



INTEGRATING INDIAN KNOWLEDGE SYSTEMS WITH MODERN RESEARCH AND INNOVATION FOR SUSTAINABLE DEVELOPMENT AND VIKSIT BHARAT

* Sayali Suresh Dhondge, ** Neha Prakash Gawali, *** Ankita Dilip Kadlag
& **** Ranvirsing Ajitsing Pawar

Department of Bachelor of Business Administration, M. V. P. Samaj, K.R.T. Arts, B.H. Commerce and A.M. Science College Nashik, Maharashtra, India

Abstract:

Indian Knowledge Systems (IKS), rooted in ancient texts such as the Vedas, Upanishads, and Arthashastra, provide a holistic framework that emphasizes harmony between humans, nature, and economic activities. In the context of the vision of Viksit Bharat, which aspires to transform India into a developed and sustainable nation, the integration of traditional wisdom with modern research and innovation has become increasingly significant. This study explores how principles embedded in Indian Knowledge Systems—such as sustainability, ethical governance, resource optimization, and community well-being—can be effectively aligned with contemporary scientific research and technological innovation. It highlights the potential of IKS in promoting sustainable development across key sectors including agriculture, healthcare, education, and entrepreneurship. The research adopts a conceptual and analytical approach by examining existing literature, policy frameworks, and real-world applications where traditional knowledge has been successfully integrated with modern practices. The study also discusses the role of innovation and entrepreneurship in reviving and commercializing indigenous knowledge systems in a sustainable manner. Furthermore, the paper identifies key challenges such as lack of awareness, standardization issues, and the gap between traditional knowledge and modern institutional frameworks. It suggests strategic measures including policy support, interdisciplinary research, and educational reforms to bridge these gaps.

The findings indicate that integrating Indian Knowledge Systems with modern research and innovation can significantly contribute to achieving sustainable development goals and realizing the vision of Viksit Bharat. Such integration not only ensures environmental sustainability but also fosters inclusive growth, cultural preservation, and long-term economic resilience.

Keyword: Viksit Bharat, Indian Knowledge Systems (IKS), Sustainable Development, Research and Innovation.

Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial Use Provided the Original Author and Source Are Credited.

Introduction:

Indian Knowledge Systems (IKS) represent a rich repository of traditional wisdom developed over thousands of years in India. Rooted in classical texts such as the Vedas, Upanishads, and Arthashastra, these systems

encompass diverse fields including science, agriculture, medicine, governance, education, and philosophy. They emphasize a holistic approach to life, focusing on harmony between human beings, nature, and society [1]. In the present era, the concept of **sustainable development** has become central to global progress, aiming to balance economic growth, environmental protection, and social equity. At the same time, India envisions becoming a developed nation under the mission of *Viksit Bharat*. Achieving this vision requires innovative, inclusive, and sustainable strategies that are deeply rooted in the country's cultural and intellectual heritage [2]. Modern research and innovation have significantly contributed to technological advancement and economic growth. However, many contemporary development models often overlook ecological balance and ethical considerations. This is where Indian Knowledge Systems offer valuable insights. Principles such as *Dharma* (ethical duty), *Ahimsa* (non-violence), and respect for nature provide a strong foundation for sustainable practices [3]. Integrating IKS with modern research and innovation can lead to context-specific and sustainable solutions in various sectors. For instance, traditional agricultural practices promote biodiversity and soil health, while ancient healthcare systems emphasize preventive care and natural healing. Similarly, indigenous knowledge in water conservation, architecture, and community living can contribute to sustainable urban and rural development [4]. Furthermore, research and entrepreneurship play a crucial role in revitalizing and applying Indian Knowledge Systems in contemporary contexts. By combining traditional knowledge with modern technology, new opportunities for innovation, startups, and sustainable business models can be created. This integration not only supports economic growth but also preserves cultural heritage [5]. Despite its potential, the integration of IKS faces several challenges, including lack of awareness, limited documentation, and gaps between traditional knowledge and modern scientific validation [6]. Therefore, there is a need for systematic research, policy support, and educational reforms to bridge these gaps [7]. This study aims to explore how Indian Knowledge Systems can be effectively integrated with modern research and innovation to promote sustainable development and contribute to the realization of *Viksit Bharat* [8].

Objectives of the Study:

1. To understand the concept and significance of Indian Knowledge Systems (IKS).
2. To examine the role of IKS in promoting sustainable development.
3. To analyze the importance of research and innovation in integrating traditional knowledge with modern practices.
4. To explore opportunities for entrepreneurship based on Indian Knowledge Systems.
5. To identify challenges in the adoption and integration of IKS in modern systems.
6. To suggest strategies for utilizing IKS in achieving the vision of *Viksit Bharat*.

Methodology:

This study is based on a qualitative and conceptual research approach.

- a) Type of Research: Descriptive and analytical
- b) Data Source: Secondary data
- c) Method of Analysis: Comparative analysis of traditional and modern systems

d) Interpretation of concepts related to sustainability, innovation, and development

e) Scope of study: The study focuses on integrating Indian Knowledge Systems with modern research and innovation in the context of sustainable development and Viksit Bharat.

Result and Discussion:

The integration of Indian Knowledge Systems with modern research and innovation plays a crucial role in achieving the vision of Viksit Bharat @2047, ensuring not only economic development but also environmental sustainability, cultural preservation, and social well-being. The study also highlights that sectors such as agriculture, healthcare, education, and environmental management can benefit greatly from combining traditional wisdom with modern advancements. The effective implementation of IKS requires overcoming challenges such as limited documentation, lack of awareness, and the need for scientific validation.

Limitations:

- **Based only on secondary data**

The study is primarily based on secondary sources such as books, journals, reports, and online publications. No primary data (surveys or interviews) has been collected, which may limit firsthand insights.

- **Limited Empirical Validation:**

The concepts related to Indian Knowledge Systems (IKS) and their integration with modern innovation are largely theoretical in this study and lack extensive experimental or field-based validation.

- **Broad Scope of Topic:**

The topic covers multiple areas such as sustainability, innovation, entrepreneurship, and development. Due to this wide scope, some aspects may not be explored in full depth.

- **Availability of Documented Research:**

Although Indian Knowledge Systems are vast and ancient, proper documentation and scientific validation of all traditional practices are limited, which restricts detailed analysis.

- **Generalized Findings:**

The conclusions drawn are conceptual and may not be universally applicable to all sectors or regions without further specialized studies.

- **Evolving Nature of Research:**

The integration of IKS with modern research and innovation is still an emerging field, and new developments may change or expand current understanding in the future.

Conclusion:

Indian Knowledge Systems provide a strong and holistic foundation for achieving sustainable development and realizing the vision of Viksit Bharat. Their emphasis on harmony with nature, ethical practices, and community well-being makes them highly relevant in addressing contemporary global challenges such as environmental degradation, social inequality, and unsustainable economic growth. The integration of IKS with modern research and innovation can lead to the development of sustainable and inclusive solutions across various sectors. It enables the blending of traditional wisdom with scientific advancements, fostering innovation, entrepreneurship,

and cultural preservation. However, to fully utilize the potential of Indian Knowledge Systems, it is essential to overcome challenges such as lack of awareness, insufficient research, and gaps in implementation. Strengthening education systems, encouraging interdisciplinary research, and providing policy support are key steps in this direction. In synergy between Indian Knowledge Systems and modern innovation can play a transformative role in building a sustainable, self-reliant, and developed India. This integration not only contributes to economic growth but also ensures environmental sustainability and social harmony, thereby paving the way for a truly Viksit Bharat. The Viksit Bharat requires a balanced approach that combines traditional wisdom with modern technological progress. Indian Knowledge Systems provide a strong foundation for sustainable development, innovation, and entrepreneurship, ensuring that India grows not only economically but also ethically and environmentally.

Consent for Publication: Not applicable.

Availability of Data and Materials: The data and supportive information are available within the article.

Funding: None.

Conflict of Interest: The authors declare no conflict of interest, financial or otherwise.

References:

1. NITI Aayog (2025). *India's Path to Global Leadership: Strategic Imperatives for Viksit Bharat @2047*. Government of India, 8th April 2025.
2. Agarwal, Anil., & Narain, Sunita. (1997). Dying wisdom: Rise, fall and potential of India's traditional water harvesting systems. *Centre for Science and Environment*.
3. Mishra, A. (2025). The impact of Indian knowledge systems on sustainable development: Bridging ancient wisdom with modern goals. *International Journal of Innovative Education and Research Management*.
4. Yadav, A. (2024). Indian knowledge system as the foundation of Viksit Bharat. *Research Gate*. <https://www.researchgate.net/publication/394111203>.
5. Gautam, D., & Kumar, S. (2025). Bridging knowledge systems through higher education for sustainable development in Viksit Bharat 2047. *Asian International Journal of Multidisciplinary Research*.
6. Pandit, S. D. (2025). Reviving Indian knowledge systems: Bridging tradition with modernity. *Journal of Human Values*.
7. [7] Salvi, F., et al. (2025). Harmonizing heritage and innovation: IKS and Vision Viksit Bharat@2047. *Zenodo*. <https://doi.org/10.5281/zenodo.15533798>.
8. [8] Sharma, V. C., & Varma, A. (Eds.). (2025). Proceedings of the National Conference on Indian Knowledge Systems for Viksit Bharat 2047. *Springer*. <https://doi.org/10.1007/978-981-96-9759-5>.

Cite This Article:

Dhondge S.S., Gawali N.P., Kadlag A.D. & Pawar R.A. (2026). *Integrating Indian Knowledge Systems with Modern Research and Innovation for Sustainable Development and Viksit Bharat*. In **Educreator Research Journal: Vol. XIII (Issue III)**, pp. 54-57