redirects environmentalism from policy-oriented management towards a moral-spiritual practice grounded in daily life.

While Ahimsa is about non-violence toward living beings, Yoga offers a philosophical and practical approach to self-restraint, equilibrium, and simplicity. Patanjali codified the Ashtanga Yoga system, where eight limbs or branches lead practitioners to liberation. Although most are concerned with spiritual realization, they equally have ecological undertones when viewed through the prism of sustainability.

The first two limbs Yamas (moral restraints) and Niyamas (personal observances) are especially relevant to ecological ethics. The Yamas are Ahimsa (non-violence), Satya (truthfulness), Asatya (lie), Brahmacharya (moderation), and Aparigraha (non-possessiveness). They together constitute an ethic of minimalism and restraint. Aparigraha, in specific, eschews greed and accumulation and finds a close parallel with sustainable consumption principles. In a consumerist era based on overproduction and overconsumption, the Yogic prohibition against hoarding becomes a militant critique of extractive capitalism.

The Niyamas, like Santosha (contentment) and Shaucha (purity), also promote concordance with natural rhythms. Contentment channels human desire away from the acquisition of material goods to inner equilibrium, making less ecological pressure. Purity calls for cleanliness of the body but also of the environment, making it a further practice of ecological stewardship. Here, Yoga serves both as an individual discipline and as a cultural ethos that helps to develop resistance to the ecological disturbances of modernity.

Aside from ethics, the Asanas (postures) and Pranayama (breath control) practices itself reflect harmony with the body and nature. Regulation of breath, for example, highlights the unsustainability of human existence from air and atmosphere, and reminding practitioners of the vulnerability of ecosystems. Even meditation (Dhyana) can be seen as ecological since it

develops sensitivity to interconnectedness and minimizes desires that drive unsustainable practices (Feuerstein, 1996).

Together, the Yoga system values discipline, balance, and voluntary simplicity. These values translate into ecological wisdom by promoting limits on consumption, intentional interaction with natural resources, and an inner change that minimizes external exploitation. Unlike contemporary sustainability thinking, which tends to revolve around technological solutions, Yoga posits that ecological crises are also crises of desire. Unless consumption itself is regulated by cultural and spiritual disciplines, no renewable energy or afforestation can mitigate collapse. Therefore, Yoga is not merely a wellness practice but a philosophy of sustainable living as urgently applicable to modern ecological ethics.

The Vedas and Upanishads the scriptures of Hindu philosophy otherwise expound an ecological vision in which nature is worshiped as sacred. Instead of viewing forests, rivers, or animals as lifeless material, these scriptures sanctify them as instantiations of the cosmic order. This theological ecology bases human-nature relations on reverence and restraint.

The Rig Veda has prayers to natural forces like Agni (fire), Vayu (air), Surya (sun), and Prithvi (earth), accepting them as gods whose nourishment is imperative for survival. The prayers indicate a world where environmental forces are vitalized, energetic, and entitled to thanks instead of exploitation (Sen, 1961). In parallel, the Atharva Veda contains invocations for the fertility of the land, guarding medicinal plants, and concord with rivers, highlighting an extensive appreciation of ecological interconnectedness.

The Upanishads extend this ethos by conceptualizing nature as a part of the divine Self (Brahman). The Isha Upanishad memorably states: "Everything in this universe belongs to the Lord.". Appreciate what is yours, and do not desire what is not yours" (Easwaran, 2007). This lesson inculcates ecological moderation into a cosmic moral code, excluding greed and promoting stewardship. Moderation here is not a utilitarian tactic but a religious obligation, tying the human life to the wholeness of everything.

This eco-religious morality is an early expression of biocentrism, hundreds of years prior to the appearance of the term in Western ecological philosophy. Insofar as they treat animals, rivers, and forests as sacred, the Vedas and Upanishads collapse the human/nature dichotomy and proclaim kinship throughout the living world. Modern authors like Radhakrishnan (1923) and Jamieson (2014) demonstrate how these texts prefigure contemporary ecological values of interdependence, ecological justice, and responsibility to posterity.

Significantly, this vision is not symbolic or fixed; it has regulatory dimensions. Respect for rivers dissuaded pollution; sacred woods protected biodiversity by excluding felling; rites instilled seasonal cycles into agro-practices. In such a way, Vedic and Upanishadic doctrines are not theoretical philosophy but operational ecological governance, inscribed in ritual and cultural practice.

Contemporary Policy Pathways and Indigenous Philosophical Resonances

India's modern climate and sustainability efforts face significant challenges rising temperatures, unpredictable monsoons, declining agricultural output, and continued

dependence on coal. The Indian Meteorological Department (IMD, 2020) and the National Disaster Management Authority (NDMA, 2021) reports highlight increasing heatwaves, floods, and cyclones. The World Bank (2021) also predicts substantial GDP and agricultural losses if warming continues, while Singh et al. (2019) discuss farmers' exposure to climate shocks. The energy sector is equally vulnerable, with TERI (2020) noting reliance on coal despite progress in renewables.

India's most comprehensive policy for sustainable development is the National Action Plan on Climate Change (NAPCC, 2008). Its eight missions covering solar energy, energy efficiency, sustainable agriculture, and water management aim to steer the country toward low-carbon growth. However, as scholars like Dubash (2013) and Atteridge & Shrivastava (2019) observe, although the NAPCC includes structural reforms, its technocratic approach often overlooks cultural and ethical aspects of sustainability. Indian philosophical traditions offer vital insights here: they emphasize restraint, moderation, and responsibility as moral imperatives, not just policy goals.

India's leadership in renewable energy illustrates this integration. The International Solar Alliance (ISA, 2015), led by India, embodies the Upanishadic and Vedic ethic of Vasudhaiva Kutumbakam "the world is one family" (Radhakrishnan, 1996). By promoting solar cooperation worldwide, India demonstrates an ethic of interdependence that aligns with the Vedic call to harmonize human actions with cosmic forces. Similarly, programs focused on energy conservation and green agriculture reflect the teachings of Dharma and Rta (Sharma, 2000) advocating for technological progress rooted in justice, harmony, and accountability toward future generations.

Practically, this means reframing climate and development policies not solely as economic changes but as moral pursuits. Resilient agriculture, for example, involves more than climate-resistant seeds; it requires instilling ahimsa (non-harm) and land-use restraint (Kumar, 2017). Renewable energy projects aim for megawatt goals but also prioritize people-centered governance that respects community rights and ecological limits (Atteridge & Shrivastava, 2019). By integrating these philosophical principles into modern policies, India can foster a concept of sustainability that is not only technologically sound but also culturally rooted and ethically compelling.

Toward a Culturally Rooted Sustainability Model

The sustainability discourse worldwide has been predominantly technocratic in orientation, based on Western science and policy paradigms. These paradigms have certainly promoted renewable technologies, regulation, and conservation programs, but their limitations are increasingly visible in places like India. In spite of lofty goals for afforestation, renewable energy, and biodiversity conservation, environmental degradation persists, indicative of the gap between policy aspirations and cultural context. India's distinctive philosophical heritage and Indigenous knowledge traditions offer a chance to overcome this gap by integrating ethics, spirituality, and relational worldviews into environmental governance (Guha, 2012; Londhe, 2016; Chaturvedi & Dangwal, 2024). A culturally situated sustainability model with Indian philosophy furnishing the ethical foundation, contemporary policy offering the structural

instruments, and epistemic pluralism providing the coexistence of various knowledge systems is advocated in this section. Such a model places India in the position to contribute not just to national ecological resilience but also to planetary justice and decolonial sustainability.

Ancient Indian philosophy places ecological balance within a moral context. Principles like Rta (cosmic order), Dharma (duty), and Ahimsa (non-violence) highlight restraint, justice, and respect for life (Gupta, 2014; Chapple, 2002). These guidelines provide moral foundations for sustainability, perceiving nature as not an object of exploitation but as a relational partner in human flourishing. For instance, the Isha Upanishad teaches that the entire universe is of the divine and must be used with restraint, anticipating notions of intergenerational justice and ecological stewardship (Easwaran, 1987; Radhakrishnan, 1994).

Modern policies, on the other hand, offer the structural tools to implement sustainability. India's National Action Plan on Climate Change (NAPCC, 2008) articulates eight missions on energy efficiency, sustainable agriculture, and renewable energy. Likewise, the International Solar Alliance (ISA) shows India's contribution to international cooperative institutions on clean energy transitions (International Solar Alliance, 2023). However, such policies tend to be technocratic and focus on targets, measurements, and efficiency without infusing cultural ethics of restraint and relational responsibility. The meeting of philosophy and policy presents a path forward: philosophy provides the normative compass, and policy translates these values into institutions, funding, and enforcement.

To bridge policy and philosophy, India needs to adopt epistemic pluralism the acknowledgment of multiple knowledge systems as legitimate and coequal. Western science tends to compartmentalize environmental issues into climate models, biodiversity indexes, or carbon budgets. Conversely, Indian and Indigenous philosophies view ecological living in a comprehensive way, integrating ethics, spirituality, and ritual into environmental life (Renugadevi, 2012; Londhe, 2016). River worship, seed offerings, and sacred groves are not mere cultural artifacts but serve as adaptive strategies of ecology that promote biodiversity conservation, soil renewal, and water governance (Pathak & Pandey, 2023).

For example, Meghalaya's sacred groves are hotspots of biodiversity regulated by Indigenous customary law. These are not only cultural but efficient ecological institutions that maintain genetic diversity and control relations between humans and nature (Khumbongmayum et al., 2005). Likewise, community rituals of Goa and Gujarat linked to mangroves have traditionally protected ecosystems from overexploitation (Kerkar, 2022; Sharma, 2019). Identifying these practices as ecological governance mechanisms and not symbolic traditions reshapes sustainability as a collaborative project of knowledge systems and not as a top-down imposition of science upon culture. McGregor (2021) and Simpson (2004) warn us that sustainability is more just and resilient when Indigenous knowledge is not assimilated into Western systems but can stand as a coequal epistemology.

Existing Indian environmental policy demonstrates moments of harmony with its intellectual heritage. Namami Gange pulls from cultural sacredness of rivers combined with addressing restoration and pollution (Renugadevi, 2012). Renewable energy policy harmonizes with the Vedic vision of tapping cosmic powers ethically (Sen, 1961; Gupta, 2014). ISA is an expression

of the philosophy of Vasudhaiva Kutumbakam "the world is one family" that situates the earth as a common household needing cooperative care.

However, these convergences tend to be superficial. They call upon cultural motifs while persisting in overconsumption, fossil fuel dependency, and industrial growth. For example, even as India is the world leader in solar power deployment, it also continues to be one of the biggest consumers of coal, defying the ethos of restraint and nature harmony (IEA, 2022). This paradox highlights the necessity of structural reforms beyond symbolism to integrate ecological ethics into policy planning and practice. A culturally grounded model has to break down hierarchies of expertise, reconstitute Indigenous agency, and organize governance in accordance with justice and interdependence (Smith, 1999; McGregor, 2004).

Indigenous ecological knowledge (IEK) is the key to making a culturally grounded sustainability model function. In India, communities have evolved practices that reflect resilience and sustainability. Sacred groves, water harvesting systems, rotation farming, and ritualized stewardship are examples of ecological governance informed by relational ethics. Bishnoi communities in Rajasthan, informed by non-violence and ecological responsibility, conserved trees and wildlife centuries before contemporary conservation policies (Guha, 2012). Likewise, the Chipko movement, driven by Gandhian Ahimsa, organized local people to defend forests from deforestation through situated ecological praxis (Shiva, 1988).

These practices show that ecological wisdom is not mere philosophy but practical governance based on ethics. When brought into formal institutions using participatory methods like Joint Forest Management or community monitoring of climate, they enhance ecological resilience and social justice (Berkes, 2012; Whyte, 2013). This integration does not idealize tradition but appreciates the pragmatic and adaptive power of Indigenous epistemologies in meeting the uncertainties of climate change.

The Anthropocene underscores the failure of technocratic and industrial-based models of sustainability, which tend to reproduce international inequalities. India, through recourse to its philosophical traditions and Indigenous practices, can build towards a decolonial model of planetary justice. Ideas like Dharma and Rta express ecological responsibility not in terms of economic calculation but as a moral obligation to all beings and future generations (Easwaran, 1987; Radhakrishnan, 1994). This brings India's traditions in alignment with other world Indigenous philosophies like Pachamama in Andean cosmology and Mother Earth paradigms in North America and allows for a pluralist conversation for planetary ethics (Dobson, 2003; Light & Rolston, 2003).

By emulating epistemic pluralism and culturally embedded sustainability, India can present a counter to neoliberal paradigms that value growth over justice. Its strength is not merely technological innovation in solar energy or reforestation but progress toward an ethical vision in which sustainability cannot be disjoined from justice, modesty, and respect for life (Haraway, 2016; Verlie, 2017). This vision redirects global sustainability discussion toward relational, multispecies justice, against colonial knowledge and governance hierarchies.

Conclusion

The persistence of ecological crises in India, despite decades of targeted interventions, underscores the profound limitations of purely technocratic approaches to conservation and climate governance. Policy frameworks that prioritize afforestation numbers, renewable energy outputs, or carbon sequestration metrics remain valuable but ultimately partial. They do not consider the more profound ethical, cultural, and relational aspects of sustainability, and in so doing risk excluding communities, effacing Indigenous epistemologies, and sustaining cycles of ecological harm (Dubash, 2013; Atteridge & Shrivastava, 2019). As the research in this paper has demonstrated, technocratic-led models of governance replicate colonial pyramids of expertise, elevating abstractions over lived experience. Unless these paradigms are reimagined, they will go on to treat symptoms and not causes of ecological vulnerability.

Against this background, Indian philosophical traditions and Indigenous practices provide lasting resources for reconsidering sustainability. Far from being symbolic or archaic, they express high-level ecological ethics that continue to be acutely relevant in the Anthropocene. The Vedic concept of Rta places ecological balance in the larger context of cosmic balance, which reminds us that chaos caused to natural cycles by excess human behavior destabilizes society and the environment (Sen, 1961; Sharma, 2000). Dharma, in its ecological aspect, locates ecological care as a moral responsibility and as justice to present and future entities (Gupta, 2014). The Ahimsa ethic, enunciated in Jainism, Buddhism, and subsequently in Gandhian philosophy, widens the domain of non-violence to include species and ecosystems, promoting restraint and minimizing harm (Chapple, 2002; Easwaran, 2007). In the same vein, the Upanishadic emphasis on moderation and simplicity condemns unbridled consumption and demands sufficiency, not excess, as the foundation of prosperity (Radhakrishnan, 1994; Easwaran, 1987). Together, these traditions move the discourse of sustainability from a managerial ethic of command to an ethos of care, restraint, and interdependence.

Notably, these philosophical avenues take on living embodiment through Indigenous and community-based ecological work around India. Meghalaya's sacred groves, rituals associated with Goa and Gujarat's mangrove gods, and Rajasthan and Uttarakhand's Bishnoi and Chipko cultures show that religious and cultural morality tends to act as systems of governance (Khumbongmayum et al., 2005; Guha, 2012; Shiva, 1988; Kerkar, 2022). Taboos, rituals, and seasonal prohibitions intrinsic within these cultures act as adaptation strategies, preserving biodiversity, managing resource use, and maintaining resilience. They show that ecological wisdom is not limited to theoretical philosophical writings but is kept alive and embodied through life in the community. These practices make clear that sustainability is an everyday ethic and not a bureaucratic mandate, placing ecological resilience in spiritual awe and cultural obligation (Mistry & Berardi, 2016; Whyte, 2013).

Weaving these threads together, this research argues India needs a culturally embedded sustainability model that combines philosophy, Indigenous wisdom, and contemporary policy. Philosophy gives us the moral foundations principles of responsibility, self-restraint, and respect for nature; Indigenous customs put these principles into context-specific, adaptive modes of governance; and policy gives us the instrumental means to scale them up (McGregor, 2004; Smith, 1999). The challenge is to transcend the present tokenistic appeal to cultural tropes e.g., calling upon "Mother Ganga" while at the same time allowing industrial effluents

to infusing these ethics into governance design and implementation in a material way. To do this involves undoing the hierarchies that exclude Indigenous knowledge keepers, decentering rituals and practices to the status of coequal epistemologies, and making epistemic pluralism institutionalized as the basis of environmental governance (McGregor, 2021; Simpson, 2004).

Such a coming together would not only increase India's ecological resilience but also place it in a position to add a unique voice to global discussions around sustainability. Amid technocratic-dominated international climate forums dominated by targets and market mechanisms, India is able to chart a decolonial path to sustainability prioritizing justice, humility, and relationality. By borrowing from Dharma, Rta, Ahimsa, and the Upanishadic ethic of the middle path, India can promote a different paradigm wherein sustainability cannot be separated from ethics, wherein resilience is not just culturally based, and wherein justice includes human and nonhuman communities alike (Haraway, 2016; Verlie, 2017). This vision harmonizes with other world Indigenous philosophies from Andean Pachamama to North American Mother Earth structures providing the basis for a truly pluralist planetary ethics (Dobson, 2003; Light & Rolston, 2003).

Finally, the disappointments of technocratic strategies show us that sustainability cannot be boiled down to strategic technologies and numeric measures. Rather, it must be reoriented as an ethical and cultural endeavor. Indian philosophical schools and Indigenous ecological praxis collectively offer rich, long-tested methods for such reframing. Incorporating them into governance is not a form of cultural nostalgia but a requirement for the development of resilient, equitable, and just models of sustainability. By so doing, India not only ensures its environmental future but also supports the worldwide effort toward planetary justice proving that sustainability paths are strongest when rooted in cultural knowledge and ethical obligation.

References

1. Atteridge, A., & Shrivastava, M. K. (2019). India's national action plan on climate change: A critical policy analysis. Climate Policy, 19(4), 485–500.
2. Berkes, F. (2012). Sacred ecology (3rd ed.). Routledge.
3. Berkes, F., Colding, J., & Folke, C. (2000). Rediscovery of traditional ecological knowledge as adaptive management. Ecological Applications, 10(5), 1251–1262.
4. Casimirri, G. (2003). Problems with integrating traditional ecological knowledge into contemporary resource management. Forest Policy and Economics, 5(3), 245–250.
5. Chapple, C. K. (2002). Hinduism and ecology: The intersection of earth, sky, and water. Harvard University Press.
6. Chisholm Hatfield, S., et al. (2018). Indigenizing climate change science. Nature Climate Change, 8(7), 558–559.
7. Cruikshank, J. (2005). Do glaciers listen? Local knowledge, colonial encounters, and social imagination. UBC Press.
8. Datta, R., et al. (2022). Rituals, resilience, and ecological justice: Community practices in mangrove conservation. Marine Policy, 137, 104942.
9. Dobson, A. (2003). Citizenship and the environment. Oxford University Press.
10. Dubash, N. K. (2013). The rise of climate change policymaking in India. WIREs Climate Change, 4(3), 191–201.

11. Easwaran, E. (1987). The Upanishads. Nilgiri Press.

12. Easwaran, E. (2007). The Bhagavad Gita. Nilgiri Press.

13. Gadgil, M., Berkes, F., & Folke, C. (1993). Indigenous knowledge for biodiversity conservation. Ambio, 22(2/3), 151–156.

14. Grimm, N. B., et al. (2021). Global change and local realities: Integrating traditional ecological knowledge in ecosystem resilience. Ecology and Society, 26(2), 15.

15. Guha, R. (2012). The unquiet woods: Ecological change and peasant resistance in the Himalaya (2nd ed.). Oxford University Press.

16. Gupta, A. (2014). Ecology and development in the Third World. Routledge.

17. Haraway, D. (2016). Staying with the trouble: Making kin in the Chthulucene. Duke University Press.

18. Harrington, L. M. B. (2006). The role of traditional ecological knowledge in adaptation to climate change. Mitigation and Adaptation Strategies for Global Change, 11(5–6), 843–864.

19. Huntington, H. P. (2000). Using traditional ecological knowledge in science: Methods and applications. Ecological Applications, 10(5), 1270–1274.

20. Johnson, D. E., et al. (2021). Traditional ecological knowledge and climate adaptation. Frontiers in Climate, 3, 650617.

21. Kerkar, N. (2022). Mangrove rituals and sacred landscapes in Goa. Journal of Coastal Conservation, 26(3), 241–254.

22. Khumbongmayum, A. D., Khan, M. L., & Tripathi, R. S. (2005). Sacred groves of Manipur: Ideal centres for biodiversity conservation. Biodiversity & Conservation, 14(6), 1541–1582.

23. Light, A., & Rolston, H. (2003). Environmental ethics: An anthology. Wiley-Blackwell.

24. Londhe, B. R. (2013). Eco-philosophy of the Upanishads. Journal of Dharma, 38(2), 143–162.

25. Maldonado, J. K., et al. (2017). The role of Indigenous knowledge in climate change adaptation. Climatic Change, 140(2), 247–258.

26. McGregor, D. (2004). Coming full circle: Indigenous knowledge, environment, and our future. American Indian Quarterly, 28(3/4), 385–410.

27. McGregor, D. (2021). Honoring our ancestors: Indigenous governance and epistemic pluralism. Environment and Planning E: Nature and Space, 4(1), 3–24.

28. Mistry, J., & Berardi, A. (2016). Bridging Indigenous and scientific knowledge. Science, 352(6291), 1274–1275.

29. Mondal, S., & Das, S. (2022). Customary fishing practices and mangrove resilience. Asian Journal of Conservation Biology, 11(1), 43–55.

30. Mukherjee, A. (2021). Bonbibi: Forest goddess and folk conservation in the Sundarbans. South Asian Folklore Studies, 13(1), 55–70.

31. Prasad, R., & Singh, A. (2024). Community-led mangrove regeneration in Gujarat. Journal of Environmental Management, 342, 118179.

32. Radhakrishnan, S. (1994). The Principal Upanishads. HarperCollins. (Original work published 1923).

33. Ramanathan, A. L., & Nagarajan, R. (2022). Mangrove restoration in Pichavaram: A socio-ecological study. Journal of Coastal Zone Management, 25(1), 112–128.

34. Renugadevi, K. (2012). Ecological insights in Indian philosophy. Journal of Human Values, 18(1), 23–34.

35. Sen, S. (1961). Studies in the Upanishads. University of Calcutta Press.

36. Sharma, A. (2000). Classical Hindu thought: An introduction. Oxford University Press.

37. Sharma, P. (2019). Mangrove regeneration and pastoralist practices in Gujarat. Ecological Indicators, 101, 763–771.

38. Shiva, V. (1988). Staying alive: Women, ecology, and development. Zed Books.

39. Simpson, L. (2004). Anticolonial strategies for the recovery and maintenance of Indigenous knowledge. American Indian Quarterly, 28(3/4), 373–384.

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

41. Verlie, B. (2017). Caring for climate change: Learning to live with climate crisis. Environmental Education Research, 23(5), 624–640.

42. Whyte, K. (2013). On the role of traditional ecological knowledge as a collaborative concept: A philosophical study. Ecological Processes, 2(7), 1–12.

43. Wildcat, D. (2009). Red alert!: Saving the planet with Indigenous knowledge. Fulcrum.