

GIFTING

HOLISTIC

WELLNESS TO

THE WORLD



Introduction

ndian civilization has always highly valued knowledge. This is evident from our vast collection of intellectual world's largest texts, manuscript collection, and a well-documented tradition of thinkers and schools across various knowledge domains. In Srimad Bhagwad Gita, Lord Krishna tells Arjuna that knowledge is the great purifier and liberator of the self. India's knowledge tradition is ancient and uninterrupted like the flow of the river Ganga, from the Vedas (Upanisads) to Sri Aurobindo and others, knowledge has been at the centre of all rational and speculative inquiry in India.

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Weekly

Facus #111







Indian traditional knowledge places a special focus **on health and well-being**. It talks about **holistic health and wellness of the entire physical body, mind, and the soul**. The vast bank of knowledge and various approaches to healing have been a great resource that India has to offer to the world. In a world marred by diseases, conflicts, and chaos, the ancient system of Indian medicinal science and meditational ways are gradually being adopted by people beyond geographical boundaries and regional confinement. These knowledge and practices are flowing seamlessly and helping millions around the world.

1. What are the constituents of Indian traditional knowledge system that are important for the betterment of the world?

Traditional knowledge or 'local knowledge' is a record of human achievement in comprehending the complexities of life and survival in often unfriendly environments. Traditional knowledge, which may be technical, social, organizational, or cultural, was obtained as part of the great human experiment of survival and development.

Indian Traditional Knowledge System: It is the know-how, techniques, and practices that are created, maintained, and transferred from generation to generation inside a community; they frequently emerge as an integral part of its cultural and spiritual identity.

- It is based on the Vedic literature, the Upanishads, the Vedas, and the Upvedas.
- ➢ It comprises of Jnan, Vignan, and Jeevan Darshan that have evolved out of experience, observation, experimentation, and rigorous analysis.

Key components of Indian traditional knowledge ecosystem

- Civil Engineering: The Indus Valley Civilization was the world's first to build planned towns, with underground drainage, civil sanitation, hydraulic engineering, and aircooling architecture.
 - India's indigenous technologies were very sophisticated in design, planning, water supply, traffic flow, natural air conditioning, complex stonework, and construction engineering.
- Metal Technologies: India pioneered many tools for construction, including the needle with a hole at the pointed end, a hollow drill, and true saw.
 - India was the first to produce rust-free iron.
 - The British sent teams to India to analyze the metallurgical processes that were later appropriated by Britain.
- Textiles: India was the ancient home of cotton and silk fabrics. Weaving formed the most significant part of the Indian economy after agriculture.
 - Many of the machines built by Britain used Indian designs that had been improved over long periods.
- Shipping and Ship Building: India participated in the earliest known ocean-based trading systems.
 - Some of the earliest world's largest and most sophisticated ships were **built in India and China.**
 - 'Nav' is the Sanskrit word for boat, and is the root word in 'navigation', and in 'navy'.
- Water Harvesting Systems: Scientists estimate that there were 1.3 million man-made water lakes and ponds across India, some as large as 250 square miles.

- Recently, thousands of these 'talabs' have been restored, and this has resulted in a re-emergence of abundant water year-round in many places.
- Focus on rainwater harvesting for irrigation, drinking, etc.
- Mathematics, Logic, and Linguistics: Indians developed advanced math, including the concept of zero, the base-ten decimal system now in use worldwide, and many important trigonometry and algebra formulae.
 - India's Panini is acknowledged as the founder of linguistics, and his Sanskrit grammar is still the most complete and sophisticated of any language in the world.
- Farming Techniques: India's agricultural production was historically large and sustained a huge population compared to other parts of the world.
 - Traditional non-chemical-based pesticides have been recently revived in India and the world with excellent results, replacing Union Carbide's products in certain markets.
- Traditional medicine: Indian knowledge system aims to support and facilitate further research to solve contemporary societal issues in several fields such as Holistic health, Psychology, Neuroscience, Nature, Environment, and sustainable development.
 - India has given the world a precious treasure in the form of the Ayush healthcare system. Ayush represents a comprehensive healthcare approach encompassing ancient wisdom and holistic healthcare practices. It includes





Figure 1: Ayush System

Ayurveda: It focuses on healthy living rather than the treatment of diseases and personalizes the process of healing.

Siddha: It involves the identification of causes, which involves the examination of pulse, urine, eyes; study the colour of body, tongue, etc. **Yoga and Naturopathy:** It is a spiritual exercise that focuses on bringing harmony between mind and body for healthy living.

Homeopathy: Originated in Germany, It is based on the natural law of healing.

Unani: Originated in Greece, It focuses on the temperament of the individual as it is considered unique.

Sowa-Rigpa: It focuses on maintaining the balance of five elements (Prithvi, Jal, Agni, Vayu, and Akash) in proportion to maintain a healthy life.

Currently, the mainstream healthcare system is mostly constituted by the conventional modern medicine and public health framework. However, globally, **the landscape of Traditional Medicine has shown an upsurge in recognizing its significance and potential for public health** and many countries are successfully implementing it into the respective national healthcare systems by developing national policies, regulatory frameworks, and strategic plans for Traditional Medicine products, practices, and practitioners. **Studies found that 65 percent of the population in India especially in the rural areas** use Ayurveda and medicinal herbs to meet their primary health care needs.







2. How traditional medicine can promote global social wellness?

- Primary healthcare of low- and middle-income countries: Traditional medicine is the primary form of healthcare for most of the population.
 - The World Health Organization (WHO) report estimates that up to **80 percent of the world's population** relies on traditional medicine for their primary healthcare needs.
- Ethos of Vasudhaiva Kutumbakam: It underscores the interconnectedness of all beings and the significance of working in tandem to create a healthier and more harmonious world.
- This philosophy can be applied to the realm of traditional medicine to advance health and wellness for all.
- Addressing contemporary challenges: Such as the escalating burden of chronic diseases, the proliferation of antibiotic-resistant infections, and the restricted accessibility of healthcare services in rural areas.
- One health approach: Tradition medicine recognizes that the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent.



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- Acceptance of traditional medicine: According to the WHO Global Report on Traditional and Complementary Medicine 2019, 88 percent of Member States have acknowledged their use of Traditional and Complementary Medicine (T&CM) which corresponds to 170 Member States.
- Use of Traditional medicine as complementary therapy: This is common in developed countries where the health system structure is typically well developed, e.g. North America and many European countries.
- Holistic approach: Traditional medicine often emphasizes a holistic approach to health, considering the interconnectedness of the body, mind, and spirit. It can complement modern medicine's view that all diseases can be reduced to biological causes in the body.

Box 2.1: Economic dimensions of an emergent Ayush sector

The Ayush industry has seen a recent surge owing to **rising consumer awareness of the long and short-term harmful effects of chemical treatments and products**, and due to the shift towards holistic wellness and traditional medicine, post-pandemic.

- India is one of the top exporters of alternative medicines in the world. Major export destinations include the US and European countries like Germany and France.
- > The Government has allowed 100 percent foreign direct investment in the Ayush sector.
- Despite a slump in economic activity in 2020 due to the pandemic, the industry reached US\$ 20.6 billion in 2021 and US\$ 23.3 billion in 2022.
- The market size of the Indian AYUSH industry as a whole has grown by 17 percent during the last decade. During the same period, different product segments have grown at a much higher rate than the overall industry.
- Plant derivatives experienced 21 percent growth followed by nutraceuticals (20.5 percent), pharmaceuticals (15.8 percent), plant extracts 14.7 percent and herbal plants (14.3 percent).

While the sector has shown strong export performance with the AYUSH pharmaceutical sector being the flag bearer of the flourishing trade surplus, the attractiveness of the sector lies in the fact that the trade potential is largely underutilized. **Strengthening domestic standards subscriptions, ensuring traceability of the value chain, and formulating global standards with international standard bodies** are some measures that may be required for confidence in the brand AYUSH globally.

3. What are the challenges for traditional medicine in promoting health?

- Regulation and standardization: The definition and categorization of herbal medicines vary from one country to another.
 - Depending on the regulations applied to foods and medicines, a single medicinal plant may be categorized as a food, a functional food, a dietary supplement, or an herbal medicine in different countries.

Issues with IPR system:

The current system seeks to privatize ownership and is designed to be held by individuals or corporations, whereas traditional knowledge has collective ownership.

- This protection is time-bound, whereas traditional knowledge is held in perpetuity from generation to generation.
- It adopts a restricted interpretation of invention which should satisfy the criteria of novelty and be capable of industrial application, whereas traditional innovation is incremental, informal, and occurs over time.





Box 3.1: Traditional Knowledge and Intellectual Protection Rights

Traditional information in the present IPR regime can be protected by two means:

- Positive protection: It is the act of providing traditional knowledge holders with the right to take necessary action and seek remedies against the misuse of the knowledge base.
 - It involves the enactment of specific rules and regulations and laws, as well as access to benefit-sharing provisions, royalty payments, etc.
- Defensive mechanism: It refers to the steps taken by traditional knowledge owners to prevent the acquisition of their Intellectual Property rights.
 - This knowledge protection method helps traditional knowledge holders protect intellectual property rights that are illegitimately acquired by third parties.

Discrepancies between protective and constructive protection of intellectual property are not watertight. Therefore, both strategies should be used successfully to safeguard conventional information.

- Biopiracy: The exploitation of traditional knowledge and practices by pharmaceutical companies and entities outside India has been a significant concern.
 - Instances of biopiracy, where traditional knowledge is patented without due recognition or compensation to the communities that have preserved this knowledge for generations, pose a threat to the future of traditional medicine.
- Safety and Efficacy Concerns: Many traditional remedies have not undergone the same level of clinical trials and safety testing as modern pharmaceuticals.
- Stigmatization and Cultural Barriers: Stigma and skepticism from the mainstream medical community and society can impede the integration and acceptance of traditional medicine.

- Vulnerability of flora and fauna: According to IPCC 2019 report, about 1 million animal and plant species, out of a total of about 8 million, were facing the threat of extinction.
 - About 75 percent of the Earth's land surface and 66 percent of the oceans had been "significantly altered".
- Lack of control with Indigenous or local communities: Growing commercial use of resources beyond the traditional context means they are increasingly vulnerable to misappropriation and misuse by third parties.
- Raw Material-related issues: Lower supplies of raw materials, degrading quality, escalation of prices, and adulteration in active raw materials.

4. What government is doing to promote traditional medicine?

- Biological Diversity Act, 2002: An Act to provide for the conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of the benefits arising out of the use of biological resources, and knowledge.
- The National Policy on Indian Systems Of Medicine And Homeopathy (2002): It emphasized on the need for a meaningful phased integration of Indian Systems of Medicines with modern medicines, and also outlined the need to secure complete integration of all plans for health and human development.
- Central Sector Scheme for "Conservation, Development and Sustainable Management of Medicinal Plants" (2008): To provide support for Survey, Inventorization, in-situ conservation, ex-situ conservation/ herbal gardens, linkage with Joint Forest Management Committees, Research and Development etc.
- National AYUSH Mission (NAM)(2014): It envisages better access to AYUSH services; strengthening of AYUSH educational institutions, facilitate the enforcement of quality control

- For promotion of AYUSH systems across the globe: The Ministry of AYUSH has signed Country to-Country MoUs with 18 countries for cooperation in field of Traditional Medicine and Homeopathy,
 - 19 MoUs for undertaking Collaborative Research/ Academic collaboration
 - 31 AYUSH Information Cell have been set up in 28 countries to disseminate authentic information about AYUSH systems.
 - Ayush Export Promotion Council to tackle the obstacles for registration of Ayush products abroad, undertaking of market studies and research activities abroad.
- National Ayush Morbidity and Standardized Terminologies Electronic(NAMSTE) portal: It provides standardized terminologies and morbility codes for Ayurveda, Siddha and Unani systems of medicine.
- Traditional Knowledge Digital Library (TKDL): To prevent the misappropriation of patent on Country's traditional medicinal knowledge including different aspects/techniques of Yoga.

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Box 4.1: International efforts to protect traditional medicine

- The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA): It allows farmers to reuse propagating material from the previous season.
- Trade-related intellectual property rights (TRIPS) provide that members may exclude plants and animals other than microorganisms.
- ▶ **The Convention on Biological Diversity (CBD):** Under this the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization of Traditional Knowledge was signed.
- The First WHO Traditional Medicine Global Summit took place in Gandhinagar, Gujrat alongside the G20 health ministerial meeting under the Indian Presidency.
- WHO Global Centre for Traditional Medicine (GCTM): it is the first and only global outpost centre for traditional medicine across the world located at Jamnagar, Gujarat, India.
 - > India has committed an estimated US\$ 250 million to support the Centre's establishment
 - Goals of GCTM
 - » to create a database of traditional knowledge systems using technology.
 - » create international standards for testing and certification of traditional medicines
 - » develop protocols for holistic treatment of specific diseases so that patients could benefit from both traditional and modern medicine.

5. What are the steps required to protect traditional knowledge?

- Protecting plants: In situ (conservation of plants in their natural habitat outside the native habitat) and ex situ conservation (like, seed storage, DNA storage, pollen storage, in vitro conservation, field gene banks and botanical garden etc) are the key approaches to protect and conserve medicinal plant species.
- Scientific validation: There is a need to bring evidence and scientific validation around traditional medicine so that people around who use it can understand whether it's safe and effective.
- Protecting Indigenous People rights: Fully recognize, respect, and protect the rights of Indigenous Peoples, as provided in the UN Declaration on the Rights of Indigenous Peoples, including the right to selfdetermination; right to lands, territories, and resources;
- Ethical consideration in research: Incorporate ethical methods and processes in traditional medicine research and practice through the development and implementation of ethical frameworks that are culturally appropriate and socially relevant and inclusive.

- Standardisation: Advance policies that promote standardized documentation of traditional medicine, including through expanded and accelerated use of the WHO International Classification of Diseases (ICD-II).
- Strengthening IPR regime: A sui generis system separate from the existing IPR system should be designed to protect the traditional knowledge.
- Globalisation of traditional knowledge: Extend the protection by establishing bilateral or plurilateral agreements between countries that share a common interest in protecting traditional knowledge.
- Integration of TM with modern medicine: There is a need for integration of traditional medicine with modern healthcare systems has to provide more comprehensive and culturally sensitive healthcare services





Box 5.1: Sustainable Development Goals (SDGs) and Traditional knowledge

Traditional knowledge is the foundation of indigenous peoples' identities, cultural heritage, civilizations, livelihoods, and coping strategies over several centuries. The crucial role of indigenous knowledge in achieving SDGs and for addressing the most pressing global problems is gaining international traction. It can be useful in achieving the following goals

- **SDG-1** No poverty: Integration of medicinal plants can contribute to better livelihoods and eradication of poverty in all its forms.
- SDG-3 Good health and well-being: Traditional medicine can help in achieving better health outcomes by making healthcare more equitable and affordable.
- **SDG-4-Quality education:** Traditional medicine holds a wealth of knowledge that can be passed down through generations.
- SDG-10 Reduced Inequalities: Traditional knowledge can lead to reduced inequality by making healthcare more affordable.
- SDG-15 Life on Land: Increased use and demand for medicinal plants can lead to the standing forest and its biodiversity being recognized and valued.
- SDG-17 Global partnership: Traditional knowledge can foster Partnership by encouraging collaboration and the exchange of knowledge and experience.

To make the process of sustainable development feasible and operational, it is important to establish a common focus that can integrate the outlook and efforts of various participants in development such as Indigenous people.

Conclusion

The traditional knowledge of India holds a holistic understanding of wellness that extends beyond the mere absence of diseases to encompass the harmonious balance of the mind, body, and spirit. Rooted in ancient wisdom, these practices emphasize the interconnectedness of all aspects of life, encouraging individuals to cultivate a deep sense of self-awareness, mindfulness, and harmony with nature. As this traditional wisdom continues to transcend borders and integrate with modern practices, it offers a profound reminder that true wellness is a journey that encompasses the nurturing of the entire being, leading to a more balanced and fulfilling life.

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TOPIC AT A GLANCE

Indian Traditional Medicine: Gifting Holistic Wellness to the World

Indian Traditional Knowledge System is the know-how, techniques, and practices that are created, maintained, and transferred from generation to generation inside a community.



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Key components of Indian traditional knowledge

- Civil Engineering as The Indus-Sarasvati Civilization was the world's first to build planned towns.
- ❸ Metal Technologies as India pioneered many tools for construction.
- Textiles as India was the ancient home of cotton and silk fabrics.
- Shipping and Ship Building as India participated in the earliest known ocean-based trading systems.
- Water Harvesting Systems as Scientists estimate that there were 1.3 million man-made water lakes.
- Mathematics, Logic, and Linguistics as Indians developed advanced math, including the concept of zero.
- Farming Techniques as India's agricultural production was historically large.
- Traditional medicine as India has given the world a precious treasure in the form of the Ayush healthcare system.

Traditional medicine can promote global social wellness in following ways

- ⊖ It promotes the Ethos of Vasudhaiva Kutumbakam
- Address contemporary challenges such as the escalating burden of chronic diseases, the proliferation of antibiotic-resistant infections, etc.
 etc.
- ● It promotes One health approach recognizing that the health of humans, domestic and wild animals, plants, and the environment are closely linked and interdependent.
- Promote affordable and accessible healthcare services.
- Ouse of Traditional medicine as complementary therapy in welldeveloped countries.
- Traditional medicine often emphasizes a holistic approach to health, considering the interconnectedness of the body, mind, and spirit.



Government steps to promote Traditional knowledge

- Biological Diversity Act, 2002
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- National AYUSH Mission (NAM) (2014) to envisage better access to AYUSH services



Challenges for traditional medicine in promoting health

- ⊖ Lack of Regulation and standardization
- ⊖ Issues with IPR system
- The exploitation of traditional knowledge and practices by pharmaceutical companies and entities outside India
- Traditional remedies have not undergone the same level of clinical trials and safety testing as modern pharmaceuticals.
- Stigmatization and Cultural Barriers
- **Treat to flora and fauna** as about 1 million animal and plant species are facing the threat of extinction.
- ⊖ Lack of control with Indigenous or local communities



Steps required to protect Traditional Knowledge

- ⊖ Protecting plants: In situ and ex-situ conservation of plants
- There is a need to bring evidence and scientific validation around traditional medicine.
- **⊖** Protecting Indigenous People rights
- Incorporate ethical methods and processes in traditional medicine research.
- **Promote standardized documentation** of traditional medicine.
- ⊖ Strengthening IPR regime
- ⊖ Globalisation of traditional knowledge.
- ⊖ Integration of TM with modern medicine

The traditional knowledge of India holds a holistic understanding of wellness that extends beyond the mere absence of disease to encompass the harmonious balance of the mind, body, and spirit. Rooted in ancient wisdom, these practices emphasize the interconnectedness of all aspects of life, encouraging individuals to cultivate a deep sense of self-awareness, mindfulness, and harmony with nature.

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