


Reciprocity with the Earth: Leveraging India's Traditional Ecological Knowledge for Planetary Well-Being

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**Reciprocity with the Earth: Leveraging India's Traditional Ecological Knowledge for Planetary Well-Being**

**Prof. (Dr.) Anamika Kaushiva<sup>1</sup>**

**Abstract**

*The health and well-being of individuals, communities, the environment, and the planet are multidimensional indicators of a life well lived. It encompasses both human well-being and environmental well-being. It is a state in which people and ecosystems thrive in an equitable balance of resources within their local natural environments. Well-being promotes planetary health and sustainable development. The Earth is facing the negative externalities of industrialisation – loss of biodiversity, pollution and waste, global warming, and climate change. This has endangered both human and planetary well-being. An insight into the history of religious, cultural, and indigenous communities across the globe demonstrates that they recognised the social contract between individuals and the environment and have honoured it. They acknowledged the reciprocity and interconnectedness between nature and society. These indigenous communities thrived within their ecological surroundings, guided by their informal livelihood practices and 'traditional ecological knowledge'. India's traditional knowledge is a treasure trove of practices for biodiversity conservation, climate resilience, and the sustainable management of finite natural resources. It is evident across a wide range of practices, such as agroforestry, water conservation, and sacred groves. This paper explores this TEK, which must be leveraged to achieve planetary well-being. Drawing on historical, cultural, and regional contexts, the research paper analyses the multifaceted Indian TEK practices for sustainable living that should be incorporated into contemporary environmental governance. The paper discusses the documentation and preservation of indigenous knowledge, fostering education and capacity-building, and advocates for inclusive policy frameworks to support a sustainable future and long-term ecological well-being.*

**Keywords:** Planetary Well-Being, Indigenous Communities, Traditional Ecological Knowledge

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<sup>1</sup> Professor, Department of Economics, Sahu Ram Swaroop Mahila Mahavidyalaya, Bareilly. Uttar Pradesh 243005

## Introduction

Climate change, loss of biodiversity, and pollution and waste are the three elements of a triple planetary crisis that is threatening the Earth [UNEP, 2024]. Pollution is altering the global climate patterns and harming ecosystems. The damaged ecosystems are losing their capacity to absorb emissions, filter natural water resources, and maintain the climate cycles. Planetary transformation has enormous implications for human health [Butler C. D., 2016]. The continuous and viscous cycle of the crisis has endangered both human and planetary well-being.

The term ‘well-being’ is a construct that usually refers to human beings, ignoring the environment or ecology. However, the climate crisis and the need for ‘sustainable’ development have made the concept of environmental well-being or planetary health increasingly relevant. An ‘unwell’ environment has been degraded or is impoverished [Neller, A. H., et al. 2009]. Air pollution, contaminated water resources, deforestation, biodiversity loss, and resource depletion are indicators of an environment compromised in the pursuit of development. The world has witnessed the paradox of progress [Peñasco, C. et al. 2025], and today is suffering from the negative externalities of growth. Nature has intrinsic value: ecosystems and species have worth independent of their utility to humans, and they deserve protection for ethical and ecological reasons. Human well-being is “a state of complete physical, mental, and social well-being and not merely the absence of disease and infirmity” [WHO, 2019]. Human beings need clean air, an adequate and safe water supply, health and nutrition, shelter, and a sustainable global ecosystem to survive and flourish. Health and well-being apply not only to the body, mind, and spirit of individuals but also to the communities, the environment, and the planet.

*“Planetary well-being is a state where the integrity of the Earth system and ecosystem processes remains unimpaired to a degree that species and populations can persist into the future and organisms have the opportunity to achieve well-being.”* [JYU. Wisdom community, 2021]. Sustainable development and planetary well-being are interlinked. The exploitation of natural resources to improve the standard of living, promote growth, and enhance human well-being at a ‘sustainable’ pace is possible only when today's development does not compromise the needs of future generations [Brundtland, G., 1987].

The 17 United Nations Sustainable Development Goals, adopted in 2015, aim to end poverty and to ensure that by 2030, all people enjoy peace and prosperity [UN, 2015]. They recognise that development must strike a balance between economic, social, and environmental sustainability. The complex relationship between the natural environment and well-being is evident in the fact that all SDGs and targets have an ecological dimension (SDGs 2, 6, and 7), while SDGs 13, 14, and 15 directly address climate change and the protection of life on land and water. Environmental well-being is thus an issue of ecological and social justice [Julian A. et al., 2002].

Religious, cultural, and indigenous communities across the globe demonstrate that they recognised the social contract between individuals and their surrounding environment and honoured it. They believed in the importance of acknowledging the reciprocity and interconnectedness between nature and society. These indigenous communities continue to thrive today within their ecological surroundings, guided by their informal livelihood practices, cultural traditions, and traditional ecological knowledge systems (TEK). The TEK is a treasure of practices of sustainable resource management, biodiversity conservation, and climate resilience.

This research paper outlines the concepts of environmental well-being and TEK, and their roles in sustainability. It traces India's traditional ecological practices to understand how India's indigenous communities have conceptualised nature, ecology, and well-being in their daily practices and culture. India's TEK has been analysed to understand how it can leverage its TEK to advance modern environmental practice for environmental well-being and sustainable development. The paper discusses the need to preserve India's TEK, the challenges in doing so, and the government's policy and institutional support for integrating TEK into mainstream ecological policies.

The research questions raised are:

- What is TEK and its multifaceted contribution to environmental sustainability?
- What are the Indian TEK practices of preserving biodiversity in rural and tribal areas, such as water harvesting systems, sacred groves, agroforestry, and sustainable agriculture?
- What are the challenges of preserving India's TEK?
- What policy and institutional support measures are being adopted to integrate TEK into sustainable development policies?

### **Methodology:**

The paper explores Indian TEK and its role in environmental well-being through a descriptive, exploratory analysis. Research papers and studies, particularly those focusing on Indian indigenous communities, have been reviewed to map traditional ecological practices and study how they promote environmental well-being. This search adopts a review approach, encompassing available research published up to 2025, and is restricted to open-access, peer-reviewed journal articles. Section 1 introduces the theme, Section 2 briefly reviews the literature, and Section 3 delves into the meaning and importance of TEK and environmental well-being. Section 4 attempts to trace the historical roots of India's ecological wisdom. Section 5 discusses the challenges of leveraging TEK for planetary well-being, while Section 6 outlines the measures adopted in India to address them.

### **Review of Literature**

Julian D. et al. [2025] define environmental well-being as 'a state where humans and nonhumans thrive within equitable resource use and local environment' and emphasise the need to integrate environmental well-being with local governance for sustainability.

The article by Parajuli and Das [2013] examines the importance of TEK for long-term environmental conservation. The research highlights the symbiotic relationship between indigenous communities and their environment, grounded in their profound understanding of natural resources.

The systematic literature review of the impacts of TEK on the livelihoods and health of indigenous peoples, presented by Mohd S. J. et al. [2023], highlights the unique cultural and social characteristics tied to their ancestral lands and natural resources. They conclude that TEK can promote well-being, but it faces threats from urbanisation and a lack of appreciation.

Puttahariyappa, H. et al. [2016] discuss the TEK among the Soliga and Lingayat communities in the MM Hills region of South India, particularly in the context of food, medicine, culture, and ethnic practices. Their study documents India's wild edible, medicinal,

and culturally significant plants. They have identified some primary drivers that have caused a decline in the TEK in the region: modernisation, policy interventions that restrict their rights and do not give value to their TEK, decline of native plant species due to the rise in invasive species of plants, and finally, migration and changes in occupations amongst youth. They suggest a conceptual framework to strengthen TEK that emphasises inclusive policies.

Singh, R. et al. [2020] surveyed five villages in Upper Spiti, India, to analyse the TEK of pastoral and agro-pastoral communities related to livestock and resource management, demonstrating how these practices are crucial for maintaining environmental well-being.

The TEK of North East India related to forestry, fisheries, agriculture, wild food, dye plants, crafts, and healthcare has been documented by Tynsong, H. et al. [2020] as a vast treasure of ecological practices that are on the verge of being lost due to a lack of recognition and documentation. Their paper highlights both the potential and the vulnerability of TEK in India.

Das, K.S. et al. [2024] explore the TEK of indigenous communities in Haryana, Andhra Pradesh, and Tamil Nadu, such as the use of paddy straw as manure, vermicomposting, and traditional cisterns for agricultural waste management. They argue that this TEK of in-situ waste management can offer sustainable solutions to the waste management challenge and help in combating the climate change crisis. They advocate for a balanced policy approach that integrates traditional and modern agricultural practices for sustainability.

Kumar, A. et al. [2021] examine the role of traditional ethnobotanical knowledge in achieving poverty alleviation, health, and climate action goals, and emphasise the need to recognise ethnobotanical knowledge and indigenous communities for sustainable development. Their paper proposes an integrated approach to harmonise traditional knowledge to address issues such as food security and biodiversity conservation, thereby promoting overall well-being.

Paul, S.K. et al. [2025] explore the role of Indian Indigenous Knowledge Systems in promoting sustainable environmental practices, including sacred groves, shifting cultivation, traditional water management, and ethnomedicine. Their study concludes that Indian TEK can foster environmental sustainability, resilience, and cultural preservation, and it is essential to integrate it into modern policies and practices for environmental well-being.

Focusing on climate-resilient agricultural practices in India, such as green manuring, vermicomposting, traditional irrigation systems, and ethnoveterinary practices, Barman, Bikram et al. [2024] argue that TEK can enhance resource use efficiency, biodiversity conservation, and climate resilience in agriculture.

Waghmode, Ahilya V. et al. [2025] have reviewed Indian TEK in the context of biodiversity conservation, ecosystem resilience, and sustainable resource management, with a specific focus on climate change hazard mitigation.

Singh, Y. et al., [2016] have presented a detailed study on various national initiatives and frameworks in India, aimed at integrating TEK into conservation efforts such as AYUSH, National Medicinal Plants Board, Biodiversity Act of 2002, People's Biodiversity Registers, Traditional Knowledge Digital Library, and All India Coordinated Research Project on Ethnobiology.

## **Environmental Well-being**

The term ‘well-being’ is a multidimensional indicator of a life well-lived. It encompasses basic human needs, physical and material well-being, social well-being, mental well-being, and environmental well-being. It is a state in which humans and nonhumans (individuals, communities, ecosystems) thrive in an equitable balance of resources and uses within their local built and natural environments.

Environmental well-being depends on planetary health. Planetary health is “*a vision for a planet that nourishes and sustains the diversity of life with which we coexist and on which we depend*” and “*a philosophy for living [that] emphasises people, not diseases, and equity, not the creation of unjust societies*” [Horton, R. et al., 2014].

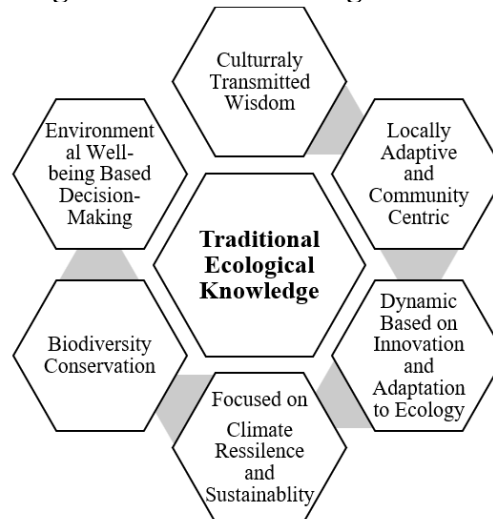
The United Nations Agenda 2030 acknowledges that the economic, social, and environmental dimensions of sustainability overlap and are interconnected. They must be targeted simultaneously for health and well-being. All SDGs and targets have an ecological dimension directly or indirectly.

An insight into the history of Indigenous communities reveals that they have an understanding of the complex relationship between ecology and well-being.

## **Traditional Ecological Knowledge**

Traditional ecological knowledge is “... *the accumulation of knowledge, practice and belief about relationships between living beings in a specific ecosystem that is acquired by Indigenous Peoples over hundreds or thousands of years through direct contact with the environment, handed down through generations, and used for life-sustaining ways.*” [National Park Service, US]. Rituals, religious practices, agricultural techniques, and environmental conservation methods are intertwined in the traditional ecological framework of local communities. Community-driven systems, such as farming systems, community-managed forests, and water conservation techniques, are integral to the knowledge of any indigenous community. The Indigenous People have a “deep understanding of the relationships between people, plants, animals, natural phenomena, landscapes, and timing of events for activities such as hunting, fishing, trapping, agriculture, and forestry,” [Whitaker, B., May 2025]. Their TEK encompasses “... know-how, skills, and practices that are developed, sustained, and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity” [WIPO]. This knowledge is adapted to the region's ecology and local biodiversity of flora and fauna, and is passed down through generations. TEK, or Traditional Ecological Knowledge, has played a crucial role in promoting long-term ecological stability and resilience across all indigenous communities worldwide.

**Fig.1. Traditional Ecological Knowledge**



The deep interconnectedness of indigenous communities with the land and its ecology is evident in their agricultural practices, diets, and lifestyles, which are closely tied to the variety of native fungi, plants, and animal species, as well as the local climate. The interdependence is ingrained in food consumption habits, agricultural practices, land and water resource management, cultural practices, and ceremonial practices within Indigenous communities. This unique relationship has preserved their cultural, physical, emotional, psychological, and spiritual well-being across generations. They acknowledge that well-being depends on understanding the reciprocity between humans and nature, as well as respect and responsibility for wildlife, the land, and natural resources.

TEK has contributed to long-term ecological stability and resilience in local communities in many aspects

- Sacred Ecology and Spirituality;
- Rituals, religious practices, and ecological conservation;
- Community-driven conservation systems and agricultural systems;
- Plant-based knowledge and emphasis on local biodiversity preservation;
- Climate change adaptation strategies;
- The non-anthropocentric view;
- The ethical and moral dimensions of nature conservation and sustainable livelihoods.

### **Indian Traditional Ecological Knowledge**

The Indian TEK is a rich repository of practices that demonstrate a holistic approach to planetary well-being, integrating biodiversity, ecological resource management, ethics, and spirituality to ensure environmental sustainability. The TEK can be traced in Vedic and post-Vedic texts, as well as in Vastu Shastra, Ayurveda, and religious traditions that honour the environment and respect the five elements of nature: Earth, Water, Wind, Space, and Fire. India's TEK developed a foundational approach to ecological sustainability through a holistic, culturally embedded framework grounded in deep respect for nature and its interconnectedness with human well-being. All the religious scriptures of ancient Indian literature, including the Vedas, Upanishads, the Ramayana, the Mahabharata, and the Bhagavad Gita, regard nature as both sacred and divine. Ritual and devotional resources that honour the natural environment abound in the Hindu tradition. [Narayanam, V. 2001].

In Vedic thought, the fundamental, universal principle of natural order and balance that governs the universe is the eternal and sacred law *Rta* (ऋत). It governs all living beings and matter in the universe, allowing them to exist in an orderly manner, provides an ethical framework for well-being by emphasising the inherent interconnectedness of all life, and calls for ensuring that human actions sustain this cosmic balance [Boddupalli, A., & Boddupalli, R.S., 2023].

The Vedic philosophy reveres the Earth as a ‘mother’ and honours its fecundity, variety, and nourishing capability. The ‘*Pr̥thvī Sūkta*’ (Hymn to Earth), (Atharva Veda 12.1), one of the earliest and most comprehensive hymns to Earth, articulates a proto-ecological worldview that integrates cosmology, agriculture, social order, and ethical responsibility [Vijayasimha, N., 2025]. The shlok, “*Pr̥thivīm mātaram śivam, hridayam yatra tishṭhati*” (*Atharvaveda 12.1.3; The Earth, our progenitor, is benevolent and magnanimous, and our emotions dwell within her*) emphasises Earth's fertility and sustaining capacity and calls for harmonious coexistence with nature. Similarly, “*Ma himsīt sarvabhūtāni; māśīrvadabhiṣecanaḥ*”, *Atharvaveda 3.30.8.* (Do not harm any living creature; treat them with compassion and care) reflects a profound ecological awareness, respect for all life forms, and promotes minimal consumption, which is the foundation of contemporary sustainability concepts [Srivastava, M., 2024]. Traditional practices in forest management and conservation of ecological biodiversity, as well as in agriculture, soil and water management, and Ayurveda, are based on the above philosophy.

The Vedic practices also revere the bountiful earth as ‘sacred.’ The tribal communities in various regions of India conserve forests in their vicinity as sacred, believing that the ‘deity’ of the village resides in them and provides food, fuel, water, and herbs for daily life, as well as protects the village from natural calamities, thereby ensuring their well-being. Thus, they have unique cultural and religious practices that conserve the flora and fauna of their sacred grove. These practices reflect the diverse facets of human-nature relationships that have contributed to the ecological sustainability of indigenous communities. Practices such as crop rotation, organic farming, the use of cow dung manure in agriculture, step wells, tanks, and the ‘bamboo drip’ system for water management, as well as terrace farming for soil conservation, all aim at achieving sustainability and environmental well-being. A brief outline of selected TEK practices is presented in Table 1.

1.	Traditional Ecological Knowledge	Traditional Practices	Environmental Well-being
2.	<i>Rta</i> (Cosmic Order)	Establishing intricate harmony and balance of the universe through <i>satya</i> (truth), <i>yajña</i> (sacrifice), and <i>dharma</i> (law).	A beautiful, orderly life through the power of the eternal and sacred law, <i>ṛta</i> , sustains the cosmic balance and promotes well-being. [Khan M.L. et al., 2007]
3.	The Prithvi Sukta Atharvaveda 12.1.12	“ <i>Mātā bhūmiḥ putroham pr̥thivyāḥ, parjanyaḥ pitā sa u naḥ pipartu.</i> ”	Living in harmony with nature, promoting conservation and sustainable consumption

		Earth is my mother, and I am her son. May the rain-bearing heavens be kind.	
4.	<b>Protection of forests</b>	Sacred Groves	North-East India - 166 sacred groves in Manipur, <i>Dikhos</i> by the Dimasa community, Assam, 56 holy groves. [Devi, A. et al., 2005; Bhattacharjee, S., 2024.] Conservation practices prohibit activities like deforestation and hunting, for example, in the Sindhudurg District of Maharashtra in the Western Ghats. [Patwardhan, A. et al., 2021]
5.	<b>Biodiversity Conservation</b>	Mankirdia tribe  Shola Grasslands - Irulas and Kurumbas, shepherds and honey collectors  Mangroves	Live in transient settlements called tanda in the forests of Mayurbhanj district in Odisha, utilising a special indigenous architectural technique to build waterproof houses, as well as making ropes, nets, and baskets from Siali fibre. [Sahoo, M., 2023]  In Nilgiris – The TEK of rotational grazing practices to prevent overgrazing and promote biodiversity. [Cordero, R.L. et al. 2018]  Forest resources for livelihood-fisheries, a variety of flora and fauna. They serve as an invaluable coastal ecosystem for safeguarding both human well-being and ecological integrity. [Mugilan S, et al., 2024]
6.	<b>Sustainable Agriculture</b>	Terrace Farming  Vegetative Barriers  Jhum cultivation  Apatani Traditional Paddy-cum-Aquaculture	Terraces along the slope contour are used to avoid waterlogging and bind the soil. (The Himalayan Regions) Shrubs and grasses are used as hedges along the land's contour to control runoff. (The Himalayan Regions) The cut-and-burn or burn-and-plant method of shift cultivation in Garo Hills, Meghalaya, worshipping holy soil, water, air, fire, and sky by Bodos in Meghalaya. [Pathak, N., Brahma, R. 2025] Paddy-cum-Aquaculture by the Apatani tribe living in the Lower

			Subansiri district of Arunachal Pradesh. [Yani P., Sharma A. 2022].
7.	<b>Water management</b>	Traditional Rainwater Harvesting System	Dholavira -Ancient tank irrigation structures in the Indus Valley Civilisation for rainwater collection. [Jain S et al. 2024] Johad -Small earthen check dams and step wells to capture and store rainwater in the arid region of Rajasthan. Baoli -Stepwells are wells in which the water is reached by descending a set of steps. Ghuls – Stone encampments for tapping water from streams on hill slopes in the Western Himalayan region. Zabo -impounding water run-off in ponds on the slopes of the North-eastern region. [Bhattacharya, S., 2015]
8.	<b>Ayurveda</b>	Forest Biodiversity and Medicinal Plants	Medicinal plants, minerals, and animal-based products for the coordination of Pancha Mahabhoota (five elements of the universe -Air, Water, Space, Earth, and Fire) with the three elemental humours of the human body, Vata dosha, Pitta dosha, and Kapha dosha, and the <i>Saptadhatu</i> s to achieve a healthy state of living. [Jaiswal, Y. S., Williams, L. L., 2016]
9.	Architecture	Jharokhas Bonga Wattle and daub houses	Building fronts for visibility and ventilation Circular house structure in Rajasthan Bamboo and mud houses in central India. [Mathur A. et al., 2024]

Source: Compiled from various sources.

### Challenges in Leveraging Traditional Ecological Knowledge for Planetary Well-being

The leveraging of TEK for planetary well-being is a challenging task because it involves not only understanding and integrating it with modern scientific techniques, but also addressing the socio-political exclusion of Indigenous communities. The main challenges are:

- Rapid erosion of traditional ecological knowledge due to migration to urban areas, modernisation of agricultural practices, and disruption of traditional livelihoods like gathering, pastoralism, and hunting.

- Lack of integration due to factors like bias towards modern scientific techniques and misinterpretations of their knowledge.
- Cultural and linguistic barriers leading to difficulties in the process of documentation and sharing of TEK.
- Fragmentation of knowledge across regions complicates the adoption of measures to integrate it with mainstream conservation efforts.
- Lack of formal legal and institutional recognition of the TEK
- Political and social marginalisation hampers their ability to influence decision-making processes. Their voices are left unheard in debates on environmental policies, land rights, or conservation strategies.
- Intellectual property and knowledge exploitation because of non-payment of fair compensation and ‘biopiracy’, i.e., use of TEK without consent or compensation.
- Conflict of TEK with modern conservation practices used in protected areas or wildlife sanctuaries.

**Policy and Institutional Support to integrate TEK into mainstream environmental policies.**

Well-being requires a whole-of-society approach involving action across all levels, stakeholders, and sectors [WHO, 2022]. Integrating TEK with modern knowledge data for planetary well-being requires legal recognition, financial mechanisms, institutional capacity building, and collaborative governance. [Belaïd, F. et al. 2024] Key strategies adopted in this direction can build resilience and create culturally relevant environmental policies for harnessing the full potential of TEK. The government of India has implemented numerous policy measures to preserve its cultural heritage and achieve the Sustainable Development Goals. The strategies aim at

- Documentation and preservation of TEK through the use of digital technology and archives;
- Empowering indigenous communities through education about both traditional and modern environmental management;
- Awareness creation about TEK by making it a part of the academic curricula;
- Development of research institutes to work on projects related to TEK;
- Policy reforms and support to frameworks that recognise the role of TEK in promoting well-being;
- Strengthening the community rights of indigenous communities and increasing their participation in environmental decision-making;
- Engaging indigenous communities in participatory environmental governance;

To achieve the above objectives, the Indian government has developed a multi-faceted approach that combines legislative and legal frameworks, institutions, and educational policies and measures to preserve and promote TEK, as outlined in Table 2. [Singh, Yashaswi et al. 2016]

<b>Table 2. Initiatives for preserving Traditional Ecological Knowledge</b>	
<b>Policy /Programme/Institution</b>	<b>Objective/Strategy</b>
<b>A. Legislative and Policy Frameworks</b>	

1.	<b>National Medicinal Plants Board (NMPB), 2000</b>	39 projects on the cultivation of medicinal plants 86 projects on storage godowns Joint Forest Management Committees for the conservation of medicinal plants
2.	<b>Protection of Plant Varieties and Farmers' Rights (PPV&amp;FR) Act 2001</b>	Recognises farmers' contributions to conserving, improving, and making available plant genetic resources.
3.	<b>The Bio-Diversity (BD) Act, 2002</b>	Act to maintain and validate the People's Biodiversity Register (PBR) in consultation with the local population and document traditions, folklore, and ecological knowledge and practices.
4.	<b>Forest Rights Act 2006</b>	Protection of the rights of the Scheduled Tribes and other indigenous communities over their forest resources
5.	<b>AYUSH, 2014</b>	Programme to develop and propagate ancient and holistic systems of health and medicine - Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homoeopathy
6.	<b>National Intellectual Property Rights (IPR) Policy, 2016</b>	Provisions to protect traditional knowledge and the interests of its holders within the national IPR regime.
<b>B. Documentation and Institutional Initiatives</b>		
7.	<b>National Institute of Science Communication and Information Resources (NISCAIR) – The Wealth of India series</b>	All India Coordinated Research Project on Ethnobiology - An encyclopedia series to identify each plant and its distribution in the wild or cultivation in India
8.	<b>Botanical Survey of India and Zoological Survey of India</b>	Agencies for the survey and inventory of flora and fauna of the country.
9.	<b>The Traditional Knowledge Digital Library (TKDL)</b>	A digital database developed by the GoI for the preservation of TEK and the prevention of its misinterpretation by breaking language barriers and providing access to these knowledge systems in 5 international languages: English, German, French, Spanish, and Japanese.
10.	<b>NEP 2020</b>	Integration of TEK into the school curriculum to foster a better understanding and appreciation.
11.	<b>Environmental Education Centre (CPREEC)</b>	Conservation of Ecological Heritage and Sacred Sites of India and the restoration and preservation of sacred groves.
12.	<b>Environmental Information System (ENVIS)</b>	For raising awareness, building capacity, and improving livelihoods related to environmental issues among policymakers, scientists, and the public.

13.	<b>National Innovation Foundation (NIF), 2000</b>	An autonomous body under the Department of Science and Technology, NIF works to recognise, document, and scientifically validate grassroots innovations and traditional knowledge, helping to bridge the gap between conventional wisdom and modern science.
14.	<b>Indian Knowledge Systems (IKS) Cell</b>	An IKS cell, Ministry of Education, at AICTE, New Delhi, to focus on preserving and fostering indigenous traditional knowledge systems

Source: Compiled from various sources.

## Conclusion

A healthy planet nurtures healthy humans; it is essential to keep the health of the earth in focus for well-being and sustainability. The concept of well-being cannot be limited to an individual's health alone, given the reciprocal interdependence of human health and the health of the planet. Environmental changes to ecological life-support systems threaten the well-being of all. Traditional ecological knowledge helped indigenous communities coexist with nature without disturbing the ecosystem's balance. Their nature-based solutions were passed down through generations in religious rituals, myths, folklore, and socio-economic practices. India's traditional ecological knowledge system conceptualised ecology and environmental stewardship within its spiritual and cultural context, fostering a deep connection with the natural world. These traditional ecological practices must be effectively integrated into current environmental policies and frameworks. A new strategic approach is needed to harness TEK to achieve the SDGs and planetary well-being.

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