



Research Article

Sustainable Development Through the Lens of Indian Knowledge System: A Holistic Approach

 **Dr. Ranju Kumar Bharali**

Assistant Professor, Department of Economics, Cinnamara College, Jorhat, Assam, India

Corresponding Author: * Dr. Ranju Kumar Bharali 

DOI: <https://doi.org/10.5281/zenodo.21868664>

Abstract

Indian knowledge system (IKS) incorporates a rich heritage of wisdom and practices that have evolved over a thousand years. The Indian knowledge system (IKS) has profound applicability to sustainable development embedded in ancient wisdom. It offers a unique and holistic approach to understanding the interconnection of human and natural systems. The IKS places great emphasis on living in harmony with nature. This paper explores the potential of IKS in addressing modern sustainability challenges. This paper talks about the Indian Knowledge System and how it focuses on sustainable development so that we can serve the purpose of one earth, one family and one future. Traditional farming techniques can be integrated with modern approaches for sustainable agriculture and to preserve biodiversity. The traditional medical practices can be revived for a holistic healthcare system. The IKS also highlights the cultural and spiritual focus on living in harmony with nature.

Manuscript Information

- **ISSN No:** 2583-7397
- **Received:** 01-07-2026
- **Accepted:** 05-08-2026
- **Published:** 10-08-2026
- **IJCRM:** 5(4); 2026: 628-632
- **©2026, All Rights Reserved**
- **Plagiarism Checked:** Yes
- **Peer Review Process:** Yes

How to Cite this Article

Bharali R K. Sustainable Development Through the Lens of Indian Knowledge System: A Holistic Approach. Int J Contemp Res Multidiscip. 2026;5(4):628-632.

Access this Article Online



www.multiarticlesjournal.com

KEYWORDS: Indian Knowledge System, Sustainable Development, Holistic Approach, Sustainable Agriculture, Traditional Medicine.

1. INTRODUCTION

The Indian Knowledge System represents an incredibly rich and ancient collection of wisdom that spans many different areas like philosophy, science, art, and literature. This system has its roots in sacred texts like the Vedas and Upanishads, along with other ancient writings that offer a deep understanding of the nature of reality, human life, and the universe. This knowledge has had a huge impact on Indian culture and keeps inspiring people around the world with its enduring wisdom and holistic approach to life. Indian civilisation, being one of the oldest in the world, has made enormous contributions to indigenous knowledge that's gradually gaining worldwide recognition. This knowledge system brings together wisdom and practices that have grown in India over many thousands of years, touching on various areas including science, mathematics, astronomy, medicine, philosophy, education, cosmology, architecture, metalworking, visual and performing arts, and agriculture. (Subhashree Mishra, Atal Bihari Tripathy, P. Rashmita Patro, 2024).

The phrase 'Indian Knowledge System' refers to a collection of academic disciplines that have their roots and development on the Indian subcontinent, including philosophy, mathematics, astronomy, medicine, arts and ethics. The IKS has impacted numerous different cultures and geographical areas in addition to making a substantial contribution to the advancement of human civilisation (Dharmendra N. Dev, 2026). The IKS is the systematic transmission of knowledge from one generation to the next generation. The IKS comprises Jnan, Vgyan and Jeevan Darshan that have evolved out of experience, observation, experimentation and rigorous analysis (Pavan Madhavkar)

Bharatiya Jnan Parampara- (Indian Knowledge System) Comprises three words

- **Indian:** It refers to Akhanda Bharata, i.e., the undivided Indian subcontinent
- **Knowledge:** Knowledge refers to the unstated knowledge, and it lies in the wisdom of knowledge seekers.
- **System:** System means a well-organised methodology and classification scheme used to access a body of knowledge (Naresh Chandel, Kamlesh Kumar Prashar, 2024).

In the view of Kautilya, Education should aim at three outcomes

- **Vidya**-Creation of new Knowledge
- **Vivek** -Wisdom to use the right knowledge at the right time and place for the right purpose
- **Vichashaknata** – the skill set to get the proper results of knowledge in real life

The entire Indian Knowledge System has always focused on "how" rather than "what".

The ancient Indian education was prevalent in Gurukul, where there is Acharya (Guru) and Shishya

- The shishyas had to study the Vedas, Upanishads, and the Epics like Ramayana and Mahabharata

- The shishyas had to perform some duty with the study. They (students) had to serve the Guru and keep the Gurukul in clean condition

Sustainable Development

The World Commission on Environment and Development (WCED), established in 1983, released a report titled "Our common future" in 1987. The report became known as the "Brundtland Report" in honour of Gro Harlem Brundtland, the chairperson of the Commission. The Commission defined Sustainable Development as "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Thus, sustainable development is the process of addressing the needs of the current generation without endangering the capacity of future generations to address their own. It ensures long-term global well-being by combining social inclusivity, economic advancement, and environmental protection. The idea deals with important global problems such as eradicating poverty, fair allocation of resources and protecting natural ecosystems. The interconnectedness of ecological health and the economic system is emphasised by sustainable development (Patowari and Bhattacharjee, 2026)

Adoption of energy sources including wind and solar promotes energy security and lowers greenhouse gas emissions (United Nations, 2015). Organic farming and crop rotation are sustainable agricultural practices that promote food security and biodiversity conservation (Sharma, 2019). The two most important environmental conservation strategies for mitigating climate change and safeguarding ecosystems are water management and reforestation. Though the concept of sustainable development is a new concept, its idea was inherent in the Indian Knowledge System, and its goals can be achieved under the framework of IKS.

2. REVIEW OF LITERATURE

Traditional Indian knowledge systems provide a significant resource for attaining the Sustainable Development Goals in developing economies. Their comprehensive approach, focus on sustainability, and strong connection to local contexts resonate with the interrelated nature of the SDGs (Chatterjee, 2025). Ayurveda, one of the ancient holistic healing practices, highlights the balance between body, mind, and spirit. As a traditional Indian medical system, Ayurveda prioritises overall health and preventive care. Its emphasis on natural treatments, lifestyle changes, and tailored therapeutic strategies has demonstrated effectiveness in tackling various health issues (Mahajan, 2025).

The Indian Knowledge System provides a thorough and ethically driven framework for promoting sustainable development and building an inclusive nation. Its integrated perspective, ecological awareness, and focus on community-oriented practices offer valuable insights for tackling contemporary global issues. Strategies for sustainable development that incorporate indigenous knowledge are more likely to be robust, fair, and culturally relevant. (Shah, 2026).

Research on IKS and sustainable human development shows that education based on IKS nurtures ethical leadership, environmental sustainability, and inclusive progress by harmonising material advancement (Artha) with moral responsibilities (Dharma), emotional satisfaction (Kama), and spiritual freedom (Moksha). Ultimately, connecting IKS with the objectives of NEP 2020 presents a meaningful path toward achieving sustainable human development in India by fostering thoughtful and responsible global citizens.(Mandal, 2026).

The Indian Knowledge System offers enduring insights and practical solutions for sustainable development due to its comprehensive and holistic perspective. It emphasises sustainable consumption, collective governance, renewable energy, comprehensive healthcare, and environmental conservation, aligning seamlessly with the UN's Sustainable Development Goals. The insights derived from IKS remain a vital asset as the global community seeks sustainable development pathways, demonstrating that traditional knowledge can illuminate the path toward a sustainable future (Patowari and Bhattacharjee, 2026)

3. OBJECTIVE

The study is undertaken to analyse how sustainable development can be attained under the framework of the Indian Knowledge System, with emphasis on sustainable agriculture, forest conservation, traditional medicine and spiritual connection to nature so that we can serve the purpose of one earth, one family and one future.

4. METHODOLOGY

This study adopts a qualitative and analytical research design. It is based on textual analysis of classical Indian literature of the ancient and medieval periods and secondary scholarly literature. The study relies on the existing academic literature and philosophical texts. The methodology emphasises interpretive analysis to connect traditional Indian knowledge with contemporary development discourse.

Limitations of the Study

The present study is based entirely on secondary data collected from research articles, relevant books, ancient and medieval texts and other published sources. As such, the findings are dependent on the accuracy and completeness of these sources. The study does not include primary survey data or field investigations, which may limit a deeper understanding of the subject matter.

VasudhaivaKutumbakam

It is a philosophy that inculcates an understanding that the whole world is one family. It is a philosophy that tries to foster an understanding that the whole of humanity is one family. The original verse appears in Chapter 6 of Maha Upanishad and is also found in the Rig Veda. It was the motto of India's G20 Presidency.

The Indian knowledge systems for sustainable development

The Indian Knowledge System (IKS) offers a profound frame for sustainable development, embedded in centuries-old wisdom and practices.

Holistic and Ecological Approach

Indian traditional practices emphasise living in harmony with nature. Ancient textbooks like the Vedas, Upanishads, and Puranas promote the understanding that humans are an integral part of nature, and our survival depends on the health of our ecosystems. This perspective is reflected in sustainable agrarian practices, water conservation techniques and biodiversity protection.(Suthar, 2025)

IKS and Sustainable Agriculture

Agriculture is the backbone of Indian civilisation, and traditional Indian agricultural practices have made immense contributions to sustainable farming. One of the most significant contributions of IKS to sustainable agriculture is organic farming, which emphasises the use of natural fertilisers (like animal dung) and crop rotation and biodiversity. Ancient Indian texts such as the 'Vedas' and 'Krishi-Parashara' (an ancient, significant Sanskrit text on Indian agriculture, attributed to the sage Parashara) provide the methods of sustainable farming. These texts advocate for methods of maintaining soil fertility and soil health without harming the environment. Here is the foundational verse from 'Krishi Parasara' (Verse-6) that highlights the core philosophy of sustainable agriculture

कृषिधर्मपरंविद्धिकृषिलोकेपरायणम्।
कृषिनावर्धतेलोकःसर्वकृषौप्रतिष्ठितम्॥

Or

kr̥ṣiṁdharmamparamviddhikṛṣimlokeparāyaṇam |
kr̥ṣiṇāvardhatelokaḥsarvamkr̥ṣaupratisthitam ||

This verse means, "agriculture is the highest duty (dharma); agriculture is the ultimate refuge of the world. Through agriculture, the world flourishes, and upon agriculture rests everything." By framing agriculture as a moral obligation rather than purely an extractive commercial activity, Sage Parashara highlights the responsibility of farmers to act as stewards—not exploiters—of the earth. The line "sarvamkrishaupratishthitam" (upon agriculture rests everything) emphasises that human survival, economic systems, and ecological health are inextricably linked to how we care for the soil, water, and seeds.

Based on such traditional teachings, the use of vermiculture and organic waste as fertiliser and neem-based insecticides are traditions of Indian agriculture. Crop rotation and intercropping are important aspects of traditional Indian agriculture to maintain soil fertility. Diversity in farming is another critical aspect of traditional Indian agriculture, where foodgrains, vegetables and fruits were grown together to maintain the natural ecosystem. Farmers in many parts of India are reviving these traditional agricultural practices. The Sikkim Organic Mission, inspired by traditional practices, has made Sikkim the first fully organic state in India.

Traditional water management systems like stepwells, tanks, and rainwater harvesting ensured sustainable water use in arid regions. These water conservation techniques demonstrate an advanced understanding of hydrology and ecological balance in ancient India. (Sheikh, 2025)

IKS and Forest Conservation

The significance of trees and the importance of forest conservation were inherent in the Indian Knowledge System. Ancient Indian texts such as 'Vrikshayurveda' were the elaborate science of plant life, mainly dealing with various species of trees and their healthy growth and productivity. 'Vrikshayurveda', which literally means 'the Ayurveda of plant life', existed in ancient India as a special branch of knowledge dealing with procurement, preservation and treatment of seeds for plantation. It also deals with plant diseases and protection and laying of garden orchards. (Ramachanran, 1984).

The chapter 'Tarumahima' of the book 'Vrikshayurveda' states the significance of trees as follows.

দশকূপসমাবাপী, দশাবাপীসমোহদঃ।
দশহৃদসমোপুত্রো, দশপুত্রসমোদ্রুমঃ॥

Or

daśakūpasamāvāpī, daśāvāpīsamohradah |
daśahradasamoputro, daśaputrasamodrumah ||

This verse states that ten wells are equivalent to one pond, ten ponds to one lake, ten lakes to one son and ten sons to one tree. Such was the importance of trees in ancient India. It was believed that the Almighty lives with those who plant trees. (Vrikshayurveda for Farmers: Basic Concepts and Techniques, 2023)

Traditional Medicinal Systems

Ayurveda, Siddha, and Unani, the traditional Indian medicinal systems, emphasise preventative healthcare and holistic well-being. They concentrate on balancing the body's basics, promoting practices that ensure physical and environmental health.

Ayurveda, an ancient Indian system of medicine, promotes holistic health through natural remedies, dietary regulation, yoga, and lifestyle practices. Integrating Ayurvedic principles with modern healthcare systems can promote preventive healthcare and reduce the burden of diseases. Yoga, originating from India, emphasises mental and physical well-being through exercises, breathing techniques, and meditation. Promoting yoga can contribute to mental health resilience and overall well-being among the population. Traditional ecological knowledge promotes a harmonious relationship between humans and nature, which is crucial for long-term health and well-being. Practices like organic farming and forest conservation contribute to clean environments and sustainable health. (Sangita Pramanick, Jayanta Mete). During the COVID-19 pandemic, practices rooted in IKS, such as consuming spices like turmeric, cumin, and black pepper, and incorporating yoga and meditation, gained global attention for their role in boosting

immunity and mental health. The United Nations' declaration for the celebration of International Yoga Day on June 21 highlights the global relevance of these traditions. (Sheikh, 2025)

The National AYUSH Mission of the AYUSH Ministry of the Government of India have promoted Ayurveda-based interventions for lifestyle diseases, addressing healthcare gaps.

Spiritual Connection to Nature

Indian culture's spiritual component cultivates a profound reverence for the natural world. Natural habitats, rivers, mountains, and trees are frequently considered sacred in our classical texts, which helps in their conservation. The great medieval saint of Assam, Srimanta Sankardeva, in his epic work 'Kirtan Ghosa', mentioned that.

কুকুৰ্শৃগালগৰ্দভৰোআত্মাৰামা
জানিয়াসবাকেপৰিকৰিবাৰ্ণাম॥

Or

Kukuraśṛgālagardabharōātmārāma |
Jāniyāsabākoparikoribāṛṇāma ||

This verse means that in every creature like a dog, fox and donkey, the indwelling soul is God; knowing that God resides in all living beings, bow down to everyone with devotion. This famous verse from Mahapurush Srimanta Sankardeva's Kirtana Ghosa encapsulates the core Mahapurushiya philosophy: recognising the divine in every living creature.

সমস্তভূততব্যাপিআছোমইহৰি।
সবাকোমানিবাবিষ্ণু-বুদ্ধিকৰি॥

Or

Samastabhūtataavyāpīāchomaihari |
Sabākomānibāviṣṇu-buddhi kari ||

This verse means I, Hari (the Divine Lord), pervade all living beings. Therefore, honour and respect everyone, recognising the presence of Vishnu (the almighty) in all.

একবৃক্ষশতপুত্রসমান।

Or

eka vṛkṣaśataputrasamāna

This verse means A single tree is equal to a hundred sons/children. This proverb, popularised in Assamese eco-spiritual literature and traditional folk sayings reflecting Purāṇika environmental wisdom, emphasises the immense life-sustaining value of planting and preserving trees.

These classical medieval texts written by Mahapurusha Srimanta Sankardeva in the Brajvali language depict the spiritual connection to sustainability. These texts emphasised the significance of conservation and protection of wildlife, trees and all living creatures. Such conservation and protection are the most important goals of the modern concept of sustainability.

5. CONCLUSION

The Indian Knowledge System offers valuable insights for sustainable development through its eco-friendly practices and holistic viewpoint. Merging traditional wisdom with contemporary knowledge can create more efficient strategies for managing resources, improving human welfare, and achieving sustainable development goals. This vast reservoir of ancient wisdom, developed over countless generations, presents innovative yet culturally relevant solutions to pressing challenges in agriculture, health care, water resource management, and climate action. By aligning IKS with modern scientific progress and policy frameworks, India can formulate sustainable models that are both effective and inclusive. To maintain biodiversity and guarantee food security, traditional agricultural methods such as water-efficient crop systems and natural pest control can be harmonised with modern techniques. In a similar vein, the resurgence of traditional medicinal systems like Ayurveda and Siddha can offer comprehensive and affordable healthcare, particularly to underprivileged populations. Furthermore, the cultural and spiritual emphasis on living in harmony with nature, which is demonstrated by the preservation of sacred groves and biodiversity, closely aligns with the objectives of environmental sustainability and climate action.

Acknowledgement

The author gratefully acknowledges various researchers and publishers whose published reports, articles, and books were utilised in the preparation of this study. The author also acknowledges those who helped in understanding the ancient and medieval texts and literatures. The author also expresses sincere gratitude to colleagues and well-wishers for their valuable suggestions during the development of the manuscript.

Ethical Statement

This study is based exclusively on secondary data obtained from publicly available published research articles and other documentary sources. No human participants were involved, and no primary data were collected. Therefore, ethical approval from an institutional ethics committee was not required. The study adheres to the principles of academic integrity, proper citation, and responsible use of secondary data.

Conflict of Interest

The author declares that there is no conflict of interest regarding the publication of this manuscript. The author has no financial, professional, or personal relationships that could have influenced the research, analysis, or interpretation of the findings presented in this study.

REFERENCES

- Chatterjee N. Indian knowledge systems and achievement of sustainable development goals in the context of developing economies. In: Saha P, editor. *Role of Libraries in Unveiling Indian Knowledge Systems*. Kolkata: Universal Briefing; 2025.
- Dev DN. Holistic development through Indian knowledge system in the present context of India. In: *Integrating Indian Knowledge System with Modern Economy, Sustainable Development and Indigenous Practices*. Assam: Assam College Teachers Association; 2026.
- Mahajan Y. From ancient wisdom to modern innovation: Leveraging Indian knowledge systems for Atmanirbhar Bharat. *J Manag Res Anal*. 2025. doi: 10.18231/j.jmra.2024.037.
- Mandal S. Indian knowledge systems and sustainable human development: A value-based approach. *Int J Contemp Res Multidiscip*. 2026;5(2):141-146.
- Chandel N, Prashar KK. Indian knowledge system and NEP: A brief analysis. *J Emerg Technol Innov Res*. 2024;11(1):260-263.
- Patowari M, Bhattacharjee S. Indian knowledge system and sustainable development. In: *Integrating Indian Knowledge System with Modern Economy, Sustainable Development and Indigenous Practices*. Assam: Assam College Teachers Association; 2026.
- Ramachandran CK. Vrikshayurveda (arboreal medicine in ancient India). *Anc Sci Life*. 1984;4(2):110.
- Sharma PD. *Ecology and Environment*. New Delhi: Rastogi Publications; 2019.
- Pramanick S, Mete J. Impact of Indian knowledge systems on sustainable development goals. In: *Indian Knowledge System*. Pune: Kripa Dristi Publication.
- Sheikh MM. Indian knowledge system and sustainable development: Integrating ancient wisdom with modern sustainable development goals. *J Glob Resour*. 2025;11(1):62-67.
- Mishra S, Tripathy AB, Patro PR. Integrating traditional Indian knowledge system in Indian higher education in NEP 2020 perspectives. *Int J Curr Sci*. 2024;14(3):346-352.
- Suthar AR. Indian knowledge system and sustainable development. *The Academic*. 2025;3(7):169-175.
- National Medicinal Plants Board, Ministry of AYUSH, Government of India. *Vrikshayurveda for Farmers: Basic Concepts and Techniques*. New Delhi: National Medicinal Plants Board; 2023.
- Shah MM. Indian knowledge systems and sustainable development: Integrating indigenous wisdom into contemporary nation-building and global sustainability discourses. *Int J Nov Res Dev (IJNRD)*. 2026;11(1):30-34.

Creative Commons (CC) License

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution–Non-Commercial–No Derivatives 4.0 International (CC BY-NC-ND 4.0) license. This license permits sharing and redistribution of the article in any medium or format for non-commercial purposes only, provided that appropriate credit is given to the original author(s) and source. No modifications, adaptations, or derivative works are permitted under this license.

About the Corresponding Author



Dr. Ranju Kumar Bharali is an Assistant Professor in the Department of Economics at Cinnamara College, Jorhat, Assam, India. His academic interests include economics, sustainable development, public policy, and socio-economic research. He is actively engaged in teaching, research, and scholarly activities, contributing to the advancement of economic studies.