An Overview on Indian Knowledge System

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ABSTRACT

The Indian knowledge system (IKS) seeks to actively support, and advance research aimed at addressing contemporary societal challenges. Rooted in the rich tradition of Vedic literature, including the Vedas and the Upanishads, IKS is poised for integration into digital learning platforms. To enhance the quality of classroom instruction on IKS courses, tailored modules for educator training and orientation are under consideration. Specialized teacher training centers will be established, focusing on specific topics within the Indian Knowledge Systems. Innovation within IKS will be fostered through initiatives like Grand National Challenges, National Competitions, and Hackathons, with incentives provided for groundbreaking ideas. Collaboration with global institutions, facilitated by entities like the Indian Council of Historical Research (ICHR), will enable the conduct of India-centric research. To catalyze the founding of Indian knowledge System in numerous Higher Education Institutions (HEIs), initial seed financing will be provided. Outreach efforts targeting the public will employ diverse mechanisms to spread and promote genuine IKS. Public involvement will be encouraged via Jan Bhagidari programs, akin to citizen science initiatives. Youth will find job prospects through skill-based programs, and IKS will actively foster tradition knowledge by leveraging technological keys to platform Indian inheritance globally. The overarching goal is to capture 10% of world tourism, thereby generating substantial employment opportunities for the youth.

Keywords- Indian knowledge system, IKS, employment opportunities, NEP 2020, Vedic literature, Upanishad, and Education

I. INTRODUCTION

The Indian Knowledge System (IKS) is a systematic and structured approach to transmitting knowledge from one generation to the next. It distinguishes itself as a process of knowledge transfer rather than merely a tradition. Rooted in the Vedic literature, the Upanishads, Vedas, and Up Veddas, the IKS serves as a foundational principle recognized by the National Education Policy (NEP-2020). The core components of the Indian Knowledge Systems—Jnan (knowledge), Vignan (science), and Jeevan Darshan (philosophy of life)—have evolved through a dynamic interplay of knowledge, observation, investigation, and rigorous analysis. This custom of validation and practical application has left a profound impact on diverse fields such as education, administration, law, justice, manufacturing, and commerce.

The influence of IKS extends to conventional and other languages of Bharat (India), disseminated through various mediums, including documented, oral, and arty traditions. This comprehensive wisdom system encompasses the wisdom of ancient India, encompassing both its achievements and challenges. It provides a foundation for understanding India's future aspirations, touching upon crucial aspects such as education, health, environment, and all facets of life. In essence, the Indian Knowledge System serves as a reservoir of wisdom that continues to shape the intellectual, cultural, and practical dimensions of Indian society.

II.   SIGNIFICANCE OF INDIAN KNOWLEDGE SYSTEM IN THE PRESENT SCENARIO

Indian civilization has long held knowledge in high regard, evident through its vast repository of intellectual texts—arguably the world's largest collection of manuscripts—and a well-documented heritage spanning texts, thinkers, and schools across diverse subjects. Lord Krishna, in the Bhagavad Gita (4.33, 37–38), imparts the wisdom that knowledge is the paramount means of self-purification and liberation. This commitment to knowledge has persisted like the unbroken flow of the Ganges River, extending from the Vedas and Upanishads to the insights of figures such as Sri Aurobindo.

The foundation of Indian knowledge systems lies in the rich tapestry of Indian culture, philosophy, and spirituality, evolving over millennia. Ayurveda, Yoga, Vedanta, and Vedic sciences, integral components of these systems, remain relevant in the contemporary world.

1. **Well-being:** Ayurveda, a traditional Indian medical system, advocates a holistic approach to well-being. In a world where health-related challenges are increasing, Ayurveda promotes natural healing methods, personalized remedies, and a focus on preventive health measures.
2. **Stress Management:** Yoga, originating in ancient India, provides a comprehensive approach to internal, physical, and spiritual well-being. Incorporating practices like asanas (postures), pranayama (breath control), and meditation, Yoga has proven effective in reducing stress, enhancing internal health, and bolstering overall well-being—especially pertinent in today's fast-paced and stressful world.
3. **Sustainable Living:** Indian knowledge systems stress the interconnectedness of all beings, promoting sustainable living practices, encapsulated in the concept of "Vasudhaiva Kutumbakam" (the world is one family). Given the pressing environmental concerns and the need for natural resource conservation, these principles gain increasing significance.
4. **Spiritual Growth:** Systems like Vedanta offer insights into the nature of reality, mindfulness, and spiritual well-being. Grounded in ancient Vedas, they provide guidance on emotional intelligence, mindfulness, and the pursuit of meaning and purpose—crucial in a modern world where many seek deeper fulfillment.
5. **Innovation:** Indian knowledge systems historically contributed to scientific advancements in mathematics, astronomy, and metallurgy. Concepts like zero, the decimal system, and trigonometry, originating from ancient Indian thought, continue to play a pivotal role in contemporary science and

technology, highlighting the enduring influence of Indian knowledge in fostering innovation.

In conclusion, the Indian knowledge system remains highly relevant today, offering practical solutions for contemporary challenges such as stress management and sustainability. Its vast wealth of knowledge has the potential to uplift individuals, communities, and humanity.

The objectives of the Indian Knowledge System (IKS) and the functions of its division are outlined with a vision and mission that underscore interdisciplinary research, preservation, dissemination, and application of Indian knowledge. Here is a breakdown of the key elements:

Objectives of IKS:
1. **Support Research:** IKS aims to support and facilitate further research to address contemporary societal issues in various fields, including health, Psychology, Environment, and Sustainable development.
2. **Integration of Ancient Knowledge:** The primary objective is to draw from the past and integrate Indian knowledge systems to solve contemporary and emerging problems, utilizing the uninterrupted tradition of knowledge transfer and the unique perspective of "Bhāratiyu Drishti" (Indian viewpoint).

IKS Cell:
1. **Innovative Division:** The IKS operates as an innovative cell under the Ministry of Education (MoE) at AICTE, New Delhi.
2. **Interdisciplinary Focus:** It is established to promote interdisciplinary research across various domains, including Arts and Literature, Agriculture, Basic Sciences, Engineering & Technology, Architecture, Management, Economics, etc.

Functions of IKS Division:
1. **Facilitation and Coordination:** Facilitate and coordinate IKS-based interdisciplinary work conducted by various institutions in India and abroad, including universities, research laboratories, and ministries.
2. **Research Group Establishment:** Establish, guide, and monitor subject-wise interdisciplinary research groups, bringing together researchers from different institutes and disciplines.
3. **Popularization Schemes:** Create and promote popularization schemes for IKS, facilitate project funding, and develop mechanisms for research and policy recommendations.
4. **Vision:**
*   Promote interdisciplinary research on all aspects of Indian Knowledge Systems.
*   Preserve and disseminate Indian Knowledge Systems for further research and societal applications.

Mission:

1. **Database Creation:** Create a comprehensive database of individuals and organizations contributing to ancient and contemporary Indian knowledge across various domains.
2. **Archival Portal:** Establish a portal for archival and dynamic dissemination of Indian knowledge, adopting a wiki-style approach.
3. **Research Promotion:** Promote and enable further research to address contemporary societal challenges in areas such as Holistic health, Psychology, Neuroscience, Nature, Environment, and Sustainable development.
4. **Scholar Identification:** Identify scholars and institutions contributing to IKS, categorize major areas, and compile reports of their work for regular publications.
5. **Research Fellowships:** Create research fellowships for scholars in both traditional and modern disciplines, fostering collaboration between Sanskrit Professors and Science/Technology Professors.
6. **Financial Assistance:** Provide financial assistance for research activities, workshops, seminars, and publications related to IKS. Suggest measures to integrate IKS in modern textbooks.
7. **IKS Cells Establishment:** Establish IKS cells in general universities, Sanskrit universities, and other institutions under the Ministry of Education (MoE).
8. **Collaboration and Coordination:** Initiate collaboration and coordination between institutions, ministries, independent scholars, NGOs, and private institutions working in the field of IKS to promote interdisciplinary research.
9. **PPP Model Exploration:** Explore and adopt a Public-Private Partnership (PPP) model where feasible, such as creating a wiki-type platform and a comprehensive IKS portal.
10. **Expert Groups and Committees:** Constitute expert groups and committees to plan, execute, and oversee the objectives of the IKS division.
11. **Flexibility in Action:** Undertake any step, work, project, or activity deemed necessary to further the cause of IKS.

This comprehensive framework aims to integrate traditional Indian knowledge with modern research, fostering collaboration, and ensuring the preservation and dissemination of India's rich intellectual heritage.

The integration of the Indian Knowledge System (IKS) into the education sector is a key initiative aimed at introducing diverse and holistic learning experiences for students. Here are some key points regarding the incorporation of IKS in education:

Curricular Integration:

1. **Scientific Approach:** IKS will be introduced in a scientific manner into both school and higher education curricula.
2. **Comprehensive Coverage:** The IKS curriculum will encompass tribal knowledge, indigenous and traditional learning methods, covering a wide range of subjects such as ma philosophy, architecture, engineering, linguistics, literature, sports, games, governance, etc.
3. **Courses:** Courses dedicated to relevant topics will be introduced.
4. **Elective Course:** An elective course on Indian Knowledge Systems will be made available to students in secondary schools, providing them with the option to explore these rich traditions.

Experiential Learning:

1. **First-hand Imbibing:** The policy emphasizes the need for learners to imbibe the knowledge of India's rich diversity first-hand. Activities such as student tours to various regions of the country will be encouraged.
2. **Ek Bharat Shrestha Bharat:** Under the 'Ek Bharat Shrestha Bharat' initiative, 100 tourist destinations will be identified, where educational institutions will send students to study about the history, literature, and knowledge of these areas.

Establishment of IKS Centers:

1. **Research and Education Hubs:** Thirty-two IKS Centers have been established to catalyze innovative research, education, and spreading of IKS.
2. **Interdisciplinary Research Facilities:** Ongoing projects include 75 high-end interdisciplinary research facilities focusing on ancient metallurgy, ancient town planning, water resource management, and rasayanshastra.
3. **Internships and Faculty Development:** Around 5,200 internships on IKS have been offered, and 50 faculty development programs, workshops, and national/international conferences have been conducted.
4. **Curriculum Adoption:** More than 8,000 Higher Education Institutions (HEIs) have started adopting IKS in their curriculum, and efforts have been made to digitize 1.5 lakhs of books.

Vision 2047:

1. **Roadmap Development:** The IKS Division has carried collectively commanding intellectuals and specialists to progress Vision 2047, outlining a roadmap for launching a thriving Bhāratīya Gnana Paramparā (Indian Knowledge Tradition).
2. **Promotion of Research:** By drawing from the vast knowledge of the Indian tradition, the aim is to foster and support added research to refer contemporary encounters.

Educational Impact:

1. **Inspiration and Heritage Preservation:** Inclusion of IKS courses in mainstream education is expected to inspire students while preserving the rich heritage of traditional learning systems.
2. **Cultural Understanding:** Exposure to both traditional and contemporary concepts enable

students to gain a better understanding of their culture.

3. **Intellectual Development:** Students can experience an expansion in their intellectual development through exposure to a diverse range of subjects within the IKS framework.

4. **Confidence Enhancement:** The incorporation of IKS concepts aims to enhance students' confidence by providing a holistic and culturally rooted education.

This comprehensive approach to integrating IKS into education reflects an effort to provide students with a well-rounded and culturally enriching learning experience.

III. GUIDELINES -MINISTRY & REGULATORY BODIES

The Ministry and Regulatory Bodies have issued comprehensive guidelines to implement the goals outlined in the National Education Policy (NEP) 2020. These guidelines cover various aspects such as curriculum integration, faculty training, collaboration with artists and artisans, introduction of courses based on Indian heritage and culture, mandatory credit components, designing regional courses, scope of collaborations, online/ODL courses, recruitment, regularized faculty training, hands-on learning opportunities, support for research and innovation, and promotion of Jan Bhagidari (public participation). Here's a detailed breakdown:

1. *Incorporating Indian Knowledge in Higher Education Curricula (13.06.2023):*
- Encourages the integration of Indian Knowledge System (IKS) into curricula at all levels of education.
- Prescribes that every student in UG or PG programs should take credit courses in IKS, comprising at least 5% of the total mandated credits.
- At least 50% of IKS credits should be related to the major discipline, and the medium of instruction can be any Indian language.

2. *Training/Orientation of Faculty on Indian Knowledge System (13.04.2023):*
- Aims to generate a positive attitude towards IKS among faculty members.
- Promotes interest in exploring IKS through induction programs and refresher courses.

3. *Empanelment of Artists/Artisans–in–Residence in Higher Educational Institutions (08.05.2023):*
- Facilitates collaboration between artists and higher educational institutions (HEIs).
- Involves skilled Kala Gurus in teaching, research, and other academic activities on a regular basis to synergize artistic experience with conventional education.

4. *Introduction of Courses Based on Indian Heritage and Culture (08.05.2023):*
- Aims to familiarize people with the cultural and intellectual heritage of India.
- Offers short-term multi-tier credit-based modular programs covering various dimensions of learning, including universal human values, Vedic Maths, Yoga, Ayurveda, Sanskrit, Indian languages, etc.
- Allows for the awarding of a minor degree to students completing 18 to 20 credits in IKS.

5. **Mandatory Credit Component:**
- UGC mandates the inclusion of 5% of total credits in the curriculum related to IKS courses.
- AICTE introduces IKS courses for first-year students in engineering colleges.

6. *Designing Regional Courses:*
- States/UTs encouraged to document their native cultures, arts, crafts, traditions, etc., to tailor dedicated courses for learners.

7. *Scope of Collaborations:*
- Encourages multidisciplinary courses designed by universities to consider international collaboration.
- For example, NCERT is including text highlighting historical ties between India and Indonesia at the school level.

8. *Online/ODL Courses:*
- Existing IKS courses may be synchronized with digital learning platforms like SWAYAM and NPTEL for learners across geographies.

9. *Recruitment:*
- Entrance exam syllabus may include IKS as a subject for testing under UGC-NET.
- Regularized faculty training modules to improve the quality of classroom delivery on IKS courses.

10. *Hands-on Learning Opportunities:*
- IKS Internships and hands-on workshops provided for students to learn various skills.
- Hackathons and specialized IKS-themed events to incentivize innovation.

11. *Translation of Academic Content:*
- Translation of teaching-learning materials into local languages by IKS Centers to engage diverse learners.

12. *Support for Research and Innovation:*
- Priority research funding through dedicated grants proposed through NRF for IKS-related research.
- Inclusion of IKS in prestigious schemes like PMRF to attract top talent into interdisciplinary IKS research.

13. *International Collaborations:*
- Institutions encouraged to access global collaborations through bodies like the Indian Council of Historical Research (ICHR) for India-centric research.

14. *Fund Institutional Support Mechanisms:*
- Establishes IKS Centers to catalyze research, education, and outreach activities.

- Initial seed funding provided for the establishment of IKS Centers in various HEIs.

15. *Promote Jan Bhagidari:*

- Outreach to the public through competitions, conferences, exhibitions, radio and television programs, social media, etc., to disseminate and popularize authentic IKS knowledge.
- Involvement of people through Jan Bhagidari programs, similar to citizen science initiatives.

16. *Create Employment Opportunities:*

- Creation of employment opportunities for youth through skill-based IKS programs in areas like Ayurveda-based dieticians, Gandhashastra-based perfumery, etc.

17. *Promote Heritage Technology:*

- Promotion of heritage technology to showcase Indian heritage to the world, aiming to capture 10% of the world tourism market and provide employment opportunities for youth.

IV. CONCLUSION

The Indian Knowledge System (IKS) encompasses wisdom from ancient India, detailing both its achievements and challenges, while also reflecting India's future aspirations in areas such as education, health, the environment, and various facets of life. With a focus on holistic health, psychology, neuroscience, nature, and sustainable development, the IKS seeks to facilitate extensive research to address contemporary societal issues. As an innovative entity, the Indian Knowledge System serves to promote interdisciplinary research, preserve, and disseminate knowledge for further exploration and societal applications.

The IKS actively commits to sharing the rich heritage and traditional wisdom of India, incorporating tribal, indigenous, and traditional learning methods. Encompassing diverse fields. The IKS not only boosts tourism but also fosters awareness and appreciation of India's diversity, culture, and traditions. It includes the propagation of knowledge in areas like archaeological sites, heritage, literature, sculpture, music etc.

In a move towards integration, universities are encouraged to launch student credits or IKS elective courses in all courses, ensuring students across subjects gain exposure to customary knowledge. Recognizing the significance of IKS, the University Grants Commission (UGC) has mandated the inclusion of 5% of total credits related to IKS courses in curricula. To further support this initiative, the establishment of IKS centers is proposed, acting as catalysts for research, education, and outreach activities across different regions of the nation.

REFERENCES

[1] Traditional Knowledge Systems of India
[2] https://www.sanskritimagazine.com/india/traditionalknowledge-systems-of-India/
[3] Indian Knowledge Systems Vol 1 https://iks.iitgn.ac.in/wp-content/uploads/2016/01/Indian-Knowledge-Systems-Kapil-Kapoor.pdf
[4] https://orientviews.wordpress.com/2013/08/21/how-colonial-india-destroyed-traditional knowledge-systems/
[5] https://iksindia.org/about.php
[6] www.education.gov.in