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Role of Indian Knowledge System in Building A Developed India 2047

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ABSTRACT: The Indian Knowledge System (IKS) encompasses a vast and diverse body of knowledge, encompassing science, technology, philosophy, arts, and literature, developed over centuries in India. It emphasizes interdisciplinary research, preservation, and societal applications of traditional wisdom. IKS is rooted in ancient texts like the Vedas and Upanishads and has evolved through various civilizations and cultures.

KEYWORDS: Indian Knowledge System, developed India, 2047, culture

I. INTRODUCTION

Key Aspects of IKS:

Interdisciplinary Nature:

IKS encourages the integration of various fields of knowledge, like arts, literature, agriculture, and sciences, to address complex problems.

Holistic Approach:

It emphasizes a comprehensive understanding of human beings, nature, and the universe, fostering harmony at all levels of existence.

Practical Utility: IKS seeks to address contemporary challenges by integrating traditional knowledge with modern approaches.[1,2,3]

Paramparā (Tradition): Upholding the continuous flow of knowledge passed down through generations is a core principle of IKS.

Dṛṣṭi (Perspective): IKS offers unique perspectives that are relevant to addressing modern problems.

Laukika-prayojana (Practical Application): IKS focuses on the practical utility of knowledge to solve societal problems.

Examples of IKS: Ayurveda: Traditional Indian medicine with a focus on holistic health and well-being.

Yoga: A physical, mental, and spiritual practice for promoting health and mindfulness. Ancient Indian Science and Technology: Advancements in areas like metallurgy, architecture, and agriculture. Philosophy and Literature: Rich traditions of philosophical inquiry and literary works. [4,5,6]

Relevance of IKS Today: National Education Policy (NEP) 2020: IKS is a significant component of the NEP, aiming to integrate traditional knowledge into the education system.

Addressing Contemporary Issues: IKS provides insights into sustainable living, traditional healthcare, and environmental stewardship.



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Criticisms of IKS:

Potential for Bias:

Some critics argue that IKS curricula might bias students against modern knowledge or limit access to useful Western knowledge.

Employment Concerns:

Concerns have been raised about the potential impact on employment prospects for graduates specializing in IKS.[7,8,9]

The Viksit Bharat @2047 initiative envisions India as a developed nation by the centenary of its independence in 2047. This transformative roadmap emphasizes inclusive development, sustainable progress, and effective governance. At its heart lies the active participation of India's youth, regarded as the key drivers of this change. Prime Minister Narendra Modi underscored their role, stating, "Youth power is both the agent of change and also the beneficiaries of change". Through platforms like the Voice of Youth, the initiative seeks to channel the creativity, energy, and ideas of the younger generation, aligning their aspirations with the nation's development goals and fostering a future of innovation, progress, and self-reliance. An important announcement has been made to turn the vision of Viksit Bharat 2047 into a reality.

II. DISCUSSION

The Indian Knowledge System (IKS) is integral to the "Viksit Bharat" vision for a developed India by 2047. IKS, encompassing traditional knowledge and practices, is being integrated into education and research to foster sustainable development, social harmony, and technological advancement, according to the Ministry of Education and the National Education Policy 2020. This includes areas like agriculture, medicine, architecture, and governance, aligning modern needs with ancient wisdom.

Elaboration:

Viksit Bharat 2047:

This ambitious vision aims to transform India into a developed nation by its 100th year of independence in 2047. It encompasses economic prosperity, social advancement, environmental sustainability, and effective governance. [10,11,12]

Indian Knowledge Systems (IKS):

IKS encompasses diverse traditional knowledge, including Ayurveda, Yoga, Vedic mathematics, and various indigenous practices.

Integration into Education:

The National Education Policy 2020 mandates the integration of IKS across all levels of education, as noted by Chandigarh University ensuring that students learn about and appreciate India's rich heritage.

Research and Innovation:

The Ministry of Education has established 32 IKS Centers to promote research and development in various domains of IKS, including traditional medicine, sustainable agriculture, and renewable energy.

Vision 2047:

The IKS division has developed a roadmap for establishing thriving Indian knowledge systems by 2047, incorporating the principles of IKS into various aspects of national development, according to the Ministry of Education.

Examples of IKS Contributions:

Agriculture: Traditional farming techniques, water management practices, and knowledge of soil health. Medicine: Ayurveda, Yoga, and other traditional healing practices. Architecture: Traditional building methods, sustainable design principles, and knowledge of local materials. Governance: Ancient systems of governance, social harmony, and community leadership. [13,14,15]

Importance:

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IKS provides a holistic approach to development, emphasizing sustainable practices, social harmony, and the integration of traditional knowledge with modern science and technology.

Indian Knowledge Systems (IKS) encompass a wide range of traditional practices and knowledge, including Vedic mathematics, Ayurveda, Yoga, and various traditional arts and crafts. These systems have contributed significantly to diverse fields like healthcare, rural development, and spiritual well-being. For instance, Ayurveda provides a holistic approach to health and disease, while Yoga offers physical and mental well-being benefits. IKS also plays a crucial role in promoting sustainable practices, such as traditional agricultural techniques and water management strategies.

Examples of IKS Contributions:

Ayurveda:

A holistic approach to health and disease, emphasizing preventive measures and personalized treatment plans.

Yoga:

A practice that combines physical postures, breathing techniques, and meditation to improve physical and mental wellbeing.

Vedic Mathematics:

A system of mathematical techniques that can enhance computational skills and problem-solving abilities. [16,17,18]

Traditional Agriculture:

Indigenous knowledge systems often include sustainable farming practices, such as crop rotation, water management, and natural pest control.

Traditional Crafts and Arts:

Various traditional crafts, like pottery, weaving, and metalwork, not only provide livelihoods but also preserve cultural heritage.

Traditional Medicines:

Many cultures have developed their own systems of medicine, using natural herbs and remedies for various ailments. Traditional Knowledge in Disaster Preparedness:

IKS often includes knowledge about weather patterns, natural disasters, and ways to mitigate their impact.

Universal Human Values:

IKS emphasizes ethical principles, moral values, and the importance of community and social harmony.

The Bhartiya way is sustainable and strives for the welfare of all. It is important that we regain the comprehensive knowledge system of our heritage and demonstrate the 'Indian way' of doing things to the world. This requires training generations of scholars who will demonstrate and exemplify to the world a way of life so unique and peculiar to our great civilization.

The NEP, 2020 recognizes this rich heritage of ancient and eternal Indian knowledge and thought as a guiding principle. The Indian Knowledge Systems comprise of Jnan, Vignan, and Jeevan Darshan that have evolved out of experience, observation, experimentation, and rigorous analysis. This tradition of validating and putting into practice has impacted our education, arts, administration, law, justice, health, manufacturing, and commerce. This has influenced classical and other languages of Bharat, that were transmitted through textual, oral, and artistic traditions. "Knowledge of India" in this sense includes knowledge from ancient India and, its successes and challenges, and a sense of India's future aspirations specific to education, health, environment and indeed all aspects of life.[19]

III. RESULTS

Indigenous knowledge systems contribute to development by promoting sustainable practices, preserving biodiversity, and enhancing social cohesion.

Indigenous knowledge systems (IKS) are a rich source of wisdom and understanding that have evolved over generations. They are deeply rooted in local culture and environment, and thus, offer unique insights and solutions to



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local challenges. This makes them particularly valuable in the context of sustainable development. Indigenous communities have a deep understanding of their local ecosystems, which they have managed and preserved for centuries. Their practices often promote sustainability, as they are based on a holistic understanding of the environment and a respect for natural resources. For instance, indigenous farming methods often involve crop rotation and intercropping, which maintain soil fertility and prevent erosion, contributing to sustainable agriculture.

Moreover, IKS play a crucial role in preserving biodiversity. Indigenous communities are often located in biodiversity hotspots and their traditional practices have contributed to the conservation of these areas. They have a profound knowledge of local flora and fauna, including medicinal plants, which can be invaluable for scientific research and pharmaceutical development. For example, the knowledge of the San people of Southern Africa about the Hoodia plant has led to the development of appetite suppressants.

In addition, IKS contribute to social cohesion and resilience. Indigenous knowledge is often shared and passed down through communal activities and rituals, which strengthen social bonds and community identity. This social cohesion can enhance the community's capacity to adapt to changes and cope with challenges, contributing to social development. For instance, in many indigenous communities, traditional conflict resolution mechanisms based on dialogue and consensus-building contribute to social harmony and stability.

Furthermore, recognising and valifying IKS can empower indigenous communities and contribute to their socioeconomic development. It can help to challenge and change power dynamics, by acknowledging the value of indigenous knowledge and promoting the rights of indigenous peoples. For example, the recognition of indigenous land rights can enable communities to benefit from their natural resources and traditional knowledge.[20,21,22]

Indigenous knowledge systems have much to offer to development. They provide sustainable solutions to local challenges, contribute to biodiversity conservation, enhance social cohesion, and can empower indigenous communities. Therefore, integrating IKS into development strategies can be a powerful way to promote sustainable and inclusive development.

The Indian Knowledge Systems (IKS), or the Bhāratīya Jñāna Paramparā Vibhāga is a division of the Ministry of Education of the Government of India which purports to promote indigenous Indian systems of knowledge.[1][2] Established in October 2020, it is located in the AICTE headquarters in New Delhi.[1]

The Indian National Education Policy (NEP), as enacted in 2020, emphasizes the inclusion of IKS into curriculums at all levels of education;[3][4][5] in line with this, the National Credit Framework (NCF) has made it possible for students to earn credit in courses relating to ancient Indian sciences and arts.[6] IKS is also being included under the Vision 2047 for Bharatiya Rasayanasastra initiative.[7] In the 2022-2023 budget, IKS's financial allocation was doubled to ₹20 crore (US\$2.4 million).[8]

Under University Grants Commission (UGC) guidelines, it is advised that 5 per cent of a student's total credits should be in IKS courses at the undergraduate and postgraduate levels.[9] The UGC aims to train 1.5 million teachers in IKS by 2025,[2] and has launched an online IKS MOOC course.[10]

IKS has also spearheaded and funded certain research initiatives relating to traditional Indian knowledge,[11] such as in relation to agriculture and architecture.[12][13][14]

Vedic mathematics, various shastras such as the Arthashastra, and Indian astronomy will be taught under the IKS initiative.[15][16][17] IKS topics for students taking UG medicine courses will include yoga, meditation, and ayurveda. Critics of the IKS division have asserted that its curricula pedal pseudoscience and pseudohistory, do not constitute a genuine scholarly "decolonisation" programme, are a tool of indoctrination by the Hindutva ideology of the ruling Bharatiya Janata Party (BJP), and will economically and professionally disadvantage Indian graduates in the workforce.[23]

Writing for The Wire, Vasudevan Mukunth criticised the introduction of a new textbook under the auspices of IKS as a "Trojan horse of pseudoscience".[28] The textbook in question dismisses as a myth the commonly accepted belief that "aeronautics was developed by Wright Brothers in 1903," asserting instead that 5,000 years before the Wright Brothers,



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"Maharshi Bhardwajan wrote an epic called Yantra Sarvasva and aeronautics is a part of the epic [...] Yantra Sarvasva is not available now but out of whatever we know about it, we can believe that planes were a reality in Vedic age." The textbook also asserts that "It's a Myth that Theory of Gravity was discovered by Isaac Newton in 1666 AD; the truth is that thousands of years before Newton, a number of epics were written on the gravitational force and we can find the evidence in the Rig Veda".[29]

Manasi Thapliyal Navani, a professor in the School of Education Studies at Dr. B. R. Ambedkar University Delhi, has criticized the IKS curriculum as not being genuinely decolonial, stating that "Indigenous knowledge education or decolonisation projects begin with a critical dialogue with history and with the dominant forces that have shaped modern disciplines," and because IKS curricula lack such critical engagement, "the whole project essentially boils down to becoming one of indoctrination."[30]

Jaheer Mukthar, an assistant professor of economics at Kristu Jayanti College in Bangalore, asserted that "the government is clearly using the textbook as a tool for propagating the Hindutva agenda".[30]

Another criticism is that the IKS curricula may deprive students of access to useful Western knowledge, or bias them against it.[31] In his article for The Wire, Mukunth also warned that an IKS education "would render [Indian] graduates even more unemployable, or under-employed, than they already are".[28] Some critics have urged that IKS courses be made optional so as to not create issues for students who want to take courses that are better for their employment prospects.[32]

Critics have also alleged that it serves to disseminate propaganda to further the political agenda of India's ruling Bharatiya Janata Party (BJP) and its far-right Hindutva/Hindu nationalist ideology.[32]

IV. CONCLUSION

The work of the IKS division has been interpreted by some as being guided by a mission to preserve Indian heritage,[3] apply ancient knowledge to modern problems such as climate change,[33][34] and decolonise Indian education in a way that reduces undue Western influences[24]

REFERENCES

- 1. "about". iksindia.
- 2. Chakrabarty, A. M. Jigeesh & Sreeparna (7 October 2023). "UGC to train over 1,000 teachers to teach Indian knowledge systems from degree level". The Hindu. ISSN 0971-751X. Retrieved 25 October 2023.
- 3. Kumar, Mamidala Jagadesh (29 July 2023). "Embrace Indian Knowledge System, enrich higher education". The Sunday Guardian Live. Retrieved 25 October 2023.
- 4. "IIT Madras workshop for educators to implement Indian Knowledge Systems (IKS)". Edex Live. 16 October 2023. Retrieved 25 October 2023.
- 5. "Bhagavad Geeta to be taught in NCERT textbooks: Centre". The New Indian Express. 19 December 2022. Retrieved 25 October 2023.
- 6. "Philosophy is necessary: Exploring Indian knowledge systems beyond Science". Free Press Journal. Retrieved 25 October 2023.
- 7. "Conference on ancient Indian knowledge system commences in Varanasi". The Times of India. 14 February 2023. ISSN 0971-8257. Retrieved 25 October 2023.
- 8. "Union Budget 2023-24: Promotion of Indian languages receives impetus". Hindustan Times. 3 February 2023. Retrieved 25 October 2023.
- 9. "Mandatory 'Indian knowledge' course seen as 'indoctrination'". Times Higher Education (THE). 27 June 2023. Retrieved 25 October 2023.
- "UGC Launches Indian Knowledge System Online Course For Students; Classes From July 31". News18. 27 June 2023. Retrieved 25 October 2023.
- 11. "Impact of ragas on humans among proposals selected for govt funding". Hindustan Times. 12 February 2022. Retrieved 25 October 2023.
- 12. "Charaka Samhita to using dung as biofertiliser: 11 topics picked for govt funds". Hindustan Times. 4 April 2023. Retrieved 25 October 2023.

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International Journal of Multidisciplinary Research in Science, Engineering and Technology (IJMRSET)

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

- 13. "Education ministry identifies 9 areas of research under IKS programme this year". Hindustan Times. 9 October 2022. Retrieved 25 October 2023.
- 14. "Sanskrit language use, modern applications of ancient knowledge among research topics selected by AICTE for IKS". India Today. 18 February 2022. Retrieved 25 October 2023.
- 15. "UGC releases draft guidelines on Indian knowledge systems in higher education". India Today. 13 April 2023. Retrieved 25 October 2023.
- 16. Chandra, Jagriti (15 December 2022). "UGC recommends training in Indian Knowledge Systems". The Hindu. ISSN 0971-751X. Retrieved 25 October 2023.
- 17. "Indian Knowledge Systems to focus on Sanskrit texts, Indian math proofs". The New Indian Express. 2023.
- 18. "UGC issues guidelines on integrating Indian Knowledge System with UG, PG syllabi". OnManorama. Retrieved 25 October 2023.
- "UGC pushes for IKS courses in UG, PG, MBBS programmes". news.careers360.com. 23 June 2023. Retrieved 25 October 2023.
- 20. "Edu ministry forms plan to bring in 'Bharatiya Games' in schools". Hindustan Times. 31 December 2022. Retrieved 25 October 2023.
- 21. "'Gilli danda' among 75 'Bharatiya sports' set to be introduced in schools". Hindustan Times. 30 July 2022. Retrieved 25 October 2023.
- 22. "IIT Roorkee, IIT Bhilai partners to preserve and promote Indian Knowledge Systems". India Today. 2 January 2024. Retrieved 23 July 2024.
- 23. "IIT Mandi introduces first-of-its-kind MS, PhD programmes in Music and Musopathy". India Today. 6 July 2024. Retrieved 23 July 2024.
- 24. "MSN". www.msn.com. Retrieved 23 July 2024.





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