Sagacity: A Multidisciplinary Research Journal ISSN: 2583-7540 July-Dec 2025, Vol.4, No.2.

Indian Knowledge System: A Conceptual Framework

Dr. Ritu Dhawan
Assistant Professor & Head
P.G. Department of Commerce and Management
Khalsa College for Women
Amritsar

Abstract

Indian Knowledge Systems (IKS) represent a vast, living, and dynamic repository of knowledge developed over millennia across diverse domains such as philosophy, science, mathematics, medicine, ecology, linguistics, arts, governance, and social organization. With the establishment of the Indian Knowledge Systems (IKS) Division under the Ministry of Education (MoE) in October 2020, a renewed national effort has been initiated to move beyond mere recognition of India's intellectual heritage towards its systematic rejuvenation, mainstreaming, and integration within contemporary education and research ecosystems. Anchored in the principles of Paramparā (tradition), Dṛṣṭi (indigenous perspective), and Laukika-prayojana (practical applicability), the IKS Division envisions cultivating a living tradition that bridges traditional and modern knowledge systems. This paper presents a conceptual exploration of Indian Knowledge Systems in light of the key priciples of IKS, examining their contemporary relevance and applicability, and transformative potential in education, research, and societal development. The paper argues that IKS is not a relic of the past but a fertile ground for generating future-oriented, contextually rooted, and globally relevant knowledge.

Keywords: Indian Knowledge Systems, IKS Division, Paramparā, Dṛṣṭi, Laukika-prayojana, Indigenous Knowledge, Interdisciplinary Research

Introduction

Knowledge systems reflect the worldview, values, and lived experiences of civilizations. India, one of the world's oldest continuous civilizations, has produced a rich and diverse body of knowledge known today as Indian Knowledge Systems

(IKS). These systems evolved through rigorous observation, debate, experimentation, and transmission across generations, forming an unbroken intellectual tradition.

For a long time, colonial epistemologies marginalized indigenous knowledge systems, leading to a disconnect between traditional Indian knowledge and modern education. The establishment of the **IKS Division by the Ministry of Education in October 2020** marks a decisive shift towards reclaiming India's intellectual sovereignty. The Division's mandate extends beyond historical appreciation to active knowledge creation, dissemination, and application for contemporary societal challenges.

This paper conceptualizes Indian Knowledge Systems within this renewed national framework and explores their relevance in today's interdisciplinary and transdisciplinary academic landscape.

Understanding Indian Knowledge Systems (IKS)

The Indian Knowledge System (IKS) constitutes a vast and enduring intellectual heritage that has evolved through systematic development and intergenerational transmission for more than five millennia. Far beyond a collection of traditional practices, IKS represents a well-structured framework for knowledge generation, validation, and application. Its distinctive strength lies in its holistic and integrated approach to understanding reality, encompassing multiple dimensions of life and learning.

The National Education Policy (NEP) 2020 has explicitly acknowledged the significance of integrating the Indian Knowledge System into contemporary educational curricula, highlighting its potential to promote multidisciplinary learning while preserving cultural heritage. The relevance of IKS extends beyond its historical roots; it offers valuable insights for addressing present-day challenges related to sustainability, health, and holistic human development.

In this context, Albert Einstein, one of the most influential physicists of the twentieth century, aptly observed, *"We owe a lot to the ancient Indians, teaching us how to count. Without which most modern scientific discoveries would have been impossible."*

This recognition underscores the foundational contributions of Indian knowledge traditions to the evolution of global intellectual and scientific thought.

Specialized Knowledge Domains and Contemporary Relevance of the Indian Knowledge System (IKS)

Specialized Knowledge Domains of IKS

Agricultural Sciences

The Indian Knowledge System reflects advanced agricultural wisdom rooted in sustainability and ecological balance. Ancient texts emphasize soil health, crop rotation, seasonal farming, and water management. Archaeological evidence from the Indus Valley Civilization highlights developed irrigation systems, use of ploughs and wheeled carts, and cultivation of crops such as wheat, rice, barley, and millets. These practices promoted biodiversity conservation, long-term soil fertility, and sustainable food systems.

Architectural Sciences

Vāstu Śāstra, the traditional Indian science of architecture, provides principles for designing structures in harmony with natural forces. It emphasizes balance among the five elements—earth, water, fire, air, and space—along with proper orientation, spatial planning, and integration of nature to ensure health, harmony, and energy efficiency.

Metallurgical Sciences

Ancient Indian metallurgy demonstrates sophisticated knowledge of metal extraction and alloy production. Techniques developed during the Indus Valley period include copper and bronze metallurgy. The invention of wootz steel stands as a globally recognized technological achievement known for its strength and durability.

Musical Sciences

Indian classical music is based on a highly systematic theoretical framework involving rāga (melody) and tāla (rhythm). The division of the octave into 22 śrutis and 12 svaras reflects mathematical precision and a deep understanding of sound, aesthetics, and emotional expression.

Contemporary Relevance of the Indian Knowledge System

Educational Integration

The National Education Policy (NEP) 2020 mandates the inclusion of IKS in educational curricula to promote multidisciplinary learning, critical thinking, innovation, and cultural preservation. Institutions such as IIT Kanpur and IIT Madras have established IKS centers, while the UGC and Ministry of Education are actively supporting faculty training and curriculum development.

Healthcare Applications

Traditional Indian systems such as Yoga, Ayurveda, and meditation have gained global recognition for promoting holistic health. Their preventive and lifestyle-based approaches are particularly relevant in managing stress, mental health issues, and lifestyle-related diseases.

Sustainability and Environmental Solutions

IKS emphasizes sustainable living and ecological harmony, reflected in the concept of Vasudhaiva Kutumbakam (the world is one family). Traditional agricultural and resource-management practices offer environmentally friendly alternatives to chemical-intensive methods and support biodiversity conservation.

Global Recognition

Indian indigenous knowledge systems are increasingly acknowledged worldwide for their contributions to food security, environmental conservation, and holistic well-being. Global institutions and researchers are collaborating with Indian scholars to apply IKS principles to contemporary global challenges.

Key Principles of the Indian Knowledge System (IKS)

The Indian Knowledge System (IKS) is grounded in a set of core principles that reflect a holistic, integrated, and value-oriented approach to knowledge. These principles guide the creation, validation, and application of knowledge across diverse domains such as philosophy, science, health, education, and environmental management.

Holistic and Integrated Worldview

IKS views reality as an interconnected whole rather than as isolated components. It emphasizes the unity of mind, body, nature, and consciousness, promoting a comprehensive understanding of life and the universe.

Interconnectedness of All Life

The principle of *Vasudhaiva Kutumbakam*—the world as one family—highlights the ethical and ecological interconnectedness of all beings. This principle fosters respect for nature, social harmony, and responsible living.

Sustainability and Harmony with Nature

IKS advocates living in balance with natural systems. Traditional practices in agriculture, architecture, and resource management emphasize conservation, regeneration, and long-term sustainability rather than short-term exploitation.

Experiential and Practice-Based Knowledge

Knowledge in IKS is not merely theoretical but experiential (*anubhava*). Learning occurs through observation, practice, discipline, and self-reflection, as seen in Yoga, meditation, and traditional crafts.

Multiple Means of Knowledge (Pramāṇas)

IKS recognizes diverse sources of valid knowledge, including perception (*pratyakṣa*), inference (*anumāna*), testimony (*śabda*), and comparison (*upamāna*). This pluralistic epistemology encourages critical inquiry and balanced reasoning.

Ethical and Value-Oriented Framework

Ethics and values such as *dharma* (righteous duty), *satya* (truth), and *ahimsa* (non-violence) are central to IKS. Knowledge is considered meaningful only when it contributes to individual well-being and social welfare.

Spiritual and Self-Realization Focus

A distinctive feature of IKS is its emphasis on inner development and self-realization. The pursuit of knowledge aims not only at material progress but also at liberation (*mokṣa*) and inner harmony.

Adaptability and Continuity

IKS is a dynamic and evolving tradition that has adapted to changing social, cultural, and historical contexts while maintaining continuity with its foundational principles.

Together, these principles highlight the relevance of the Indian Knowledge System in addressing contemporary challenges related to education, sustainability, ethics, and holistic human development.

Transformative Potential of the Indian Knowledge System (IKS) in Education, Research, and Societal Development

The Indian Knowledge System (IKS) possesses significant transformative potential in reshaping education, research, and societal development by offering a holistic, ethical, and sustainable framework of knowledge. Rooted in centuries of intellectual inquiry and experiential learning, IKS complements modern knowledge systems and provides context-sensitive solutions to contemporary challenges.

Transformative Role in Education

In education, IKS promotes a learner-centric and multidisciplinary approach that integrates intellectual, ethical, and experiential dimensions of learning. By incorporating concepts such as critical inquiry (pramāṇas), value-based education (dharma), and experiential practices like Yoga and meditation, IKS fosters critical thinking, creativity, emotional intelligence, and moral responsibility. The integration of IKS under the National Education Policy (NEP) 2020 enables students to develop cultural rootedness alongside global competence, thereby nurturing well-rounded individuals capable of lifelong learning.

Transformative Role in Research and Knowledge Creation

IKS offers alternative epistemological frameworks that broaden the scope of research beyond purely empirical or reductionist approaches. Its emphasis on observation, inference, textual analysis, and experiential validation encourages interdisciplinary and transdisciplinary research. Areas such as sustainable agriculture, traditional medicine, architecture, metallurgy, linguistics, and environmental studies can benefit from integrating IKS with modern scientific methods. This convergence promotes

innovation grounded in sustainability, ethics, and contextual relevance, while also revitalizing indigenous research traditions.

Transformative Role in Societal Development

At the societal level, IKS contributes to inclusive and sustainable development by emphasizing harmony, social responsibility, and ecological balance. Principles such as Vasudhaiva Kutumbakam, ahimsa, and sarvodaya guide community-oriented development models that prioritize collective well-being over individual gain. Traditional knowledge systems in healthcare, resource management, and conflict resolution offer low-cost, culturally appropriate solutions to pressing social challenges, including public health, environmental degradation, and social inequality.

Global Relevance and Future Impact

In an increasingly interconnected world, the Indian Knowledge System offers globally relevant insights into sustainable living, ethical governance, and holistic human development. Its integration into education and research has the potential to position India as a global knowledge leader while contributing meaningfully to international discourse on sustainability, well-being, and inclusive growth.

Conclusion

The Indian Knowledge System (IKS) represents a profound and enduring intellectual tradition that embodies India's civilizational wisdom, holistic worldview, and ethical foundations. Far from being merely a repository of ancient practices, IKS constitutes a dynamic and structured framework for knowledge creation, validation, and application that remains highly relevant in the contemporary world. Its evolution through rigorous observation, debate, and experiential learning underscores its scientific temper and adaptability across generations.

The renewed institutional focus on IKS, particularly through the establishment of the IKS Division under the Ministry of Education and the integration of IKS within the National Education Policy (NEP) 2020, marks a significant step towards reclaiming India's intellectual heritage and embedding it meaningfully within modern education and research. The diverse specialized knowledge domains—ranging from agriculture, architecture, metallurgy, and music to healthcare and sustainability—demonstrate the

breadth and depth of IKS and its capacity to address present-day challenges in a sustainable and culturally rooted manner.

The core principles of IKS, including holistic integration, ethical responsibility, sustainability, experiential learning, and spiritual self-realization, offer a value-based alternative to purely materialistic and fragmented knowledge systems. Moreover, its transformative potential in education, research, and societal development lies in its ability to foster multidisciplinary inquiry, inclusive growth, ecological balance, and human well-being.

In an era marked by environmental crises, health challenges, and ethical dilemmas, the Indian Knowledge System provides globally relevant insights for sustainable living, responsible innovation, and harmonious coexistence. Integrating IKS with contemporary scientific and academic frameworks not only strengthens India's role as a global knowledge leader but also contributes meaningfully to the pursuit of a more balanced, humane, and sustainable future for all.

References

Acharya, P. K. (1998). *An encyclopaedia of Hindu architecture*. Oxford University Press.

Basham, A. L. (2004). *The wonder that was India* (3rd ed.). Picador.

Chakrabarti, A. (2018). *Classical Indian philosophy of mind: The Nyāya dualist tradition*. Oxford University Press.

Dharampal. (2000). *Indian science and technology in the eighteenth century*. Other India Press.

Iyengar, B. K. S. (2002). *Light on yoga*. HarperCollins.

Ministry of Education, Government of India. (2020). *National Education Policy 2020*. Government of India.

Ministry of Education, Government of India. (2020). *Indian Knowledge Systems (IKS): Vision, framework and implementation*. IKS Division, Government of India.

Nene, Y. L. (2005). *Agriculture in ancient India*. Asian Agri-History Foundation.

Sharma, C. D. (2012). *A critical survey of Indian philosophy* (6th ed.). Motilal Banarsidass.

Singh, A. K., & Mishra, S. (2021). Integrating Indian knowledge systems in higher education: Opportunities and challenges. *University News, 59*(48), 6–12.

University Grants Commission. (2022). Guidelines for incorporating Indian Knowledge Systems in higher education curricula. UGC, New Delhi.

Zimmer, H. (2013). *Philosophies of India*. Princeton University Press.