NITI Aayog

Strategic Roadmap for

MAKING AYURVEDA GLOBAL

Strategic Roadmap for Making Ayurveda Global

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Message

India's civilizational knowledge systems have long contributed to the global discourse on health and well-being, with Ayurveda standing as one of the most comprehensive and time-tested holistic traditional medicine system. In recent years, Ayurveda has witnessed renewed momentum both domestically and internationally, supported by the sustained efforts of the Government of India and a growing global interest in traditional medicine.

This study on the globalization of Ayurveda comes at a critical juncture, as the world increasingly seeks sustainable, evidence-based, and person-centric health solutions. The report provides a comprehensive assessment of Ayurveda's current global footprint, while systematically examining the opportunities and challenges associated with its international expansion. The structured framework of Availability, Acceptability, and Propagation offers a nuanced lens to understand the multiple dimensions that shape Ayurveda's global integration.

The findings highlight expanding exports, growing international recognition, and increasing research collaborations. Its global presence in many instances is constrained by regulatory, institutional, and perceptual barriers. The study underscores the need for a shift from a fragmented and product-centric approach to a more coordinated, evidence-driven, and system-oriented strategy.

The comparative insights drawn from international best practices further reinforce the importance of mission-mode implementation, institutional coordination, and sustained investment in research and global outreach.

The roadmap outlined in this report is both ambitious and pragmatic. By adopting a phased approach extending up to 2047, it aligns well with India's broader developmental vision of *Viksit Bharat@2047*. The focus on building globally recognized standards, enhancing manufacturing and export-competitiveness, promoting medical value travel, and leveraging India's diplomatic and cultural capital offers a clear pathway for positioning Ayurveda as a credible component of global healthcare systems.

Equally important is the emphasis on governance mechanisms and multi-stakeholder coordination frameworks, which will be critical for translating strategic intent into measurable outcomes.

I commend the efforts of the Health Division team for undertaking this comprehensive and policy-relevant study. It is expected that the insights and recommendations presented in this report will serve as a valuable guide for policymakers, industry stakeholders, and global partners in advancing Ayurveda as a trusted, evidence-based, and globally integrated system of healthcare.

(Ashok Lahari)

Place: New Delhi
Date: 29.05.2026

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Message

Ayurveda, as one of India's most enduring and scientifically rich systems of traditional medicine, holds significant potential to contribute to the evolving global paradigm of integrative, preventive, and person-centric healthcare. In recent years, there has been a marked increase in global interest in holistic health systems, creating a strategic opportunity for India to position Ayurveda as a credible and scalable component of international health ecosystems.

This study provides a comprehensive and structured assessment of Ayurveda's globalization, examining its current status, key barriers, and emerging opportunities. The three-pillar framework of availability, acceptability, and propagation offers a clear and actionable lens to understand the systemic challenges and enablers that will shape Ayurveda's international trajectory.

The study brings out important stakeholder perspectives, particularly the need for regulatory clarity, standardized training frameworks, strengthened research ecosystems, and streamlined support for industry to navigate complex international markets. It also emphasizes the importance of shifting global perceptions of Ayurveda, from a wellness-centric to a protocol-driven, clinically credible system of integrative care.

The phased approach, spanning short, medium, and long-term horizons, prioritizes critical interventions such as strengthening regulatory alignment through WHO-GMP standards, developing global practitioner registries and mobility pathways, scaling multi-country clinical research, and enhancing international cooperation through bilateral and multilateral platforms. The focus on medical value travel, global branding, and digital enablement further strengthens the implementation strategy.

Particularly noteworthy are the recommendations on governance and institutional mechanisms, including the establishment of a Mission Steering Group and strengthened inter-ministerial coordination. These will be essential to ensure convergence across research, regulation, education, trade, and diplomacy. Another important area is fostering collaboration with modern medicine to undertake world-class clinical trials and translational research for generating robust scientific evidence and promoting the evidence-based integration of Ayurveda for holistic health care.

In conclusion, the effective implementation of the recommendations outlined in this report will require sustained commitment, inter-sectoral convergence, and active collaboration among all stakeholders. With a clear strategic direction and coordinated action, Ayurveda has the potential to emerge as a credible, evidence-based, and globally integrated system of healthcare, contributing meaningfully to improved health outcomes, economic growth, and India's leadership in global health.

(M Srinivas)

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FOREWORD

The global healthcare landscape is undergoing a paradigm shift towards preventive, promotive, and integrative models of care. In this evolving context, Ayurveda offers a time-tested, holistic framework that aligns closely with emerging global priorities of wellness, sustainability, and person-centric healthcare.

2. This study on the globalization of Ayurveda provides a comprehensive assessment of its current international footprint, while identifying key barriers and opportunities for expansion. It highlights that despite significant progress in exports, research collaborations, and global interest, the full potential of Ayurveda remains under-realized due to fragmented regulatory pathways, limited practitioner mobility, and gaps in internationally aligned standards and evidence.

3. The report lays out a well-defined and phased roadmap up to 2047, focusing on strengthening regulatory credibility, enhancing manufacturing competitiveness, expanding research and evidence generation, and building a globally coherent brand for Ayurveda. The emphasis on digital enablement, market intelligence, and medical value travel further reinforces the implementation-oriented approach of the strategy.

4. Importantly, the study underscores the need for a coordinated, whole-of-government effort supported by robust institutional mechanisms. Effective convergence across sectors such as health, trade, education, and diplomacy will be essential to translate strategic intent into tangible outcomes and sustained global presence.

5. As India seeks to play a greater role in shaping global health systems, Ayurveda can emerge as a key pillar of both public health contribution and economic growth. The insights and recommendations presented in this report are expected to guide policy action and accelerate the positioning of Ayurveda as a credible, evidence-based, and globally integrated system of healthcare.

6. I appreciate the dedicated efforts of the Health Division team of NITI Aayog for bringing out this timely and insightful report on the globalization of Ayurveda. The report comes at a crucial juncture, when there is growing global interest in traditional systems of medicine. I acknowledge and appreciate the PwC team for conducting this important study with a comprehensive and forward-looking approach. I am confident that the findings and recommendations of this report will support informed decision-making and coordinated action towards positioning Ayurveda as a credible and globally integrated system of healthcare.

Dated: 29th May, 2026

[Nidhi Chhibber]

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Acknowledgment

The globalization of Ayurveda is aligned with the vision of *Viksit Bharat @2047*, reinforcing India's role in promoting holistic healthcare globally. This report has been developed in collaboration with PricewaterhouseCoopers (PwC) under the Research Scheme of NITI Aayog. It provides a comprehensive and forward-looking assessment of the global landscape of Ayurveda. It brings together rigorous analysis, stakeholder consultations, and international benchmarking to outline a structured, evidence-based roadmap for positioning Ayurveda as a globally credible and accessible system of healthcare.

I would like to place on record our sincere gratitude to the then Member (Health), NITI Aayog, Dr. Vinod Kumar Paul, for his proactive leadership and continuous guidance at various stages of the study. I also extend my sincere thanks to the then CEO, NITI Aayog, Shri B.V.R. Subrahmanyam, for his inputs and suggestions in formulating this report.

I am equally grateful to the Vice Chairperson, Dr. Ashok Kumar Lahiri, for his leadership and support. I also sincerely acknowledge the continued support and guidance of the Member, NITI Aayog Prof. (Dr) M. Srinivas, and the CEO, NITI Aayog Ms. Nidhi Chhibber, whose leadership and institutional support have been invaluable.

I acknowledge the contributions of various Ministries, regulatory bodies, academic institutions, industry bodies/stakeholders, and domain experts whose insights have enriched the study. The focus of the report on strengthening availability, enhancing acceptability, and promoting the global propagation of Ayurveda offers actionable pathways for policy formulation, institutional strengthening, and international collaboration.

I commend the dedicated efforts of the Health Division in formulating this report from conceptualization to its final preparation. I also acknowledge and appreciate the PwC team for the rigorous and in-depth work undertaken for this important study.

The findings and recommendations of this report are expected to support evidence-informed policymaking and contribute in strengthening India's position as a global leader in traditional medicine and promoting holistic and sustainable healthcare solutions.

(Rajib Kumar Sen)
Programme Director (Health)

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Abbreviations

AIIA	All India Institute of Ayurveda
ASEAN	Association of Southeast Asian Nations
Ayush	Ayurveda, Yoga & Naturopathy, Unani, Siddha, Sowa Rigpa and Homoeopathy
BHU	Banaras Hindu University
BIS	Bureau of Indian Standards
BRICS	Brazil, Russia, India, China and South Africa
CAGR	Compound Annual Growth Rate
CAM	Complementary and Alternative Medicine
CCRAS	Central Council for Research in Ayurvedic Sciences
CDSCO	Central Drugs Standard Control Organisation
CHC	Community Health Centre(s)
CTRI	Clinical Trials Registry – India
DSHEA	Dietary Supplement Health and Education Act
FDA	Food and Drug Administration
FICCI	Federation of Indian Chambers of Commerce & Industry
FSSAI	Food Safety and Standards Authority of India
GCP	Good Clinical Practice
GTMC	Global Traditional Medicine Centre
ICCR	Indian Council for Cultural Relations
ICD-11	International Classification of Diseases, 11th Revision
ICH	International Council for Harmonisation
IEC	Information, Education, and Communication
IP	Intellectual Property
IRDAI	Insurance Regulatory and Development Authority of India
ISO	International Organisation for Standardisation
ISO/TC 249	ISO Technical Committee 249 (Traditional Chinese Medicine)
ITRA	Institute of Teaching and Research in Ayurveda

MAP	Medicinal and Aromatic Plants
MDNIY	Morarji Desai National Institute of Yoga
MVT	Medical value Travel
NABH	National Accreditation Board for Hospitals & Healthcare Providers
NCISM	National Commission for Indian System of Medicine
NIA	National Institute of Ayurveda (Jaipur)
NITI	National Institution for Transforming India (NITI Aayog)
PCIM&H	Pharmacopoeia Commission for Indian Medicine & Homoeopathy
PHC	Primary Health Centre
R&D	Research & Development
SCO	Shanghai Cooperation Organisation
TCM	Traditional Chinese Medicine
TKDL	Traditional Knowledge Digital Library
TM	Traditional Medicine
WFCMS	World Federation of Chinese Medicine Societies
WHO	World Health Organisation
WHO-GMP	World Health Organisation - Good Manufacturing Practice
eCAM	Evidence-based Complementary and Alternative Medicine (journal)

Executive Summary

Introduction and Study Objectives

Ayurveda is a well-recognised and regulated system of traditional medicine in India. The Ministry of Ayush has taken various initiatives to promote Ayurveda on the global stage, such as bilateral/multi-lateral agreements and collaborative efforts in the fields of teaching, training, research, and Ayush information cells established globally. The globalisation of Ayurveda has the potential to generate significant economic opportunities, including growth in markets for health products, wellness services, and medical value travel. The study aims to assess Ayurveda's current global presence, identify barriers and enablers for its international expansion, evaluate regulatory frameworks across major geographies, map global demand patterns, and ultimately develop a structured implementation roadmap for accelerating Ayurveda's globalisation.

Methodology

The study adopts a mixed-methods approach combining extensive secondary research with in-depth stakeholder consultations involving **Ministries, Regulatory Bodies, Government and Industry Associations, Academic Institutions, Research Organisations, International Bodies, Manufacturers, and Service Providers**. The analysis is anchored around a three-pillar framework of **Availability, Acceptability, and Propagation**. Each pillar is assessed through four components. *Availability* examines global workforce capacity, manufacturing and export readiness, international research advancement, and education standardisation. *Acceptability* evaluates regulatory compliance, international cooperation, insurance and reimbursement penetration, and cultural adaptability. *Propagation* focuses on strategic brand positioning, global visibility, medical value travel, and strengthening India's presence across major international platforms.

Current Status of Globalisation of Ayurveda

Ayurveda's global footprint is expanding steadily, with formal recognition in nearly 30 countries through diverse licensing models, academic collaborations, and inclusion in national health policies. India maintains a strong domestic ecosystem with over 355,000 trained Ayurveda practitioners[1], but international practitioner representation remains limited, with 95% of qualified professionals based in India. Countries such as Sri Lanka, Nepal, Pakistan, Bangladesh, Mauritius, the United Arab Emirates (UAE), South Africa, Tanzania, and several European Union (EU) member states recognize Ayurveda to varying degrees, while practitioner communities in the United States, United Kingdom, and Australia continue to grow through diaspora networks and integrative medicine centres.

The *Availability* pillar highlights legal recognition of Ayurveda practice around the world and availability of trained Ayurveda professionals in different countries, manufacturing and export of Ayurveda products to around 150 countries, and exports rising from USD 1.09 billion in 2014 to USD 2.16 billion in 2023. Despite growth, most Ayurveda products are exported as dietary supplements due to regulatory constraints. International research in the field of Ayurveda now spans nearly 70 countries, strengthened

by global institutional collaborations and the World Health Organisation Global Traditional Medicine Centre in Jamnagar. Educational outreach includes scholarships to 277 international students from 32 countries and Ayush academic chairs in global universities, though standardised global curricula are still evolving.[2]

Areas of Improvement

A comparative assessment of global best practices—particularly the internationalisation journey of Traditional Chinese Medicine (TCM) highlights clear areas where Ayurveda can accelerate its globalisation trajectory. Ayurveda, despite its strong domestic foundation, has yet to achieve similar levels of penetration due to **limited practitioner licensure frameworks, fragmented global research leadership, low availability of harmonised pharmacopeial standards, and insufficient integration of modern scientific validation pathways**. Addressing these systemic gaps is essential for positioning Ayurveda as a credible, scalable global healthcare system.

For **availability**, Ayurveda's international expansion remains uneven, with services primarily limited to wellness, spa, and complementary therapy settings in most countries. Global uptake is constrained by the lack of standardised practitioner licensure, the absence of internationally recognised microcredential programs for healthcare workers in host countries, and relatively low export of finished Ayurvedic pharmaceuticals due to regulatory barriers—especially in the United States and European Union. Although export value is rising, the dominance of raw material exports reflects untapped potential in high-value finished products. Strengthening global research collaborations, establishing multi-country clinical trial hubs with World Health Organization Collaborating Centres, building public-private research partnerships, and expanding international educational pathways are critical to enhancing availability.

For **acceptability**, bridging the wide gap between domestic quality standards and stringent international regulatory expectations remains a priority. Manufacturers need clearer guidance through standardised qualification playbooks, region-specific regulatory intelligence, and a centralised repository of compliant Good Manufacturing Practices (GMP)-certified units. Upgrading Ayush GMP to WHO-GMP levels, incentivizing Micro, Small and Medium Enterprises (MSME) manufacturing improvements, and supporting more robust Quality Assurance / Quality Rating-linked transparency will strengthen global confidence. Greater international presence through bilateral agreements, multilateral platforms, insurance pilots demonstrating cost-effective outcomes, and localised care pathways aligned with public health priorities of each geography will help deepen the clinical acceptability of Ayurveda.

For **propagation**, a coordinated global branding ecosystem is essential. Presently, fragmented messaging by different stakeholders creates confusion about Ayurveda's identity and value proposition. Ayurveda needs unified, culturally adaptable communication strategies, multilingual consumer education, myth-busting campaigns, and region-specific narratives emphasizing natural, holistic, and scientifically validated healing. Addressing quality concerns through transparent sourcing and manufacturing practices will reinforce credibility. Enhancing Medical Value Travel (MVT) through international hubs, domestic wellness zones, simplified Ayush visas, teleconsultation-enabled pathways, and higher NABH accreditation coverage can significantly strengthen global visibility and consumer confidence.

Comparative Analysis with Global Best Practices

Traditional Chinese Medicine (TCM) provides the most relevant benchmark for Ayurveda's global ambitions.Traditional Chinese Medicine's international success is underpinned by mission-scale state support, deep Research & Development funding, and proactive global standards diplomacy. Its

integration into national development plans, establishment of over 30 overseas Traditional Chinese Medicine centres, inclusion in multiple free trade agreements, and recognition through ISO/TC 249 standards have significantly advanced its global adoption.

In contrast, Ayurveda—despite a strong domestic foundation—has comparatively limited international penetration. Key lessons from Traditional Chinese Medicine include prioritizing practitioner licensure frameworks, developing internationally harmonised pharmacopeial standards, establishing global research hubs for multi-country trials, and building integrated educational pathways that blend traditional knowledge with modern scientific validation. Ayurveda can accelerate its trajectory by institutionalising similar globally aligned, evidence-driven mechanisms.

Strategic Roadmap and Recommendations

The strategic roadmap adopts a phased approach spanning 2025-2047, structured around three implementation horizons with specific deliverables and performance indicators. Short-term priorities (2025-2029) focus on establishing foundational infrastructure, including centralised export data management, global professional registry, communication/awareness/branding campaigns, fast-tracking WHO-GMP certification for major manufacturers, launching flagship international centres in priority markets, and developing standardised clinical protocols for evidence generation.

Medium-term objectives (till 2035) emphasize market integration through Traditional Herbal Medicinal Products Directive registrations for key formulations, pilot insurance programs in select countries, and professional mobility program implementation. Long-term vision (till 2047) targets systematic healthcare integration with formal recognition in at least **20 national health systems**, sustainable evidence generation ecosystems, and robust global quality assurance frameworks. The roadmap emphasizes governance through a **Mission Steering Group**, performance-linked financing, and transparent progress monitoring to ensure accountability and sustained momentum toward achieving Ayurveda's recognition as a globally respected healthcare system contributing to universal health coverage and sustainable wellness worldwide.

India's roadmap for the globalisation of Ayurveda calls for a transformative shift from a fragmented, product-driven international presence to a **holistic, evidence-anchored, regulation-ready global health ecosystem**. Central to this vision is building a globally mobile, professionally credible workforce supported by a **Global Ayurveda Register (GAR)** with **World Health Organization-aligned digital credentials** and a structured **Continuous Professional Development (CPD)** architecture under the custodianship of National Commission for Indian System of Medicine(NCISM). Complementing this is the creation of a **Global Information Portal**, functioning as a comprehensive, single-window system for licensing pathways, country-specific regulations, visa norms, documentation checklists, and compliance expectations—thereby reducing information asymmetry and enabling smooth practitioner mobility.

India must further leverage its diplomatic capital through **Mutual Recognition Arrangements (MRAs)** across friendly nations and multilateral groupings such as **G20, Brazil, Russia, India, China and South Africa (BRICS), and Association of Southeast Asian Nations (ASEAN)**, while expanding the global academic footprint through **Ayurveda electives in international medical schools**, strategically integrated with the **Ayush Chair** initiative. These steps collectively strengthen global legitimacy, normalize Ayurveda within integrative health education, and gradually widen recognition in countries that already have pathways for **Complementary and Alternative Medicine (CAM)** practice.

Global expansion also hinges on building regulatory credibility through robust, internationally aligned quality systems. This requires upgrading **Schedule T** to **WHO-GMP equivalence**, publishing a public directory of certified units, and developing an **Export Edition of the Ayurvedic Pharmacopoeia**

aligned with international standards—complete with **Good Agricultural and Collection Practices based raw material sourcing**, contaminant and heavy metal profiles, and **chemical fingerprinting** for batch consistency.

India must adopt a differentiated strategy for priority markets as per the specific regulatory requirements of these countries/regions, such as the United States of America, the European Union, the United Arab Emirates, Australia, and Canada.

Strengthening regulatory preparedness also requires expanding **AyushExcil** into a well-resourced, specialised market intelligence and compliance facilitation body with regions-specific desks, ready-to-use **regulatory playbooks**, and pre-submission support systems.

Evidence generation needs to be scaled dramatically through **multi-country WHO Collaborating Centre (WHO-CC) trials**, **annual Global Evidence and Safety Reports**, real-world data registries leveraging IRDAI-mandated Ayush coverage, and targeted clinical research on **high-impact global health conditions** where Ayurveda has strong therapeutic relevance.

Modernising Traditional Knowledge Digital Library(TKDL), operationalising **World Intellectual Property Organization-aligned disclosure frameworks**, and implementing a national **Patent Watch Mechanism** ensure both defensive and innovation-supportive IP stewardship, positioning Ayurveda as scientifically robust and innovation-capable.

Trade growth requires India to move decisively from raw-material–heavy exports to a strong presence of **high-value finished products**, backed by regulatory compliance, stability data, quality documentation, and branding tailored to diverse international markets. This includes diversifying into culturally aligned Asian and African countries, establishing **localised finishing units** abroad under local Good Manufacturing Practice for faster approvals, and operationalizing a real-time **Ayurveda Trade Dashboard** to consolidate HS-code intelligence, price-volume movements, regulatory alerts, and competitor trends. On the services side, India must advance the **Ayurveda-as-a-Service (AaaS)** model by establishing **standardised clinics and integrative wellness centres overseas**, supported through bilateral agreements and initial viability facilitation.

The medical value travel (MVT) agenda should be strengthened by creating international **Ayurveda medical value travel hubs** (beginning with Mauritius), developing domestic **Ayurveda medical value travel zones** in heritage destinations creating regional medical hubs (integrative care) and offering **bundled Ayush Visa packages** that include diagnostics, treatment, and structured tele-follow-ups from NABH-accredited centres. Long-term acceptance can be advanced through **insurance pilots in Organisation for Economic Co-operation and Development (OECD) countries**, progressing to **out-of-area insurance coverage** for Ayurveda services delivered in India, positioning the country as a global destination for effective and reimbursable integrative care.

A unified and coherent global branding for Ayurveda is essential to shift international perception from fragmented herbal wellness to a **credible, evidence-backed system of holistic healthcare**. This requires culturally resonant **Ayurveda Localisation Toolkits**, translation of dosha concepts into medically relevant and ICD11-TM2-compatible language, localised digital commerce strategies, and continuous **myth-busting with transparent quality and safety data**.

Embassies must be empowered as proactive Ayurveda information nodes through strengthened **Ayush Information Cells**, crisis-response communication protocols, and curated multilingual **IEC content ecosystems**. Strategic visibility can be amplified through premium **Ayurveda Experience Centres** at global landmarks, including Geneva's WHO HQ zone, New York's United Nations Headquarter and Times Square, London's Trafalgar Square, Singapore's Marina Bay, and Tokyo's Shibuya Crossing—and through structured partnerships with global hospitality, tourism, pharmacy, and retail chains.

India must simultaneously deepen its global engagement through the WHO's regional offices, the **WHO Global Traditional Medicine Centre (GTMC)**, and international bodies such as **United Nations Educational, Scientific and Cultural Organisation, World Intellectual Property Organization, World Trade Organisation, Food and Agriculture Organisation, and United Nations Development Programme**, ensuring Ayurveda becomes an integral part of global health diplomacy, cultural heritage promotion, trade standardisation, and sustainable development.

To coordinate this multi-dimensional effort, a high-level **Mission Steering Group (MSG)** chaired by the Minister of Ayush is recommended, supported by a **Global Ayurveda Forum** for execution, inter-ministerial alignment, milestone-linked Memorandum of Understanding, and transparent progress dashboards. This governance architecture will ensure that research, regulation, diplomacy, trade, education, and service delivery move in synchrony toward a shared vision.

Together, these interventions will position Ayurveda as a **scientifically credible, regulation-ready, globally accessible, and culturally adaptive system of medicine**, capable of meaningful integration into national health systems worldwide and contributing substantially to global wellness, universal health coverage, and India's soft power leadership.

These recommendations are further structured into actionable short-term (up to 2029), medium-term (up to 2035), and long-term (up to 2047) measures in the form of a comprehensive roadmap.

Section 1: Introduction and Background

Historical Evolution of Ayurveda

India has been a cradle of knowledge and the art of healthcare since ancient times. Ayurveda, regarded as the mother of traditional medicine systems in the Indian subcontinent, originated over 3,000 years ago. Ayurveda, the "Science of Life," is embedded in hymns of the Rigveda and Atharvaveda (between 5000 BC - 1000 BC), which describe herbal remedies and healing practices for health.

Acharya Charaka and Sushruta, sages of lore, etched Ayurveda's essence in the Charaka Samhita and Sushruta Samhita (around 1000 BC). Charaka Samhita laid the foundation for internal medicine and medical ethics. Sushruta Samhita made significant contributions to advanced surgery. Ashtanga Hridaya integrated these teachings into a comprehensive and practical framework. These texts codified holistic principles of diagnosis, treatment, and prevention, emphasizing balance among the three Doshas (Vata, Pitta, Kapha), Panchamahabhuta (five elements), promoting individualized care through diet, lifestyle, Rasayan (rejuvenation therapy), daily and seasonal regimens, herbal therapies, and Panchakarma (detoxification).

In the 20th Century, the formal regulation and institutional development of Ayurveda have significantly strengthened its credibility and practice. The Drugs & Cosmetics Act, 1940, along with the Drugs & Cosmetics Rules, 1945, and subsequent amendments, established a legal framework to regulate the manufacturing, quality, and safety of Ayurvedic formulations. The establishment of the Central Council for Indian Medicine (CCIM) in 1970 marked a major step toward standardizing education and professional training, leading to structured curricula such as the Bachelor of Ayurvedic Medicine and Surgery (BAMS) degree. Furthermore, the creation of the Central Council for Research in Ayurvedic Sciences (CCRAS) in 1969 facilitated systematic scientific research, validation of classical formulations, and the promotion of evidence-based Ayurveda, thereby bridging traditional knowledge with modern scientific approaches.

Unique Principles and Specializations

Ayurveda is distinguished by its preventive and holistic approach, focusing on addressing the root cause of disease rather than merely managing symptoms. Its fundamental philosophy emphasizes maintaining harmony between body, mind, and soul through natural and individualized interventions. Central to this is the concept of Tridosha, i.e., Vata, Pitta, and Kapha- three vital bio-energies derived from the Panchamahabhuta (five elements, namely space, air, fire, water, and earth) that regulate all physiological and psychological functions. Health (Swasthya) is achieved through their equilibrium (Samyavastha), while imbalance (Vaishamya) leads to disease. Other key principles include Prakriti (individual body constitution), Dinacharya (daily regimen), Ritucharya (seasonal regimen), Rasayana (rejuvenation), Sadvritta (good conduct), along with the concepts of Saptadhatu (seven body tissues) and Malas (waste products).

Ayurveda encompasses eight classical clinical specialties (Ashtanga Ayurveda): Kayachikitsa (internal medicine), Shalya Tantra (surgery), Shalakya Tantra (ENT and ophthalmology), Kaumarbhritya (pediatrics), Bhutavidya (psychiatry), Agadatantra (toxicology), Rasayana (rejuvenation therapy), and Vajikarana (reproductive health and vitality). At present, Ayurveda teaching systems offer structured postgraduate training in 18 specialty areas, covering non clinical, para clinical, and clinical disciplines, reflecting its comprehensive and multidisciplinary scope.

National Health Policy 2017

The National Health Policy 2017 underscores the importance of mainstreaming Ayurveda into the public healthcare system as part of the broader Ayush framework. It promotes co-location of Ayurvedic services with allopathic care, strengthening infrastructure and human resources, ensuring quality control of drugs and practices, and encouraging research for evidence-based validation. The policy also highlights Ayurveda's role in preventive and promotive healthcare and supports its inclusion in national health programs, aiming to enhance accessibility, patient choice, and progress toward universal health coverage.

Current status of Ayurveda in India

At present, Ayurveda in India is supported by a well-structured system of undergraduate, postgraduate, and doctoral education. A strong network of qualified practitioners and established manufacturers contributes to its widespread practice and availability. Additionally, significant improvements in infrastructure across both public and private sectors have enhanced service delivery, enabling broader and more effective outreach of Ayurvedic healthcare to communities.

The Ministry of Ayush was elevated to full ministerial status in November 2014 from its prior Department of Ayush. It serves as the nodal agency for promoting Ayurveda as a part of the other traditional medicine systems (namely Yoga & Naturopathy, Unani, Siddha, Sowa-Rigpa and Homoeopathy), under the umbrella of Ayush. The Indian government has institutionalised the development and regulation of Ayush practices through dedicated ministry, academic institutions, and various schemes (Annexure 1), fostering research, education, and standardisation.

Different Traditional Medicinal Systems of the World

Traditional medicine systems have been the foundation of healthcare for centuries, deeply rooted in the cultural, spiritual, and ecological landscapes of societies across the world. These systems, passed down through generations, represent a combination of empirical knowledge, natural remedies, spiritual practices, and community-based healing. Despite the rapid advancements in modern medicine, traditional systems continue to play a critical role, particularly in regions with limited access to formal healthcare.

According to the World Health Organisation (WHO), approximately 88% of countries utilise traditional medicine in some form. Over 170 WHO Member States have acknowledged traditional medicine in their national health policies. Furthermore, about 40% of modern pharmaceuticals are derived from natural substances traditionally used for healing, including globally recognised drugs like aspirin (from willow bark) and artemisinin (from Artemisia annua).

Fig 1: Traditional Medicine footprints around the Globe

Some major Traditional Medicine systems include:

1. **Traditional Chinese Medicine (China):**

   Traditional Chinese Medicine originated in China around 2,500 years ago. It is based on balancing the flow of Qi (energy) in the body. TCM is a culmination of various components such as acupuncture, herbal medicine, cupping and moxibustion, tui na, qi gong, and dietary therapy. It is widely practiced in China and is integrated into their healthcare. It is widely recognised across the world as well, making acupuncture one of the most prominent practices around the world.

2. **Kampo Medicine (Japan):**

   Kampo or Kanpō, Japan's traditional medicine system, was adapted from Chinese medicine during the 5th and 6th centuries and later standardised. It uses a combination of herbs tailored to the patient's symptoms, often with simplified diagnostic processes. Kampo is backed by scientific evaluation and is covered under national health insurance. Common formulations include shosaikoto and keishibukuryogan for inflammation and circulation issues.[3]

3. **Traditional Korean Medicine System (TKM):**

   TKM incorporates acupuncture, herbal medicine, moxibustion, and a unique system called Sasang Constitutional Medicine, which categorizes individuals based on physical and psychological traits. Treatments are personalised according to one's constitution and imbalances in Qi, blood, and bodily fluids. TKM is fully institutionalised in Korea, with parallel education, licensing, and hospitals running alongside modern medicine.

4. **Jamu (Indonesia):**

   Jamu is Indonesia's centuries-old herbal medicine system, widely consumed in liquid or powdered form. It uses turmeric, ginger, tamarind, cinnamon, and other local ingredients to address conditions ranging from fatigue and inflammation to postpartum recovery. Jamu is sold in markets, homes, and modern clinics. The government promotes its use through national wellness programs and supports research into its safety and efficacy.

5. **Traditional Thai Medicine (Thailand):**

   Traditional Thai Medicine integrates elements from Ayurveda, Chinese medicine, and local Thai knowledge. It views health as a balance of four elements (earth, water, wind, fire) and uses herbal compresses, Thai massage (Nuad Thai), energy line therapy (Sen lines), meditation, and physical exercise like Reusi Dat Ton (Thai yoga). It is supported by Thailand's Ministry of Public Health and is practiced both in local health centres and the wellness tourism industry.[4]

6. **Native American Traditional Medicine (North America):**

   Native American traditional medicine is deeply spiritual and holistic, viewing health as harmony between the individual, nature, and the spirit world. Different tribes use various plant-based treatments like echinacea and yarrow, along with ceremonial practices such as sweat lodges, smudging with sage, and vision quests. Healers, often called medicine men or women, use rituals, prayers, and symbolic objects to heal physical and emotional ailments, emphasizing balance, respect for nature, and ancestral guidance.

7. **Unani (Ancient Greece & Islamic World):**

   Unani medicine is based on Hippocratic and Galenic traditions, later advanced by Arab and Persian scholars like Avicenna. It operates on the principle of balancing four humours and individual temperament (Mizaj), with treatments including herbal formulations, cupping therapy, massages, diet management, and lifestyle changes. It is officially practiced in countries like India and Pakistan, with dedicated Unani colleges, hospitals, and research councils under the Ministry of Ayush in India.

8. **Brazilian Traditional Medicine (Brazil):**

   Brazilian traditional medicine draws from Indigenous Amazonian, African, and Portuguese healing traditions. It involves the use of native herbs, roots, and sacred plants such as ayahuasca, guaraná, and jatobá for both physical and psycho-spiritual healing. Indigenous shamans and folk healers known as 'Benzedeiras' use rituals, herbal baths, chants, and spiritual cleansing to address illnesses. This practice is embedded in local culture and spirituality, especially in rural and forest communities.[5]

9. **African Traditional Medicine (Sub-Saharan Africa):**

   Practiced by over 80% of the population in many African countries, African traditional medicine involves a combination of herbalism, ancestral rituals, spiritual healing, and manual techniques. Common practices include the use of medicinal plants, bone- setting, midwifery, and divination using items like cowrie shells. Traditional healers (sangomas or babalawos) are highly respected, often regarded as custodians of communal health, knowledge, and spirituality.

10. **Aboriginal Bush Medicine (Australia):**

    Aboriginal Bush Medicine is one of the world's oldest continuous systems of healing, practiced for tens of thousands of years. It uses native plants like tea tree, eucalyptus, and kangaroo apple for antibacterial and anti-inflammatory purposes. Healing also involves smoke ceremonies, songlines, and spiritual connection to "Country" and ancestors. Illness is often viewed as a disruption in spiritual harmony, and treatment seeks to restore balance through rituals and nature-based care.

Strategic Imperatives for Globalisation of Ayurveda

Recent shifts in the worldwide healthcare paradigm underscore a pronounced focus on preventive protocols, holistic wellness, and the integration of traditional modalities with conventional medical practice. Within this evolving landscape, Ayurveda offers comprehensive frameworks rooted in

centuries-old wisdom. Its principles resonate strongly with contemporary demands for sustainable and patient-centred care, making their global proliferation both timely and essential from an Indian policy perspective.

- **Economic opportunity:** As the global wellness economy continues its rapid expansion, estimated to reach multi-trillion-dollar valuations, there exists immense scope for Indian enterprises to capitalise on the rising demand for authentic Ayurveda products, therapies, and services. This growth potential extends beyond domestic markets, paving the way for increased exports, foreign investment, and the development of new industry segments focused on research, education, and innovation in traditional medicine.
- **Public health contribution:** Ayurveda has demonstrated efficacy in the management of chronic illnesses, prevention of lifestyle-related disorders, and promotion of mental health and well-being. Their integration with allopathic medicine can strengthen health system resilience, especially in resource-constrained settings, by providing complementary interventions that are accessible, affordable, and culturally relevant.
- **Sustainability and accessibility:** The use of locally available natural resources and the low-cost nature of many Ayurveda treatments make these approaches particularly suitable for large-scale implementation across diverse socio-economic and geographic contexts. Such attributes reinforce the alignment between Ayurveda and the United Nations' Sustainable Development Goals, particularly in ensuring healthy lives and promoting well-being for all.
- **Health diplomacy:** The mainstreaming of Ayurveda methodologies offers India a unique avenue to project soft power and augment its stature in global forums. By sharing indigenous knowledge systems, India can foster bilateral and multilateral partnerships, support public health initiatives in other nations, and facilitate cross-cultural exchange in medicinal traditions.

Fig 2: Strengths of Ayush Systems

- **Integral part of WHO's global strategy:** The WHO Global Traditional Medicine Strategy 2025–2034 underscores Ayurveda as a key component of the broader Traditional, Complementary, and Integrative Healthcare (TCIH) framework. The draft strategy explicitly lists Ayurveda among major traditional systems alongside Traditional Chinese Medicine and others, recognising its

cultural heritage and growing global relevance. WHO's vision is to maximize the contribution of TCIH, including Ayurveda, to universal health coverage and the Sustainable Development Goals by promoting safe, effective, and evidence-based integration into health systems. WHO's Global Traditional Medicine Centre (GTMC) in Jamnagar, India, which serves as a global hub for policy development, data analytics, and innovation in traditional medicine. This centre is pivotal for Ayurveda, providing a platform for international collaborations, digital health initiatives, and the development of standardised classifications.

In light of these compelling drivers, India is well-positioned to lead the global dissemination of Ayurveda through robust institutional support, world-class research capabilities, and internationally accredited educational programs. Realizing this objective will necessitate methodical planning, inter-sectoral coordination, and a commitment to evidence-driven validation of Ayurveda interventions, thus ensuring their credibility and acceptance within the global healthcare ecosystem.

Governance of Ayurveda and the Push Towards Globalisation

The governance of Ayurveda in India has evolved significantly since Independence in 1947, transitioning from fragmented oversight to a structured institutional framework under the Central Government. Initially, Ayurveda and other Indian systems of medicine were managed within the Ministry of Health and Family Welfare without a dedicated department. Recognising the need for focused development, the Department of Indian Systems of Medicine and Homoeopathy (ISM&H) was established in 1995. This marked the first formal step toward organised governance of Ayurveda at the national level. In 2003, the department was renamed as the Department of Ayush (Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homoeopathy), reflecting a broader mandate to promote all traditional systems. The most significant milestone came in 2014, when the department was elevated to a full-fledged Ministry of Ayush, signaling the government's commitment to mainstreaming traditional medicine and positioning it as a key component of India's health strategy.

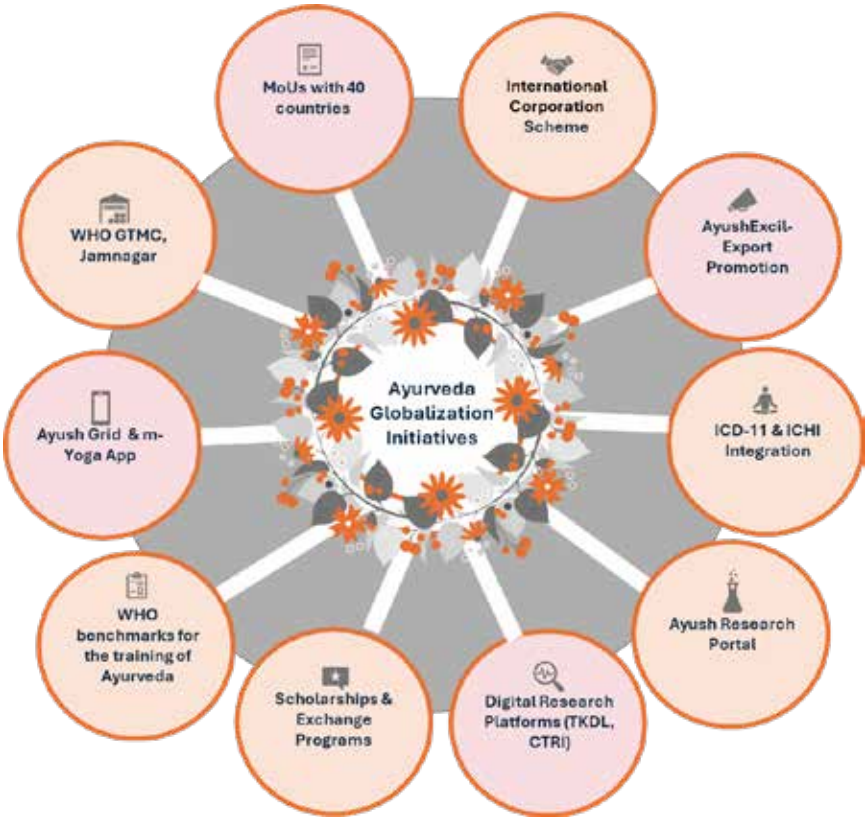

Fig 3: Ayurveda Globalisation Initiatives

Over the decades, several regulatory and institutional mechanisms were introduced to strengthen Ayurveda's education, research, and practice. The Indian Medicine Central Council Act, 1970, established the Central Council of Indian Medicine (CCIM) to regulate education and professional standards, later replaced by the National Commission for Indian System of Medicine (NCISM) in 2021 for modernised governance. Research was institutionalised through the Central Council for Research in Ayurvedic Sciences (CCRAS), while pharmacopeial standards are maintained by the Pharmacopoeia Commission for Indian Medicine & Homoeopathy (PCIM&H).

The globalisation of Ayurveda has been a strategic priority for the Government of India and the Ministry of Ayush, reflecting the vision to position Ayurveda as a globally recognised system of holistic healthcare.

Since the creation of the Ministry of Ayush in 2014, multiple initiatives have been launched to enhance international visibility, regulatory alignment, and market access for Ayurveda products and services:

- The Ministry has signed over ~75 Memorandum of Understanding (MoUs) with foreign governments and institutions. These MoUs are focused on cooperation in multiple areas and sectors to promote Ayurveda (Ayush) globally.
- International Cooperation Scheme: Supports MoUs, academic chairs, and Ayush Information Cells in 39 countries to promote Ayurveda education and services globally.
- WHO Global Traditional Medicine Centre (GTMC), Jamnagar: Established in 2022 as a global knowledge hub for evidence-based traditional medicine in collaboration with WHO.
- Ayush Export Promotion Council (AyushExcil): Created to boost exports of Ayurveda products and services.
- Ayush Visa: Initiated in 2022, the Ayush visa streamlines and facilitates medical value travel for foreign nationals seeking Ayurveda and other Ayush treatments in India.
- ICD-11 Inclusion & ICHI Module Development: WHO's classification now includes traditional medicine codes, paving the way for Ayurveda's integration into global health data systems.
- Digital and Research Platforms: Projects such as the Traditional Knowledge Digital Library (TKDL), the Clinical Trials Registry of India (CTRI) and Ayush Research Portal contribute to knowledge sharing and evidence-based research within the field.
- Scholarship and Exchange Programs: The Indian Council for Cultural Relations (ICCR) Organises scholarships and international exchange initiatives, providing opportunities for overseas students to pursue studies in Ayurveda within India.
- Digital Initiatives (Ayush Grid, m-Yoga App): Enhance global accessibility and standardisation of Ayurveda practices.
- International Day of Yoga (UNGA, 2014): Elevated global awareness of holistic health, indirectly promoting Ayurveda.
- WHO benchmarks for the training of Ayurveda: Defines the minimum requirement/criteria for establishing training of Ayurveda in WHO Member States and provides the fundamental knowledge requirements for all those involved in the practice and training of Ayurveda.

These initiatives collectively represent a focused strategy to position Ayush, particularly Ayurveda, as an integral and credible component of global healthcare.

However, despite these steps and achievements, there are several gaps that need to be fulfilled for Ayurveda to realize its true global potential. Regulatory harmonisation across countries is still limited, evidence-based clinical research for global acceptance is inadequate, and integration into insurance and reimbursement frameworks is minimal outside India. Additionally, challenges persist in ensuring uniform quality standards, practitioner accreditation, and global supply chain compliance. Addressing

these gaps through coordinated policy, research, and industry action is essential for Ayurveda to have a truly global presence.

1.1 Objectives of the Study

The overarching aim of this study is to chart a clear and actionable roadmap for positioning Ayurveda as a globally recognised and accepted system of healthcare. To achieve this, the study addresses multiple dimensions like policy framework, regulatory set-up, markets, and stakeholder engagement with the following objectives:

Fig 4: Objectives of the study

1.1.1 Assess the Current Status of Ayurveda Globalisation

(i) Conduct a comprehensive review of the existing presence of Ayurveda in international markets.

(ii) Map the extent of integration of Ayurveda practices in global healthcare systems, wellness industries, and academic institutions.

(iii) Identify countries and regions where Ayurveda has gained traction and analyse the factors contributing to this success.

1.1.2 Identify Barriers, Gaps, and Enablers

(i) Examine regulatory, infrastructural, and cultural barriers that hinder the global acceptance of Ayurveda.

(ii) Highlight gaps in research, standardisation, and quality assurance that limit international credibility.

(iii) Identify key enablers such as global wellness trends, demand for natural therapies, and government initiatives that can accelerate globalisation.

1.1.3 Analyse Existing Schemes, Policies, and Regulatory Frameworks

(i) Review current national and international schemes, programs, and interventions supporting Ayurveda.

(ii) Assess the effectiveness of existing regulatory provisions and certification standards in meeting global requirements.

(iii) Recommend policy enhancements and harmonisation strategies to align Ayurveda with international norms.

1.1.4 Map Global Demand and Opportunity Areas

(i) Provide an area-wise analysis of global demand for Ayurveda products and services, including herbal medicines, wellness therapies, and educational programs.

(ii) Identify priority markets and emerging regions with high growth potential.

(iii) Highlight consumer trends and preferences shaping the Complementary and Alternative Medicine (CAM) sector globally.

1.1.5 Developing an Implementation Roadmap

(i) Formulate a structured, phased roadmap for Ministries, State Governments, Ayurveda industry players, and regulatory bodies.

(ii) Define actionable steps for capacity building, international collaborations, research and development, and branding.

(iii) Suggest mechanisms for monitoring progress and measuring impact to ensure sustainable globalisation.

1.2 SWOT Analysis of Ayurveda's Potential for Globalisation

To understand Ayurveda's current position and future potential in the global healthcare landscape, we did a short SWOT analysis based on the information we could gather from different stakeholder interactions and the secondary research that we undertook.

As one of the world's oldest holistic medical systems, Ayurveda offers unique advantages such as a preventive and personalised approach, natural therapies, and a strong cultural heritage. These strengths align well with global trends favoring wellness, sustainability, and integrative medicine. However, Ayurveda's globalisation journey is not without challenges.

Weaknesses such as fragmented regulatory recognition, limited scientific evidence in globally accepted formats, and inconsistent quality standards hinder its acceptance in mainstream healthcare systems. At the same time, emerging opportunities, ranging from the booming wellness economy and nutraceutical markets to digital health platforms and medical value travel, create significant growth avenues.

Conversely, threats such as a fragmented ecosystem, competition from the global expansion of other traditional medicinal systems, and over-reliance on short-term strategies like focusing solely on dietary supplements could dilute Ayurveda's identity as a comprehensive medical system.

This SWOT analysis synthesizes insights from secondary research and stakeholder consultations to provide a structured view of Ayurveda's global positioning. It serves as a foundation for developing a strategic roadmap that leverages strengths, addresses weaknesses, capitalizes on opportunities, and mitigates threats to achieve sustainable globalisation.

1.2.1 Strengths of Ayurveda from a Globalisation Perspective

Focus on Holistic Wellness and a Preventive Approach

Ayurveda emphasizes balance between mind, body, and environment, focusing on prevention rather than just cure. This aligns with the global shift toward wellness, lifestyle medicine, and preventive healthcare, making it highly relevant in today's health-conscious world.

Individualised Care

Unlike one-size-fits-all models of various other systems of medicine, Ayurveda offers individualised treatment plans based on a person's constitution (Prakriti). This resonates with the growing trend of personalised medicine in modern healthcare.

Natural and Plant-based Therapies

Ayurveda relies on herbal formulations, diet, and lifestyle interventions, which appeal to consumers seeking natural, chemical-free, and sustainable alternatives to synthetic drugs.

Cultural Heritage and Global Recognition

With a 5,000-year-old legacy, Ayurveda carries strong cultural credibility. The methods, practices, and treatment modalities have a long history of remaining in popular use and being effective, providing anecdotal evidence of the effectiveness of Ayurvedic therapies. In terms of modern healthcare, with a long body of scientific research and evidence, its inclusion in the WHO's traditional medicine strategy and ICD-11 classification further enhances Ayurveda's legitimacy on international platforms.

Synergy with Yoga and Wellness Tourism

The global popularity of Yoga provides Ayurveda a natural gateway for expansion through retreats, wellness resorts, and medical value travel, strengthening its visibility and acceptance. Ayurveda's reliance on plant-based, eco-friendly practices aligns with global sustainability goals and the booming US$1 trillion wellness economy, positioning it as a future-ready system.

Integration Potential with Modern Medicine

Ayurveda's principles complement modern medicine in areas like chronic disease management, stress reduction, and rehabilitation, creating opportunities for integrative healthcare models. Such integrative models are already being researched at multiple premier healthcare institutions of the country.

1.2.2 Weaknesses of Ayurveda from a Globalisation Perspective

Lack of Recognition as a Formal System of Medicine Globally

A recurring concern is the lack of formal recognition of Ayurveda as a medical system in many countries, which restricts practice rights, prescriptive authority, institutional presence, and payer acceptance.

Absence of a Standardised Global Policy Framework

Regulations, categories, and claims differ widely across markets (e.g., dietary supplement vs. herbal medicinal product routes), creating a patchwork that raises compliance costs and delays market entry. Open-ended or non-binding MoUs without milestones were cited as insufficient to unlock predictable access.

Workforce, Education, and Licensure

Outside India, there is a limited number of certified practitioners, uneven recognition of credentials, and language/cultural barriers for international students. Stakeholders also flagged outdated curricula and the need for globally oriented training, clinical exposure, and assessment standards to enable safe, portable practice. The downstream effect: limited-service availability, inconsistent quality, and reduced consumer trust in newer markets.

Evidence and Publishing Gaps

Stakeholders pointed to a methodology mismatch, i.e., Classical double blind Randomised Controlled Trials (RCTs) are not always well-suited to personalised Ayurvedic protocols like Panchakarma or multi-ingredient formulations, yet alternative designs and endpoints are not uniformly accepted by regulators or journals. A documentation gap (terminology, language, and indexing) further constrains publication in high-impact outlets, reducing global visibility of positive findings and hampering payer or regulator confidence.

Regulatory Hurdles

Companies face regulatory complexities for registering Ayurvedic products, particularly when formulations are polyherbal, dosage forms are unfamiliar to foreign agencies, or when quality proofs and contaminants testing need to meet stricter local benchmarks (USFDA, EMA, MHRA, etc.). The high cost of clinical evidence was repeatedly highlighted: estimates ranged from ₹25–40 lakh per product for smaller studies and much higher for RCTs, especially outside India. The result: fewer dossiers, slower approvals, and a reliance on low claim categories that limit clinical narratives.

Quality-related Concerns

Multiple stakeholders raised quality assurance weaknesses like variability in raw materials by geography, inconsistent GMP adoption, and perceived gaps in oversight of certifying bodies. Concerns around contaminants or heavy metals (even when not applicable to a specific product) have reputational spillovers for the entire category, complicating market positioning and retailer onboarding. Shelf life and standardisation for traditional dosage forms also emerged as technical stumbling blocks in overseas climates and distribution systems.

Insurance and Integration Gaps

In most countries, Ayurvedic services and products lack insurance coverage or are confined to fringe wellness benefits. There are few structured pathways for integrative practice (dual licensure, referral protocols, shared records), limiting collaboration with mainstream providers and hospitals, and weakening real-world outcomes data capture.

1.2.3 Opportunities for Ayurveda from a Globalisation Perspective

Government Program and Bilateral levers

Ayush Academic Chairs, scholarships, foreign exchange programs, and international workshops have created early mover beachheads in priority geographies. Flexible MoUs, when backed by milestones, can bring in more international exposure for Ayurveda, like co-teaching, elective modules, and joint clinics, enabling a bridge from awareness to structured adoption. The Ayush Visa is a notable facilitation step for medical value travel. Export facilitation and other modes of support provided by institutions like AyushExcil and financial support schemes reduce entry friction for SMEs.

Coordination with WHO and Standardisation Efforts

Stakeholders consistently emphasised the strategic value of WHO collaboration, from benchmark documents on training and practice to inclusion in ICD/related frameworks, and the role of the Global Traditional Medicine Centre (GTMC) in Jamnagar as a convening and knowledge platform. Progress on standardised terminology, pharmacovigilance schemes, and

engagement with WHO's Uppsala Monitoring Centre are seen as credibility multipliers—if fully operationalised and linked to industry and academia.

Service Quality Accreditation Mechanisms

NABH accreditation for Ayurveda facilities is emerging as a trust mark, with an expanding pool of Ayurveda trained assessors and growing recognition beyond India. NABH accreditation is gradually becoming a benchmark internationally as well. This recognition can enhance the credibility and acceptance of Ayurveda practices on a global scale. Many stakeholders consider quality accreditation not only as a local quality uplift but also as a signaling device for international insurers, facilitators, and referral networks, especially if coupled with outcomes reporting and patient experience standards.

Riding the 'Wellness' and 'Yoga' Wave

Stakeholders mentioned seeing immediate runway in global wellness—stress, sleep, digestive health, musculoskeletal disorders—where Ayurveda's preventive and lifestyle strengths are well-matched to consumer demand. Nutraceutical and functional food pathways can enable earlier market penetration, providing a bridge to higher-evidence clinical indications over time. Similarly, Yoga's global acceptance gives Ayurveda an adjacent, culturally coherent doorway. Curricula, retreats, and integrated programs can add Ayurvedic nutrition, Dinacharya/Ritucharya, and basic therapies as modular layers atop existing yoga ecosystems. This "gateway" can convert awareness into trial and, eventually, into insurance-eligible, protocolised services where local conditions allow.

Medical Value Travel

With the Ayush Visa and growing interest in integrative care, there is scope to build Ayurveda MVT corridors anchored in NABH (and potentially JCI) accredited centres, standardised protocols, and transparent outcomes dashboards. Bundled packages with diagnostics, follow-up tele-care, and lifestyle coaching can enhance continuity and patient satisfaction, while creating the data trails needed for eventual payer engagement.

Communication Reset

There is a strong opportunity to reframe Ayurveda's narrative—from defensive to evidence-forward—by investing in consumer-friendly scientific evidence-based communications, developing country-specific FAQs (e.g., metals policy, sourcing), and a "Myth vs. Fact" playbook for priority herbs and therapies. Coordinated participation in global expos and forums can amplify professional credibility and B2B partnerships.

1.2.4 Threats for Ayurveda from a globalisation perspective

Fragmented Ecosystem

Stakeholders repeatedly mentioned the risk of working in silos between practitioners and modern scientists, or between academia and industry. The roadmap will need governance that convenes all sides, creates comprehensive plans, sets shared milestones (e.g., priority indications, target markets), and aligns funding to joint deliverables (dossiers, curricula, registries), not just meetings and MoUs.

Short-term Commercial Gains Limiting the Growth of Ayurveda

This threat stems from the short-term, commercially driven strategies adopted by many Indian exporters of Ayurveda products. Rather than investing in the rigorous regulatory pathways

required to position Ayurveda as a credible system of medicine globally, a large number of manufacturers are opting for the easier route of classifying products as dietary supplements or nutraceuticals. While this approach may offer quicker market access and fewer regulatory hurdles, it undermines the scientific and therapeutic depth of Ayurveda. This strategy risks diluting the identity of Ayurveda, reducing it to a collection of herbal products rather than a holistic medical system with millennia of clinical wisdom.

Rapid Global Expansion of other Traditional Medicinal systems

A growing threat to the global positioning of Ayurveda is the rapid and strategic internationalisation of other traditional medicine systems, particularly Traditional Chinese Medicine (TCM). Backed by strong state support, scientific research, and structured regulatory engagement, TCM has successfully established itself in global healthcare ecosystems. It enjoys formal recognition in several countries, is integrated into insurance schemes, and is supported by a robust network of international education and research institutions. This first-mover advantage has allowed TCM to occupy the global space for traditional medicine, leaving limited room for Ayurveda to assert itself as a comparable system.

Balancing Authenticity with Compliance

Another threat to Ayurveda's growth is that while meeting modern regulatory expectations for safety, quality, and clinical substantiation, the classical authenticity should remain intact. That means agreeing where standardisation serves patient safety (e.g., contaminant limits, labelling) and where personalisation must be protected (e.g., tailored protocols), then encoding those decisions into protocols and dossiers acceptable to regulators and journals.

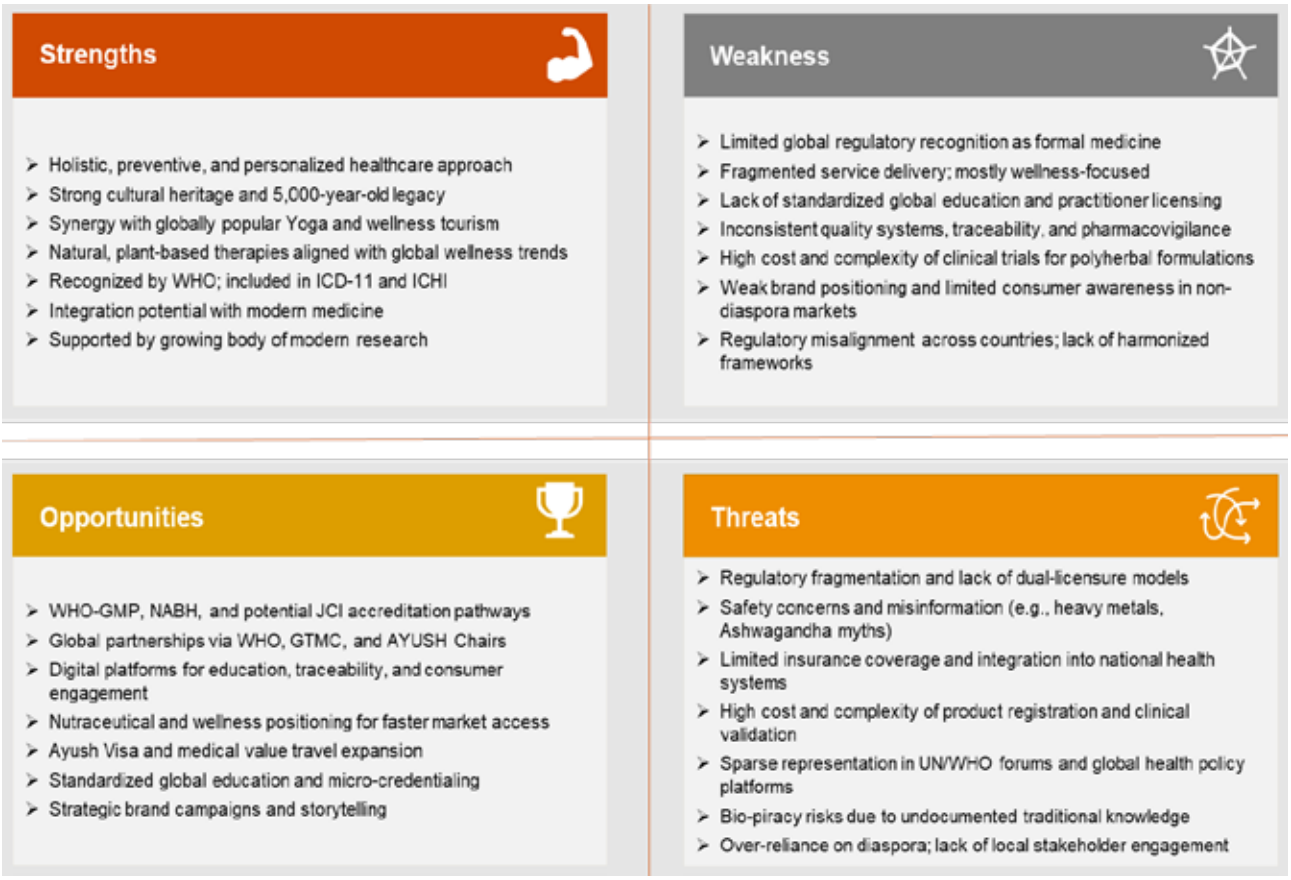

Fig 5: SWOT Analysis

1.3 Literature Survey

1.3.1 Introduction

This literature survey synthesizes peer-reviewed research, global policy frameworks, and authoritative market/industry analyses on the internationalisation of Ayurveda. It situates India's efforts within the broader Traditional, Complementary and Integrative Medicine (TCIM) ecosystem, tracing four strands of evidence: (i) international policy momentum and codification, (ii) current global footprint of Ayurveda, (iii) comparative insights from Traditional Chinese Medicine (TCM) and other systems, and (iv) key gaps- quality, regulation, education, and insurance, that shape mainstream acceptance.

1.3.2 International Visibility and Cultural Recognition

Global visibility for India's traditional practices has grown steadily through cultural diplomacy and formal recognition. Yoga was inscribed on UNESCO's Representative List of the Intangible Cultural Heritage of Humanity in 2016, underscoring its status as a living tradition promoting mental, spiritual, and physical well-being. WHO diplomacy and convenings further amplify visibility. The WHO Traditional Medicine Summit (Gandhinagar, 2023) and subsequent global dialogues positioned TCIM as relevant to Universal Health Coverage (UHC), health security, and person-centred care.[6]

1.3.3 Global Policy and WHO's Traditional Medicine Strategy

The new Global Traditional Medicine Strategy 2025–2034, adopted by the World Health Assembly in May 2025, evolves the mandate to TCIM with four strategic objectives—strengthen evidence; ensure safety via regulation; integrate into health systems; optimize cross sector value/empower communities—and nine principles (evidence-informed, holism, sustainability & biodiversity, rights, culture, people centred care, integrated services, equity). WHO's Traditional, Complementary and Integrative Medicine (TCI) portal and the World Health Assembly-78 decision record confirm adoption and reporting milestones to 2030 and 2034.[7]

1.3.4 Global Market Presence, Education, and Research Outputs

Market trackers estimate Ayurveda's global market size and growth potential within the wider wellness economy. India dominates the supply of Ayurvedic products and medicinal plants, with exports spanning North America, EU (European Union), GCC (Gulf Cooperation Council) and ASEAN (Association of Southeast Asian Nations). Comparative literature often contrasts Ayurveda's market share with TCM's larger global footprint. Education capacity is strong domestically but limited abroad; the WHO Benchmarks for Training in Ayurveda provide a foundation for harmonisation. Research outputs have expanded, but systematic reviews flag methodological challenges and evidence gaps compared to TCM's prolific publication base.

1.3.5 Regulations, Standards, and Insurance: Towards Mainstreaming

International acceptance hinges on regulatory fit. In the US, most Ayurvedic products enter as dietary supplements under DSHEA; advanced products may pursue FDA Botanical Drug

pathways. In the EU, THMPD offers a route for registrations based on traditional use evidence. Insurance integration remains limited globally; payer inclusion follows localised evidence and physician-supervised delivery models. Comparative precedents (Medicare acupuncture coverage, Kampo reimbursement in Japan) show pathways Ayurveda can emulate.[8]

1.3.6 Trade and Exports

RIS's Ayush export report (2023) compiles market sizes, supplier/importer profiles, and barriers across MAPs, extracts, and pharmaceuticals, with detailed US sections (dietary supplements vs. botanical drugs), EU dossiers, and country wise regulatory navigation—this is the most comprehensive public analysis to guide export strategies and "route to market" choices for Ayurveda firms.

For official statistics/policy, the Ministry of Ayush Annual Report 2023–24 and 2024–25 summarize international cooperation, quality regulation, pharmacopeial efforts, and mission programs (NAM, AOGUSY, PCIM&H, Ayush Chairs, Ayush Grid), providing the domestic backbone that export readiness depends on. Recent Rajya Sabha data on Ayush exports (2019–20 to 2023–24) sit on India's Open Government Data portal for trend analysis and baselining.

RIS/FITM Ayush newsletters track globalisation updates (collaborating centres, insurance dialogues, standards), and specific Switzerland policy notes regarding Ayurveda recognition pathway[9]—critical for practitioner mobility and payer inclusion.[10]

1.3.7 Comparative Lens: Global Best Practices Among Traditional Systems of Medicine

The literature on TCM's internationalisation attributes its globalisation success to mission-scale state support, R&D funding, professional licensure, and international standards diplomacy (ISO/TC 249). China's network of overseas TCM centres and service export bases under the Belt and Road, plus physician-delivered models, lower adoption friction and generate local data. For Ayurveda, literature recommends flagship international hubs with embedded QA labs and pragmatic trials; milestone-based MoUs; standardised dose forms for THMPD; and micro-credential pathways mapped to WHO benchmarks.[11]

1.3.8 Gap Synthesis

Four gap clusters recur in Ayurveda's strategic globalisation push in the literature review:

1. Evidence & Methods—limited high-impact, multi-country trials; need for pragmatic designs and ICD-11 TM2 compatibility.
2. Quality & Standards—variability in raw material sourcing and GMP adoption.
3. Education & Licensure—few formal programs abroad; missing licensure.
4. Insurance Integration—absence of localised indication-specific evidence inhibits payer decisions.

Table 1.1: Indicators-based comparison of TCM and Ayurveda

	Components	Traditional Chinese Medicine (TCM)	Ayurveda	Strategic Gap / Opportunity for Ayurveda
Availability	***Global Workforce***	• 34,000+ licensed acupuncturists in US; regulated in 47 states	• ~5,000 practitioners abroad; mostly diaspora-led	• Need for global licensure & practitioner registry
	Global Export and Manufacturing	• $5.4B exports; overseas GMP units	• $2.16B exports; India-centric production	• Promote overseas finishing units & THMPD dossiers
	International Research and Development	• 8,000+ new products; WHO-recognised trials	• Growing R&D; limited global trials	• Leverage WHO CCs for multi-country trials
	Standardised Global Education	• 42 TCM universities; ISO/TC 249 standards	• ~415+ Ayurveda colleges; limited global recognition	• Develop global micro-credentials & dual degrees
Acceptability	***Compliance with Regulations and Guidelines***	• ICD-11 TM1; national laws in China, Australia	• ICD-11 TM2 in progress; UAE recognition	• Accelerate TM2 adoption & regulatory diplomacy
	International Collaborations	• Belt & Road TCM centres; WHO CCs	• MoUs, Ayush Chairs, GTMC	• Create flagship international hubs with embedded trials
	Insurance Coverage	• Covered in Medicare (US), Japan, Germany	• Covered in India; limited abroad	• Pilot insurance in OECD countries
	Localisation and Cultural Adaptability	• Kampo integration in Japan; TCM centres abroad	• Limited reformulation; Sanskrit barriers	• Standardise dosage forms; translate core texts
Propagation	***Strategic Brand Positioning***	• Unified national strategy; cultural diplomacy	• Fragmented efforts across ministries	• Create Mission Steering Group for branding
	Global Visibility and Promotions	• TCM Belt & Road centres; UNESCO heritage	• WHO-GTMC in India; Ayush Visa	• Launch global Ayurveda Centres of Excellence
	Medical Value Travel	• TCM clinics abroad; inbound curiosity	• Ayush Visa launched; modest uptake	• Bundle visa with care & tele-follow-up
	Presence in Global Bodies	• ICD-11 TM1, ISO/TC 249, UNESCO, WIPO	• ICD-11 TM2, TKDL, GTMC	• Expand presence in WHO regional offices & UN bodies

1.3.9 Contribution of the Present Study

This report bridges the critical gaps identified in the literature by moving from descriptive analysis to an actionable, evidence-driven roadmap for Ayurveda's globalisation. While existing studies highlight fragmented regulatory frameworks, limited clinical evidence, and weak international education and insurance integration, this study consolidates these insights into a structured three-pillar strategy—Availability, Acceptability, and Propagation, supported by measurable indicators and phased timelines. It operationalizes WHO's TCIM principles and ICD-11 TM2 coding into practical steps, proposes export-grade pharmacopoeia and WHO-GMP alignment to address quality gaps, and introduces mechanisms like the Global Ayurveda Register, milestone-based MoUs, and international centres of excellence to overcome workforce and research limitations. By embedding insurance pilots, real-world data registries, and digital outreach, the roadmap transforms conceptual recommendations into implementable actions, ensuring Ayurveda's transition from cultural heritage to a globally recognised, evidence-based healthcare system.

Section 2: Approach and Methodology

This study is designed to build an evidence-based, actionable roadmap for the globalisation of Ayurveda—spanning people, products, exports, services, medical value travel, regulatory positioning, reimbursement, education, collaborations, and visibility.

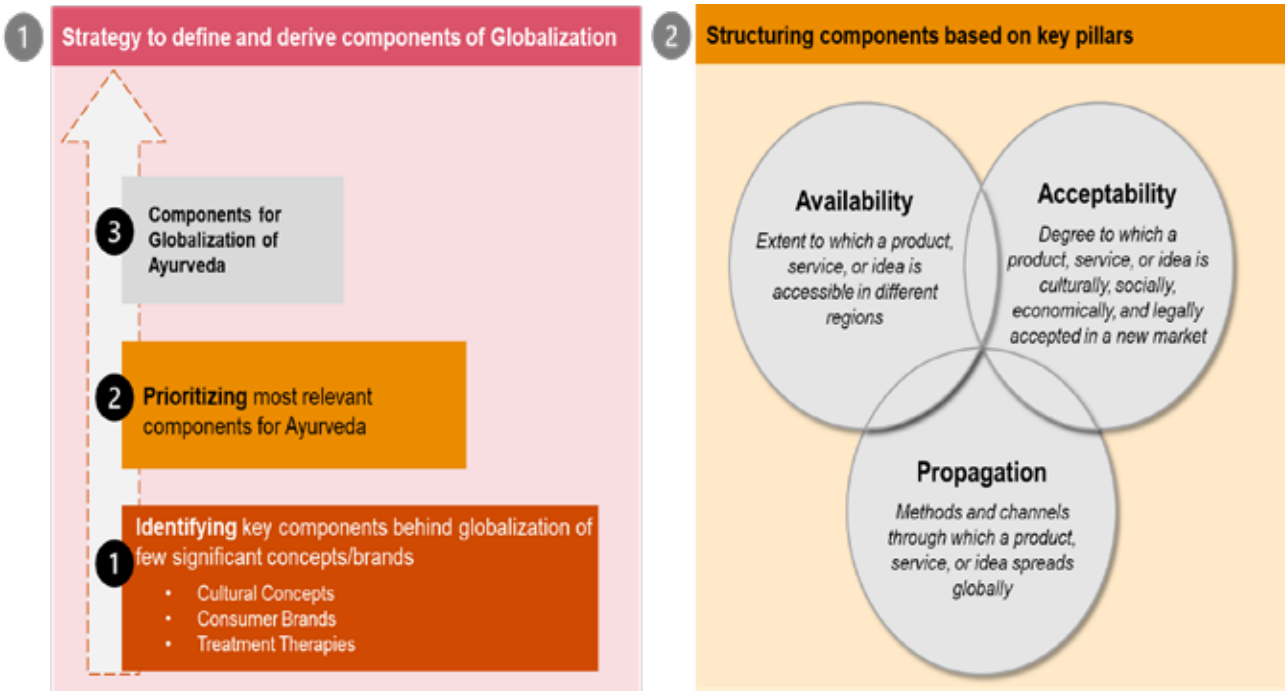

Fig 6: Approach and Methodology

2.1 The Broad Study Design

The study design presents a structured framework for progressing from analysis to strategic action in advancing the globalisation of Ayurveda. It prioritises a thorough evaluation of Ayurveda's current status using defined indicators, allowing for the adaptation of these metrics as new evidence is obtained throughout the study. This methodology incorporates benchmarking against globally established traditional medicinal systems, examining growth opportunities through comprehensive stakeholder engagement, and identifying policy gaps along with areas requiring intervention. A SWOT analysis informs the development of strategic recommendations, culminating in detailed short, medium, and long-term roadmaps and a stakeholder-specific action plan. This systematic approach ensures that the resulting strategy is evidence-based, internationally benchmarked, and aligned with the broader objective of integrating Ayurveda into global healthcare systems.

The main steps of this design are as follows:

1. Assess the current state of globalisation utilizing a comprehensive, framework-driven evaluation.
2. Apply the same framework to benchmark Ayurveda against leading traditional medical systems (e.g., TCM) to calibrate objectives.

3. Identify barriers, enablers, and growth opportunities through stakeholder engagement.
4. Map existing gaps and areas for policy intervention.
5. Develop actionable short-, medium-, and long-term plans based on the findings.

2.2 Cross-Industry Patterns to the Ayurveda-specific Framework

We began by studying how globalisation works outside the field of healthcare and then translated those lessons systematically to Ayurveda. The definition we adopted frames globalisation as the interconnected flow of goods, services, people, and ideas, enabled by institutions and policies that lower frictions, a lens that forces us to measure both access and the rules of the game, not just popularity or anecdotes.

2.3 Understanding Globalisation

Step-1: Cross Domain Benchmarking: We deliberately juxtaposed three families of global exemplars: cultural concepts, consumer brands, and treatment systems (Allopathy, Traditional Chinese Medicine), to isolate common and repeatable "success ingredients." These drivers describe how ideas scale internationally, irrespective of sector.

Step-2: We condensed the drivers into a portable three-pillar architecture for health systems:

- **Availability**: whether people and institutions can reliably find, purchase, study, or access Ayurveda across borders.
- **Acceptability**: whether policymakers, regulators, clinicians, payers, and consumers trust Ayurveda (quality, safety, evidence, and fit with local norms).
- **Propagation:** whether there is a scalable engine and narrative that spreads Ayurveda (branding, advocacy, international platforms, and medical value travel).

Step-3: We operatically implemented each pillar into concrete components that reflect Ayurveda's realities along the value chain:

- **Availability:** 1. Globalised practice & workforce; 2. Exports & Manufacturing; 3. International R&D; 4. Standardised global education.
- **Acceptability:** 1. Regulatory compliance; 2. International collaborations (academic/industry); 3. Insurance coverage; 4. Localisation & cultural adaptability.
- **Propagation:** 1. Strategic brand positioning; 2. Global visibility & promotions; 3. Medical value travel; 4. Presence in global bodies (e.g., WHO).

AVAILABILITY	ACCEPTABILITY	PROPAGATION
Globalized Practice and workforce	Compliance to Regulations and Guidelines	Strategic Brand positioning
Global Exports and Manufacturing	International Collaborations (Academic and Industrial)	Global Visibility and Promotions
International Research & Development	Insurance coverage-products & services	Medical Value travel
Standardized Global Education	Localization & Cultural Adaptability	Presence in Global bodies (WHO)

Fig 7: Components of the study

2.4 Understanding the Globalisation Status of Ayurveda

According to the framework outlined above, the globalisation of Ayurveda is evaluated through a pillar-wise assessment. The three principal pillars identified for this analysis are Availability, Acceptability, and Propagation. Each of these pillars is examined in detail to assess the current status and future potential of Ayurveda in the context of globalisation.

Availability Pillar:

- **Practice & workforce:** Ayurveda practitioners outside India; share of non-Indian practitioners; countries permitting practice (wellness vs. medical scope).
- **Exports & manufacturing**: Exported Ayurveda products by destination, overseas manufacturing sites, and herb-growing geographies; quality certifications/GMP status.
- **International R&D:** Countries with active Ayurveda research; collaborative trials; publications/ citations in indexed journals; registered clinical studies.
- **Education:** Universities offering Ayurveda (UG/PG/PhD/CPD) abroad; accreditation status.

Acceptability Pillar:

- **Regulations:** Products compliant with key regimes (e.g., supplement vs. medicine routes); Ayurveda monographs in international pharmacopoeias; IP activity (patents filed/granted).

- **Collaborations:** Outcomes of country-level MoUs; institute-level partnerships; academic chairs; recognition of Ayurveda pharmacopoeias/associations.
- **Insurance coverage:** countries where Ayurveda services/products receive public or private coverage; extent of benefit design.
- **Localisation**: localised formulations/labels; number of languages and country-specific materials; market-specific manufacturing/marketing strategies.

Propagation Pillar:

- **Brand positioning:** global campaigns to (re)position Ayurveda; share-of-voice and sentiment; presence of Ayurveda firms among global leaders/public markets.
- **Visibility:** International conferences/expos with Ayurveda presence; earned media; social/digital reach; e-commerce marketplace coverage; India-partnered events in BRICS/QUAD/SCO.
- **Medical value travel:** International patients seeking Ayurveda treatment in India; recognised MVT hubs and accreditations.
- **Global bodies:** Partnerships with WHO/UN agencies; coding/standards wins; representation in WHO regional processes. These indicators will be iterated as we test feasibility and signal strength with stakeholders.

2.5 Research Design: Data Collection and Analysis

For this study, we followed a two-step approach. First, evidence was gathered through wide-angle secondary research and targeted primary inputs (interviews and focus groups). Second, the data was analysed to turn findings into reliable, actionable recommendations and a phased roadmap.

Data Collection:

We have combined wide-angle secondary research with deep primary engagement. Secondary sources span government schemes and policies (Ayush, Commerce), multilateral publications and standards compendia, market and trade data, academic literature, and curated media. Primary collection employs Key Informant Interviews (KIIs) across ministries, regulators, manufacturers, hospital/retreat chains, professional associations, payers, and international partners, and focus group discussions (FGDs) to pressure test hypotheses and surface local constraints/enablers. A detailed list of Stakeholders interviewed is attached in **Annexure 2.**

Data Analysis Plan:

- **Quantitative:** Data cleaning and descriptive statistics to establish baselines by component and country.
- **Qualitative:** Thematic coding of interviews/FGDs to surface recurring barriers (e.g., labelling variance, licensing gaps), enablers (e.g., WHO collaboration), and market-specific opportunities.
- **Triangulation & Benchmarking:** Cross-validation of primary and secondary evidence; benchmarking Ayurveda against TCM and other medicinal systems for like indicators (e.g., coding, pharmacopoeia, insurance pathways).

Outputs feed directly into a pillar-wise strategy option and the phased implementation roadmap. Based on the roles and responsibilities of different stakeholders as elicited from primary and secondary research, a short-, mid- and long-term action plan for each stakeholder has been developed.

Section 3: Global Availability of Ayurveda

Components

A	Globalised Practice and Workforce
B	Global Exports and Manufacturing
C	International Research and Development
D	Standardised Global Education

A. Globalised Practice and Workforce

Current Status

Internationally, Ayurveda is expanding its footprint gradually and gaining formal recognition. As of 2024, around 30 countries officially permit the practice of Ayurveda as a medical discipline, either through licensing frameworks, academic collaborations, or inclusion in national health policies. India has over 355,000 Ayurvedic professionals, forming a strong domestic ecosystem.[12] But 95% of these practitioners are working in India, leaving a very small minority of qualified Ayurveda practitioners available in international locations. Countries such as Germany, Hungary, Romania, Latvia, the UAE, and Sri Lanka have integrated Ayurveda into their healthcare systems to varying degrees.[13]

Table 3.1: Glance of Ayurveda in India

Metric / Category	Details / Numbers
Total Traditional Medicine Practitioners	750,000+
Ayurvedic Professionals	~355,000
Countries Recognising 'Ayurveda' as a system of Medicine[14,15]	Nepal, Sri Lanka, Pakistan, Bangladesh, South Africa, Tanzania, Mauritius, Saudi Arabia, Bahrain, the UAE, Oman, Qatar, Malaysia, Colombia, Cuba, Brazil, Switzerland, Germany, Serbia, Hungary

Outside the conventional Ayurveda-friendly geographies in India and neighbouring countries, practitioner presence is growing in countries such as the United States (around 5,000 practitioners), Germany (around 2,000), and Australia (around 1500), primarily through diaspora communities and integrative medicine centres.

- **South Asia:** In neighbouring countries like Nepal, Sri Lanka, Bangladesh, Ayurveda is largely institutionalised with dedicated departments and regulatory bodies.[16,17,18]

- **Middle East:** In the **UAE**, Ayurveda is an approved Medical System. Practitioners and therapists must be licensed by health authorities (e.g., Dubai Health Authority in Dubai) to practice legally. In **Oman**, Ayurveda is recognised as an approved medical system by the Ministry of Health (MOH), while the Traditional, Complementary and Alternative Medicine(TCAM) section under the Ministry of Health is the licensing authority. Practitioners must pass the TCAM-MOH Examination for the license to practice in the country. In **Saudi Arabia**, Ayurveda is an approved medical system integrated into the healthcare framework under Saudi Vision 2030. The National Centre for Complementary and Alternative Medicine(NCCAM) serves as the main regulatory body, and Practitioners must pass required evaluations and exams to secure a license to practice from NCCAM.[19]
- **USA:** Ayurveda is not legally recognised as a medical system. 11 states have passed **"Health Freedom" laws** allowing Ayurveda practitioners to offer limited services legally without a medical license, provided they do not practice medicine as defined by the state, including not prescribing medicine or performing surgeries. Ayurveda practitioners can recommend dietary supplements to their clients. In the other 39 states of the USA where these laws do not exist, practitioners almost exclusively operate as educators or lifestyle consultants to avoid legal conflict.[20]

Health Freedom Law in United States

Health Freedom Laws (also known as "Safe Harbor" laws) protect the right of individuals to access complementary and alternative health care services that are not within the scope of conventional medicine. They provide a legal framework that allows unlicensed professionals to practice openly as long as they follow specific disclosure and prohibited-conduct rules.

- **Mandatory Disclosure:** Health care practitioner must inform the patient of the practitioner's education, experience, and credentials in relation to the complementary or alternative health care treatment option.
- **Prohibited Conduct:** They cannot perform surgery, set fractures, prescribe drugs, or puncture the skin.
- **Client Acknowledgement**: Practitioner must inform the patient of the nature of the treatment and must explain the benefits and risks associated with the treatment to the extent necessary for the patient to make an informed and prudent decision regarding such treatment option.

As of recent legislation updates, 11 states have passed versions of these Health Freedom laws. These states are:

1. California
2. Colorado
3. Minnesota
4. Arizona (only for Homoeopathy)
5. Nevada
6. Oklahoma
7. Rhode Island
8. Idaho
9. Louisiana
10. New Mexico
11. Maine

- **Europe:** Switzerland, Germany, UK, Hungary, Latvia, and Romania have recognised Ayurveda in varying degrees, allowing the practice of Ayurveda as an alternate system of Medicine. In **Germany**, **Heilpraktiker license** (Naturopath) is provided for traditional medicine practitioners after a written exam. **Switzerland** also offers nationally recognised certificates for non-physician practice of Complementary and Alternative Medicine(CAM). There are countries in Europe with free choice of therapy, and doctors are free to choose an alternate mode of therapy for treating their patients. Hence, in countries like **Austria** and **Netherlands** there are no major restrictions on the practice of Ayurveda.[21]

- **Russia:** Dual-regulatory framework. Since 2015, the National Classification of Occupations (OK 010 – 2014) has officially recognised the terms "Ayurvedic medicine" and "Doctor of Ayurvedic medicine". But clinical practice is allowed only for Doctors of Modern(Allopathic) medicine who have completed additional state-approved 144-hour "Fundamental Principles of Ayurveda" courses.
- **Africa:** In countries like South Africa, Tanzania, and Mauritius, Ayurveda is integrated through formal collaborations and health agreements.
- **Australia:** Ayurvedic practitioners are not regulated by the Australian Health Practitioner Regulation Agency(AHPRA). Instead, they operate under a non-registered health practitioner model. Non-AHPRA-regulated practitioners must legally comply with the National Code of Conduct for Non-Registered Health Practitioners, which sets standards for safety, transparency, and clinical conduct.

Table 3.2: Regulatory requirements for Ayurveda practice in key geographies of the world

Country	Status of Practice	Key Regulatory Requirements
United States of America	Regulations vary across states	No federal license for Ayurveda; practitioners often work under **"Health Freedom"** laws in specific states as health coaches or wellness consultants.
United Kingdom	Unregulated	Practitioners are not legally regulated.
Australia	Unregulated	Practitioners are not legally regulated.
Switzerland	Regulated	Ayurveda is officially recognised as a medical system. Practitioners must meet specific Swiss federal diploma standards for complementary medicine.
Germany	Regulated	BAMS graduates can practice in wellness centres or clinics after obtaining a **"Heilpraktiker"** (naturopath) license for clinical practice.
Saudi Arabia, UAE, Oman	Regulated	Ayurveda is an approved Medical System. Practitioners and therapists must be licensed by health authorities (e.g., DHA in Dubai) to practice legally.
Canada	Regulated	Ayurveda is not recognised as a system of medicine, but authorities grant permission to BAMS professionals to practice Ayurveda.
Russia[22]	Regulated	Clinical practice is allowed only for doctors of Allopathic medicine who have completed additional state-approved 144-hour "Fundamental Principles of Ayurveda" courses.
Malaysia	Regulated	Mandatory registration with the **Traditional and Complementary Medicine (T&CM)** council.

Workforce portability and clinical acceptance hinge on training standards. WHO published Benchmarks for the Practice of Ayurveda (2022), defining minimum standards for safety, quality, and regulation of Ayurveda practice globally. These guidelines help countries integrate Ayurveda into their health systems. These benchmarks set minimum requirements for curricula, competencies, and safety and are useful for building micro-credentials with host universities, and for hospital CME frameworks in countries where Ayurveda is not yet regulated as a profession.

The recent Free Trade Agreement (FTA) between India and the European Union in January 2026 mentions an intent among EU countries to provide a boost to Indian traditional medicine services and practitioners. It mentions that in the EU Member States where regulations do not exist, Ayush practitioners will be able to provide their services using the professional qualifications they gain in India. Further, the FTA also provides future certainty and locks in the openness of the EU for the establishment of Ayush wellness centres and clinics in the EU Member States.[23] As the FTA gets

implemented in the days to come, it may surely open new doors and opportunities for providing regulatory approvals for the practice of Ayurveda.

Areas of Improvement

- Despite growing international presence, global service delivery of Ayurveda remains fragmented; largely confined to wellness centres, spas, and complementary therapy clinics rather than fully integrated healthcare systems.[24]
- The inclusion of Ayurveda in ICD-11 Module 2, which codifies morbidity classifications for traditional medicine systems, is a landmark development.[25] It enables better integration of Ayurveda into global health systems, thereby making the practice more legitimate in countries and markets where it was previously forbidden.
- There is a lack of availability of micro-credentials to build the capacities of healthcare professionals of host countries in popular Ayurveda therapies and procedures. These micro-credentials can be offered to multiple cadres of healthcare professionals, including nurses and paramedics. With the necessary regulatory approvals, health professionals trained in these micro-credentials can create a large global workforce trained in Ayurveda.

Global Best Practices

Among the traditional medicine systems, China has made significant investments in building a robust TCM infrastructure domestically. 5100 TCM hospitals and 138 key TCM hospitals are operational, with plans to establish 1,200 specialised TCM centres. TCM is integrated into community clinics, with the number of such clinics growing from 195 in 2017 to 41,700 in 2024.[26] The domestically developed integrated care delivery models have helped China to push TCM in overseas markets as a more acceptable option of integrative medicine. **China has aggressively internationalised TCM through 30 overseas TCM centres and inclusion in 16 Free Trade Agreements**. TCM practitioners are supported by bilateral agreements and academic collaborations, enabling formal practice in multiple countries.[27] Licensure footprints have been built in major markets by anchoring TCM around acupuncture and Chinese herbal medicine credentials.

- **US:** Today 47 states (with the exception of Alabama, Oklahoma, and South Dakota), plus the District of Columbia, have instituted acupuncture statutes and license the professional practice of acupuncture. Licensure in most states requires candidates to pass the examinations provided by the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM), with the exception of California and Nevada, which have their own examinations.[28] The latest professional mapping estimated around 34,500 active licensed acupuncturists in the US.[29]
- **Australia:** Australia regulates "Chinese medicine" nationally with more than 4,800 practitioners currently registered under the Chinese Medicine Board of Australia (CMBA). Australian Health Practitioner Regulation Agency (AHPRA) is the national body that implements the National Registration and Accreditation Scheme (NRAS) for health professionals in Australia, including CMBA, which regulates traditional Chinese medicine practitioners. These regulatory anchors normalize practice, ease insurer contracting, and underpin workforce mobility.[30]
- **Switzerland and Germany:** A route for the restricted practice of the complementary system of medicine, like TCM, has been created. In Germany, a Heilpraktiker license (Naturopath) is provided to the traditional medicine practitioner after a written exam. Switzerland also offers nationally recognised certificates for non-physician practice of complementary and alternative

medicine. TCM practitioners often register with the Swiss Professional Organisation for TCM (SPO-TCM) for quality assurance and recognition.[31]

How other systems have been able to do it: TCM has a more structured and expansive global workforce pipeline, supported by strong academic and policy frameworks. Ayurveda, while rich in practitioner base, lacks global academic visibility and integrated infrastructure. Both systems have strong domestic education pipelines, but TCM ensures employment through integration mandates. **TCM practitioners benefit from ISO standards (123 published) and national laws supporting integration with modern medicine, developing multiple employment pathways**. Ayurveda has WHO benchmarks for training, but needs mutual recognition agreements for practitioner mobility across the world. The World Federation of Chinese Medicine Societies (WFCMS) plays a key role in global standardisation and practitioner accreditation, enhancing mobility and recognition. [32,33,34]

World Federation of Chinese Medicine Societies (WFCMS)

- WFCMS is an international non-profit academic organisation established in 2003, headquartered in Beijing, China. It operates under the guidance of the **State Administration of Traditional Chinese Medicine** and is recognised by global bodies such as the WHO and UNESCO.
- WFCMS currently has **300 group members** and **191 branches** across **77 countries** and regions.
- Major Functions of WFCMS
  - » WFCMS connects TCM societies in these countries, **works to introduce TCM into national health systems by promoting modernisation and standardisation**.
  - » WFCMS also facilitates global talent exchange and **professional development for TCM practitioners**, creating a strong international presence for TCM.

How Ayurveda can Utilise these Learnings

India's Ayurveda infrastructure, while growing, remains less expansive. The number of Ayurveda practitioners is estimated to be around 3.55 lakh, but with limited global mobility and recognition. Educational infrastructure includes over 415 Ayurveda colleges, but none are ranked globally. **Within India, integration with modern medicine is limited, mostly through co-located facilities rather than fully integrated departments.** As TCM shows, the integrative care model needs to be developed and propagated domestically; only then would a meaningful expansion be possible abroad.[35]

Workforce portability and clinical acceptance hinge on training standards. The WHO benchmarks for training and practice of Ayurveda (2022) set minimum requirements for curricula, competencies, and safety; useful for building micro-credentials with host universities, and for hospital CME frameworks in countries where Ayurveda is not yet regulated as a profession.[36] Regarding building a robust global workforce, some of the ways ahead for Ayurveda can be:

- **Prioritise licensure:** Treat Ayurveda practitioner licensing as an acupuncture style wedge. This can be started with jurisdictions already friendly to complementary medicine (e.g., parts of the US, Australia, Switzerland).
- **Creating a global register, directed at portability:** Ayurveda can mirror Australia's AHPRA model by piloting an Ayurveda Global Register with a standardised continuous professional development component, and seek mutual recognition MoUs with host regulators drawing on WHO Collaborating Centre networks.

Recommendations

Short Term (Up to 2029)

1. **Creating a Global Information Portal for Ayurveda Practice:** Establishing a comprehensive digital portal dedicated to Ayurveda practitioners worldwide can serve as a single-window resource for navigating international practice requirements. This platform should include **country-specific regulatory frameworks, licensing pathways, work visa guidelines, documentation checklists, and compliance norms**. By offering verified, up-to-date information, the portal would reduce ambiguity and empower practitioners to make informed decisions about career opportunities abroad. Additionally, it can host FAQs, legal advisories, and success stories, creating a knowledge ecosystem that accelerates global mobility and fosters trust among regulators and practitioners alike.
2. **Create a Global Ayurveda Register (GAR):** Creating an international register of country-wise Ayurveda practitioners with a competency-based Continuous Professional Development (CPD) component. This register may also have digital credentials aligned to WHO Benchmarks for Training, as a portable reference for foreign regulators and insurers. NCISM can act as a custodian of this register. An authentic and transparent institutional mechanism to certify and validate Ayurveda practitioners globally would add weightage to the proposal for regularizing Ayurveda practice in many countries.
3. **Leveraging bilateral relationships and multi-country platforms for Mutual Recognition Arrangements and Export of Services:** MRAs to be negotiated for certificates and micro-credentials (e.g., Ayurveda nutrition, rehabilitation, pain protocols) with countries having good bilateral relationships with India, such as Russia, Italy, Japan, etc., and with the member countries of those multi-country forums where India is an active member (G20, ASEAN, BRICS, etc.). This can be a good starting point, which can later be leveraged along with the support from WHO CCs and GTMC to co-design curricula with local professional bodies. Leverage trade agreements such as the India–EU FTA to facilitate the cross-border mobility of Ayurveda physicians and the export of related services.
4. **Electives in global medical schools**: Introduce Ayurveda-focused electives in global medical schools by embedding 10–12 evidence-backed courses (e.g., Ayurveda in chronic pain, metabolic health, oncology supportive care, women's health) into curricula across the U.S., EU, Australia, and ASEAN. These electives should be implemented through country or institution-level MoUs and integrated into the Ayush Chair strategy to normalize integrative healthcare pathways.
5. **Strategic approach towards recognition of Ayurveda and validation of practice:** Validation of Ayurveda practice in major geographies of the world may be a long process, but sustained and focused strategic efforts surely would help in making gradual progress. In many countries, some alternate mechanisms are available for limited practice of Complementary and Alternative Medicine (CAM). Leveraging these existing pathways (e.g., Australia, parts of the U.S., Switzerland, Germany, Italy, etc.), focused efforts can be made to ensure all authentic Ayurveda practitioners can practice. Gradually, efforts to strengthen and streamline the regulatory pathways by influencing the authorities through local associations, alumni groups, Ayush chairs, and with the support of local embassy and Ayush information cells (if available) can lead to success in getting Ayurveda recognised as a full-fledged system of Medicine.

Medium (Up to 2035) and Long Term (Up to 2047)

1. **Promotion of Integrative care models with modern medicine:** Positioning Ayurveda as a complementary and rehabilitative therapy within integrative care models can significantly enhance its acceptance in countries where standalone recognition may face regulatory hurdles. **By collaborating with modern medicine and demonstrating evidence-based outcomes in a domestic setup first, such as improved recovery rates, reduced side effects, and enhanced patient well-being, Ayurveda can gain credibility as part of holistic treatment protocols.** This approach mirrors the success of Traditional Chinese Medicine, which leveraged integrative frameworks to enter mainstream healthcare globally. Such partnerships not only validate Ayurveda scientifically but also create sustainable pathways for its inclusion in public health systems.
2. **Expanding the global spectrum of Ayurveda education:** To build a strong international pipeline of Ayurveda professionals, it is essential to broaden the reach of Ayurveda education globally. This can be achieved by **establishing Ayurveda colleges, accredited programs, collaborative degree courses, and training modules in partnership with reputed universities and healthcare institutions across different regions**. Offering flexible formats such as online certifications, exchange programs, and joint research fellowships will attract diverse learners and create a skilled workforce capable of delivering authentic Ayurveda care worldwide. Such initiatives will not only increase practitioner numbers but also embed Ayurveda into mainstream health education systems internationally.
3. **Promoting standardisation and evidence-based research:** For Ayurveda to gain global acceptance as a credible system of medicine, it must be positioned as a science-driven, evidence-backed discipline. This requires **rigorous clinical research, standardised protocols for therapies and formulations, and transparent quality benchmarks for products and practices**. By publishing outcomes in peer-reviewed journals and aligning with international regulatory norms, Ayurveda can strengthen its scientific image and dispel misconceptions. Demonstrating its efficacy in holistic healing through natural methods will enhance trust among policymakers, practitioners, and patients, paving the way for its integration into global healthcare frameworks.
4. **Establish a World Federation of Ayurveda and Yoga** as an international, non-profit umbrella organization to network Ayurveda & Yoga societies/associations globally, advance standardization and health system integration, and enable structured professional exchange and capacity building for Ayurveda and Yoga practitioners for global placement.

B. Global Exports and Manufacturing

Current Status

Ayurvedic products are exported to 150 countries, primarily under the category of dietary supplements and wellness goods. While most exports are non-medicinal, the scale of distribution highlights strong global interest. However, the absence of centralised data on manufacturing and export volumes presents a challenge. Addressing this gap could enhance transparency, traceability, and strategic branding—key steps toward establishing Ayurveda as a globally trusted system of medicine.

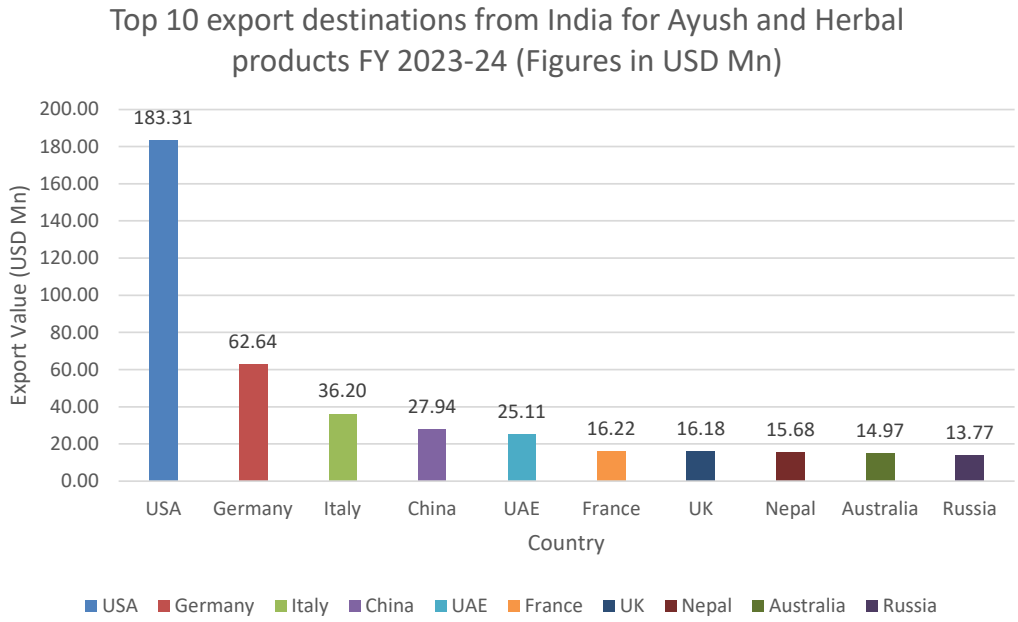

Fig 8: Top 10 export destinations from India for Ayush and Herbal products)[37]

The export of Ayush products doubled from USD 1.09 billion in 2014 to USD 2.16 billion in 2023.[38] The export basket includes Medicinal and Aromatic Plants (MAPs), extracts, pharmaceuticals, cosmetics, and nutraceuticals. According to the Ayush Export Report, the herbal medicinal sector exports grew from USD 0.86 billion in 2017 to USD 1.26 billion in 2021, registering a CAGR of 7.82%.[39] The top three markets—the USA (34.95%), EU (18.66%), and UAE (5.52%)—accounted for nearly 60% of total Ayush exports in 2021 for all 3 categories of Ayush products. China and India are the two major exporters of MAPs across the globe, accounting for around 25.65 and 17.25 per cent of the total exported value of MAPs in 2021, respectively. While China registered a CAGR of -0.36 per cent in the export of MAPs for 2017-21, India recorded a CAGR of 6.14 per cent.[40]

- **Medicine and Aromatic Plants (MAPs):** USD 630.05 Mn | CAGR: 5.76% Major items: Psyllium (48.42%), Turmeric (32.66%), Senna leaves, Zedovary roots
- **Extracts:** USD 438.47 Mn | CAGR: 11.60% High growth in EU countries like Sweden (112%), Ireland (64%), Denmark (37%)
- **Pharmaceuticals:** USD 193.6 Mn | CAGR: 7.18% Major destinations: EU (17.08%), the USA (11%), UAE (10.9%), Nepal (10.4%)[41]

While India remains the primary hub for Ayurveda and other Ayush product manufacturing, overseas production is gradually emerging to meet local regulatory requirements and reduce trade barriers. Countries such as the United States, Germany, and Australia have seen Ayurvedic dietary supplements

and herbal formulations manufactured under local GMP standards to comply with FDA, TGA, and EU directives.[42] Additionally, contract manufacturing partnerships in Southeast Asia and the Middle East are growing, driven by rising consumer demand for natural wellness products and the need for faster market access. These facilities often focus on nutraceuticals, herbal extracts, and Ayurveda-inspired personal care products, ensuring compliance with local labelling, safety, and quality norms. This trend not only supports localisation but also enhances consumer trust and facilitates integration into mainstream retail and e-commerce channels.

- Dabur has manufacturing units in UAE, Egypt, South Africa, Turkey, Nigeria, and Nepal. The main objective of these units is to cater to the Middle East, North Africa, and global markets with localised compliance.[43]
- Patanjali Ayurveda is registered with the US-FDA for export and compliance. They operate through the international business division and have tie-ups for overseas distribution and manufacturing partnership.[44]
- Himalaya has subsidiaries and contract manufacturing arrangements in the UAE and the USA for nutraceuticals and OTC herbal products. The major focus of these units is local GMP compliance for supplements and cosmetics.[45]

Areas of Improvement

- **The majority of exports from India are in the form of raw products, i.e., MAPs and Extracts.** When it comes to the finished products in the form of Pharmaceuticals, the numbers are much lower. Only 4.83% of total exports to the USA and 15.4% to the EU are in the form of pharmaceuticals. A major factor behind this is the lack of regulatory approval for the marketing of Ayurveda products as drugs in these markets.
- Relatively smaller markets like UAE and Nepal are among the biggest importers of Ayurveda pharmaceuticals, signifying much larger **untapped scope in other countries where Ayurveda is recognised as a system of medicine and products are allowed to be marketed as drugs like South Africa, Tanzania, Brazil, Columbia, Sri Lanka and others, especially the Asian markets** where there is significant scope of increasing the demand of Ayurveda products.
- **Focused efforts need to be made to enter the US and EU markets as drugs.** In the USA, drug registration under the Botanical Drug category can be a market authorisation pathway for Ayurveda. **Psyllium alone accounts for more than 86% of MAPs export to the US,** and it has been included in the OTC drug review and the FDA has classified certain Psyllium substances as Generally Recognised as Safe and Effective (GRASE). Registration strategies of Ayurveda products, beginning with single-herb botanical drugs, may earn substantial exports similar to Psyllium.

Global Best Practices

Global exports of TCM products reached ~US$5.46 billion in 2023, more than double Ayurveda's export value. TCM products are shipped to 190+ countries, with strong penetration in Asia (Japan, South Korea), North America and Europe. Manufacturing units are also established in multiple international locations, ensuring supply chain efficiencies. China accounts for ~25% of global Medicinal and Aromatic Plant (MAP) exports, leveraging large-scale cultivation and industrial processing. China reports a distinct customs line for "medicinal materials and medicaments of Chinese type" with ~USD 1.21 bn exports in Jan–Nov 2023; plant extracts are now the largest TCM export category across Regional Comprehensive Economic Partnership (RCEP), a **free trade agreement among 15 Asia-**

Pacific countries (including China, Japan, South Korea, Australia, New Zealand, and 10 ASEAN nations). Aggressive standardisation as per international regulations has ensured steady demand for TCM products overseas.[46]

How other systems have been able to do it:

TCM is embedded in China's Five-Year Plans, treated as a strategic industry. Dedicated industrial parks, tax incentives, and R&D subsidies have created a robust manufacturing ecosystem.

- **TCM is included in 16 Free Trade Agreements**, reducing tariff barriers.
- Integration of TCM into national health insurance boosted domestic demand, creating economies of scale for exports.
- **ISO/TC 249 has published ~120 standards for TCM**, covering raw materials, formulations, and devices. Moreover, strategic efforts to secure regulatory approvals for TCM products in key markets (working party in EDQM to ensure product approval in the EU) have also immensely helped in boosting the demand for TCM products.[47]
- TCM is recognised as a system of medicine, and the **practice of TCM has also been legitimised in a large number of countries.** This has helped in increasing the demand for TCM products.
- China enforces **traceability systems (blockchain-based) for TCM products**, ensuring global buyers trust quality and origin. Such measures for compliance with international norms accelerate regulatory approvals abroad.
- Chinese firms have set up **overseas manufacturing and processing units** in Belt & Road countries and Africa to reduce logistics costs and meet local regulatory norms.

How Ayurveda can Utilise these learnings

Ayurveda-led Ayush exports stand at ~US$2.16 billion, reaching 150+ countries. Export growth is steady (CAGR ~11%), but the product mix is dominated by raw botanicals and basic formulations, with limited high-value finished goods. No large-scale manufacturing hubs have been created in overseas locations for Ayurveda; exports rely on India-based production only. Ayurveda R&D spend is ~US$234 million (2025); this is only a fraction of TCM's investment. Regarding improving the export volumes, some of the ways ahead for Ayurveda can be

- **Use of trade corridors:** Replicate TCM's Belt and Road style alliances with India led Ayurveda supply hubs (Africa, ASEAN, LATAM) and manufacturing units using AyushExcil and MEA platforms.
- **Building export grade Standardisation:** An Ayurvedic Pharmacopoeia "Export Edition" can be developed, which is harmonised with ISO/TC 249 methods so that Indian plants/formulations have standard monograph entries when tendering to EU/UK/ Canada/Australia markets.

Recommendations

Short Term (Up to 2029)

1. **Trade geography diversification and shifting up the value chain:** India's Ayurveda exports are currently concentrated in a few geographies (notably the US, EU, and UAE) and are dominated by low-value-added categories such as herbs and extracts. **A focused diversification strategy should target Asian and African markets where traditional medicine systems are culturally accepted and Ayurveda already has some degree of recognition**; using country-prioritisation, in-market partnerships, and targeted promotion through Indian missions, trade fairs and B2B buyer–seller meets. In parallel, **export strategy should explicitly aim to increase the share of finished**

products (Ayurvedic pharmaceuticals, OTC wellness products and dietary supplements) by supporting product adaptation for local regulations, strengthening brand-building and consumer trust, and enabling manufacturer readiness (quality systems, packaging/labelling, stability data).

2. **Ayurvedic Pharmacopoeia-Export Edition**: We need to create a specialised version of India's Ayurvedic pharmacopoeia that meets international regulatory expectations, especially those of the European Medicines Agency (EMA) and its Herbal Medicinal Products Committee (HMPC). Moreover, we need to ensure that raw material sourcing follows Good Agricultural and Collection Practices (GACP) and manufacturing follows Good Manufacturing Practices (GMP), data on contaminants and heavy metals (heavy metals, pesticides, aflatoxins, microbes) is provided and chemical fingerprinting is used to prove batch-to-batch consistency. All these steps are critical for multiple international quality assurance standards (e.g., Europe), strengthening the case for Indian manufacturers preparing regulatory dossiers under the Traditional Herbal Medicinal Products Directive (THMPD) or equivalent national pathways in EU member states.[48,49]
3. **Capacity building of manufacturers for export promotion**: AyushExcil is already doing a wonderful job by helping the manufacturers in clearing the regulatory requirements of international markets, well supported by bodies like FICCI, which continuously engage with manufacturers and service providers. But with the existing limitations of human resources; there seems to be a need for strengthening of AyushExcil. Specialised cells within AyushExcil for major markets; support desk for exporters to guide them through complex international regulations like THMPD (EU), DSHEA (US), NHP (Canada), TGA (Australia) permitted indications can be immediate next steps for an expanded AyushExcil. Playbooks for each market can be prepared along with a dossier diary, so that every manufacturer doesn't have to reinvent the wheel every time.
4. **Creating a real-time Ayurveda Trade Dashboard:** To enable evidence-based trade policy and industry decision-making, a dedicated Ayurveda Trade Dashboard should be instituted **to provide near real-time import–export intelligence across HS codes mapped to Ayurveda product categories (raw herbs, extracts, formulations, nutraceuticals, cosmetics, devices, etc.).** The dashboard should integrate data from customs/export promotion bodies and relevant ministries, and offer actionable analytics—market-wise trends, product-wise growth, price/volume movements, top exporters/importers, port-wise flows, regulatory alerts, and competitor benchmarks. **A robust dashboard will help identify emerging markets early, monitor the impact of policy interventions, detect supply-chain bottlenecks, and guide exporters toward high-potential products and geographies**, thereby improving responsiveness and reducing information asymmetry.
5. **Focused regulatory compliance strategy in Key Markets:** A persistent barrier to scaling Ayurveda exports is regulatory uncertainty and compliance complexity in major markets. India should adopt a focused "pathfinder" strategy that concentrates resources on (i) qualifying a single high-potential herb/ingredient (e.g., Psyllium/Isabgol) through the most credible pathway in the US (drug/OTC monograph or other appropriate route, supported by safety, quality and clinical evidence where needed), and (ii) instituting formal technical engagement in Europe through a structured working party with EDQM to pursue Ayurveda-relevant monographs and quality standards.
6. **Trade facilitation by reducing the pain points in export and leveraging FTAs**: Harmonised System (HS) codes are international customs codes used to classify goods for trade. Ayurveda products often fall under broad herbal or food categories, which can cause confusion and delays in customs clearance. Aligning HS codes specifically for Ayurveda items ensures consistent classification globally, reducing

trade friction. Leverage FTAs to facilitate market access, streamline regulatory approvals, and boost the export of Ayurveda and herbal medicines to global markets.

Medium Term (Up to 2035)

1. **Upgrading the local GMP guidelines to WHO-GMP guidelines**: We need to upgrade Schedule T, which is India's GMP guideline, to WHO-GMP equivalence, which is stricter and internationally recognised, especially in regulated markets (EU, US). Adoption of the WHO-GMP guidelines for export of Ayurveda products among export-oriented manufacturers needs to be encouraged. **An online database listing all Ayurveda manufacturers certified to WHO-GMP standards can be created and published for building trust with foreign regulators and buyers.** Batch-wise Certificates of Analysis (COA) need to be published showing test results for (heavy metals, aflatoxins, pesticides, microbes) with QR links on packs; these are key safety parameters demanded by EMA, FDA, and other regulators.[50]
2. **Promoting overseas finishing Units**: For regulatory agility and trust, we must promote establishing more and localised finishing/packaging units abroad, especially in major markets (UAE/EU/US) under local GMP for selected supplements/cosmetics. These units, while relying on raw materials extracted and exported from India for value capture, would be very helpful in clearing regulatory hurdles in major markets. Incentivizing the manufacturers who wish to set up manufacturing units abroad can also be a good step to promote global trade.
3. **Ayurveda as a Service (AaaS) model**: Government can catalyze global demand by supporting the establishment of Ayurveda service delivery centres abroad (Ayurveda hospitals/clinics and wellness centres) through bilateral MoUs, facilitation of licensing, and viability support for initial set-up. **These centres would offer standardised Panchakarma, preventive care, rehabilitation, and integrative wellness packages, backed by Indian-trained practitioners and accredited protocols.** Creating a "service export" channel (alongside product exports) builds trust, drives destination-pull for Indian Ayurveda, and creates sustained demand for certified medicines, therapies, and training.

Long Term (Up to 2047)

1. **Work with WHO-GTMC to create 'Global Safety and Efficacy Benchmarks'**: Partner with WHO– Global Traditional Medicine Centre (GTMC) to bring harmonisation in regulatory requirements for traditional medicines worldwide and develop a globally acceptable benchmark framework for Ayurveda covering safety, efficacy, and quality.
2. **Publishing Annual global safety report and Global Evidence report**: Institutionalize an annual global report that consolidates post-market safety (pharmacovigilance/adverse event reporting), real-world outcomes from accredited centres, and quality compliance trends across major markets. Complement this with a Global Evidence Report that curates clinical studies, systematic reviews, and priority evidence gaps—presented in a regulator- and clinician-friendly format. Consistent, transparent reporting strengthens trust, supports responsible claims, and provides an evidence backbone for policy dialogue and market access negotiations.
3. **Building a distinct identity of Ayurveda**: Position Ayurveda as a credible, evidence-backed wellness and healthcare system, anchored in scientific validation, consistent quality, and measurable outcomes rather than fragmented product messaging. A unified brand narrative should highlight standardised protocols, GMP-grade manufacturing, traceable botanicals, and safety monitoring, with clear differentiation from generic "herbal" products.

C. International Research and Development

Current Status

Ayurveda's scientific relevance is gaining robust international recognition, with active research initiatives now underway in approximately 70 countries. The Ministry of Ayush has strategically fostered this growth through collaborations with premier institutions such as AIIMS, ICMR, CSIR, DBT, and IITs, leading to landmark studies in areas like Ayurgenomics, gut microbiota, neuropsychiatric disorders, and non-communicable diseases.[51] Notable research includes the Ayurtech initiative at IIT Jodhpur, which integrates AI for predictive health interventions. **Ayush–ICMR Advanced Centre for Integrative Health Research (AI-ACIHR) program** is a recent joint initiative to generate high-quality evidence by integrating Ayurveda with conventional biomedicine and modern research methods, and to develop evidence-based integrative care pathways (including mechanistic studies and cross-referral guidelines). It is being implemented through four AIIMS-based branches covering priority disease areas: **AIIMS Delhi** (Gastro-intestinal Disorders; Women & Child Health), **AIIMS Nagpur** (Cancer Care), **AIIMS Jodhpur** (Geriatric Health), and **AIIMS Rishikesh** (Geriatric Health). Across these branches, the work spans clinical trials and outcomes research, innovations across diagnostics, prevention/health promotion and treatment, and development of integrative management protocols to support wider acceptance and adoption.[52,53]

Central Council for Research in Ayurvedic Sciences (CCRAS) under the Ministry of Ayush has signed 20 MoUs/LoIs with foreign universities and institutions for research and development in Ayurveda.[54] Examples include Charité University (Germany), NCNPR (the USA), Alberta University (Canada), and University of Debrecen (Hungary) for establishing the European Institute of Ayurvedic Sciences. These collaborations focus on clinical research, cancer research, and academic chairs in Ayurveda. Considering the strategic importance and growing interest in Ayurveda research internationally, a dedicated International Cooperation Section (IC-Section) was set up at CCRAS in 2016. This centre processes all issues related to International Cooperation, coordinates collaborative studies, and supports the Ministry of Ayush in the organisation of international meetings, conferences, etc.

One Herb, One Standard initiative: Pharmacopoeia Commission for Indian Medicine and Homoeopathy (PCIM&H), Ministry of Ayush is working jointly with the Indian Pharmacopoeia Commission (IPC) for harmonising herb monographs that currently exist in multiple official compendia like Ayurvedic, Siddha, Unani, Homoeopathic Pharmacopoeias of India and the Indian Pharmacopoeia into one unified, harmonised monograph, so that a single herb is not governed by divergent test specifications and methods. This work is enabled by formal inter-ministerial collaboration to share scientific information and reference materials/extracts and to jointly develop the technical content of the harmonised monographs (with PCIM&H as the publishing authority), giving the harmonised standards the same legal standing as existing pharmacopeial publications. Through this initiative, each monograph will have Indian Standards along with the international quality requirements, so that all Indian quality standards become contemporary with the global standards for the same botanicals.[55]

CSIR–IGIB has pioneered research in the area of **Ayurgenomics** by integrating Ayurvedic Prakriti-based phenotyping with genomic methods to characterize inter-individual variability in health, disease susceptibility, and responses to diet, drugs, and lifestyle factors. Studies focusing on extreme Prakriti types (Vata, Pitta, and Kapha) have identified distinct molecular signatures, including differential gene-expression patterns across immune and other key biological pathways, providing a genomic rationale for Prakriti stratification. These findings position **Ayurgenomics to enable Prakriti-**

informed precision approaches, supporting individualised risk assessment and diagnostics, and strengthening the evidence base for elucidating mechanisms of action of Ayurvedic drugs and clinical procedures—an area relevant to global regulatory acceptance. In parallel, systematic mapping of molecular effects of Ayurvedic interventions to established disease pathways may facilitate **drug repurposing opportunities, particularly for conditions with limited therapeutic options in contemporary medicine**. One of the notable achievements by the Central Council for Research in Ayurvedic Sciences (CCRAS) is that they have generated scientific evidence of clinical efficacy and safety of approximately 182 classical Ayurveda formulations for 40 disease conditions.[56] During the COVID-19 pandemic, Ayush-based interventions such as **Ayush-64 and Kabasura Kudineer** were clinically evaluated and widely adopted, with results published in PubMed-indexed journals. Over 150 studies were conducted, and the Ayush Sanjivani app collected data from 1.35 crore respondents, showing high public trust in Ayush measures.[57,58,59] WHO Global Traditional Medicine Centre (GTMC) in Jamnagar acts as a neutral hub for standards, evidence generation, and policy dialogue. It facilitates multi-country trials and harmonisation of outcome measures.[60] India currently has only 3 WHO Collaboration centres for Traditional Medicine, where one is dedicated to Ayurveda (ITRA-Jamnagar), another for Yoga (Morarji Desai National Institute of Yoga-New Delhi), and the third one in CCRAS-National Institute of Indian Medical Heritage, Hyderabad, is dedicated to formal and literary research in traditional medicine.

The private sector research being conducted by Ayurveda drug manufacturers is limited and is mostly focused on process optimisation and building quality parameters within the manufacturing processes to achieve internationally accepted standards of good agriculture, collection and manufacturing practices. Generating robust, regulator-grade evidence on the safety and efficacy of Ayurveda products—particularly where the intent is to support "drug" positioning in overseas markets—is largely expected to be anchored by India's publicly funded R&D ecosystem, including apex research bodies (e.g., CCRAS, CSIR) and institutions of excellence such as the All India Institute of Ayurveda (AIIA), working in partnership with industry and regulators. In terms of funding, in FY 2024-25, CCRAS was allocated ₹457 crore, and the allocation for AIIA in the same period was ₹251.2 crore.[61] **While this investment supports annual operational costs and vital domestic initiatives, it contrasts sharply with the substantial capital requirements often exceeding USD 20 million[62] (around ₹180 crore) mandated for high-end clinical trials for a single drug and its global regulatory entry.** This resource gap highlights a significant opportunity for enhanced public-private partnerships and international collaborative funding to bridge the path between traditional knowledge and global pharmaceutical standards.

Areas of Improvement

- Strengthening international research collaborations by establishing additional Ayurveda-aligned research institutions abroad, developed in partnership with globally recognised WHO Collaborating Centres, to support high-quality, evidence-based research and global knowledge exchange.
- India should also aim to open at least 5 more WHO collaboration centres, with 3 dedicated to Ayurveda and one each for Siddha and Unani systems of Medicine.
- The gap between the research requirements of the Ayurveda industry and the focus of academic and public institutional research organisations needs to be addressed through regular dialogue and coordination between the two, along with building models of public-private partnerships and collaborative funding.

Global Best Practices

China has invested USD 1.76 billion (2021) in TCM R&D, leading to the development of more than 8,800 new products. TCM research is integrated into China's Five-Year Plans, with a focus on AI-based diagnosis, system pharmacology, and drug discovery. China has embedded TCM R&D into national strategies, backing national key labs, clinical research centres and inheritance/innovation centres. Infrastructure includes 1,200 provincial research platforms, 7 national key laboratories, 5 engineering research centres, and 4 innovation platforms.[63] These platforms support drug discovery, pharmacology systems, AI-assisted diagnosis, and large-scale trials. TCM research output is prolific:[64,65]

- 4,200+ papers in *Journal of Ethnopharmacology*
- 1,500+ in Phytomedicine
- 4,000+ in eCAM
- 2,900+ in Frontiers in Pharmacology

Chinese Academy of Chinese Medical Sciences (CACMS) is China's leading, state-affiliated platform for advancing Traditional Chinese Medicine (TCM) through systematic research, clinical evaluation, and evidence generation. It operates as a comprehensive system that combines research institutes, clinical hospitals, postgraduate training, and knowledge dissemination, enabling the translation of TCM theory into clinical protocols and innovations. include basic and applied research, clinical research capacity building, standard setting support, technology platforms for new product development, and facilitating translation and application of research outputs—all central to creating "regulator-credible" evidence for TCM. CACMS has established joint laboratories with universities in Australia and Netherlands to promote international research in TCM. [66]

Among international research, initiatives like the Belt and Road, **China has supported the creation of TCM Overseas Centres in Asia, Europe, Africa, and US. These centres serve as hubs for clinical practice, education, and research collaboration, addressing challenges in standardisation and cultural adaptation**.[67] Institutions like the China-Australia International Research Centre for Chinese Medicine (RMIT University, Australia) conduct high-impact research, including clinical trials and systematic reviews, to build evidence-based frameworks for TCM. The US Centre for Chinese Medicine (USCCM), established by Beijing University of Chinese Medicine, promotes research and education in the U.S., integrating TCM into local healthcare systems.[68] The World Health Organisation recognizes multiple collaborating centres for traditional and complementary medicine worldwide. **China already has 4 WHO collaborative centres with a focus on TCM-related disciplines, namely- integration of TCM and modern medicine, Acupuncture/moxibustion and Materia Medica, etc.** Platforms like the International Traditional Medicine Clinical Trial Registry (ITMCTR) facilitate global registration of TCM clinical trials, supporting evidence-based integration into healthcare systems.[69]

How other systems have been able to do it

TCM's R&D ecosystem is significantly advanced, with higher funding, infrastructure, and global standardisation. Ayurveda needs to scale up cross-disciplinary research and international collaborations. TCM benefits from mission scale, state-funded R&D that flows into regulated products and publication/patent outputs. The Chinese Government signed more than 40 bilateral agreements to bolster TCM, the effect of which trickled down to research as well. Development of TCM Regulatory Science (TCMRS) to standardize quality, safety, and efficacy using modern tools like systems biology, AI, and network pharmacology has also been a significant factor.[70] Similarly, the establishment of overseas TCM centres, training programs for local practitioners in Asia, Africa, Europe and America. WHO's inclusion of TCM in the International Classification of Diseases (ICD-11) gave it formal recognition,

accelerating adoption in insurance and clinical practice worldwide. **Annual fiscal appropriation (budget allocation) in the year 2024-25 for China's premier TCM research agency CACMS was around 1.72 billion Yuan (around ₹ 2000 crore), whereas its total income was somewhere around 11.75 billion Yuan (around 13000 crore).**

How Ayurveda can Utilise these learnings

India has strengthened the public R&D backbone for Ayurveda under CCRAS, PCIM&H, and national institutes, with increasing Ayurveda R&D allocations. Budget for the financial year 2025-26 increased the Ministry of Ayush outlay to ₹3,992.90 crore, including ₹457.2 crore for CCRAS and ₹251.2 crore for AIIA. But in comparison to the financial resources available with the premium TCM research institution like CACMS, which is approximately around Rs.15000 crore, Ayurveda still has a long way to go. For research abroad, Ayurveda should look to establish international research centres which can act as hubs for international research and multi-country clinical trials. They can leverage the globally spread out WHO Collaboration Centres and should also advocate to initiate more WHO CCs in India.

Globally, Ayurveda faces skepticism due to limited high-quality clinical evidence. Ayurveda needs to adopt modern research tools (AI, pharmacogenomics, big data) and create global clinical trial registries for Ayurveda, similar to TCM's evidence-based approach. Also, Ayurveda can look to promote research, evidence generation for prioritised therapies and treatment areas where acceptability and interest are high to ensure comprehensive regulatory compliance for products, services, and insurance as well. Promoting research on Integrative medicine is another important area where global interest has been observed.

Recommendations

Short Term (Up to 2029)

1. **Research focus on flagship conditions/drugs**: There are high-impact, globally relevant health problems where Ayurveda has already demonstrated measurable benefits. **Conditions like chronic low back pain, knee osteoarthritis, functional GI disorders, insomnia/stress, metabolic syndrome, and women's health are a stronghold for Ayurveda** and more evidence around these will certainly benefit in building international acceptability for Ayurveda therapies and drugs associated with these conditions. Some of these conditions come with a payer precedent (acupuncture coverage and Kampo drug reimbursement) as well; hence, building an acceptance among international insurance agencies would also help the Ayurveda service industry. Moreover, **generating more evidence regarding the efficacy and safety of single herbs like Psyllium can open doors for lots of new substances to be classified as a drug in the US markets.**[71,72]
2. **Increased coordination between industry and academia:** An '**Ayurveda Research Development Committee'** should be set up with nominated members from academia, research institutions, Ayurveda industry (both product and services), Ministry of Ayush, and others to **discuss and coordinate overall research priorities in the field of Ayurveda**. Promoting Public-Private Partnerships and ensuring coordination between different stakeholders involved in Ayurveda-related research should be the main agenda of this committee.
3. **Real-world data (RWD)**: Leverage IRDAI-mandated Ayurveda coverage in India to build **RWD registries** (outcomes, safety, utilisation, cost offsets) feeding payer dossiers overseas.
4. Promoting **Ayurgenomics** as an important research vertical in the international research being planned with WHO Collaboration centres, building on IGIB's translational unit model and the field's demonstrated translational opportunities (biomarkers, drug mechanisms, drug repurposing).

5. **Clarity on available opportunities for private sector Ayurveda patents**: It has been observed that a reason for the lack of private sector participation in Ayurveda research is the lack of patent access for them, citing India's no patent policy for traditional knowledge. Communicating a simple policy line to the private sector that "**Traditional knowledge per se is not patentable, but substantial improvements may be**", which is consistent with India's patent position as well, would be very helpful in this regard. Ministry of Ayush can publish and socialize "green lane" examples of patentable innovations like novel extraction/standardisation processes, novel delivery systems, validated biomarkers/diagnostics, formulation optimisation with demonstrated technical effect, and new manufacturing controls—while ensuring claims don't merely repackage known formulations.

Medium (Up to 2035) and Long Term (Up to 2047)

1. **Establishing International Ayurveda Centres of Excellence:** On the lines of the All India Institute of Ayurveda established in India, similar centres of excellence for Ayurveda can be established in some of the Ayurveda-friendly geographies as a collaboration between the host -country's Universities and Ayurveda CoEs in India, like AIIA/ITRA. Apart from academics, research can be a focus area for these institutions, which can be conducted in coordination with WHO CCs.
2. **WHO Collaboration Centre networked trials**: Ayurveda can partner with globally spread out WHO CCs to conduct multi-country clinical trials on safety, efficacy, and pharmacovigilance of Ayurvedic therapies. University of Illinois at Chicago (UIC) is a WHO CC for herbal medicine research, NAFKAM (Norway's National Research Centre for Complementary and Alternative Medicine) is a WHO CC for traditional and complementary medicine research, similarly Royal London Hospital for Integrated Medicine (UK) which is the WHO CC for integrative medicine can be leveraged for such multi country research and trials. Co-funding ensures shared ownership and credibility. Indian institutions like ITRA Jamnagar, AIIA Delhi, and CCRAS can serve as central data hubs and quality assurance labs for these trials, ensuring compliance with WHO Good Clinical Practice (GCP) and pharmacovigilance standards.
3. **Establish 5 more WHO Collaboration Centres in India:** Expanding the network of World Health Organisation (WHO) Collaboration Centres within India would significantly enhance Ayurveda's global visibility and acceptance. These centres would serve as standardised hubs for data collection, quality control protocols, and education, ensuring research findings are disseminated through a globally recognised framework and facilitating consistent international collaboration. India should push for 5 more WHO collaboration centres, with 3 of them dedicated to Ayurveda (focused on Panchakarma, Pain management, Integrative medicine, Geriatric Health, etc.) and one each for Siddha and Unani systems of medicine.
4. **Build an International Ayurveda Research Alliance under WHO-GTMC:** Creating a formal International Ayurveda Research Alliance anchored within the WHO- Global Traditional Medicine Centre (GTMC) would provide a unified, authoritative platform for multi-country clinical trials and research initiatives. This alliance would streamline regulatory harmonisation and shared research agendas, leveraging the GTMC's mandate to integrate traditional medicine evidence into global health policies effectively.
5. **Bring in newer technologies like network pharmacology and AI-based quality control:** Integrating cutting-edge methodologies like network pharmacology and AI-driven quality control is crucial for providing a precise scientific understanding of the complex, multi-component nature of Ayurvedic practices and ensuring rigorous, automated quality assurance.

D. Standardised Global Education

Current Status

In Western countries and East Asia, Ayurveda is mostly offered through private institutes, wellness academies, or continuing education programs, not as part of accredited medical degrees. Ayurveda is formally recognised and taught in government universities as part of medical education in neighbouring countries like Nepal and Sri Lanka, almost like India, while in countries like Japan and Thailand, Ayurveda is taught mainly through short-term courses, wellness programs, and collaborations with Indian institutions, not as a full-fledged degree program.

The Ministry has launched the Ayush Scholarship Scheme, which currently supports 277 international students from 32 countries [73] (ICCR). While Traditional Chinese Medicine (TCM) leads globally with around 180 accredited courses, Ayurveda is rapidly expanding its footprint. The Ministry's efforts to integrate Ayurveda into mainstream education include the NCISM Act, 2020, and NCH Act, 2020, aligning Ayush education with the National Education Policy (NEP) 2020.[74] These reforms have led to a surge in Ayush institutions, with ~415 colleges, and the establishment of Institutes of national importance and all-India level like ITRA Jamnagar and AIIA Delhi.

The Ministry is also promoting dual PhD programs, simulation labs, and virtual anatomy tools to modernize Ayush education. The Ayush Grid and Ayush Research Portal have digitised research dissemination, with over 42,000 publications repository. Furthermore, India's leadership in the WHO Global Traditional Medicine Centre (GTMC) and the inclusion of Ayurveda in ICD-11 Module 2-mark significant milestones in global academic and regulatory integration.[75] As part of India's broader strategy to integrate Ayush into global health systems, especially in the academic domain, the Ministry of Ayush has established Ayush Chairs at multiple academic institutions abroad.

Ayush Chairs: These chairs serve as academic ambassadors for Indian traditional medicine. They promote research and education on Ayush systems, advancing their recognition in the host countries. Under this initiative, Indian experts are deployed at foreign institutions, and the Ministry provides financial support, including salaries and travel expenses, while the host university offers accommodation and local hospitality.[76] Their key roles include

- **Curriculum Development:** Designing short and medium-term Ayush courses for host universities.
- **Teaching & Training:** Delivering lectures, tutorials, and practical sessions.
- **Research Collaboration:** Exploring joint research projects with foreign institutions.
- **Public Engagement:** Conducting seminars, workshops, and at least two public lectures annually.

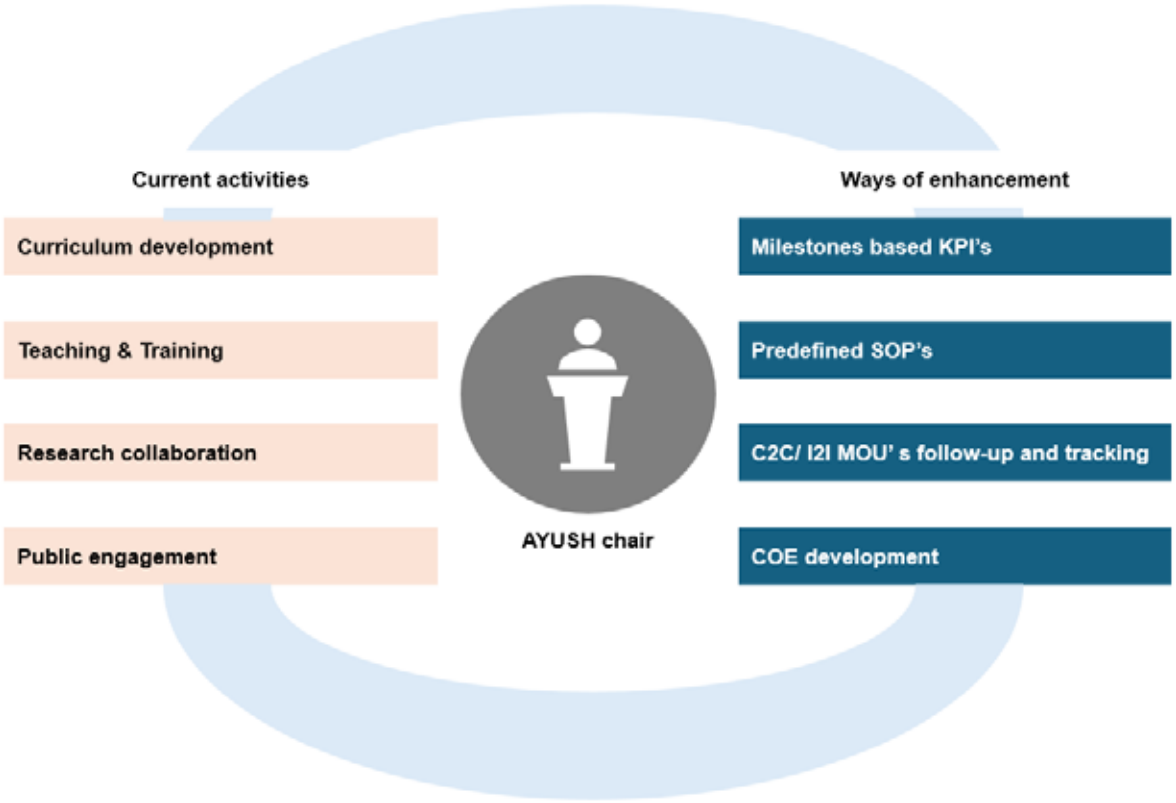

Fig 9: Ayush Chair-Roles and Ways of Enhancement

- **Information Hub:** Acting as a credible source of Ayush knowledge for the host-country.
- **Clinical Demonstrations:** Providing practical training and clinical services where applicable

Apart from India and neighbouring countries like Nepal and Sri Lanka, where Ayurveda education is well developed, today, multiple universities across the world offer Ayurveda-related courses.[77]

- **United States:** Maharishi International University (MIU) offers accredited Bachelor's and Master's degrees in Ayurveda Wellness. Other key providers include Bastyr University, Southern California University of Health Sciences (SCUHS), and Mount Madonna College of Ayurveda.
- **Europe:** The **Rosenberg European Academy of Ayurveda** offers an M.Sc. in Ayurveda across Germany, Austria, and Switzerland. **Charité University** (Berlin) and the **University of Debrecen** (Hungary) have active research and educational collaborations.
- **Australia & New Zealand:** Western Sydney University and the Australasian Institute of Ayurvedic Studies provide clinical training and recognised diplomas.
- **Latin America:** The University of Buenos Aires and the National University of Cordoba in Argentina incorporate Ayurveda into their medical school curricula.

Micro-credentials and Short-Term Courses: Institutes like the National Institute of Ayurveda (NIA), Jaipur, run specialised modules for foreign nationals on *Panchakarma*, *Ksharasutra*, and Ayurvedic Diet and Lifestyle. Specialised Procedure Training: Short-term certificates (often 1–3 months) are available for *Marma Sharir*, *Ayurveda Aahaar* (food), and *Ayurvedic Beauty Care*.[78]

Elective and Integrated Courses: Several G20 nations have introduced Ayurveda as an elective within Complementary and Alternative Medicine (CAM) programs. India has established Ayush Academic Chairs in countries such as Hungary, Thailand, Russia, Mauritius, and Argentina to facilitate elective teaching and clinical research at the university level.

Areas of Improvement

- To strengthen Ayurveda's global education ecosystem, a priority should be the standardisation and quality assurance of curricula through the **establishment of globally distributed International Ayurveda Centres of Excellence** that deliver authentic, competency-based training aligned with agreed academic and clinical standards.
- To expand Ayurveda's adoption as an integrative modality—particularly in rehabilitation and chronic care—well-documented domestic models should be developed, evaluated, and packaged as replicable best-practice frameworks. **These integrative care models can then be translated into globally relevant learning pathways by promoting short, stackable micro-credentials and elective offerings in leading universities,** enabling medical, allied health, and public health learners to access structured, evidence-informed Ayurveda content within mainstream education systems.

Global Best Practices

China has built a comprehensive education ecosystem for TCM with 42 dedicated TCM universities and 238 universities offering TCM programs. Over 50,000 undergraduates pass out annually in TCM courses. TCM education is integrated into national policy and aligned with international standards through ISO/TC 249.

TCM curricula include modern science integration, research methodology, and clinical training, making graduates globally competitive. **At least 50+ universities and colleges globally offer structured TCM programs outside China, mainly in Australia, the USA, Canada, UK, Switzerland, and Latin America**. China's National Administration of TCM has explicitly prioritised supporting the establishment of "high-quality TCM centres overseas" as part of international cooperation. This overseas-centre model is long-running; China has already established **17 overseas TCM centres in Belt & Road–related countries/regions**, alongside many other international education platforms.

- **Australia:** Australia's Chinese Medicine Board publishes quarterly workforce data and runs Objectively Structured Clinical Examinations (OSCEs) for overseas trained practitioners — creating a transparent, portable talent pool.
- **United States:** The US ecosystem is anchored by the National Commission for Chinese and Oriental Medicine (NCCAOM) examinations and accredited schools.[79] China has made headway in promoting international cooperation in Traditional Chinese medicine (TCM) through establishing Confucius Institutes overseas.
- Over 240 **Confucius Institutes** in 78 countries have introduced courses on TCM and Taichi as of December 2019, attracting about 35,000 registered students as well as 185,000 people participating in relevant experiential activities, according to data from the National Administration of Traditional Chinese Medicine.[80,81,82]

Confucius Institutes for TCM Education

Modeled after organisations like the British Council or Germany's Goethe-Institut, Confucius Institutes are not for-profit institutes established in partnership between Chinese universities and overseas institutions with the primary objective to promote Chinese language, culture, and academic exchange. There are 510 Confucius Institutes active worldwide spread across 164 countries.

Many of these CIs have expanded their scope to include Traditional Chinese Medicine education. The Global Alliance of Confucius Institutes for Chinese Medicine connects these specialised institutes to share resources, standardise education, and promote research.

- 19 Confucius Institutes in 19 countries are completely focused on TCM education and research**.**
- These TCM focused CIs are located in multiple continents with presence in the US, Cuba, Brazil, South Africa, Japan, Thailand, South Korea, while 7 CIs are present in Europe itself.
- Approximately 2500-3000 students are registered in formal TCM courses globally through the CI network.
- Multiple elective and Micro-credential courses are offered to local healthcare providers and practitioners at these TCM CIs.

How other systems have been able to do it

ISO/TC 249 has published ~120 standards for TCM, covering terminology, materials, and clinical practice. These standards enable mutual recognition of qualifications and facilitate TCM program adoption abroad. TCM degrees are recognised in several countries, allowing graduates to practice internationally. TCM curricula incorporate biomedical sciences, pharmacology, and evidence-based research. This hybrid approach appeals to global academic institutions and regulators. China also advances standardisation through academies and liaison bodies (e.g., WFCMS), and through cultural-exchange institutions like Confucius Institutes, reflecting a coordinated diplomacy approach. China has established overseas TCM centres that double as training hubs. Partnerships with universities in Europe, the US, and Asia have led to joint degree programs and exchange initiatives.

How Ayurveda can Utilise these learnings

India has 415 Ayurveda colleges under NCISM, with 64,812 UG seats and 7,799 PG seats across Ayush systems. Ayurveda education is largely domestic-focused, with limited global recognition.

- WHO has published Benchmarks for Training in Ayurveda (2022), but adoption by foreign universities is minimal. Few Ayurveda chairs exist abroad, but there is no large-scale global academic network comparable to TCM.
- India can increase coordination with universities abroad by making the signed MoUs milestone-based and creating a similar milestone-based approach for Ayush chairs as well.
- Ayurveda can also look for the creation of courses focused on Micro-credentials instead of full-fledged Ayurveda UG-PG-PhD courses; This would allow other professionals and cadres of healthcare professionals also to study Ayurveda courses. This can initially target more popular therapies for easier regulatory approvals.
- Use of modern technologies like digital courses, simulation-based learning, etc., offering courses in more languages to make Ayurveda courses more user-friendly and interesting.

Recommendations

Short Term (Up to 2029)

1. **Globalisation-ready Ayurveda Education Packs**: To generate more interest and participation from the global community towards the academic education and courses of Ayurveda, **a curated set of short-term, modular courses (around 1 year each) can be designed for international students and professionals**. The modules can include popular Ayurveda practices like **Ayurvedic Nutrition** (diet and preventive health), **Mind-Body Practices** (stress management, yoga integration), **Pain Management** (Ayurvedic approaches for musculoskeletal issues), and **Panchakarma Techniques** adapted for out-patient settings (shorter, practical versions suitable for global clinics). As part of an integrative study of Ayurveda with modern science courses, **Ayurgenomics** can also be introduced as a micro-credential/elective course at international universities, emphasizing its role as a bridge discipline connecting Ayurveda with genomics, precision medicine, and integrative care frameworks.
    a. These programs would be developed in partnership with reputed global universities to enhance credibility and attract international learners, while the National Commission for Indian System of Medicine (NCISM) can define competency-based learning outcomes, ensuring quality and alignment with WHO Benchmarks for Training in Ayurveda.
2. **Use of modern technologies to make courses more user-friendly and exciting**: Before setting up physical training abroad, **start with digital and simulation-based learning to make Ayurveda education globally accessible and scalable.** Online courses can be offered in English along with local languages (e.g., German, French) to overcome language barriers. **Modern technologies like virtual reality or simulation tools can be used to teach practical skills like Panchakarma techniques without requiring immediate physical presence.** A repository of clinical case studies tagged with ICD-11 TM2 codes (Ayurveda diagnostic codes) can also be built so that the learners understand how Ayurveda integrates with global health data systems.
3. **Strengthen the 'Ayush Chair' initiative:** To enhance the effectiveness of the Ayush Chair, **it should move from an individual-dependent model to an institutionally anchored one.** This requires clearly defined terms of reference—covering expected outputs in teaching, curriculum development, research, partnerships, and outreach—along with a dedicated support structure within host universities (e.g., administrative coordination, teaching assistants, and seed funding for academic activities). **To avoid loss of momentum when a Chair's tenure ends, continuity mechanisms should be institutionalised, including a structured handover process, overlap/transition periods where feasible, and a rolling multi-year workplan jointly owned by the host university and the sponsoring agency.** In addition, the program should be backed by an active alumni network of former Chairs and trainees and reinforced through coordinated embassy-level facilitation to support academic partnerships, visibility, and local stakeholder engagement.
4. **Alumni as ambassadors**: Alumni of Indian Ayurvedic Medical colleges working in international locations can become the ambassadors of Ayurveda and can play an important role in its globalisation. A formal alumni chapter can be initiated in 50 countries; this group may have KPIs on workshops, CME, and policy engagement.

Medium (Up to 2035) and Long Term (Up to 2047)

1. **Joint/dual degrees**: Design and offer Joint and Dual degree programs for Ayurveda education in coordination with leading medical universities across the world, and can also leverage the clout of 'Ayush Chairs" for this purpose.
2. **Establish International Ayurveda Centres of Excellence (IACoEs):** On the lines of the All India Institute of Ayurveda established in India, similar centres of excellence for Ayurveda can be established in some of the Ayurveda-friendly geographies.
    a. These IACoEs would be **premier education institutions** offering Ayurveda education outside India, with regular faculty exchanges happening between CoEs in India and abroad in order to provide quality exposure of Ayurveda education and teaching standards.
    b. These countries should be close partners, along with having a favorable regulatory setup and decent consumer base like **UAE (Dubai/Abu Dhabi), Germany/Switzerland** (insurance-friendly), **U.S. (East/West coast within academic health centres), Mauritius, South Africa or Australia.**
    c. Some of these centres can be run in a **partnership mode** between top Indian Ayurveda institutions like AIIA (All India Institute of Ayurveda), ITRA, CCRAS and host-country universities or hospitals for local integration. **Some IACoEs can also be completely owned by the Ministry of Ayush, Government of India.**
    d. WHO Collaborating Centres (CCs) can act as technical advisors to ensure global standards in these IACoEs.
    e. These IACoEs will offer clinical Ayurveda services combining Ayurveda with modern diagnostics and care. To ensure quality of care in these institutions, **National Accreditation Board for Hospitals (NABH) standards**, customised for international settings, can be used, while for clinical documentation, **ICD-11 Traditional Medicine Chapter (TM2**) and **International Classification of Health Interventions (ICHI) can** be used.
    f. These centres can also be utilised to conduct embedded clinical trials on Ayurvedic therapies and for product testing, release certification, and pharmacovigilance (monitoring safety).
3. **Benchmarks adoption**: Promote the uptake of the **WHO Benchmarks for training of Ayurveda** in foreign continuing education systems.[83]

WHO - Benchmarks for the Training of Ayurveda

WHO's 2022 benchmark document (an update of the 2010 version) sets minimum requirements/ criteria for establishing and strengthening Ayurveda training in Member States, to support qualified practice, patient safety, and regulatory standard-setting.

- It outlines **training pathways for Ayurveda practitioners and associate Ayurveda service providers** and specifies competency-based learning outcomes alongside recommended curriculum content and program structure, including attention to safety issues related to clinical application and medicinal preparation.
- The document is intended to **guide national authorities in quality assurance, accreditation/ licensure approaches, and harmonisation of training expectations**, while aligning with the WHO Traditional Medicine Strategy 2014–2023 and prioritising consumer protection and patient safety as core objective.

Key Recommendations

The recommendations under **Availability Pillar** centre on strengthening Ayurveda's global footprint through reforms in practitioner mobility, exports, research, and education are as follows:

Short Term: (Up to 2029)

1. Create a **Global Information Portal for Ayurveda Practice** to serve a single-window resource for navigating international practice requirements.
2. Create a **Global Ayurveda Register (GAR)** of country-wise Ayurveda practitioners with CPD component.
3. Leverage **bilateral relationships and multi-country platforms** for Mutual Recognition Arrangements (MRAs) and export of Ayurveda services.
4. Introduce **Ayurveda related Elective/Micro-credential courses** in Global Medical schools to normalize integrative healthcare pathways.
5. Adopt **strategic approach** towards recognition of Ayurveda and validation of practice in major geographies of the world to enable Ayurveda as a recognised full-fledged system of Medicine.
6. Prioritise **trade geography diversification** and shifting up the value chain to increase the share of finished products export.
7. Create **Ayurvedic Pharmacopoeia-Export Edition** to meet international regulatory expectations.
8. Strengthen AyushExcil by establishing specialised cells for major markets for **capacity building of** manufacturers for export promotion.
9. Create a real time **Ayush/Ayurveda Trade Dashboard to** enable evidence-based trade policy and industry decision-making.
10. Adopt a focused **regulatory compliance strategy in key markets** to address regulatory uncertainty and compliance complexity in major markets.
11. Align **HS codes for Ayurveda products and leverage FTAs for Trade facilitation.**
12. Increase research focus on **flagship conditions/drugs** to enhance international acceptability.
13. **Increase coordination** between Ayurveda Industry and Academia/Research bodies to discuss and coordinate overall research priorities in the field of Ayurveda.
14. Bring clarity of available opportunities for **private sector on Ayurveda patents** to enhance their participation in research.
15. Design globalisation ready **Ayurveda Education Packs (set of short-term, modular courses)** to generate more interest and participation from the global community.
16. Leverage **modern technologies** to make courses more interesting and user friendly.
17. Strengthen the '**Ayush Chair' initiative** by moving from an individual-dependent model to an institutionally anchored one.
18. Build a community of **Alumnus** as **Ambassadors of Ayurveda** to enhance their contribution in globalisation of Ayurveda.

Medium (Up to 2035) and Long Term (Up to 2047)

1. Promote **Integrative care models** with modern medicine to enhance acceptance in countries where standalone care models may face regulatory hurdles.
2. Expand the **global spectrum** of Ayurveda education to build a strong international pipeline of Ayurveda professionals.
3. Promote **standardisation** and **evidence-based research** to gain global acceptance as a credible system of medicine.
4. Establish a **World Federation of Ayurveda and Yoga** to globally network Ayurveda & Yoga societies/ associations, promote standardization and health system integration, and support workforce mobility through professional exchange and capacity building for Ayurveda and Yoga practitioners for global placement.
5. Upgrade the **local GMP guidelines** to WHO-GMP guidelines for better global acceptance.
6. Promote **overseas finishing/ packaging Units,** especially in major markets (UAE/EU/US) for regulatory agility and trust.
7. **Catalyze** global demand by supporting the **establishment of Ayurveda service delivery centres** (Ayurveda-as-a-Service model) abroad.
8. Work with WHO-GTMC to create **'Global Safety and Efficacy Benchmarks'.**
9. Publish **Annual global safety** report and **Global Evidence report to** strengthen trust, support responsible claims, and provide an evidence backbone for policy dialogue and market access negotiations.
10. Build a **distinct identity of Ayurveda** as a credible, evidence-backed wellness and healthcare system, anchored in scientific validation, consistent quality, and measurable outcomes.
11. Establish **International Ayurveda Centres of Excellence** to promote academic and research activities at global level.
12. Design and offer **Joint and Dual degree programs for Ayurveda education** in coordination with leading medical universities across the world.
13. **Partner with WHO Collaboration Centres** to conduct multi-country clinical trials on safety, efficacy, and pharmacovigilance of Ayurvedic therapies.
14. Establish **5 more WHO Collaboration Centres** in India to enhance Ayurveda's global visibility and acceptance.
15. Build an **International Ayurveda Research Alliance** under WHO-GTMC to provide a unified, authoritative platform for multi-country clinical trials and research initiatives.
16. Bring in **newer technologies** like network pharmacology and **AI based quality control to provide** a precise scientific understanding of the complex, multi-component nature of Ayurvedic practices and ensuring rigorous, automated quality assurance.

Section 4: Global Acceptability of Ayurveda

Components

A	Compliance with Regulations and Guidelines
B	International Collaborations (Academic and Industrial)
C	Insurance Coverage- Products & Services
D	Localisation & Cultural Adaptability

A. Compliance with Regulations and Guidelines

Current Status

Despite the growing global popularity of Ayurvedic products, formal recognition by major international regulatory bodies such as the U.S. FDA and European Medicines Agency (EMA) remains elusive, and only a few markets, like the UAE, where Ayurveda has been able to achieve formal compliance.[84]

- **United States:** Ayurveda pharmaceuticals are primarily marketed as dietary supplements under the Dietary Supplement Health and Education Act (DSHEA).[85] This pathway allows for easier market entry due to the absence of pre-market approval requirements. However, it also imposes limitations—health claims are prohibited, and products cannot be marketed as treatments or cures, which restricts their therapeutic positioning.[86]

  In contrast, the Botanical Drug pathway under the FDA offers a formal route for drug registration, but it requires rigorous clinical trials and safety data.[87,88] Till date, no Ayurveda drug has been registered under this category. However, single-herb products like Psyllium and Senna have been included in the OTC drug monograph, suggesting that single-herb botanical drug registration could be a viable strategy for India.

- **European Union**: Ayurveda products are mostly marketed as food supplements, governed by Directive 2002/46/EC.[89] While this allows for market access via notification to national authorities, it lacks harmonisation across member states. Each country maintains its own positive and negative lists of permissible plant ingredients, and many Indian herbs are not listed, creating uncertainty for exporters.[90] Additionally, Novel Food regulations require extensive documentation for ingredients not consumed in Europe before 1997, posing a significant barrier for many Ayurveda herbs.

- **UAE:** It stands out as the only major market where Ayurveda pharmaceuticals are formally registered as drugs. The UAE Ministry of Health has a simplified regulatory framework for traditional medicines, including Ayurveda, Homoeopathy, and Unani.[91] Products must be registered with supporting documents such as Certificates of Pharmaceutical Product (CoPP) and undergo label approval. The UAE also issues professional licenses for Ayurveda practitioners, facilitating the growth of Ayurveda system clinics and services.[92]

Regulatory hurdles- Barriers and Technical challenges

While tariff barriers are generally low in developed markets like the US and EU (not considering the impact of recent tariffs imposed by the USA on India and the Free Trade Agreement between India and UK as the repercussions have not yet been fully understood at the time of writing this report), non-tariff barriers (NTBs) pose significant challenges. These include:

- **Sanitary and Phytosanitary (SPS) measures:** These involve restrictions on microbial contamination, pesticide residues, and plant disease risks. Many Indian MAPs are wild-sourced, making traceability and conformity assessment difficult.[93,94]
- **Technical Barriers to Trade (TBT):** These include packaging, labelling, and testing requirements. For example, the EU mandates Hazard Analysis and Critical Control Points (HACCP) compliance for food supplements, which is stricter than US standards.[95,96]
- **Import Licensing:** In the UAE, only companies with 51% local ownership can obtain import licenses, limiting direct access for Indian exporters.[97,98]
- **Lack of Harmonised Plant Lists:** The absence of a unified EU-wide list of permissible herbs means exporters must navigate country-specific regulations, such as the BELFRIT list used by Belgium, France, and Italy.

Indian Regulatory Landscape

The regulatory landscape within the country invariably affects the standards that the manufacturers can meet worldwide, and that is why a conversation around the Indian regulatory landscape for Ayurveda is important for the scope of this report. Within the Indian regulatory landscape, it is important to understand the legal framework that governs the manufacturing, marketing, and advertising of Ayurvedic, Siddha, and Unani (ASU) drugs. The Drugs and Cosmetics Act, 1940 and the Drugs and Cosmetics Rules, 1945, provide the foundational structure for ensuring safety, efficacy, and quality of ASU products. Several specific provisions—such as Section 22E, Rule 161, Rule 158B, and Rule 170—play a critical role in regulating various aspects of the Ayush sector, including inspection powers, labelling norms, licensing requirements, and advertising controls. These rules reflect India's commitment to balancing traditional knowledge with modern regulatory standards, while also highlighting areas where reform and harmonisation are needed to support domestic growth and international acceptance.[99]

Section 22E – Powers of Inspectors (Specific to ASU Drugs)100

Section 22E of the Drugs and Cosmetics Act empowers inspectors appointed under the Act to inspect premises where Ayurvedic, Siddha, and Unani (ASU) drugs are manufactured or sold. These inspectors are authorised to take drug samples, examine records, and ensure that manufacturers and sellers comply with licensing conditions and quality standards. Although the law is strict, there is inconsistent enforcement across states due to the absence of harmonised inspection protocols and standard operating procedures. This leads to variability in compliance and regulatory oversight.

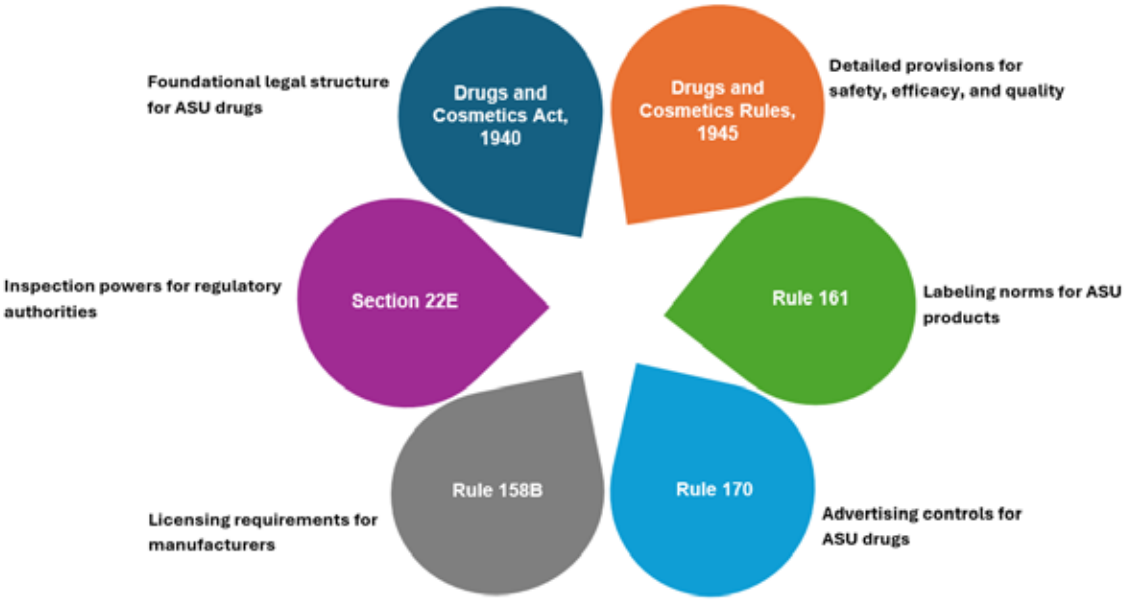

Fig 10: Regulatory landscape around Ayush Drugs in India

Rule 161 – Labelling and Packaging of ASU Drugs[101]

Rule 161 of the Drugs and Cosmetics Rules mandates that labels on Ayurvedic, Siddha, and Unani (ASU) drugs must include a comprehensive and transparent set of information to ensure consumer safety and regulatory compliance. Specifically, the rule requires that the label must list all ingredients with their true botanical names and the specific plant parts used. It must also mention the method of preparation as prescribed in authoritative classical texts, include cautionary statements for substances listed under Schedule E(1) (which are known to have toxic properties), and provide essential details such as the manufacturer's name and address, batch number, expiry date, and usage instructions.

Rule 158B – Licensing Guidelines for ASU Drugs[102]

Rule 158B of the Drugs and Cosmetics Rules outlines the regulatory framework for issuing manufacturing licenses for Ayurvedic, Siddha, and Unani (ASU) drugs. According to this rule, classical formulations, those that are prepared strictly in accordance with authoritative texts, are exempt from the requirement of conducting safety studies, as their long-standing traditional use is considered sufficient evidence of safety. However, for patent or proprietary formulations, manufacturers are required to provide evidence of effectiveness. This can be in the form of published scientific literature or pilot studies as well; full-scale clinical trials are not mandated. The rule emphasizes the need for proof of both safety and efficacy, especially for new or modified formulations.

Rule 170 – Advertisement Approval for ASU Drugs[103]

Introduced in 2018, Rule 170 of the Drugs and Cosmetics Rules was originally meant to regulate the advertising of Ayurvedic, Siddha, and Unani (ASU) drugs. It required manufacturers to seek prior approval from Licensing Authorities before publishing advertisements, particularly to prevent misleading claims. Under this rule, companies had to submit textual references from authoritative sources, safety data, and a scientific rationale to support the claims made in their advertisements. However, in July 2024, the Ministry of Ayush issued a notification to omit Rule 170, citing its overlap with the provisions of the Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954. Initially, the Supreme Court upheld this omission, effectively removing the requirement for prior approval. Although the Court later vacated the stay, the omission of Rule 170 remains in effect, thereby allowing advertisements of ASU drugs without mandatory pre-screening.

WHO-GMP & Ayush GMP Certification: Relevance, Challenges, and Impact on Ayurveda

The WHO-GMP (World Health Organisation – Good Manufacturing Practices) and Ayush GMP certifications are pivotal regulatory frameworks that ensure the safety, quality, and consistency of Ayurvedic products. These certifications are essential for manufacturers aiming to establish credibility in both domestic and international markets. WHO-GMP certification, governed by global standards, is particularly relevant for export-oriented Ayurvedic companies. It mandates stringent quality control across all stages of production, from raw material sourcing and in-process checks to final product testing and documentation. Manufacturers must maintain detailed records such as Batch Manufacturing Records (BMR), Standard Operating Procedures (SOPs), and stability testing reports to ensure traceability and compliance.[104,105,106] On the other hand, **Ayush GMP certification, regulated under Schedule T of the Drugs and Cosmetics Act by the Ministry of Ayush, is mandatory for all Ayurvedic manufacturers in India**.[107,108] It focuses on hygiene, safety, and authenticity of ingredients as per classical texts. The certification process involves inspection of manufacturing facilities, verification of personnel qualifications, and adherence to pharmacopeial standards. Manufacturers can apply for different types of licenses: Manufacturing, Loan, or Third-Party, based on their operational model.[109,110] Despite their importance, these certifications face several challenges. There is also a lack of harmonisation between domestic Ayush standards and international GMP norms, which creates barriers for global market access. Additionally, the variability in raw material quality poses challenges in standardisation and scientific validation.

The impact of GMP certification on the Ayurveda sector is profound. In the product segment, it enhances consumer trust, facilitates exports, and opens access to regulated markets like the EU, US, and ASEAN. Many Ayurveda product manufacturing companies have leveraged the WHO-GMP certification to expand globally. In the service sector, NABH-certified facilities ensure safer Panchakarma therapies, better hygiene standards, and improved clinical outcomes, thereby elevating the credibility of Ayurveda clinics and wellness centres. Moreover, NABH compliance supports the integration of Ayurveda into insurance schemes and hospital networks, further mainstreaming traditional medicine. Ultimately, GMP/ NABH certification is not just a regulatory requirement; it is a strategic enabler for Ayurveda's global expansion and its transformation into a trusted, evidence-based healthcare system.

Indian Pharmacopeia

The Indian Pharmacopoeia (IP), published by the Indian Pharmacopoeia Commission (IPC) under the Ministry of Health and Family Welfare, serves as the official compendium of drug standards in India. It plays a vital role in ensuring the quality, safety, and efficacy of medicines, including Ayurvedic formulations. The IP is regularly updated to reflect scientific advancements and best international practices, and it serves as a benchmark for both domestic regulation and global trade. **Global recognition and acceptance:** The Indian Pharmacopoeia is currently recognised by at least 15 countries, including:

- Afghanistan, Nepal, Ghana, Mauritius, Suriname, Nicaragua
- Several African and Caribbean nations, such as Liberia, Togo, Mali, Sierra Leone, Kenya, and Barbados
- Switzerland, where Swissmedic has officially accepted over 200 monographs and 985 Ayurvedic Formulary specifications for simplified drug registration

This recognition reflects India's growing influence in global pharmaceutical regulation and its commitment to harmonising standards across borders.

The Ayurvedic Pharmacopoeia of India (API) is a subset of IP and includes 665 monographs of single drugs (Part I), 224 monographs of compound formulations (Part II) and over 985 classical formulations listed in the Ayurvedic Formulary of India (AFI). These monographs provide standardised references for identity, purity, strength, dosage, and therapeutic use, covering a wide range of herbs, minerals, and classical preparations. Many Ayurvedic formulations listed in the IP are actively exported. For instance:

- Psyllium, Turmeric, Senna, and Ashwagandha—all included in IP—are among the top exported medicinal plants from India.
- Psyllium alone accounts for over 86% of India's MAPs export to the USA.

These standardised formulations benefit from easier regulatory navigation in countries that recognize IP, enhancing market access and credibility. However, despite recognition, not all listed formulations are being exported at scale, and many remain underutilised due to regulatory, market, or awareness barriers. Some of the challenges that limit its full impact in international markets are

- **Limited Harmonisation with Global Standards**: IP is not yet fully aligned with major pharmacopoeias like the USP (United States) or Ph. Eur. (Europe), which restricts its acceptance in high-value markets.
- **Underutilisation of Recognised Monographs**: Even in countries that recognize IP, many Ayurvedic formulations are not actively exported due to a lack of awareness, marketing infrastructure, or regulatory clarity.
- **Absence of a Dedicated Ayurveda Working Group in EDQM**: Unlike Traditional Chinese Medicine (TCM), Ayurveda lacks a formal Working Party at the European Directorate for the Quality of Medicines (EDQM), which hinders inclusion of Ayurvedic monographs in the European Pharmacopoeia.
- **Traceability and Quality Compliance Issues**: Many Ayurvedic products, especially MAPs, face non-tariff barriers such as Sanitary and Phytosanitary (SPS) measures, due to challenges in traceability, wild sourcing, and lack of Good Agricultural & Collection Practices (GACP).
- **Fragmented Export Strategy and Lack of Market Intelligence**: Exporters often lack access to country-specific plant lists, banned substances, or simplified registration pathways, leading to missed opportunities in compliant markets.
- **Regulatory Bottlenecks for Drug Classification**: In most countries, Ayurvedic products are marketed as dietary supplements rather than medicines due to the absence of clinical validation and harmonised drug registration frameworks.

Areas of Improvement

- **Increased awareness about the regulatory requirements of various international markets among manufacturers.** Creating qualification playbooks and sharing them with all. Strengthening the capabilities of AyushExcil so that they can have a regionally focused approach having specialised teams working on each specific market geography.
- Looking ahead, the scope for improvement includes **developing a centralised digital repository for GMP-certified manufacturers.**
- **Bridging the gap between domestic and international regulatory standards by aligning Ayush GMP standards with WHO-GMP standards.**

- To ensure that more manufacturers start achieving these licenses, **incentivizing small manufacturers to upgrade their facilities, ensuring quality assessment and licensing procedure**, will create a great incentive in the export market for Indian manufacturers.
- Training programs for quality assurance personnel and real-time pharmacovigilance systems can also strengthen regulatory oversight.

Global Best Practices

In the **United States**, TCM's clinical ecosystem benefits from state licensure for acupuncture (most states require NCCAOM examinations/certification) and an accredited education pipeline through ACAHM, a U.S. Department of Education recognised programmatic accreditor. This institutional infrastructure standardizes training and creates clear, regulated practice pathways that support payer and policymaker engagement—advantages Ayurveda has yet to match in the U.S. market. As for products, the North American TCM market (mainly U.S.) was valued at $69.3 billion in 2024, projected to grow at 6% CAGR through 2031. U.S. is among the top importers of Chinese herbal medicines and acupuncture-related products. In the **European Union**, many TCM herbal products make use of the THMPD pathway, drawing on HMPC monographs and EMA quality guidelines just as Ayurveda can. Firms that meet the EU's pharmacopeial expectations—GACP/GMP documentation, validated fingerprints, contaminant testing—access a harmonised route to national registrations and pan EU recognition.[111] In Europe, since 2009, Chinese herbal drug quality monographs have been gradually established and elaborated by the TCM working party in the European pharmacopoeia (Ph. Eur.).[112] In **Australia**, TCM is a statutorily regulated profession. The Chinese Medicine Board of Australia (CMBA) under AHPRA registers practitioners across divisions (acupuncture, Chinese herbal medicine, Chinese herbal dispensing) and publishes practice/safety standards (e.g., infection prevention, safe herbal practice). As for products, the Therapeutic Goods Administration (TGA) under the Therapeutic Goods Act 1989 is the main regulatory agency in Australia with a two-tier registration system. Low-risk products with limited therapeutic claims are classified as 'Listed Medicines', whereas higher-risk products with stronger claims are classified as 'Registered Medicines'. TCM products focus on herbs already identified as low risk by TGA and use WHO monographs and Chinese Pharmacopoeia references for traditional use claims.

How other systems have been able to do it

TCM currently leads in regulatory readiness because it invested early in professional regulations and accredited education (U.S./Australia), achieving a recognised scope of practice and standardised training footprints that aid payer recognition and clinical integration.

- TCM invested early in FDA-compliant manufacturing, quality testing, and facility registration to penetrate the US market despite strict regulations.
- They submitted New Dietary Ingredient (NDI) notifications for herbs not marketed in the U.S. before 1994, backed by toxicology and safety data.
- For European market, under directive 2004/24/EC, products can qualify for Traditional Use Registration (TUR) if they demonstrate at least 30 years of medicinal use globally, including 15 years within the European Union. As TCM had an early start in Europe, they are able to show more than 15 years of safe use in European geography.
- TCM's extensive historical records and pharmacopoeias also provide strong bibliographic evidence for safety and plausible efficacy, reducing the need for full clinical trials in certain categories.
- The ICD-11 Traditional Medicine Chapter (Module 1) for East Asian diagnostics further normalizes TCM within international health information systems, strengthening health system legitimacy.

- China has invested heavily in TCM regulatory science (TCMRS), focusing on Good Agricultural and Collection Practices (GACP), Good Manufacturing Practices (GMP), and chemical fingerprinting for complex herbal formulations. These measures ensure batch-to-batch consistency, traceability, and contaminant control, critical for meeting stringent EU and FDA quality standards.
- Advanced techniques like network pharmacology and AI-driven quality assurance have further strengthened compliance. This systematic modernisation gives TCM an edge over a less standardised traditional medicine system.

TCM has successfully penetrated major markets such as Australia, Canada, and the EU by leveraging frameworks like natural health product licensing, traditional use evidence, and GMP-certified manufacturing. These systems emphasize standardised formulations, pharmacopeial references, and clinical documentation, often supported by government-backed research and international collaborations. Additionally, China has also invested in regulatory diplomacy, ensuring mutual recognition agreements and streamlined export certifications.[113]

How Ayurveda can Utilise these Learnings

Licensure and education accreditation (U.S.), statutory registration (Australia), and acceptance into ICD-11 TM Module-1 have normalised TCM across systems. Ayurveda is poised to narrow this gap as the WHO advances the planned ICD-11 Module 2 derived from Ayurveda and as Indian manufacturers systematically meet EMA-grade quality expectations for EU registrations. **Many Ayurveda manufacturers operate under Ayush GMP, which does not fully match EU GMP standards; further strengthening of domestic regulatory standards will help these products comply with European regulatory norms**. Overall, it's clear that as a policy, India needs to invest in strengthening the regulatory aspects, especially with respect to quality manufacturing. Use of modern technologies and quality assurance mechanisms can help more manufacturers and products to fulfill the stringent regulatory requirements of major international markets. For each specific market, specific strategies to comply with the regulatory requirements need to be prepared and templatised. **Supportive bodies like AyushExcil can help in creating such templates and subsequently building the capacities of manufacturers on them.**

Recommendations

1. **Country-wise playbooks:** Creating country and market-specific playbooks for all major international markets will enable the manufacturers to undertake the required procedures swiftly and make their entry into the international markets much easier without reinventing the wheel. Agencies like AyushExcil can be strengthened to maintain and update these playbooks and organise regular webinars, meetings, and sensitisation sessions for each market every now and then.
    a. **United States (DSHEA first, then step-ups)**
        i. **Supplements**: Ayurveda products can enter the US market under the Dietary Supplement Health and Education Act (DSHEA). It allows herbal products to be sold as dietary supplements without pre-market FDA approval, provided they meet safety and labelling. These supplements cannot claim to diagnose, treat, cure, or prevent diseases. They can only make general wellness or structure–function claims (e.g., "supports joint health"). After initial entry, companies can add structure–function claims, supported by real-world data (RWD) and pragmatic clinical trials to strengthen credibility. This phased approach allows Ayurveda brands to enter the U.S. market quickly as supplements, build trust with compliance, and then expand claims based on evidence without violating FDA rules.[114]

ii. **Botanical Drug Pilots**: Instead of only selling Ayurveda products as dietary supplements, some of the promising candidates should be selected to register as botanical drugs as well with the U.S. FDA. To develop a botanical drug in the U.S., companies must file an Investigational New Drug (IND) application under the FDA's Botanical Drug Development Guidance. This allows clinical trials for prescription drug approval. We can start with herbs that already have strong safety and efficacy data (e.g., Ashwagandha, Boswellia) because multi-herb formulations are harder to standardize and approve. Botanical drug development is expensive and time-consuming (clinical trials, GMP compliance, FDA reviews). So, a few high-potential products should only be picked initially rather than trying to convert all Ayurveda formulations. This strategy helps Ayurveda move beyond supplements into regulated drug status, which brings higher credibility, insurance coverage potential, and integration into mainstream healthcare.

iii. **Procedure integration-two-pronged strategy**: Map Ayurveda procedures to **ICHI** as that module matures, which would ensure that Ayurveda starts getting recognised in global health data systems, making it easier for integration into mainstream healthcare and reimbursement frameworks. While international coding evolves, in parallel, credentialing of Ayurveda providers within **integrative medicine clinics** under physician supervision (mirrors early acupuncture integration pre-licensure) can allow immediate clinical integration of Ayurveda procedures.

b. **European Union (THMPD/National)**

i. **Prepare Regulatory Dossiers**: As mentioned in previous sections, the most important method to enter the EU market should be through motivating and promoting manufacturers to prepare regulatory dossiers under the Traditional Herbal Medicinal Products Directive (THMPD) or equivalent national pathways in EU member states. Where this is not feasible, national traditional registrations or food supplement routes can be pursued while monographs mature. To avoid novel food triggers for non-history food supplements, safety packages need to be planned in advance with comprehensive documentation of toxicology, pharmacology, and clinical safety data to satisfy EU regulators or reformulated by adjusting ingredients or dosage to align with EU norms.

c. **GCC / UAE**

i. **Drug registration**: The UAE already has a simplified traditional medicine pathway and professional licensure for Ayurveda. For Ayurveda products with medical claims, Ministry of Health and Prevention (MOHAP) registration is mandatory. MOHAP classifies products based on composition, intended use, and risk level; Ayurveda medicines with therapeutic claims fall under the herbal medicinal products category. By following the stepwise procedure laid out for this registration, the products can be registered and marketed as a drug in the UAE. Ayurveda industry can use the UAE as a service & product lighthouse for the Gulf countries, combining clinics with compliant manufacturing/finishing.

d. **Australia**: In Australia, the Therapeutic Goods Administration (TGA) regulates complementary medicines. Most Ayurveda products would enter as "Listed Medicines" under the TGA system. They must meet GMP standards, use permitted ingredients, and make only approved low-risk claims (e.g., "supports digestive health"). TGA provides a list of approved health claims for listed medicines. Ayurveda products must align with these indications (e.g., stress relief, joint health) rather than making disease treatment claims.

e. **Canada**: In Canada, herbal and traditional medicine products are regulated as Natural Health Products under Health Canada's NHP Regulations. To sell Ayurveda products, companies must obtain an NPN (Natural Product Number) by submitting safety, quality, and evidence data. Products must use standardised formulations, meet GMP standards, and comply with labelling rules. This approach allows Ayurveda to legally enter the Canadian market through compliant products and gradually integrate services into wellness and insurance ecosystems.

Other Recommendations

2. **Strengthen AyushExcil:** AyushExcil should be scaled from a small, generalist setup into a market-intelligence and compliance support body. Creating dedicated country/region desks (e.g., EU/UK, US, GCC, ASEAN, Africa), staffed with specialists who track evolving regulatory requirements, import procedures, labelling norms, claims restrictions, and documentation expectations as needed. Each desk should maintain ready-to-use "market playbooks" (step-by-step export guidance), standard dossiers (product, quality, safety, and traceability templates), and a helpdesk that supports exporters with pre-submission checks, regulator queries, and risk mitigation—reducing rejections, delays, and compliance costs.
3. **Encourage adoption of WHO-GMP guidelines by export-oriented manufacturers and creating a dashboard of WHO-GMP certified Units:** To align Indian Ayurveda products with international manufacturing expectations, encourage adoption of WHO-GMP standards among export-oriented units. This should be backed by a public, searchable online dashboard listing verified WHO-GMP certified facilities, product categories, certification validity, audit dates (where permissible), and corrective-action status. Transparent publication of certified units will improve buyer confidence, regulator trust, and brand credibility, while also incentivizing industry-wide quality upgrades and reducing compliance friction in high-regulation markets.
4. **Working Party at EDQM for Ayurveda:** Establishing a dedicated Ayurveda Working Party at EDQM would provide a structured platform to develop and refine Ayurvedic herbal monographs in line with European Pharmacopoeia expectations—similar to how other traditional systems have benefited from sustained technical engagement. This working party should include EDQM experts, European pharmacopeial stakeholders, and Indian technical institutions to harmonize identity, purity, contaminants, analytical methods, and reference standards. Over time, stronger monographs and standards setting can support broader recognition, regulatory clarity, and smoother market access for Ayurveda ingredients and finished products in Europe.
5. **Patent Protection Measures**
   a. The recent **WIPO Treaty on Intellectual Property, Genetic Resources and Associated Traditional Knowledge (adopted May 24, 2024)** introduces an international disclosure requirement for patent applicants when inventions are "based on" genetic resources and/or associated Traditional Knowledge. India should operationalize domestic processes and digital systems that make such disclosure workable and verifiable.[115]
   b. **Create 'Patent Watch and Rapid Opposition Cell'**: Institutionalize a national capability **to continuously monitor global patent filings in herbal/plant-based medicines, formulations,** and delivery technologies; flag risky claims early; and file oppositions/third-party observations quickly using TKDL-backed prior art. Defensive protection is explicitly recognised as a strategy to prevent illegitimate IP rights over TK.

c. **Upgradation and Strengthening of TKDL**: Make TKDL the central "always-on" infrastructure for preventing misappropriation; expand its coverage, modernize search options, and strengthen multilingual/semantic retrieval so examiners can rapidly find prior art across Ayurveda texts and formulations. Further, rolling out "widened access with safeguards" (tiered access for R&D/academia/industry) to support innovation while protecting against misuse, which has already been approved by the union cabinet.

Medium (Up to 2035) and Long Term (Up to 2047)

1. **Expand AOGUSY and make it efficient:** Broaden the scope of 'Ayurveda Oushadhi Gunvatta evam Utpaadan Samvardhan Yojana (AOGUSY) scheme to provide practical compliance support for SMEs, including documentation, testing, quality systems, and market-access readiness, through standardised toolkits and technical assistance. The fund support should be shifted to a milestone-linked disbursement model instead of the current utilisation-linked model, improving accountability, outcomes, and efficient utilisation.
2. **Expanding the Horizon of Formal Recognition as a System of Medicine:** Adopt a structured advocacy strategy to secure formal inclusion of Ayurveda within national health policies and reimbursement frameworks, including insurance coverage where feasible. This should be supported by evidence packages (safety, quality, outcomes, and cost-effectiveness) and engagement with health ministries, payers, and professional bodies to transition Ayurveda from a purely complementary modality to a recognised, regulated, and accessible care option in priority countries.

B. International Collaborations (Academic and Industrial)

Current Status

India's active participation in global platforms such as BRICS, SCO, G20, and the WHO Traditional Medicine Summit has amplified Ayurveda's visibility and credibility on the world stage. To support this momentum, the Ministry of Ayush has signed over 75 international Memoranda of Understanding (MoUs), including 25 country-to-country agreements, 52 institute-level MoUs, and 15 MoUs for Ayush Academic Chairs in foreign universities. These MoUs span areas such as collaborative research, academic exchange, clinical training, and product promotion. Ayush Information Cells have been established in 43 locations across 39 countries, serving as cultural and educational bridges for Ayurveda.

However, despite the scale of these collaborations, current public domain data lacks clarity on the operational status and outcomes of many MoUs. There is limited visibility into whether these agreements have translated into measurable academic programs, clinical services, or product approvals. Many MoUs appear to be ceremonial or exploratory, without milestone-based implementation plans or performance indicators. This raises concerns about their effectiveness and sustainability. For instance, while Ayush Chairs have been established in countries like Bangladesh, Australia, Latvia, Mauritius, and Malaysia, there is little publicly available data on curriculum development, student enrollment, or research output.

Areas of Improvement

- MoUs should be designed with clear, measurable deliverables and an embedded progress-monitoring mechanism, including defined milestones, timelines, and accountability for both parties.

- India should leverage its strong bilateral relationships to advance structured cultural and health cooperation aimed at improving recognition and responsible practice of Ayurveda through a comprehensive, phased plan.
- In parallel, India should use its influence in multilateral platforms to position Ayurveda as a credible traditional health system with preventive, therapeutic, and rehabilitative value, supported by consistent messaging and evidence-based advocacy.

Global Best Practices

International collaborations have provided traditional medicine systems with three critical enablers: scientific legitimacy through research, market access via trade agreements, and policy support through global health strategies. These factors have collectively fueled a global growth story, transforming traditional practices into integrated healthcare solutions that cater to rising demand for holistic, evidence-based, and culturally diverse medical options.

- China has pursued a state-supported internationalisation strategy for Traditional Chinese Medicine (TCM). Under the Belt and Road Initiative, it reports establishing 30+ overseas TCM centres and 31 national TCM service export bases to expand clinical services, training, and technology cooperation. These platforms have strengthened TCM's education and research footprint while also improving awareness and acceptance across regions. China also plans to train approximately 1,300 TCM practitioners annually from BRI countries through training programs conducted in China.
- Official narratives place TCM activities in more than 196 countries/regions, underpinning a pervasive presence from Europe to Central Asia. These centres double as demonstration and training hubs, producing local partnerships and regulatory familiarity that facilitate service uptake and product registrations.
- WHO Collaborating Centres (WHO-CC) for Traditional Medicine are specialised institutions designated by the World Health Organisation to support its work in Traditional, Complementary, and Integrative Medicine (TCIM). These centres act as technical arms of WHO, providing expertise, research, and capacity-building to advance safe, evidence-based integration of traditional medicine into health systems globally. There are around 25 such WHO CCs spread across the world to ensure geographical diversity. TCM works extensively in collaboration with the WHO CCs, especially in the field of research and clinical trials.
- Academic collaborations have been equally transformative. Partnerships between Chinese universities and global institutions—such as the Medical University of Graz in Austria and WHO-backed research networks—have advanced clinical research, pharmacological studies, and technology-driven innovations like AI-based quality control and network pharmacology. These collaborations have produced peer-reviewed evidence supporting TCM's efficacy in areas like pain management and chronic disease care, addressing skepticism and meeting Western regulatory standards. Moreover, joint research platforms, including the WHO's Global Traditional Medicine Centre, have prioritised evidence generation and standardisation, enabling traditional systems to align with modern scientific paradigms.

How other systems have been able to do it

Many countries have international collaborations and agreements, but the major difference in China's approach for TCM is that China has turned collaborations into physical, co-funded assets—overseas centres of excellence, service export bases, and teaching clinics; which create trust, train local clinicians,

and generate in-market data. TCM's overseas centres/export bases convert policy into presence, enabling training, local data, and public familiarity. Ayurveda's MoUs, academic chairs, and WHO GTMC are valuable, but should culminate in co-funded centres in priority markets with embedded trials and QA labs.

How Ayurveda can Utilise these Learnings

- India's Ministry of Ayush has expanded Ayurveda's global footprint through diplomacy and programs: More than ~75 MoUs with multiple countries and educational institutions, academic chairs and Ayush Information Cells. These initiatives foster collaborative research, education, and public awareness. Ayurveda's MoUs and academic chairs are valuable foundations to match TCM's momentum.
- Ayurveda stakeholders in large international markets will need flagship international hubs (EU, US, Japan, GCC) with embedded trials units and joint Quality Assurance labs (for GACP and release testing) that can speed herbal registrations and retailer acceptance. WHO GTMC can act as the neutral forum for core outcome sets and data standards that make multi-country research comparable and compelling for regulators.

Ayurveda can also leverage the global network of WHO Collaboration Centres, the recognised hubs for scientific research and clinical trials. Ayurveda can partner with these centres to conduct multi-country studies on safety, efficacy, and pharmacovigilance of Ayurvedic formulations and therapies. Such evidence is critical for meeting regulatory requirements in markets like the EU and U.S., where scientific validation is mandatory for product registration. Collaborative research also helps Ayurveda transition from anecdotal heritage to evidence-based medicine, increasing global trust. The WHO GTMC in Jamnagar, established via agreement with WHO- anchors a neutral platform for evidence and standards.

Recommendations

Short Term (Up to 2029)

1. **Milestone-based MoUs with progress dashboard:** Instead of signing generic Memorandums of Understanding (MoUs) with foreign governments or institutions, these MoUs can be specific and measurable. Clear metrics for each deliverable can be defined as the number of courses started, the number of trials registered, or the number of products registered. The Ministry of Ayush or its designated authority/body should maintain an online dashboard showing the progress of these agreements. This ensures transparency for stakeholders, accountability for the implementation of agreed action items, and global visibility of Ayurveda's expansion efforts. This approach moves from symbolic MoUs to actionable partnerships, making it easier to track impact and build credibility internationally.
2. **Establish flagship hubs across the globe in friendly countries:** India should establish a network of flagship Ayurveda hubs in strategically selected, friendly countries across key regions (e.g., Europe, ASEAN, GCC, Africa, and the Americas). They should also serve as in-region coordination nodes for regulatory facilitation, quality assurance, and market intelligence to reduce compliance frictions for exporters. By anchoring partnerships with local universities, hospitals, and regulators, the hubs can accelerate mainstream acceptance and responsible practice of Ayurveda. Over time, a hub-and-spoke model can support coordinated promotion, distribution, and trade development from within each region. These hubs can gradually be upgraded into education and research institutes of repute and become International Ayurveda Centres of Excellence.

3. **Leverage the WHO CCs network:** as neutral conveners to co-design trials, pharmacopeial harmonisation, and practitioner standards with host-country regulators; ensure geographic spread (Americas, Europe, Western Pacific).[116]
4. **Leverage GTMC and its role as a global hub for research and policy:** The WHO Global Traditional Medicine Centre (GTMC) in Jamnagar acts as a global hub for research, standards, and policy on traditional medicine. India, through GTMC, should actively participate in and co-lead the WHO's global consultations that decide which research questions and disease areas get priority funding and attention in traditional medicine. By influencing these priority-setting exercises, Ayurveda-related research topics (e.g., chronic pain, metabolic disorders, and integrative care) can be included in the WHO's regional and global research agendas. This will eventually ensure more funding opportunities for Ayurveda trials, inclusion in WHO-supported multi-country studies, and greater visibility in policy and health system integration discussions. This would be a strategic move to make Ayurveda a core part of WHO's evidence-generation roadmap, rather than being sidelined by other traditional systems like TCM.

Medium (Up to 2035) and Long Term (Up to 2047)

1. **Create an overarching administrative structure for Ayurveda globalisation:** Given the multi-stakeholder nature of the Ayurveda industry—spanning multiple ministries, departments, and sectors—a clear governance structure to drive globalisation efforts in a focused and accountable manner is strongly recommended. At the apex, a **Mission Steering Group (MSG)**, chaired by the Hon'ble Minister of Ayush, would provide strategic direction and oversight. Key supporting ministries—such as the Ministry of Health & Family Welfare (MoHFW), Ministry of Commerce, Ministry of External Affairs (MEA) and Ministry of Environment, Forest and Climate Change—would be represented, alongside stakeholders from industry (manufacturers and service providers), academia, research institutions, WHO representatives, and other reputed agencies.
    a. The MSG would serve as the overall guardian of the globalisation mission, setting priorities, aligning stakeholders, and monitoring progress. Reporting to the MSG, a **Global Ayurveda Forum** would function as the **primary working platform, with participation from Secretaries of relevant ministries**. This forum would translate the MSG's direction into actionable strategies and implementation plans, while operating under the MSG's guidance and governance.
2. **Establish International Ayurveda Centres of Excellence:** On the lines of the All India Institute of Ayurveda established in India, similar centres of excellence for Ayurveda can be established in some of the Ayurveda-friendly geographies as a collaboration between the host-country's Universities and Ayurveda CoEs in India, like AIIA/ITRA. Apart from academics, research can be a focus area for these institutions, which can be conducted in coordination with WHO CCs.
3. **Assume strategic leadership position in Traditional Medicine:** Use the WHO Global Traditional Medicine Centre (GTMC), Jamnagar as a strategic platform to shape the global traditional medicine agenda—not only as a knowledge hub but as an active co-leader of WHO consultations. This would include:
    a. Co-leading WHO technical consultations and expert working groups on evidence standards, safety/quality, education benchmarks, and integrative care models.
    b. Hosting recurring "global consensus" roundtables to align countries on priority research questions, data standards, and outcome measures relevant to Ayurveda.

4. **Global Policy Inclusion:** Influencing priority-setting for global research funding by developing WHO-aligned research roadmaps (e.g., multi-country trials, real-world evidence protocols, and implementation research for integrative care) to build stronger global legitimacy for Ayurveda, clearer evidence expectations, and sustained alignment between India's Ayurveda priorities and WHO's technical agenda.

C. Insurance Coverage- Products & Services

Current Status

Ayurveda is increasingly being integrated into health insurance frameworks across multiple countries, reflecting its growing acceptance as a legitimate and insurable healthcare system. In India, the Insurance Regulatory and Development Authority of India (IRDAI) has mandated that all insurers include Ayush treatments, comprising Ayurveda, Yoga, Unani, Siddha, and Homoeopathy, at par with allopathic treatments. Leading insurers such as Niva Bupa, Reliance Health, Manipal-Cigna, Care Health, and Aditya Birla Health Insurance offer comprehensive Ayurveda treatment coverage under plans like ReAssure 2.0, Health Infinity, and ProHealth Prime. These plans cover therapies such as *Panchakarma, Abhyanga, Shirodhara, Nasya*, and herbal treatments, including in-patient costs, medicines, room rent, and pre/post-hospitalisation expenses.

Beyond India, Ayurveda is gaining insurance recognition in countries such as Sri Lanka, Nepal, UAE, Oman, Malaysia, Hungary, Switzerland, Germany, Brazil, South Africa, and Serbia. In Australia, Canada, South Africa, and parts of Europe, professional indemnity and liability insurance for Ayurvedic practitioners is available through organisations like IICT and Alternative Balance, enabling coverage for therapies like Marma therapy, herbal detox, and Ayurvedic nutrition counseling. The recent inclusion of Ayurveda and other traditional systems in the ICD-11 and ICHI frameworks further reinforces their global legitimacy and further increases their chances of getting covered in insurance in more countries. There are 6 countries where Ayurveda-based treatments are covered in Insurance:

1. **UAE:** Dubai's basic health insurance (Essential Benefits Plan) was expanded to cover alternative medicine such as Ayurveda (reported as a DHA circular update with annual limits and co-insurance).[117]
2. **Sri Lanka:** Many Sri Lankan insurer products explicitly include reimbursement for OPD/IPD charges for Ayurvedic therapies/products.[118]
3. **Switzerland:** Swiss insurance companies also list Ayurveda among complementary medicine therapies discussed for coverage (often via supplementary insurance and recognised providers).[119]
4. **Netherlands:** Ayurveda is explicitly listed as reimbursable under Dutch supplementary insurance.[120]
5. **Germany:** Ayurveda is explicitly referenced in insurance products among reimbursable alternative therapy forms for eligible tariffs.
6. **South Africa:** Ayurveda is explicitly named as a complementary therapy that is reimbursed by medical aid schemes.[121]

Although limited, the acceptance of Ayurveda therapy and products is improving across continents. However, challenges remain in harmonising regulatory standards, validating therapies scientifically, and ensuring uniform coverage across regions. To expand Ayurveda's insurance footprint, efforts are underway to standardize clinical guidelines, promote international certifications, and engage insurers in OECD countries for policy portability. This would allow foreign nationals receiving Ayurvedic

treatment in India to claim reimbursement under their home country's insurance plans, provided the treatment meets internationally accepted standards.

Areas of Improvement

- While Ayurveda's insurance coverage is expanding, especially in wellness-focused and complementary health markets, it still trails behind TCM in terms of global integration.
- Strategic collaborations, regulatory reforms, and consumer education will be key to positioning Ayurveda as a credible, insurable, and globally accessible healthcare system.
- Pilots with select insurers to demonstrate that Ayurveda can deliver safe, effective recovery and improved outcomes at a lower total cost of care compared to conventional treatment pathways—helping build payer confidence and expand coverage.

Global Best Practices

TCM has notable insurance inroads in multiple high-income markets. In the **United States**, Medicare covers acupuncture for chronic low back pain (12 treatments in 90 days; up to 20/ year upon improvement), reflecting policy acceptance of a TCM modality for a defined indication. In **Germany**, after large, randomised trials (the GERAC program), the Federal Joint Committee (GBA) added acupuncture to statutory benefits for chronic low back pain and knee osteoarthritis.[122] **Switzerland** provides a further model: acupuncture/TCM is covered by basic insurance (LAMal) when delivered by certified physicians. Other European countries, like Netherlands, etc., also include Acupuncture and TCM treatment amongst the CAM therapies covered in insurance schemes.[123] In Japan, Kampo medicines, standardised formulas derived from classical TCM, are reimbursed under National Health Insurance as physician-prescribed drugs, integrating traditional herbal medicine into mainstream prescribing and pharmacovigilance. For Ayurveda and other complementary therapies, coverage under supplementary insurance is provided, not under basic insurance. Korean Medicine (acupuncture, moxibustion, cupping, and many KM treatments) has been covered by National Health Insurance since 1987; the benefit scope continues to expand (e.g., Chuna, movement therapy). Kampo in Japan is fully integrated; 148 Kampo prescriptions are reimbursed under National Health Insurance; >80% of physicians prescribe them. National Health Insurance (NHI) in Korea has covered Korean medicine (KM) services, including acupuncture, moxibustion, cupping, and herbal preparations, since 1987, which represents the first time that an entire traditional medicine system was insured by an NHI scheme anywhere in the world.[124]

How other systems have been able to do it

TCM's reimbursement advantage rests on three pillars: condition-specific evidence produced in the target health system (e.g., GERAC in Germany leading directly to coverage decisions); physician-delivered models that fit insurer governance (e.g., Kampo prescriptions in Japan; physician-delivered acupuncture in Switzerland); and standardisation that derisks payer adoption (clear dosing, quality controls, and billing codes). TCM followed country-specific strategies and followed different routes for ensuring insurance coverage in different countries. It demonstrated indication-specific coverage (Medicare for chronic low back pain) and national drug reimbursement (Kampo, Japan), whereas it focused on integrative care models in Switzerland, where TCM treatments were overseen by licensed practitioners to address initial safety concerns and facilitate their coverage under insurance plans.

How Ayurveda can Utilise these learnings

Domestically, India has created a reimbursement base for Ayush. From April 1, 2024, the Insurance Regulatory and Development Authority of India (IRDAI) has directed all health insurers to provide

Ayush coverage at par with allopathic care, with requirements for network empanelment, quality parameters, SOPs, and engagement with the Ministry of Ayush's Core Group. This parity is crucial for generating real-world outcomes and cost-offset data that can be presented to international payers.

- Outside India, however, Ayurveda coverage remains limited in OECD markets, generally confined to wellness benefits or supplementary insurance.
- Ayurveda's domestic IRDAI parity creates an invaluable evidence engine at scale; translating this to OECD settings will require pragmatic trials in priority indications (pain, metabolic health), designed with local investigators and outcomes aligned to payer guidance.
- Ayurveda can propose limited indication pilots with insurers in Switzerland, the Netherlands, Australia, and select US plans using TM 2 codes (e.g., low back pain, functional dyspepsia) to reimburse Ayurveda consults/protocols delivered by accredited clinicians; evaluate outcomes and cost-offsets.
- Bundling care with rehabilitation and wellness may also be a good alternative for insurance coverage. Ayurveda can leverage medical value travel to package insured post-acute rehabilitation with Ayurveda wellness for European and Middle Eastern markets.

Recommendations

Short Term (Up to 2029)

1. **Domestic RWD engine**: Since the Insurance Regulatory and Development Authority of India (IRDAI) has mandated that Ayush treatments (including Ayurveda) be covered at par with allopathic care, there is now a large insured patient base. This creates an opportunity to systematically capture treatment data. A Real-World Data (RWD) system in India can be built to collect and analyse actual patient outcomes from Ayurveda treatments delivered under insurance coverage. This data can be utilised to show clinical outcomes (e.g., pain reduction, improved quality of life) and economic benefits (e.g., reduced use of NSAIDs, fewer out-patient visits, shorter hospital stays). This evidence can be used to convince global insurers and regulators of Ayurveda's value, support coverage decisions in OECD markets and Strengthen Ayurveda's credibility as a cost-effective healthcare option. [125]
2. **OECD pilots**: Pilot projects can be launched at international locations, especially in OECD countries (e.g., Switzerland, Netherlands, Australia, and select U.S. health plans), to test insurance reimbursement models for Ayurveda, where Ayurveda consultations and standardised treatment protocols (not ad-hoc therapies) are offered as reimbursable services under health insurance. We can start with specific conditions where Ayurveda has strong evidence and global relevance, such as chronic Low Back Pain (cLBP), digestive disorders, etc. To gain insurers' trust, Ayurveda services should be provided by qualified, accredited Ayurveda practitioners and should be provided within or alongside physician-supervised clinics, ensuring integration with mainstream healthcare.

Medium (Up to 2035) and Long Term (Up to 2047)

1. **Benefit Expansion and Ensuring National Coverage:** Scale successful pilots into mainstream supplemental benefits by introducing standardised, protocol-based bundled Ayurveda packages for post-acute rehabilitation and chronic pain. **Target at least three national coverage/adoption decisions for Ayurveda in insurance packages** by demonstrating consistent outcomes, quality assurance, and cost-effectiveness—leveraging precedent pathways used for services like acupuncture.

2. **Contracts with US/EU/Gulf insurers for out-of-area coverage for Ayurveda-based Medical Value Travel:** Secure contracts with major US/EU/Gulf insurers to enable "out-of-area" coverage for Ayurveda-led medical value travel—offering bundled, end-to-end care pathways delivered at NABH-accredited Indian centres. Package pricing defined clinical protocols, and outcomes reporting should be built in to simplify payer approvals and enable repeatable scale-up.

D. Localisation & Cultural Adaptability

Current Status

India's proactive representation of Ayurveda in international forums such as BRICS, SCO, Quad, and G20 has significantly elevated its visibility. The Ministry of Ayush's participation in global expos, trade fairs, and the launch of the Ayush Visa for medical value travel are strategic moves to position India as a global hub for traditional medicine. Additionally, the establishment of the Ayush Export Promotion Council (AyushExcil) has enabled branding and entrepreneurship support for Ayurvedic products and services abroad.

Ayurveda's global expansion is increasingly driven by its ability to adapt to local cultures and consumer expectations. **In markets like the United States, Ayurvedic herbs and nutraceuticals are often rebranded and reformulated to align with local preferences, wellness trends, and regulatory frameworks.** This cultural adaptability is further supported by multilingual educational and promotional content, enhancing accessibility and consumer trust. In many Western markets, Ayurveda is often remarketed through niche functional segments like **immune-boosting teas** (e.g., Tulsi or Ginger) or stress-relief supplements (e.g., Ashwagandha) rather than entire holistic systems. In Europe and North America, Ayurvedic treatments like Panchakarma are frequently re-marketed as "**Luxury Wellness Retreats**" or "**Holistic Detox Programs**" in spas and resorts, blending them with local natural therapies to suit a high-end demographic. New startups are leveraging **Artificial Intelligence to provide personalised health recommendations based on an individual's dosha** (body constitution), making the complex traditional system accessible and engaging for digital-native users.

One of the limitations in Ayurveda's internationalisation is its language of communication, which is Sanskrit. While Sanskrit preserves the authenticity and depth of Ayurvedic knowledge, it poses a barrier for global learners and practitioners, especially in Europe and other non-Indian regions. Although with the growing demand from so many countries where Ayurveda is now being taught, textbooks of Ayurveda have been translated into all major languages of the world and Ayurveda is being taught in all these languages as well. But the technical terminologies of Ayurveda and diagnostic concepts such as *Vata, Pitta*, and *Kapha* are still rooted in Sanskrit, making them difficult to understand for students and regulators unfamiliar with the language. This restricts the adoption of Ayurveda in mainstream medical education abroad and complicates regulatory documentation. **For Ayurveda to expand effectively in Europe, it is essential to translate core texts, clinical protocols, and pharmacopeial standards into widely spoken languages like English, German, French, and Spanish,** while also rephrasing traditional concepts into medically relevant terms mapped to global coding systems like ICD-11 TM2. Such linguistic adaptation will not only enhance accessibility but also foster trust and integration into international health systems. There is also a lack of **structured support for cultural adaptation of Ayurveda in non-Indian contexts, such as integrating local health beliefs or consumer behavior insights into product design and outreach**. Understanding local epidemiology and treating the conditions by using locally grown herbs and medicines requires research and with the advent of more regional presence of Ayurveda training and research institutions globally, such research might reveal localised cure of global disease conditions through using basic principles of Ayurveda.

Areas of Improvement

- It is important to position Ayurveda as a clinically relevant system of medicine by tailoring its application to the priority health conditions of each geography. Moreover, care pathways and service packages also should adapt to local patient needs and preferences—without compromising Ayurveda's core principles.
- India must invest in global regulatory engagement, develop region-specific branding toolkits, and promote collaborative research on the cultural integration of Ayurveda.
- Building regional hubs across multiple continents of the world with research and development components would allow specialised teams to understand local epidemiology and community preferences and expectations from therapies like Ayurveda. These inputs would ensure the adaptation of Ayurveda as per regional preferences and more acceptability across the world.
- Strengthening digital infrastructure for e-commerce, multilingual content creation, and consumer education will further enhance Ayurveda's global appeal and acceptance.

Global Best Practices

Japan adapted Traditional Chinese Medicine into standardised Kampo extracts integrated with national formularies and physician workflows. Japan's Kampo is the benchmark for product localisation: classic formulas have been reformulated into spray-dried extract granules, standardised for quality, and prescribed by physicians—making them compatible with Japan's regulatory, clinical, and payer ecosystems. Kampo's inclusion in National Health Insurance transformed use from niche to mainstream and built robust pharmacovigilance datasets. Separately, under the Belt and Road umbrella, overseas **TCM centres combine clinical services with cultural engagement (e.g., Tai Chi/Qigong), building community familiarity and multidisciplinary referral networks in host countries.**

How other systems have been able to do it

TCM's localisation success is rooted in product standardisation (Kampo extracts), physician-centric delivery, and cultural programming that resonates with local wellness narratives. Kampo shows how reformulation and physician prescribing change payer and prescriber behavior.

How Ayurveda can Utilise these Learnings

- In the EU, Ayurveda can reduce adoption friction by pairing the THMPD framework with dosage forms familiar to local consumers; standardised tablets, capsules, or teas—alongside classical preparations. This approach resonates with pharmacists and clinicians accustomed to pharmacopeial monographs and quality dossiers.
- Ayurveda is taking important steps; EU-grade quality, TAS recognition, and WHO-aligned training—but can accelerate by:
  - » Standardizing extracts and ready-to-use formulations alongside classical dosage;
  - » Developing shortcycle, day-care variants of therapies (e.g., Panchakarma modules) that fit work-life patterns and out-patient settings; and
  - » Embedding yoga/meditation as culturally intelligible adjuncts, comparable to Tai Chi in TCM centres.

- » Ayurveda should accelerate standardised dosage forms and context-sensitive protocols, while leveraging Ayush Visa/MVT to prototype exportable clinic models that can be transplanted with local dietetics and follow-up pathways.
- » Develop localised Ayurveda SKUs (dosage forms, labelling languages, claims) aligned with local diets and seasons (e.g., EU herbal lists, Australia's permitted indications) and translate "dosha" language into consumer-friendly terms mapped to TM 2/ICD constructs.

Recommendations

Short Term (Up to 2029)

1. **Regimen adaptation**:-Service providers can introduce day-care Panchakarma formats optimised for out-patient and workplace wellness needs.[126]
2. **Ayurveda Localisation Toolkits:** Create region-specific "Ayurveda Localisation Toolkits" that adapt messaging, imagery, and service design to local cultural norms and health priorities. Each toolkit should include: target-condition positioning (e.g., stress/sleep, metabolic health, pain), culturally appropriate narratives, do's/don'ts for claims, and locally resonant patient journeys (clinic, wellness, home-care).
3. **Addressing the language barrier**: Rephrasing dosha-related insights in simple, medically relevant terms that patients can understand, which is also mapped to ICD TM2 (e.g., patternbased phenotypes) for clinical notes and marketing compliance.[127]
4. **Co-narratives with Yoga/Meditation**: Package Ayurveda with mind-body practices (similar to Taichi/Qigong in TCM centres) to meet local wellness expectations. Yoga already has a global name, popularity and user base. This can be leveraged by designing procedures and therapies combining Yoga with other Ayurveda components for holistic wellness and mindfulness.
5. **Digital Commerce Localisation:** Strengthen end-to-end digital commerce readiness by building compliant, region-ready e-commerce capabilities: localised product catalogs, local payment methods, country-specific labelling/claims governance, pharmacovigilance workflows, and reliable last-mile delivery partnerships.
6. **Culturally relevant IEC and communication strategy:** Create a multilingual content factory (not just translation) that produces culturally relevant content across languages and formats—short videos, explainers, FAQs, practitioner-led webinars, and condition-focused pathways. Ensure content is localised for tone, metaphors, dietary context, and regulatory boundaries. In case myths and misconceptions are spread in local media, the relevant content and responses can be shared in local languages.

Medium (Up to 2035) and Long Term (Up to 2047)

1. **Understand local epidemiology and localised solutions:** It is important to position Ayurveda as a clinically relevant system of medicine by tailoring its application to the priority health conditions of each geography. Moreover, care pathways and service packages also should adapt to local patient needs and preferences—without compromising Ayurveda's core principles.
2. **Collaborative research programs with local universities/health systems**: To study "cultural fit" and adoption drivers (belief systems, trust, expectations, adherence). Prioritise research on: acceptability of dietary advice, perceptions of herbal preparations, willingness for long-term regimens, and integration with local standards of care.

Key Recommendations

The Acceptability Pillar lays out a comprehensive strategy to enhance global trust, regulatory legitimacy, and system-level integration of Ayurveda by strengthening regulatory compliance, expanding international collaborations, building insurance pathways, and ensuring cultural and local adaptability of products and services.

Short Term: (Up to 2029)

1. Create country and market specific **playbooks for regulatory compliance** for all major international markets to facilitate manufacturers.
1. **Strengthen** AyushExcil from a small, generalist setup into a market-intelligence and compliance support body.
2. Encourage adoption of WHO-GMP standards by export-oriented manufacturers to improve buyer confidence, regulator trust, and brand credibility.
3. Establish a dedicated Ayurveda Working Party at EDQM to provide a structured platform to develop and refine Ayurvedic herbal monographs in line with European Pharmacopoeia expectations.
4. **Institutionalize a 'Patent Watch and Rapid Opposition Cell'** to continuously monitor global patent filings in herbal/plant-based medicines, formulations, and delivery technologies.
5. **Upgrade and strengthen TKDL** to prevent misappropriation: expand its coverage, modernize search options, and strengthen multilingual/semantic retrieval.
6. Adopt strategy of **milestone-based MoUs** with progress dashboard to ensure transparency for stakeholders, accountability for implementation on agreed action items and global visibility of Ayurveda's expansion efforts.
7. Establish **flagship hubs** across the globe in friendly countries as **in-region** coordination nodes for regulatory facilitation, quality assurance, and market intelligence to reduce compliance frictions for exporters.
8. **Leverage WHO CCs** network as neutral conveners to co-design trials, pharmacopeial harmonisation, and practitioner standards with host-country regulators; while ensuring geographic spread.
9. **Leverage GTMC** and its role as global hub for research, standard and policy on traditional medicine to ensure more funding opportunities for Ayurveda trials.
10. Create domestic **RWD (Real World Data)** engine to collect and analyse actual patient outcomes from Ayurveda treatment to show clinical outcomes and economic benefits.
11. Launch **pilot projects at international locations**, especially in OECD countries to test insurance reimbursement models for Ayurveda.
12. Create region-specific "**Ayurveda Localisation Toolkits**" that adapt messaging, imagery, and service design to local cultural norms and health priorities.
13. Package Ayurveda with Yoga/Meditation by designing procedures and therapies combining Yoga with other Ayurveda components for holistic wellness and mindfulness.
14. Strengthen **Digital Commerce Localisation** by building compliant, region-ready e-commerce capabilities.
15. Create a culturally relevant **IEC and communication strategy** for effective messaging and response to address myths and misconceptions.

Medium (Up to 2035) and Long Term (Up to 2047)

1. **Expand & Strengthen AOGUSY** to provide practical compliance support for SMEs.
2. Adopt a **structured advocacy strategy** to secure formal inclusion of Ayurveda within national health policies and reimbursement frameworks.
3. Create an **overarching administrative structure** for Ayurveda globalisation to drive globalisation efforts in a focused and accountable manner.
4. Establish **International Ayurveda Centres of Excellence** to promote academic and research activities at global level.
5. Use the WHO GTMC, Jamnagar as a strategic platform to shape the global traditional medicine agenda as an **active co-leader of WHO consultations**.
6. Influence **priority-setting for global research funding** by developing WHO-aligned research roadmaps to build stronger global legitimacy for Ayurveda.
7. **Mainstream standardised Ayurveda packages** for post-acute rehabilitation and chronic pain into insurance, targeting at least three national coverage decisions based on proven outcomes and cost-effectiveness.
8. Secure **contracts with US/EU/Gulf insurers** to enable out-of-area coverage for **Ayurveda based MVT** offering by enabling bundled, end-to-end care pathways delivered at NABH-accredited Indian centres.
9. Tailor application of Ayurveda to the priority health conditions of each geography by understanding **local epidemiology and customizing solutions based on local needs.**
10. Initiate **collaborative research programs** with local universities/health systems to study "cultural fit" and adoption drivers.

Section 5: Global Propagation of Ayurveda

Components

A	Strategic Brand Positioning
B	Global Visibility and Promotions
C	Medical Value Travel (MVT)
D	Presence in Global bodies

A. Strategic Brand Positioning

Current Status

Ayurveda has transitioned from being a traditional Indian healing system to a globally recognised wellness and therapeutic brand, with its products increasingly occupying premium and mainstream segments in international markets. This transformation is driven by a strategic blend of cultural authenticity, scientific validation, and modern branding techniques. Leading Ayurvedic companies have successfully positioned their products in global markets by aligning them with consumer preferences for natural, holistic, and sustainable health solutions. These brands have expanded their footprints across North America, Europe, the Middle East, and Southeast Asia, often competing directly with established multinational wellness and personal care companies.[128]

Table 5.1: Market Expansion

Aspect	Details
Global Presence	North America, Europe, Middle East, Southeast Asia[129]
Consumer Trends	Preference for natural, holistic, sustainable health solutions[130]
Competitive Positioning	Competing with multinational wellness and personal care companies

The global positioning of Ayurveda products is supported by a growing demand for clean-label, plant-based, and preventive healthcare solutions. Consumers are increasingly seeking alternatives to synthetic pharmaceuticals, and Ayurveda offers a compelling proposition rooted in centuries-old wisdom and personalised wellness. Companies have leveraged digital platforms, e-commerce, and wellness tourism to enhance visibility and accessibility. Branding strategies emphasize purity, tradition, and efficacy, often supported by storytelling that connects consumers to the cultural and historical roots of Ayurveda.[131]

In summary, Ayurveda products are increasingly positioned not just as therapeutic solutions but as lifestyle brands that embody wellness, sustainability, and cultural depth. With continued innovation, regulatory support, and strategic branding, Ayurveda is poised to become a cornerstone of the global wellness economy.[132]

Table 5.2: Key Challenges in Global Branding

Challenge Area	Details
Recognition as a Medical System	Limited formal recognition restricts branding in regulated markets
Product Classification	Often categorised as dietary supplements due to a lack of harmonised standards
SME Barriers	Complex export documentation, multilingual labelling, and digital marketing
Cultural Integration	Lack of structured support for adapting Ayurveda to local health beliefs

Ayurveda products have faced recurring quality and safety scrutiny in major international markets, largely driven by findings of harmful elemental impurities and product adulteration. Regulators and public health agencies in the **US, Canada, Australia, and New Zealand** have **issued alerts after testing (or poisoning investigations)[133] identified elevated levels of heavy metals such as lead, mercury, and arsenic in certain imported or unapproved Ayurvedic products**, sometimes linked to documented cases of toxicity. In some instances, authorities also detected undeclared prescription medicines (e.g., heavy metals) in products marketed as "natural," raising concerns about intentional adulteration, weak labelling/traceability, and supply through unregulated channels (online sales, personal imports, or unauthorised clinics).[134] Overall, these examples have reinforced a consistent message from regulators: the **highest risks cluster around unregistered/unauthorised products, inadequate quality control, and insufficient disclosure**—underscoring the need for stronger GMP-aligned manufacturing, standardised testing (especially for metals), and clearer compliance with local regulatory frameworks.

Areas of Improvement

- **Coordinated approach towards building Ayurveda as a healing brand across the world**: In the multi-stakeholder environment, each stakeholder is creating their own strategies and implementing, leading to an uncoordinated messaging about Ayurveda in the global markets.
- **Addressing the Quality concerns:** There are multiple concerns around the quality of Ayurveda products. Ayurveda needs to position itself as a natural, holistic healing brand with utmost care to ensure good quality agriculture, collection, and manufacturing practices.
- **Acceptability across the world:** In many countries, Ayurveda has not been able to solidify its position as a recognised system of medicine. This creates doubt in a consumer's mind about the safety of the products and services. Ayurveda should focus on getting legitimised and accepted in all major markets of the world through focused efforts and strategies.
- **Increasing the awareness of the consumer and busting the myths/misconceptions:** Creating education/marketing campaigns focused on the natural healing components of Ayurveda and making people aware about the modern manufacturing processes and assuring them about the overall quality of Ayurveda products. Responding to multiple myths/misconceptions being floated on social media in local languages, so that people are not misinformed.

Global Best Practices

Traditional medicine systems across the world have undertaken strategic brand positioning to expand globally, often aligning with national policy, cultural diplomacy, and scientific validation. While Ayurveda is gaining momentum, systems like Traditional Chinese Medicine (TCM), Kampo (Japan), Unani, and African Traditional Medicine have made notable strides in branding and global integration.

TCM-China: China elevated TCM as a national strategy through the outline of the Strategic Plan on the Development of TCM (2016–2030) and the TCM Law (effective July 2017), embedding TCM into the "Healthy China 2030" blueprint and codifying development, services, education, and research. Earlier, **there was considerable skepticism of TCM in the face of Western medicine, particularly over the former's training and funding, and an aversion to using modern clinical tests**. Animal-rights activists had also raised questions. With a history of more than 2,000 years, TCM is seen by many as a national treasure in China for its unique theories and practices, such as herbal medicine, acupuncture, massage, and dietetics; **Tu Youyou won the 2015 Nobel Prize for her work using artemisinin to treat malaria**. Considering these, the government of China decided to make some structural changes so as to change the face/image of Traditional Chinese Medicine and give it a more mainstream and modern outlook. Under the TCM law passed in 2016;

- China puts TCM and Western medicine on equal footing within the country, with better training for TCM professionals, so that TCM and Western medicine learn from each other and start complementing each other.
- County-level governments and above to set up TCM institutions in public-funded general hospitals and mother and childcare centres. Private investment will be encouraged in these institutions.
- All TCM practitioners must pass tests. Apprentices and previously unlicensed specialists with considerable medical experience may only begin practice when they have recommendations from at least two qualified practitioners and pass relevant tests.[135]

Acupuncture & moxibustion's inscription as UNESCO Intangible Cultural Heritage in 2010[136] provided much needed cultural capital for the proliferation and acceptance of TCM in the US and EU markets. China invested in scientific research, cultural diplomacy, and standardised education programs for international students. This multi-pronged approach has positioned TCM not just as a healthcare system but as a soft power tool and economic asset.

Kempo-Japan: Derived from Chinese medicine but adapted to Japanese needs, Kempo has fully integrated into Japan's national health insurance system. **It has maintained pharmaceutical-grade production standards, making Kampo medicines widely acceptable in clinical settings**. Kempo focused on scientific validation and positioned itself as a complementary therapy in hospitals, especially for chronic conditions and palliative care. Kempo's strategic positioning was more on the lines of clinical credibility and regulatory alignment, rather than cultural branding.

African Traditional Medicine: The **African Union has promoted traditional medicine through regional harmonisation efforts for herbal medicine regulation, collaboration with WHO AFRO to integrate traditional medicine into primary healthcare.** They have kept a strong emphasis on community-based knowledge systems and biodiversity conservation; on August 31st 'African Traditional Medicine Day' is celebrated, raising awareness and policy support. While branding for African traditional medicine is only evolving, the strategic positioning here is local empowerment and health equity.

How other systems have been able to do it

TCM benefitted from earlier inclusion in ICD-11 (TM1) and a 15-year head start in ISO standardisation via ISO/TC 249 (since 2009) hence, TCM has accumulated more years of coded data, standards, and policy familiarity among regulators/insurers. This technical superiority allowed TCM the edge to push towards global recognition and policy approvals. **China's TCM Law and national plans translate into coordinated funding, internationalisation goals, proactive global standardisation and brand unification, which has resulted in the growing stature of brand TCM**. Systems like Kempo and African traditional medicines chose a different strategic approach and coordinated multi-pronged national efforts in those directions have allowed these systems to create a strategic brand identity on a global scale.

How Ayurveda can Utilise these Learnings

Since 2014, India has a dedicated Ministry of Ayush with a mandate to develop and globalize Ayurveda and allied systems. In 2022, the WHO Global Traditional Medicine Centre (GTMC) was established in Jamnagar with the Government of India support, positioning India, and by extension Ayurveda, at the centre of the WHO's traditional medicine agenda. But despite all this

- Ayurveda's global expansion has been fragmented, with efforts spread across ministries, manufacturers, researchers, and practitioners, often without a unified strategy. To address this gap, it is imperative to establish a multi-stakeholder driven governance framework dedicated to coordinate multi-pronged efforts, design and implement a strategic effort towards the globalisation of Ayurveda.
- Various misconceptions and myths around Ayurveda and its products have hampered the growth of Ayurvedic export in many countries; it is therefore very important to create reference material in local languages, specifically targeting these myths and creating a robust and evidence driven information library for Ayurveda.

Recommendations

Short Term (Up to 2029)

1. **Reposition Ayurveda and ride on the Yoga wave**: A global brand positioning strategy to be drafted and implemented, projecting Ayurveda as a preventive, evidence-backed, natural system of medicine focused on holistic healing, rejuvenation and wellness. Yoga has already received a great following and acceptance from the world community; Ayurveda should be projected as its natural extension for a holistic and natural wellness partnership.
2. **Mission Steering Group for coordinated implementation of Ayurveda's globalisation strategy:** Since 2014, India has a dedicated Ministry of Ayush with a mandate to develop and globalize Ayurveda and allied systems. Still, due to the multi-stakeholder nature of Ayurveda's globalisation efforts, results for Ayurveda's global expansion have been limited, often without a unified strategy with efforts spread across ministries, manufacturers, academicians, researchers, and practitioners. To address this, **it is imperative to establish a 'Mission Steering Group (MSG)' dedicated to plan and implement these efforts in a coordinated and focused manner on a global scale**. This MSG would serve as a central coordinating body to define and execute a global repositioning strategy for Ayurveda, aligning efforts across policy, research, regulation, industry, and diplomacy for Ayurveda's globalisation.

At the apex, a **Mission Steering Group (MSG), chaired by the Union Minister of Ayush, would provide strategic direction and oversight.** Key supporting ministries—such as the Ministry of Health & Family Welfare (MoHFW), Ministry of Commerce, Ministry of Tourism and Ministry of External Affairs (MEA)—would be represented, alongside stakeholders from industry (manufacturers and service providers), academia, research institutions, WHO representatives, and other reputed agencies.

The MSG would serve as the overall guardian of the globalisation mission, setting priorities, aligning stakeholders, and monitoring progress. Reporting to the MSG, a **Global Ayurveda Forum** would function as the primary working platform, with participation from Secretaries of relevant ministries. **This forum would translate the MSG's direction into actionable strategies and implementation plans, while operating under the MSG's guidance and governance**.

3. **Increase consumer awareness**: Standard evidence-based IEC materials in multiple international languages should be shared with the consumer for overall community awareness. Many consumers and regulators outside India have skepticism or misconceptions about Ayurveda, especially around product safety, quality, heavy metal content, sourcing of raw materials, and contamination risks. We can create localised Frequently Asked Questions (FAQ) documents tailored to each country's regulatory requirements, consumer expectations, and cultural sensitivities. These documents may also have third-party lab attestations for safety and product quality. These FAQs will serve as trust-building tools for regulators, healthcare professionals, and consumers.[137]
4. **Strengthen the Quality framework**: We need to upgrade Schedule T, which is India's GMP guideline, to WHO-GMP equivalence, which is stricter and internationally recognised, especially in regulated markets (EU, US). The industry should be encouraged to adopt the WHO-GMP guidelines, specifically for the export of Ayurveda products. **An online database listing all Ayurveda manufacturers certified to WHO-GMP standards can be created and published for building trust with foreign regulators and buyers.** Batch-wise Certificates of Analysis (COA) need to be published showing test results for (heavy metals, aflatoxins, pesticides, microbes) with QR links on packs; these are key safety parameters demanded by EMA, FDA, and other regulators.[138]

Medium (Up to 2035) and Long Term (Up to 2047)

1. **Claim the global thought leadership:** Annual Ayurveda Global Evidence Report should be prepared and published (in partnership with GTMC), tracking publications, trials, safety signals, and payer pilots in the field of Ayurveda.[139]
2. **Global campaign to connect with consumers and create demand:** A global publicity campaign can be planned and implemented, focused on building an emotional connection with consumers and creating confidence in their minds for using Ayurveda products through relatable, data-backed storytelling. These campaigns can emphasize Ayurveda's strengths in managing lifestyle issues like sleep, stress, digestion, and individualised wellness by sharing real-life success stories or testimonials. QR codes can be used on packaging or websites to link to lab reports, usage guides, or patient stories, enhancing transparency and engagement.

B. Global Visibility and Promotions

Current Status

Ayurveda, India's ancient system of holistic health and healing, has made significant strides in gaining global visibility. The current approach to global visibility and promotion of Ayurveda is multi-pronged, involving **government initiatives, institutional collaborations, cultural diplomacy, and emerging digital platforms**. One of the most notable milestones in Ayurveda's global positioning is the establishment of the WHO Global Traditional Medicine Centre (GTMC) in Jamnagar, Gujarat. This centre, backed by the Government of India and the World Health Organisation, serves as a global reference point for traditional medicine systems, with Ayurveda at its core.[140] India has also introduced the Ayush Visa, a specialised visa category aimed at promoting medical value tourism for Ayurveda and other traditional systems. This initiative supports international patients seeking Ayurvedic treatments in India, thereby linking wellness tourism with global outreach.[141]

On the promotional front, Ayurveda has been featured in **international health and wellness expos, G20 health tracks, and bilateral health dialogues with multiple countries**. The Ministry of Ayush has partnered with Indian embassies and cultural centres abroad to celebrate **Ayurveda Day**, Organise wellness camps, and conduct practitioner training programs. These efforts aim to build awareness and trust among foreign consumers and regulators. Despite these initiatives, Ayurveda's visibility in global regulatory and insurance systems remains limited. Unlike TCM, which has been included in ICD-11 TM1 and has a dedicated ISO technical committee (ISO/TC 249), Ayurveda is only beginning to align with ICD TM2 and ISO standards.[142] This delay affects its integration into clinical documentation, insurance reimbursement, and health system interoperability. Marketing-wise, Ayurveda is increasingly leveraging e-commerce enabled digital platforms to engage international consumers.

Areas of Improvement

- Strategic approach for promotion, visibility planning, and implementation.
- One size doesn't fit all; a location-specific and problem-specific approach towards communication needs to be adopted.
- A well-planned and implemented global promotional campaign might be a very helpful strategy for the globalisation of Ayurveda.

Global Best Practices

China uses its **Belt and Road Initiative (BRI)**, a global infrastructure and trade strategy, as a tool for health diplomacy, specifically to promote Traditional Chinese Medicine. BRI spans over 140 countries across Asia, Africa, Europe, and Latin America. China has actively used this network to establish international hubs for Traditional Chinese Medicine (TCM) and even set up manufacturing units abroad as part of its health diplomacy and strategic global expansion. China includes TCM in its health cooperation agreements, offering **TCM clinics and hospitals in partner countries, training programs for local practitioners, joint research and public health initiatives**. It also supports TCM product exports, regulatory harmonisation, and inclusion in local insurance systems. Recently, China announced a plan to train 1,300 overseas health professionals from BRI countries in acupuncture, herbal medicine, and evidence-based TCM research over three years. China has established over 30 TCM centres abroad, especially in countries with large Chinese diaspora populations. These centres provide clinical services, train local practitioners, and serve as cultural and medical outreach hubs. Over 1 million foreigners have received treatment at these centres.[143]

State Council Information Office of China published a white paper on TCM, emphasizing TCM's contribution to global health and its role in China's medical diplomacy, including its integration into WHO strategies, ICD-11, and ISO standardisation. The document was designed to educate global stakeholders, governments, regulators, insurers, and researchers about TCM's value and legitimacy.[144]

How other systems were able to do it

TCM's promotional ecosystem (NATCM/State Council) has operated for decades with consistent narratives. It invested timely in scientific evidence generation, standardisation and inclusion in ICD-11 classification. Moreover, the utilisation of multi-country platforms to create opportunities for TCM and build its soft power has been a continuous strategy.

How Ayurveda can Utilise these Learnings

India has already leveraged its advantage through the establishment of the WHO's Global Traditional Medicine Centre (GTMC) in the country. Moreover, using the popularity of Yoga to advance the agenda of Ayurveda has also been a strategy that has been tried. UN General Assembly proclaimed 21 June as International Day of Yoga (A/RES/69/131), and the WHO mYoga app (codeveloped with Ministry of Ayush) scaled the message globally, building halo effects for Ayurveda within the broader Ayush brand. India also led the creation of the Group of Friends of Traditional Medicine (GFTM) at WHO in 2023; periodic meetings in Geneva align member states on integrating traditional medicine into health systems have created a buzz in favor of Ayurveda. But India has not fully utilised the potential of its multi-country platforms or close relationships with countries to build Ayurveda promotional hubs, creating advancement in Ayurveda education, research, manufacturing, and clinical services. India can do well to create educational and research centres of excellence (like AIIA, ITRA, etc.) in favorable international locations having a good Ayurveda alumni base, presence of Indian diaspora, and demand for Ayurveda services.

Recommendations

1. **Leverage the International Platforms:** Use India's leadership roles to promote Ayurveda in health diplomacy, wellness tourism, and regulatory harmonisation. China utilised its international presence in multi-country platforms by going a step further and creating TCM hubs in those countries which are involved in the research and manufacturing of TCM products, thereby creating a large market and consumer base. Similarly, for Ayurveda, India will have to utilise its multi-country international platforms like G20, SAARC, QUAD, etc., and other close relationships with countries in promoting Ayurveda by establishing Ayurveda promotional hubs, which will support the establishment of manufacturing units, hospitals, and wellness centres, apart from promoting targeted quality research as well.
2. **Strategic Promotional Activities**
    a. **Bring the embassies into action:**
        i. **Position Indian embassies worldwide as the first line of credible information and rapid response for Ayurveda in their respective geographies.** This requires capacity building of embassy communication teams through structured orientation on Ayurveda fundamentals, evidence standards, regulatory sensitivities, and common misconceptions so they can proactively address misinformation and reputational risks.
        ii. Strengthen **Ayush Information Cells** at embassies by deploying trained manpower with defined roles (outreach, partnerships, media response), clear annual workplans, and measurable targets (events conducted, partnerships formed, media engagements, inquiries resolved).

iii. Ensure every embassy maintains a **well-stocked, standardised repository of IEC materials (print + digital)** and a simple **"crisis response playbook" (FAQs, approved statements, escalation matrix)** to ensure consistent messaging across regions.

b. **Design and make innovative IEC materials available:** Create a modern, digital-first IEC suite that can be localised and distributed through embassies, diaspora networks, and partner platforms.

i. Apart from printed IEC materials/pamphlets, also focus on short-form video content (reels, explainer clips, animated myth-busters), high-quality promotional videos, and easy-to-share infographics designed for social platforms.

ii. Prioritise multilingual production in key global languages (and region-specific dialects where relevant) to improve accessibility and adoption.

iii. Establish a centralised content engine that provides embassies with regularly refreshed materials, including "plug-and-play" campaign kits (topic-wise: stress/sleep, gut health, pain/rehab, women's wellness).

iv. Vetted roster of credible influencers, clinicians, and culturally relevant advocates (including selective celebrity partnerships where appropriate) to amplify reach while maintaining authenticity and compliance.

c. **Collaboration with top global brands of the hospitality industry and resorts:** Build strategic collaborations with leading global hospitality chains and destination resorts, especially in high-footfall tourist hubs, to integrate Ayurveda as a visible, premium wellness offering. This can include co-branded Ayurveda wellness menus, standardised therapies delivered by qualified practitioners, and **curated "Ayurveda + Yoga" retreat packages** aligned to global wellness trends (stress reduction, sleep optimisation, detoxification, pain management). These partnerships can serve as high-impact "experience-based marketing," converting first-time global consumers through credible, high-quality exposure in trusted environments.

d. **Pharmacy chains and Supermarkets:** Collaboration with leading Pharmacy and Supermarket chains in all major markets to showcase and sell Ayurveda OTC products.

3. **Strategic Visibility Initiatives**

a. **Ayurveda centres and stores at strategically important domestic and global destinations:** Establish a high-visibility "Ayurveda Experience + Retail" footprint in locations where footfall, trust, and discovery are naturally high.

- WHO HQ area, Geneva
- United Nations HQ area, New York
- Eiffel Tower area, Paris
- Times Square, New York
- Trafalgar Square, London
- Red Square, Moscow
- Shibuya Scramble Crossing, Tokyo
- Angkor Wat Temple area, Siem Reap
- Marina Bay area, Singapore
- Colosseum-Roman Forum area, Rome

4. **Establish International Ayurveda Centres of Excellence:** As a bold and ambitious move, pushing Ayurveda on a global stage in the truest sense, India can look to establish International Ayurveda Centres of Excellence in selected countries.

C. Medical Value Travel

Current Status

India's traditional medicine systems, particularly Ayurveda, are increasingly becoming a cornerstone of the country's medical value travel (MVT) strategy. The launch of the **Ayush Visa** in July 2023 marked a significant policy shift, enabling foreign nationals to travel to India specifically for treatment under Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homoeopathy. The visa is available in four sub-categories: AY-1 (treatment), AY-2 (attendant), and their respective e-visa counterparts. However, despite the policy's potential, uptake has been modest—**only 2,000 regular Ayush Visas were issued as of December 2024.** Due to the lesser uptake of Ayush visa, the real numbers of MVT for Ayurveda also remain speculative. For better planning and implementation of strategic efforts in this regard, actual MVT numbers are essential. The process of Ayush Visa needs to be modified so that it becomes a necessary first step for all Ayurveda-related MVTs.[145] This low uptake of the Ayush visa highlights several implementation challenges:

- Limited awareness among international patients and facilitators.
- Cumbersome documentation and a lack of streamlined visa processing.
- Insufficient global marketing of Ayush-based medical tourism.
- Inadequate international accreditation of Ayush facilities, which affects trust and insurance coverage.

A critical enabler of MVT is the quality assurance of Ayush facilities. The National Accreditation Board for Hospitals & Healthcare Providers (NABH) has developed dedicated standards for Ayush hospitals and wellness centres. **As of 2025, nationally, 375 Ayush Hospitals and 127 Panchkarma centres have received full accreditation from NABH, including public and private medical colleges and hospitals**. Over 250 Ayurveda institutions in Kerala alone have obtained NABH accreditation. However, this still represents a small fraction of the 4,000+ Ayush hospitals and 36,000+ dispensaries across India.

Despite these efforts, key gaps remain; like a lack of global insurance integration for Ayurveda treatments, limited post-treatment follow-up systems, such as telemedicine for international patients (as per prevailing legal provisions), absence of standardised clinical protocols and outcome documentation for Ayurveda therapies, underutilisation of digital platforms for patient onboarding, multilingual support, and virtual consultations. There have been multiple efforts to create a single portal for MVT where the entire gamut of information about different healthcare facilities and professionals can be made available. Earlier, by the Ministry of Tourism and recently by the Ministry of Health and Family Welfare, through the launch of the portal "Heal in India", these efforts have been made. However, due to inadequate updates, these portals could not fulfill the requirements of users, leaving patients dependent on agents and fragmented sources for guidance. To fully realize the potential of Ayurveda in global healthcare, India must expand NABH certification to more Ayurveda hospitals and wellness centres, simplify Ayush Visa processing and integrate it with the global medical tourism ecosystem, and promote international collaborations for clinical research and accreditation.

Areas of Improvement

- Increased visibility, awareness, and communication regarding Ayurveda-related Medical Value Travel among the consumers.
- Creating international Ayurveda MVT Hubs and domestic Ayurveda MVT Hot Zones in strategic locations like Heritage cities like Varanasi, Prayagraj, Rishikesh, Ujjain, etc., and regional medical hubs.
- Making the Ayush Visa process easier and bundling it with other facilities like Teleconsultation-based initial assessment and follow-up, insurance coverage, etc., to make it a more beneficial proposition for the users.
- Increased NABH accreditation of Ayurveda Hospitals without compromising on the quality.

Global Best Practices

The globalisation strategy of TCM focuses on overseas centres, training, and Belt and Road Initiative-aligned clinics rather than classic direct medical tourism. This outward approach builds global familiarity and trust, which indirectly drives patient interest and inbound flow to China. Policy targets and reporting highlight dozens of overseas TCM centres and plans for 30 "high-quality TCM centres" along the BRI by 2025. TCM is positioned internationally for chronic disease management and rehabilitation, with universities/hospitals running **satellite clinics in Russia, Central Asia, and parts of Europe.**

Among major Medical Tourism hubs of the world, **Thailand is famous for affordable cosmetic and dental procedures and has branded itself as a "Medical and wellness hub" through government support**. It boasts of world-class hospitals with international accreditation (e.g., JCI) and seamless integration of tourism and healthcare. Similarly, **South Korea, which is known for cosmetic surgery, fertility, and cancer care,** has received support from government-backed branding while it has strengthened its infrastructure through cutting-edge technology and a focus on innovation and safety.

How other systems have done well

A major factor in the success of the MVT industry has been the strong backing provided by their respective governments for strengthening the healthcare infrastructure and branding the industry on a global scale. Thailand and Korea integrated traditional systems into wellness/medical tourism offers, underpinned by strong accreditation and government marketing, giving international patients structured, insurable options for integrative care. **Countries like South Korea and Thailand have worked with international insurers to ensure that foreign patients can claim reimbursement for treatments received abroad.** Private insurance partnerships allow patients from the EU, GCC, and North America to access care with out-of-area benefits, especially for elective procedures like dental, cosmetic, and rehabilitation services. **Many of these hubs offer 'bundled packages' of services like pre-arrival consultations, diagnostics and treatment**, accommodation, wellness services, and post-treatment telehealth follow-up as well. These packages are marketed transparently with fixed pricing, reducing uncertainty for international patients.

TCM's "go out" model (centres abroad) reduces patient travel friction and nurtures local adoption, thereby allowing both the development of TCM infrastructure and base in those countries and boosting Medical Value Travel for TCM.

How Ayurveda can Utilise these learnings

- Emulating China's 'go-out' model, India can also look to establish Ayurveda Centres of Excellence abroad and market in those countries and nearby regions as MVT hubs to rope in more patients towards Ayurveda who might not be making the move currently, due to long distance and high travel costs.
- Create bundled healthcare packages and a single window information system that offers comprehensive details on hospital quality, accreditation standards, treatment costs, and other key patient information.
- Initiate pilots with international private insurance providers to include Ayurveda procedures in their package as 'out-of-area' benefits.

Recommendations

1. **Increase Visibility for Ayurveda-based Medical Value Travel offerings:** To make the prospective international consumers more aware about the wellness-based Ayurveda offerings in India and abroad; visibility focused steps need to be implemented. Some of them can be
   a. **Create an International Ayurveda Medical Value Travel Hub:** Establish one or more overseas **"Ayurveda Medical Value Travel Hub" in well-connected, tourism-friendly countries (starting with Mauritius) to serve as a regional gateway**. These hubs should act as integrated platforms for patient acquisition, pre-travel tele-consults, documentation/ visa support, standardised package selling, and post-care follow-up—linking international consumers to accredited Ayurveda providers and bundled care pathways in India.
   b. **Domestic Ayurveda Medical Value Travel Zones:** Create Ayurveda-based "MVT Zones" in
      i. Heritage destinations like Varanasi, Prayagraj, Rishikesh, Ujjain, Tirupathi, etc.
      ii. High foreign-tourist circuits such as Agra, Khajuraho, Kerala, Rajasthan, etc.

      Each zone should offer a cluster of accredited centres with standardised protocols, transparent pricing, multilingual navigation/concierge, and combined itineraries (treatment + culture), making Ayurveda easy to discover, trust, and purchase as a destination-led wellness product.
   c. **Regional Medical Hubs:** As announced in the Budget 2026–27, the proposed Regional Medical Hubs integrating modern medicine and Ayush healthcare, education, and research facilities can serve as an important enabler for the propagation of Ayurveda.
2. **Bundled offerings with Ayush Visa and care at accredited institutions:** Ayush visa was launched with an objective to make it easier for foreign nationals to visit India specifically for Ayurveda-based wellness or therapeutic care. Although the response for this effort has been average, in order to increase the utilisation of Ayush visa, there is a need to add more value for the beneficiaries. Ministry of Ayush can promote bundled models of Ayush visa plus care delivery in NABH-accredited Ayurveda hospitals/retreats with transparent outcomes and pricing bundles**. The bundled offering may include initial diagnostics (initial assessments, lab tests), therapy (Ayurvedic treatments like Panchakarma, herbal regimens), and tele follow-ups from their own countries (post-visit virtual consultations as per the legal framework).** Apart from being extremely convenient for international consumers, these bundled offerings would ensure quality, affordability, and continuity of care for international patients and position India as a trusted global destination for Ayurveda-based medical and wellness tourism.

3. **Insurance portability**: As an indirect way to promote MVT in India, India should try to work with private insurance providers in the EU and GCC (Gulf Cooperation Council) regions to make Ayurveda services reimbursable for international patients receiving their Ayurveda treatments in JCI/NABH-accredited centres in India. These "out-of-area benefits" will make Ayurveda financially accessible to international patients, integrate it into mainstream insurance ecosystems internationally, and position India as a global hub for integrative, reimbursable care.
4. **Global finder**: A single verified portal listing accredited centres, specialists, packages, with grievance redressal and outcomes dashboards.
5. **Sensitisation of the Medical Value Travel ecosystem about Ayurveda offerings**: Engage and onboard established Medical Value Travel facilitators, who strongly influence international patient flows, into the MVT ecosystem. Create a structured sensitisation and orientation program to familiarize them with Ayurveda care offerings, accredited institutions, standardised packages, and patient pathways (pre-arrival consults, in-country coordination, and post-care follow-up), so they can confidently guide international patients on how Ayurveda can complement treatment through integrative care and accelerate recovery by creating pathways for follow-up care.

D. Presence in Global Bodies like the UN

Current Status

Ayurveda has begun to make its presence felt across various United Nations bodies. While the journey is still in its early stages compared to Traditional Chinese Medicine (TCM), Ayurveda is now actively seeking visibility and legitimacy through strategic partnerships and institutional representation. Similar to the global visibility component, regarding presence in UN bodies as well, the most significant milestone for Ayurveda is the establishment of the WHO Global Traditional Medicine Centre (GTMC) in Jamnagar, Gujarat.[146,147] This centre, launched in collaboration with the World Health Organisation and the Government of India, serves as a global reference point for traditional medicine systems, with Ayurveda at its core. The GTMC is expected to play a pivotal role in evidence generation, policy dialogue, and capacity building, thereby enhancing Ayurveda's credibility and visibility within WHO's global health framework. However, Ayurveda's presence in WHO's regional offices such as AFRO, EMRO, PAHO, and WPRO is still limited.[148,149] Expanding Ayurveda's footprint in these regional offices is essential for integrating it into local health systems, insurance frameworks, and public health programs.

Beyond WHO, Ayurveda's engagement with other UN bodies is emerging but not yet fully institutionalised. For example, WIPO (World Intellectual Property Organisation) offers a platform for protecting traditional knowledge and intellectual property. India's Traditional Knowledge Digital Library (TKDL) is a valuable resource that documents Ayurvedic formulations and practices to prevent biopiracy and support patent examination. However, Ayurveda's proactive use of WIPO frameworks for global IP protection, branding, and geographical indications (GIs) remains under-leveraged.

In the cultural domain, UNESCO has recognised Yoga as an intangible cultural heritage[150], but Ayurveda is yet to receive similar recognition. A strategic push to include Ayurveda in UNESCO's heritage list could significantly boost its cultural legitimacy and global visibility. Ayurveda can also benefit from partnerships with UNDP, UNCTAD, and FAO for sustainable development, trade, and biodiversity conservation linked to medicinal plants.

Global Best Practices

China has been a strong supporter of the WHO Traditional Medicine Strategy, hosting high-level side events at the World Health Assembly to promote TCM's role in universal health coverage. In 2024, China committed $5 million over five years to support the WHO's Traditional, Complementary, and Integrative Medicine (TCIM) Program. It also launched the International Traditional Medicine Clinical Trial Registration Platform, certified by WHO, to support global research credibility. China's National Administration of Traditional Chinese Medicine (NATCM) collaborates with the WHO to develop global norms and standards, promote ICD-11 TM1 coding, and support the integration of TCM into national health systems.

Among other UN bodies, TCM practices like acupuncture and moxibustion were inscribed in UNESCO's Intangible Cultural Heritage list in 2010. The World Federation of Chinese Medicine Societies (WFCMS) is an accredited NGO with UNESCO, actively involved in preserving and promoting TCM culture globally. China hosts the World Congress of Chinese Medicine at UNESCO venues, such as the 2024 event in Paris, attended by delegates from 34 countries. With the World Intellectual Property Organisation (WIPO), China has actively worked to protect TCM-related intellectual property, including patent registration for herbal formulations, traditional knowledge databases, and Geographical Indications (GIs) for TCM products.

How other systems have been able to do it

China has strategically engaged with multiple United Nations bodies to promote Traditional Chinese Medicine (TCM) globally, using a combination of policy alignment, funding, cultural diplomacy, and institutional partnerships.

How Ayurveda can Utilise these Learnings

Ayurveda should deepen collaboration with the WHO, especially through the Global Traditional Medicine Centre (GTMC) in Jamnagar. We should push for UNESCO Intangible Cultural Heritage status for Ayurveda, like Yoga. For intellectual property rights, India should work with WIPO to register Ayurvedic formulations and therapies under Traditional Knowledge frameworks and expand the Traditional Knowledge Digital Library (TKDL) for global access.

Recommendations

1. **Expand Presence in WHO regional offices:** WHO has six regional offices (AFRO, EMRO, EURO, PAHO, SEARO, WPRO), each influencing health policy in their respective regions. Ayurveda's presence in these regional offices can enable regional policy integration, support local capacity building, and promote Ayurveda-based public health models in these regions. For this purpose, the **Ministry of Ayurveda can deploy regional Ayurveda advisors or secondments from India to each WHO regional office.** These advisors can collaborate on regional health priorities (e.g., non-communicable diseases, mental health, aging) using Ayurveda-based interventions, host regional Ayurveda symposia under the WHO umbrella and support regional TM2 coding pilots using Ayurveda patterns in clinical settings.
2. **World Intellectual Property Organisation (WIPO):** WIPO governs global IP frameworks, including traditional knowledge protection, patent classification and geographical indications. Ayurveda can start engaging with WIPO by registering Ayurvedic formulations and procedures under WIPO's Traditional Knowledge Division, promoting India's Traditional Knowledge Digital Library (TKDL) as a global reference for patent decisions. In WIPO, TKDL should be showcased

as India's flagship "implementation model," with proposals for technical sessions on traditional knowledge databases, governance mechanisms, and examiner training. This is particularly relevant as WIPO's Intergovernmental Committee (IGC) remains the principal forum for negotiating international instruments on Traditional Knowledge (TK), Traditional Cultural Expressions (TCEs), and Genetic Resources (GRs), while also providing documentation toolkits and guidance on defensive protection strategies. Further, India should push for Ayurveda-specific GI tags (e.g., Kerala Panchakarma, Himalayan herbs) and collaborate on IP education and awareness for Ayurveda startups and manufacturers with WIPO.

3. **Presence in other UN bodies:** There are multiple UN bodies with whom India can engage to support the globalisation of Ayurveda. **India should engage with UNESCO to position Ayurveda as an intangible cultural heritage, similar to Yoga**. We can also engage with the WTO to push for harmonised trade standards for Ayurvedic products under Trade-Related Aspects of Intellectual Property Rights (TRIPS) and Technical Barriers to Trade (TBT) agreements, while with UNDP, we can push for integrating Ayurveda into community health and SDG-linked programs. With bodies like FAO, India can collaborate on Ayurvedic agriculture and medicinal plant conservation.

Key Recommendations

The Propagation Pillar outlines a comprehensive strategy to elevate Ayurveda's global visibility, credibility, and influence by strengthening brand positioning, international presence, communication, medical value travel, and global partnerships.

Short Term: (Up to 2029)

1. **Reposition Ayurveda** and riding on the Yoga wave as a preventive, evidence-backed, natural system of medicine focused on holistic healing, rejuvenation and wellness.
2. Constitute a **"Mission Steering Group"** for coordinated implementation of Ayurveda's globalisation strategy.
3. Formulate **standard evidence-based IEC materials** in multiple international languages to increase consumer awareness.
4. Strengthen **the Quality framework by** encouraging adoption of WHO-GMP standards by export-oriented manufacturers to improve buyer confidence, regulator trust, and brand credibility.
5. Use India's leadership roles to promote Ayurveda in health diplomacy, wellness tourism, and regulatory harmonisation by leveraging the **international platforms.**
6. Position **Indian embassies worldwide as the first line of credible information** and rapid response for Ayurveda in their respective geographies.
7. Create a **modern, digital-first IEC suite** that can be localised and distributed through embassies, diaspora networks, and partner platforms.
8. **Collaborate with top global brands** of hospitality industry and resorts to integrate Ayurveda as a visible, premium wellness offering.
9. **Establish Ayurveda centres and stores** at strategically important **domestic** and **global destinations to enable higher-visibility.**
10. Increase visibility for **Ayurveda based Medical Value Travel offerings** by establsihing international MVT hubs/zones and regional medical hubs to enhance awareness among prospective international consumers.
11. Bundle offerings with **Ayush Visa and care at accredited institutions** to increase utilisation of Ayush Visa and to ensure quality, affordability, and continuity of care for international patients.
12. **Work with private insurance providers** in the EU and GCC regions to make Ayurveda services reimbursable for international patients receiving their Ayurveda treatments in JCI/ NABH accredited centres in India.
13. **Engage and onboard established Medical Value Travel facilitators** about Ayurveda MVT to guide international patients toward integrative care options.
14. **Expanding Presence of Ayurveda** in WHO regional offices, WIPO, WTO & Other UN bodies.

Medium (Up to 2035) and Long Term (Up to 2047)

1. **Claim the global thought leadership** by publishing annual Ayurveda Global Evidence Report.
2. **Plan and implement Global campaign** to connect with consumers and create demand.

Section 6: Roadmap and Key Recommendations

A. Strategic Roadmap and Key Recommendations for Globalisation of Ayurveda

The recommendations outlined under each pillar—already discussed in detail in the previous sections—have been developed in alignment with certain design principles. Building on these recommendations, this section presents a structured, stakeholder-wise action plan. It translates strategic priorities into clear responsibilities and expected outcomes for each stakeholder. This structured view reinforces role clarity, promotes accountability, and enables seamless execution across all stakeholders.

Design Principles

1. **Quality-centric, evidence-driven approach**: Every outward-facing initiative must be anchored in GMP, GACP, pharmacovigilance, and publishable clinical designs.
2. **Bridging the Gap between domestic and international**: The regulatory gap between product quality, manufacturing practices, and ingredient standardisation between domestic and international markets needs to be bridged by strengthening the local regulatory landscape as well.
3. **"Wedge, then widen"**: Enter through regulatory-permitted categories (e.g., supplements under DSHEA in the U.S., THMPD in the EU, complementary medicine routes elsewhere), then expand indications and coverage as evidence accrues.[7,8,9]
4. **Standardize to integrate**: Map Ayurveda diagnostics/procedures to ICD-11 TM2 and the emerging ICHI traditional medicine module to enable EHR, claims and reimbursement pathways. [4]
5. **Flagship proof, then scale**: Prioritise 6–8 selected conditions/therapies with pragmatic evidence pathways, build 3–4 flagship international hubs, then replicate.
6. **Whole-of-system governance**: A cross-ministerial Mission Steering Group (MSG) for coordinated planning, implementation, along with shared KPIs across Ayush, Health, Commerce, MEA, NCISM/CCRAS/PCIM&H, AyushExcil, QCI/NABH and industry associations.

Why this, why now

- The WHO Traditional Medicine Strategy 2025–2034 explicitly calls on Member States to integrate traditional, complementary and integrative medicine (TCIM) into health systems through evidence, regulation and standards; a tailwind we should fully harness.[151]
- India hosts the WHO Global Traditional Medicine Centre (GTMC) in Jamnagar, a neutral, global knowledge hub for research, standards and digital assets; it can be our launchpad for collaborative evidence and codification.
- Technical infrastructure for health data integration exists: ICD-11 already includes traditional medicine chapters; TM2 brings Ayurveda/Siddha/Unani diagnostics into the coding rail, while WHO and the Ministry of Ayush have advanced a Traditional Medicine module under ICHI to standardize procedures—essential for billing, insurance, and hospital IT adoption abroad.[152]

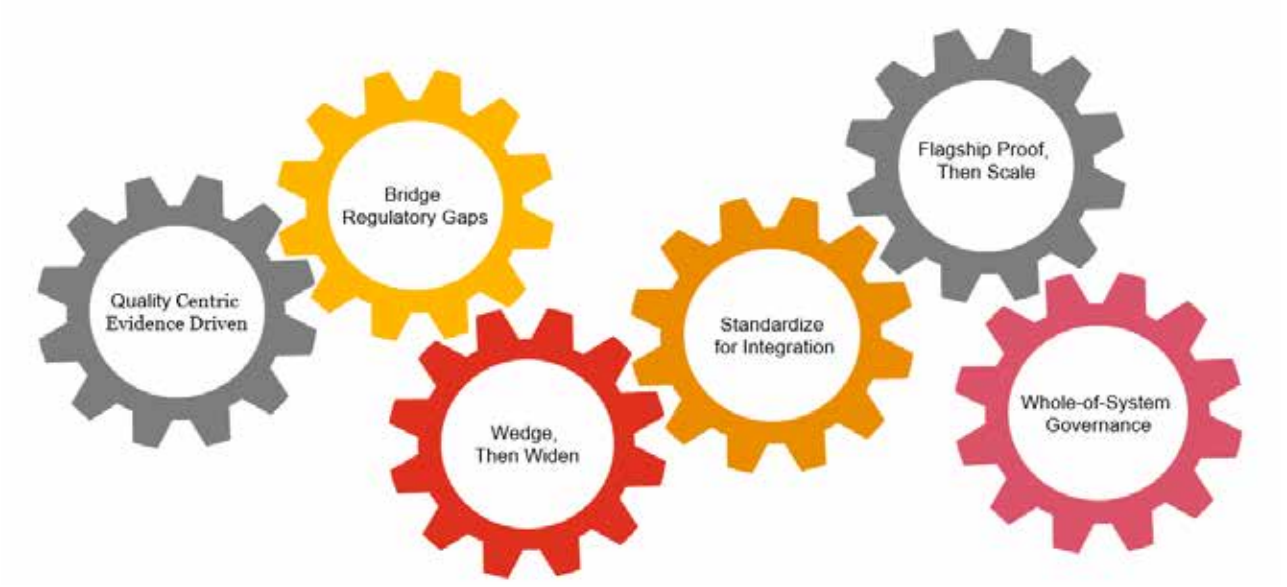

Fig 11: Design principles of the recommendations

6.1 Stakeholder-wise Goals and Action Plan

Purpose and Framing

This section turns the strategic intent for globalisation of Ayurveda into a time-sequenced implementation plan. For each stakeholder, it sets outcomes, actions, dependencies, risks, and quantitative indicators so the program can be governed like a mission. Horizons are aligned to your roadmap:

- **Short term:** now through **2029**
- **Medium term: Till 2035**
- **Long term: Till 2047**

North-star Outcomes by 2047

1. **Integration and recognition**: Ayurveda is formally recognised or integrated in at least 20 national health systems through education modules, regulated practice pathways, product registrations, and reimbursement for selected indications.
2. **Insurance inclusion**: Defined Ayurveda indications (chronic low back pain, knee osteoarthritis, functional gastrointestinal disorders, sleep and stress management, metabolic syndrome, women's health) receive insurance coverage in at least 10 countries, either through statutory benefits or private plans.
3. **Global centres and data**: A network of International Ayurveda Centres of Excellence functions across regions, combining clinical services, education, quality assurance laboratories, and research units, with routine use of internationally compatible diagnostic and procedure coding and public outcomes dashboards.
4. **Quality and safety at scale**: A mature ecosystem of farms, manufacturers, hospitals, and clinics follows Good Agricultural and Collection Practices, Good Manufacturing Practices, and clinical accreditation standards with transparent batch-wise certificates and pharmacovigilance mechanisms connected to global safety databases.

5. **Trusted brand and narrative**: A sustained, evidence-forward global narrative for Ayurveda reaches consumers, clinicians, policymakers, and payers through neutral platforms, scientific reporting, and country-specific myth-busting materials in local languages.

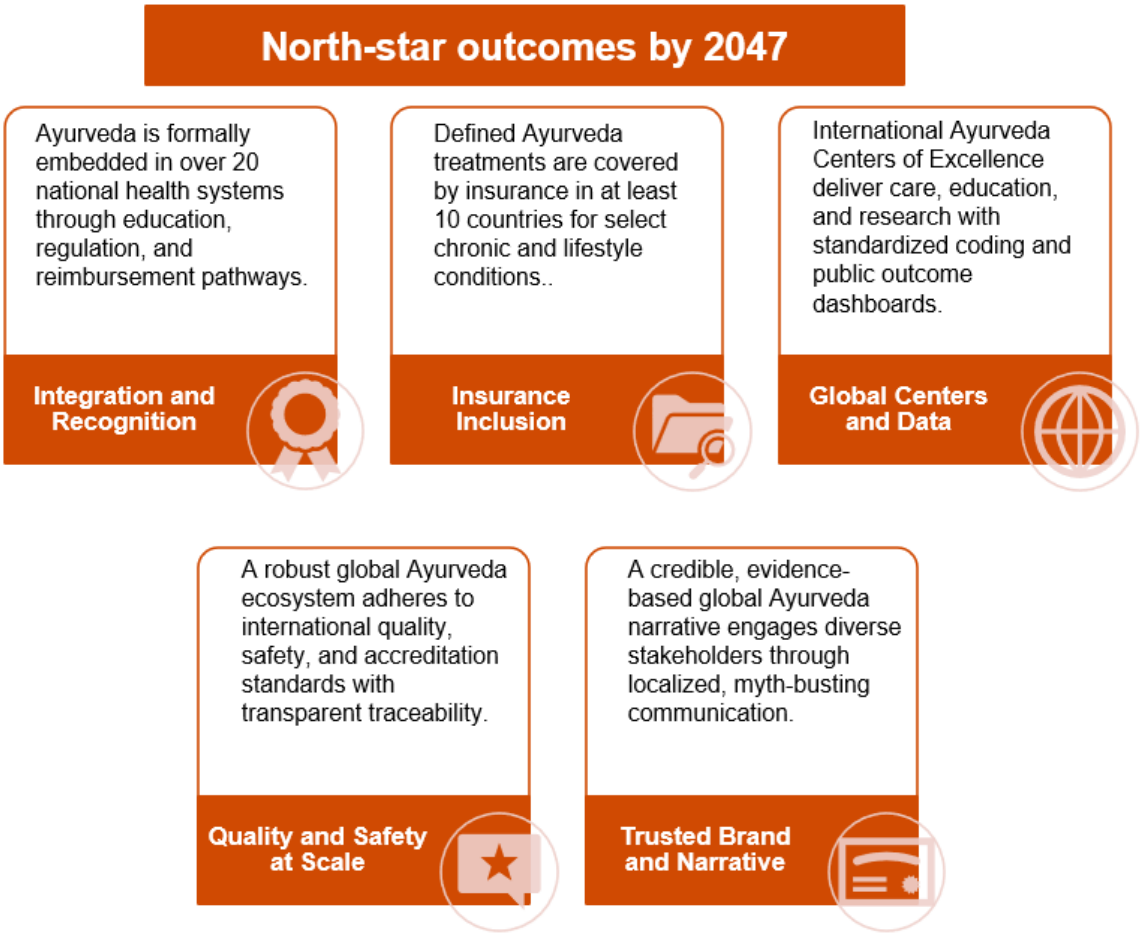

Fig 12: North star outcomes by 2047

6.1.1 Ministry of Ayush

Mission Leadership, Policy, Financing, and Accountability Related

Short Term (up to 2029)

1. **Create an inter-ministerial Mission Steering Group**: Notify a Mission Steering Group that includes the Ministry of Health and Family Welfare, Ministry of External Affairs, Department of Commerce and Industry, Ministry of Tourism, National Commission for Indian System of Medicine, Central Council for Research in Ayurvedic Sciences (CCRAS), Pharmacopoeia Commission for Indian Medicine and Homoeopathy, Ayush Export Promotion Council (AyushExcil), Quality Council of India/National Accreditation Board for Hospitals (QCI/NABH) and Healthcare Providers, National Medicinal Plants Board, leading educational institutes and industry bodies.

   Deliverables: Mission charter; roles and responsibilities; quarterly review calendar; an outcomes and indicators framework; a public progress dashboard.

   Indicators: Mission notified within six months; dashboard live in nine months; quarterly reports published thereafter.

2. **Formulate an export-oriented pharmacopoeia package**: Publish an Export Edition of Ayurvedic Pharmacopoeia that specifies identity, purity, potency, contaminant limits (heavy metals, pesticides, aflatoxins, microbial counts) and chemical fingerprints; issue a Good Manufacturing Practices equivalence checklist to reach internationally accepted standards; create a public registry of compliant plants linked to batch-wise certificates through quickresponse codes.

   Indicators: 100 updated monographs; 150 manufacturing plants audited to equivalence by 2029; registry publicly accessible.

3. **Upgrade Medical Value Travel**: Work with the Ministry of External Affairs (MEA) to bring flexibility in Ayush Visa 2.0 norms so that NABH-accredited service providers and MVT facilitators can offer international consumers bundled pathways (visa plus care at accredited centres plus followup teleconsultation), with transparent packages, grievance redressal, and outcomes reporting.

   Indicators: 25 accredited centres listed; 10 standardised bundles launched; patient satisfaction scores maintained at or above 70 on a 100 point scale. Industry discussion for creating an International Ayurveda MVT hub, domestic MVT Zones and regional medical hubs.

4. **Strengthen Academic Chairs Abroad**: For each Ayush Chair, set annual deliverables (electives, curriculum codevelopment, joint seminars, research projects, and two public lectures).

   Indicators: 10 additional chairs; 20 new electives activated.

5. **Create a Global Practitioner Register**: In partnership with the National Commission for Indian System of Medicine (NCISM), create a Global Register of Ayurveda Practitioners with competency-based continuing education mapped to international training benchmarks, to support dialogue with foreign regulators and payers.

   Indicators: 10,000 practitioners enrolled by 2029; modular credentials prepared in nutrition, musculoskeletal pain, rehabilitation, women's health, and integrative support.

6. **Milestone-based MoUs with Dashboard**: To ensure steady progress, milestone-based MoUs are to be signed with other countries and academic institutions for collaboration in the field of Ayurveda/traditional Medicine. The progress against the milestones is to be regularly tracked and displayed through a dashboard, which can be maintained by AyushExcil or MoA.

7. **Strengthen the Research Framework:** Ensuring increased coordination between Industry and Academia by the constitution of a Research Development Council and organising monthly meetings to discuss research priorities. Also, ensuring a plan for Institutional strengthening and utilisation of increased funding for Ayurveda research is prepared.

Medium Term (up to 2035)

1. **Establish International Ayurveda Centres of Excellence:** Create 10 International Ayurveda Centres of Excellence (IACoEs) across regions (for example, continental Europe, United States east and west coasts, Gulf region, Australia, and Southeast Asia) as joint ventures between leading Indian institutes and host universities or hospitals. These centres should host embedded research units, quality assurance laboratories, and clinical registries with internationally compatible coding for diagnoses and procedures.

Indicators: 10 operational centres; 25 multi-country trials initiated; 30 traditional medicine registrations secured in Europe and other regions.

2. **Establish a World Federation of Ayurveda and Yoga:** An international, non-profit umbrella organization to network Ayurveda & Yoga societies/ associations globally. This federation will consolidate efforts to promote standardization of Ayurveda and enable formal recognition of Ayurveda and Yoga practitioners globally.
3. **Strengthen domestic regulations:** Regulations for quality manufacturing, agriculture and collection practices need to be strengthened. Adoption of WHO-GMP standards should be encouraged among industry stakeholders engaged in export-oriented manufacturing.
4. **Secure mutual recognition for micro-credentials:** Negotiate at least 10 mutual recognition arrangements that grant limited scopes of practice under clearly defined conditions for holders of modular/micro-credentials.

   Indicators: 25,000 practitioners listed in the global register; 10 mutual recognition arrangements in force.

Long Term (up to 2047)

1. **Insurance inclusion and steady adoption:** Achieve coverage decisions for selected indications in at least 10 markets, maintain 20 international centres, and ensure 300 manufacturing plants meet internationally accepted Good Manufacturing Practices. Indicators: Coverage in 10 markets; 50,000 practitioners in the register; annual publication of a Global Ayurveda Evidence Report cited by payers and regulators.

Brand, Visibility, and Public Communication Related

Short Term (Up to 2029)

1. **Country specific IEC kits:** Publish materials in local languages addressing safety, heavy metals, sourcing, and quality; pair with neutral scientific storytelling from trials and registries; host an Ayurveda side event at global health assemblies in collaboration with the World Health Organisation. Also, to create a communication plan for different embassies and along with MEA; start the orientation of Ayush Information Cells and existing communication teams in embassies regarding basic principles of Ayurveda.

   Indicators: Kits live in 10 markets; the annual perception tracker shows improvement.

2. **Industry level discussions** to ensure visibility of Ayurveda products and services at strategic locations around the world.

Medium Term (Up to 2035)

1. **Flagship campaigns:** Tie campaigns to insurer pilots and international centres; co-curate Ayurveda Weeks with embassies and host universities.

   Indicators: 10 campaigns; higher patient and learner funnels to centres.

Long Term (Up to 2047)

1. **Durable presence**: Maintain a presence across United Nations bodies and global congresses; ensure the annual evidence report is adopted by neutral platforms.

   Indicators: Annual adoption; sustained visibility.

6.1.2 Ministry of External Affairs and Indian Missions (including cultural outreach) — Health diplomacy and local enablement

Short term (Up to 2029)

1. **Modify Ayush Visa process:** Allowing the NABH-accredited service providers and MVT facilitators to offer bundled packages with Ayush visa, care delivery, and tele-follow-up care (as per the legal framework) to the international customers for better marketing gains.
2. **Convert memoranda into delivery plans**: Rework existing agreements into milestone-based instruments with clear outputs (courses launched, trials registered, products filed, clinics accredited).

   Indicators: 20 agreements converted; a public progress dashboard hosted on embassy sites.
3. **Strengthen Ayurveda-related capabilities of Indian Embassies**: Ensuring availability of Ayurveda related IEC materials at embassies. Orientation of embassy staff on Ayurveda business priorities and capacity building of communication teams to handle/respond to any myths/negative campaigns regarding Ayurveda.

Medium term (Up to 2035)

1. **Regulator roundtables**: Organise embassy-led structured dialogues with host authorities to secure ingredient recognitions, traditional registration routes, pilot reimbursement and portable credentials.

   Indicators: 10 roundtables; eight regulator agreements documented.

Long term (Up to 2047)

1. **Institutionalise Ayurveda in the United Nations ecosystem**: Advance the dossier for intangible cultural heritage recognition, facilitate secondments to World Health Organisation regional offices, and support engagement with the World Intellectual Property Organisation for traditional knowledge protection

   Indicators: Dossier advanced; regional advisors placed; knowledge protection activities in motion.

6.1.3 National Commission for Indian System of Medicine — Education, Licensure, and Portability

Short term (Up to 2029)

1. **Globalisation-ready education packages**: Offer one-year modular programs for international learners (Ayurvedic nutrition and preventive health, stress and sleep, musculoskeletal pain, out-patient Panchakarma adapted to local contexts) with clearly defined competencies mapped to international training benchmarks

   Indicators: 25 partner universities; 2,000 international learners annually.
2. **Global practitioners register pilots**: Launch the global register; design objective skills assessments for international portability; activate alumni ambassador groups in 50 countries.

   Indicators: 10,000 enrollments; pilot assessments by 2029.
3. **Live Ayurveda practitioners register dashboard**: Establish a live, centrally maintained dashboard of registered Ayurveda practitioners to enable transparency and real-time verification by global regulators and stakeholders.

Medium term (Up to 2035)

1. **Dual and stacked degrees:** Co-create degree combinations with international universities (for example, Ayurveda with public health; Ayurveda with pain science) and secure at least 10 arrangements for limited scopes of practice.

   Indicators: Six-to-eight-degree pathways; 25,000 enrollments in the register.

Long term (Up to 2047)

1. **Global adoption of training benchmarks**: Achieve formal referencing of Ayurveda training benchmarks by 10 foreign licensing or continuing education bodies.

   Indicators: 50,000 enrollments; 50 practice arrangements.

6.1.4 Central Council for Research in Ayurvedic Sciences (CCRAS), the World Health Organisation's Global Traditional Medicine Centre and Other Science Institutions (INIs/ICMR/CSIR/DBT, etc.) — Evidence generation

Short term (Up to 2029)

1. **Flagship indication portfolio**: Prioritise research in areas where Ayurveda and traditional therapies already have an edge, like chronic low back pain, knee osteoarthritis, functional gastrointestinal disorders, sleep and stress, metabolic syndrome, and women's health. Design pragmatic and cluster trials that reflect personalised care and multi-component interventions; standardize core outcome sets; register trials across multiple countries; and create real-world data registries through Indian insurer coverage.

   Indicators: 10 multi-country trials registered; 50% published in indexed journals; national real-world registry live.

2. **Dossier development**: Prepare template dossiers for traditional registrations in Europe and other regions (or food supplement routes where appropriate) and identify a small number of botanical drug candidates for the United States Food and Drug Administration and the European Medicines Agency that are amenable to standardisation.

Medium term (Up to 2035)

1. **Regulatory success**: Secure at least 25 traditional registrations in Europe or national routes, and two investigative applications for botanical drugs.

   Indicators: Acceptance letters on file; trial progression documented.

2. **Publication of a Global Ayurveda Evidence Report and Global Clinical Trial Registry:** To capture global thought leadership, especially in the domain of traditional medicine, an annual Global Ayurveda Evidence Report should be prepared and published (in partnership with GTMC), tracking publications, trials, safety signals, and payer pilots in the field of Ayurveda. This will also help in creating a Global Ayurveda Clinical Trial Registry linked to WHO platforms for transparency and credibility.

   Indicators: Reports cited by payers and regulators; coverage decisions referencing Ayurveda evidence, Global clinical trial registry launched on a public platform.

Long Term (Up to 2047)

1. **Regulatory Science and Standards:** Harmonize Ayurvedic pharmacopoeia with international standards (European Pharmacopoeia, USP). Develop ISO-compliant standards for raw materials, formulations, and clinical protocols under WHO guidance.
2. **Establish the research and clinical trial component** in the International Ayurveda Centres of Excellence in collaboration with WHO-GTMC and leading universities for clinical trials, QA labs, and practitioner training.

6.1.5 Pharmacopoeia Commission, Bureau of Standards, drug regulators, food safety authority, and NABH — Quality and safety backbone

Short Term (Up to 2029)

1. Publish upgraded monographs and testing protocols suited to exports; adopt chemical fingerprinting for complex formulations; build a public plant registry with batch certificates.

   Indicators: 100 monographs upgraded; 150 plants declared Good Manufacturing Practices-equivalent; 150 hospitals/clinics newly accredited.

2. **Accreditation scale-up**: Expand accreditation for Ayurveda hospitals and Panchakarma clinics; include outcomes and safety reporting (patient-reported outcome measures and adverse events).

Medium Term (Up to 2035)

1. **Compatibility with European and other standards:** Develop a set of monographs compatible with European expectations for at least 200 herbs and formulations and finalize mapping between Indian accreditation standards and international accreditation frameworks so insurers can accept documentation

   Indicators: 300 accredited centres; acceptance notes for 50 monographs published.

Long Term (Up to 2047)

1. Every year, CCRAS and WHO-GTMC should jointly release reports summarizing real-world safety signals and clinical outcomes from accredited Ayurveda centres worldwide. This transparency builds confidence among regulators, insurers, and consumers.

   Indicators: 80% of accredited centres using internationally compatible coding (ICD-11 TM2 for diagnoses and ICHI for interventions); no critical quality breaches reported, meaning zero major violations, such as contamination or unsafe practices across the global network.

6.1.6 Ayush Export Promotion Council and the Department of Commerce — Export enablement

Short Term (Up to 2029)

1. **Country playbooks and helpdesks**: Set up market cells for the United States, Europe, Gulf region, Australia, Canada, Japan. Provide dossiers templates, labelling and claims guidance, and retail onboarding protocols; run dossier clinics for small and medium manufacturers.

   Indicators: Monthly webinars with sellers/buyers on trade/regulatory issues for each cell, 500 exporters onboard; 100 dossiers in pipeline.

2. **Trade facilitation**: Align customs classifications for Ayurveda items; publish buyer toolkits and Organise annual buyer–seller meets. Leverage trade agreements such as the India–EU FTA to facilitate the cross-border mobility of Ayurveda physicians and the export of related services.
3. **Service Sector support**: Prepare hospital establishment template with rules/regulations/ guidelines for each major market. Ensure all support from the government is extended to the provider.

Medium Term (Up to 2035)

1. **Overseas finishing and packaging**: Support the creation of six finishing units in the Gulf, Europe, and the United States so products meet local packaging and labelling rules quickly. Link clusters of farms and manufacturers in India to these units.

   Indicators: Lead time reduced by 30%; 10 supply clusters linked to retail chains.

Long Term (Up to 2047)

1. **Route progression**: Transition hero products from food supplement categories to traditional medicine registrations where possible; deepen presence in mainstream retail chains.

   Indicators: Double-digit export growth sustained; shelf presence in leading chains across 10 markets.

6.1.7 Manufacturers (large companies and small/medium enterprises)

Short Term (Up to 2029)

1. **Manufacturing upgrades**: Reach internationally accepted Good Manufacturing Practices; publish batch-wise certificates on packs through quick response codes that display contaminant test results and identity/potency verification.

   Indicators: 150 plants upgraded; 100 localised products in forms familiar to overseas consumers (for example, tablets, capsules, teas).

2. **Localisation and claims**: Reformulate to local dietary habits and regulation; use permitted claims only; establish post-market safety data collection pipelines.

Medium Term (Up to 2035)

1. **Clinical-grade products**: Build a set of 10 to 12 standardised extracts with shared core dossiers for national registrations in Europe; enter chain retailers in five markets.

   Indicators: 25 registrations; five retail markets secured.

Long Term (Up to 2047)

1. **Advanced regulatory pathways**: Progress two or three botanical drug candidates through midstage trials; maintain pharmacovigilance connection to global safety databases.

   Indicators: Two Phase II/III programs underway; periodic safety updates published.

2. **Risk Management**
   - **Compliance costs:** Access blended finance from the Ayurveda Globalisation Fund; use shared core dossiers; partner with public–private laboratories for testing.
   - **Testing capacity:** Leverage laboratories inside international centres of excellence.

6.1.8 Service providers (hospitals, retreats, clinics)

Short Term (Up to 2029)

1. **Accreditation and care bundles**: Secure clinical accreditation; launch standardised treatment bundles for international patients with transparent pricing, clear clinical protocols, and scheduled tele-follow-ups.

   Indicators: 100 new accreditations; 10 bundles launched; patientreported outcomes dashboards live.

Medium Term (Up to 2035)

1. **Insurer pilots**: Conduct pilots with payers in Switzerland, the Netherlands, Australia, and selected plans in the United States for limited indications, measuring outcomes and cost offsets against usual care.

   Indicators: At least five pilots; cost offsets of 15–20 percent; clinically meaningful improvements in patient outcome measures (for example, reductions in pain scores or improvements in function).

Long Term (Up to 2047)

1. **International clinic networks**: Operate 50 clinics linked to centres of excellence; establish shared-care protocols with host physicians and documentation compatible with international claims systems.

   Indicators: Contracts with insurers in eight markets; routine use of compatible coding.

6.1.9 Indian Academic Institutes (AIIA/ITRA,NIA, etc.)

Short Term (Up to 2029)

1. **Export curricula and lead trials**: Offer electives and faculty exchanges; lead multi-centre trials with foreign principal investigators; publish joint guidance on standards and outcomes.

   Indicators: 20 electives abroad; 10 trials initiated.

Medium Term (Up to 2035)

1. **Joint centres**: Establish 10 joint centres inside international centres of excellence that combine teaching, trials, and quality assurance laboratories; launch dual degrees with host universities.

   Indicators: 100 co-publications; dual degree cohorts graduating.

Long term (Up to 2047)

1. **Global Recognition**: Seek designation as World Health Organisation Collaborating Centres and appear in international subject rankings for traditional medicine and integrative health.

   Indicators: Five collaborating centres; international ranking visibility.

6.1.10 World Health Organisation & Global Traditional Medicine Centre and collaborating centres

Short Term (Up to 2029)

1. **Core outcome sets and data standards**: Publish condition-specific outcome sets for Ayurveda trials and registries; convene dialogues with payers and regulators on evidence thresholds and safety reporting.

   Indicators: Outcome sets adopted by trials; five payer/regulator roundtables completed.

Medium Term (Up to 2035)

1. **Multi-country trials and annual reporting**: Lead pragmatic and cluster trials; issue an Annual Global Evidence Report with India.

   Indicators: 30 trials by 2035; reports cited by decision-makers.

Long Term (Up to 2047)

1. **Regional integration**: Work through regional offices to embed Ayurveda in policy notes, coding pilots, and continuing education frameworks.

   Indicators: Pilots in four regions; joint guidance documents published.

6.1.11 National Medicinal Plants Board, state agriculture and forest departments, export promotion agencies and farmer-producer organisations

Short Term

1. **Good Agricultural and Collection Practices clusters**: Create 25 clusters for top botanicals; implement traceability from farm to finished product using digital identifiers; pilot minimum support prices where volatility is high.

   Indicators: Traceability live for 20 botanicals; price stability indicators improving.

Medium Term (Up to 2035)

1. **Contract farming and geographical indications**: Anchor quality through long-term contracts with exporters; secure geographical indication tags for region-specific botanicals and traditional processes (for example, botanicals used in classical therapies in Kerala or Himalayan herbs).

   Indicators: 15 geographical indications; 10 long-term contracts between farmer groups and exporters.

Long Term (Up to 2047)

1. **Sustainability at scale**: Ensure 80% of export products originate from audited clusters; publish annual sustainability and biodiversity reports.

   Indicators: Coverage at 80%, independent sustainability verification.

6.1.12 Insurance Regulatory and Development Authority of India and Indian insurers — Real-world data engine and pathway to overseas portability

Short Term (Up to 2029)

1. **Standardised claims and outcomes capture**: With domestic parity for traditional medicine, capture standardised outcomes and claims data; establish a national real-world data registry for comparative analyses.

   Indicators: 1,00,000 thousand cases per year coded; first comparative effectiveness reports published.

Medium Term (Up to 2035)

1. **Comparative effectiveness and benefit design**: Conduct studies in insurer cohorts for selected indications; design portable benefits for overseas coverage at accredited Indian centres.

   Indicators: Five studies; two portable benefit designs ready.

Long Term (Up to 2047)

1. **International payer contracts**: Sign contracts with payers in the European Union and Gulf region for out-of-area coverage of bundled Ayurveda pathways at accredited Indian centres.

   Indicators: Three contracts; 50,000 covered lives.

Table 6.1: Indicators-based review of stakeholder's involvement

Stakeholders	Indicators											
	Availability				Acceptability				Propagation			
	Globalised Practice and workforce	Global Exports and Manufacturing	International Research & Development	Standardised Global Education	Compliance to Regulations and Guidelines	International Collaborations (Academic and Industrial)	Insurance coverage-products & services	Localisation & Cultural Adaptability	Strategic Brand positioning	Global visibility and promotions	Medical Value travel	Presence in Global bodies (WHO)
Ministries												
Ministry of Ayush	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ministry of Health & Family Welfare	✓	✗	✗	✗	✓	✗	✓	✗	✗	✗	✓	✓
Ministry of Tourism	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✗
Ministry of External Affairs	✓	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗	✓
Ministry of Culture	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✗	✗
Ministry of Commerce	✗	✓	✗	✗	✗	✗	✗	✓	✓	✓	✗	✗
Regulatory Bodies												
NCISM	✓	✗	✗	✓	✗	✓	✗	✗	✗	✗	✗	✗
CDSCO	✗	✓	✗	✗	✓	✗	✗	✗	✗	✗	✗	✗
Govt./Industry Bodies												
AyushExcil	✗	✓	✗	✗	✗	✓	✗	✓	✓	✓	✗	✗
FSSAI	✗	✓	✗	✗	✓	✗	✗	✓	✗	✗	✗	✗
FICCI	✗	✓	✗	✗	✗	✓	✗	✗	✓	✓	✓	✗
BIS	✗	✓	✗	✗	✓	✗	✗	✓	✗	✗	✗	✗
NABH	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗
Invest India	✗	✓	✗	✗	✗	✓	✗	✓	✓	✓	✓	✗
Academic Institutes												
All India Institute of Ayurveda, New Delhi	✗	✗	✓	✓	✗	✓	✗	✗	✗	✓	✓	✗
Institute of teachings & Research in Ayurveda, Jamnagar, Gujarat	✗	✗	✓	✓	✗	✓	✗	✗	✗	✓	✗	✗
Research Institutes												
CCRAS	✗	✗	✓	✗	✗	✓	✗	✗	✗	✓	✗	✗
RIS	✗	✗	✓	✗	✗	✓	✗	✗	✗	✓	✗	✗
International Organisations												
WHO	✓	✗	✓	✓	✓	✓	✗	✗	✗	✓	✗	✓
GTMC	✓	✗	✓	✓	✓	✓	✗	✗	✓	✓	✗	✓
Others												
Manufacturers	✗	✓	✗	✗	✓	✗	✗	✓	✓	✓	✗	✗
Service Providers	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✗	✗

6.2 Summary-Recommendations

	Components	Short term (Up to 2029)	Medium Term (Up to 2035)	Long Term (Up to 2047)
Availability	Global Workforce	* Create a Global Information Portal for Ayurveda Practice * Create a Global Ayurveda Register (GAR) * Leverage bilateral relationships and multi-country platforms for Mutual Recognition Arrangements and export of Ayurveda services * Introduce Ayurveda electives in global medical schools * Adopt strategic approach towards recognition of Ayurveda and validation of practice	* Promote Integrative care models with modern medicine * Expand the global spectrum of Ayurveda education * Promote standardisation and evidence-based research * Establish a World Federation of Ayurveda and Yoga.	
	Global Export and Manufacturing	* Prioritise trade geography diversification and shifting up the value chain * Formulate Ayurvedic Pharmacopoeia-Export Edition * Strengthen AyushExcil to enable capacity building of manufacturers for export promotion * Create a real time Ayurveda Trade Dashboard * Adopt a focused regulatory compliance strategy in Key Markets * Strengthen trade facilitation by reducing the pain points in export and leveraging FTAs	* Upgrade the local GMP guidelines to WHO-GMP guidelines * Promote overseas finishing Units * Catalyze Ayurveda as a Service (AaaS) model	* Work with WHO-GTMC to create 'Global Safety and Efficacy Benchmarks' * Publish Annual global safety report and Global Evidence report * Build a distinct identity of Ayurveda
	International Research and Development	* Increase research focus on flagship conditions/drugs * Increase coordination between industry and academia * Create Real-world data (RWD) Registries * Bring clarity of available opportunities for private sector Ayurveda patents	* Establish International Ayurveda Centres of Excellence * Establish WHO Collaboration Centre networked trials * Establish five more WHO Collaboration Centres in India * Build an International Ayurveda Research Alliance under WHO-GTMC * Bring in newer technologies like network pharmacology and AI based quality control	
	Standardised Global Education	* Design Globalisation ready Ayurveda Education Packs * Leverage modern technologies to make courses more user friendly and exciting * Strengthen the 'Ayush Chair' initiative * Build a community of Alumni as ambassadors of Ayurveda	* Initiate Joint/dual degrees * Establish International Ayurveda Centres of Excellence (IACoEs)	

	Components	Short term (Up to 2029)	Medium Term (Up to 2035)	Long Term (Up to 2047)
Acceptability	Compliance with Regulations and Guidelines	* Create Country and market specific playbooks * Strengthen AyushExcil * Encourage adoption of WHO-GMP standards by exporters and create a dashboard of WHO-GMP certified Units * Establish a Working Party at EDQM for Ayurveda * Take Patent protection measures * Create a 'Patent Watch and Rapid Opposition Cell' * Upgrade and strengthen TKDL	* Expand & Strengthen AOGUSY	
	International Collaborations	* Make strategy of Milestone based MoUs with progress dashboard * Establish flagship hubs across the globe in friendly countries * Leverage WHO CCs network * Leverage GTMC and its role as global hub for research and policy	* Create an overarching administrative structure for Ayurveda globalisation * Establish International Ayurveda Centres of Excellence * Make efforts for strategic leadership position in Traditional Medicine * Ensure Global Policy Inclusion	
	Insurance Coverage	* Create Domestic RWD (Real World Data) engine * Launch OECD pilots	* Make strategy for Benefit Expansion and Ensuring National Coverage * Secure contracts with US/EU/Gulf insurers for out-of-area coverage for Ayurveda based MVT offerings	
	Localisation and Cultural Adaptability	* Make strategy for Small Regimen adaptation * Create Ayurveda Localisation Toolkits * Address the language barrier * Package Ayurveda with Yoga/ Meditation * Strengthen Digital Commerce Localisation * Create a culturally relevant IEC and communication strategy	* Tailor application of Ayurveda to the priority health conditions by understanding local epidemiology and localised solutions * Initiate collaborative research programs with local universities/health systems	

	Components	Short term (Up to 2029)	Medium Term (Up to 2035)	Long Term (Up to 2047)
Propagation	Strategic Brand Positioning	* Reposition Ayurveda and riding on the Yoga wave * Constitute a "Mission Steering Group" for coordinated implementation of Ayurveda's globalisation strategy * Enhance efforts to increase consumer awareness * Strengthen the Quality framework	* Claim the global thought leadership * Plan and implement global campaign to connect with consumers and create demand	
	Global Visibility and Promotions	* Leverage India's presence in the international platforms * Bring the embassies into action * Design and make innovative IEC materials available * Collaborate with top global brands of hospitality industry and resorts * Establish Ayurveda centres and stores at strategically important domestic and global destinations * Establish International Ayurveda Centres of Excellence		
	Medical Value Travel	* Increase Visibility for Ayurveda based MVT offerings * Enable bundled offerings with Ayush Visa and care at accredited institutions * Work with private insurance providers for insurance portability * Sensitize MVT facilitators about Ayurveda offerings		
	Presence in Global Bodies	* Expand presence in WHO regional offices, WIPO and other UN bodies		

Section 7: Annexures

A. Annexure 1- Important Schemes

1.1 Promotion of International Cooperation (IC) Scheme[153]

The Ministry of Ayush implements the *Central Sector Scheme for Promotion of International Cooperation (IC Scheme)* to enhance the global presence, acceptance, and integration of Ayush systems—Ayurveda, Yoga, Unani, Siddha, and Homoeopathy. The scheme supports Indian Ayush manufacturers and service providers in expanding exports, promotes international collaborations, and strengthens global awareness through academic, research, and capacity-building initiatives.

1. Objective of the Scheme

The **Central Sector Scheme for Promotion of International Co-operation (IC) in Ayush** aims to enhance global awareness, acceptance, and integration of Ayush systems—**Ayurveda, Yoga, Naturopathy, Unani, Siddha, SowaRigpa, and Homoeopathy**.

The scheme seeks to:

- Promote international recognition of Ayush.
- Foster collaboration among global stakeholders.
- Support export promotion of Ayush products and services.
- Facilitate the exchange of experts, knowledge, and research.
- Establish Ayush Academic Chairs and research partnerships abroad.
- Strengthen global presence through Ayush Information Cells and training programs.

2. Key Components of the IC Scheme

a. International Exchange of Experts & Officers

- Facilitates the deputation of experts/officers for global meetings, conferences, workshops, and trainings.
- Supports incoming foreign delegations.
- Provides financial assistance for travel, accommodation, per diem, insurance, and medical needs.

b. Incentive to Ayush Entrepreneurs & Institutions

- Encourages participation in international trade fairs, expos, and roadshows.
- Covers reimbursement for airfare, stall costs, freight, and promotional materials.
- Supports Ayush manufacturers, service providers, startups, and exporters.

c. Support for International Market Development

- Market surveys and international branding initiatives.
- Collaboration with foreign governments, universities, hospitals, and research bodies.
- Establishment of **Ayush Academic Chairs** in global universities.
- Participation in major international conferences, seminars, and exhibitions.

d. Translation & Publication of Ayush Literature

- Translates classical texts and key Ayush literature into foreign languages.
- Provides financial support for translation, printing, and international distribution.
- Ensures availability of authentic, standardised global Ayush content.

e. Establishment of Ayush Information Cells & Health Centres

- Establishes **Ayush Information Cells** in foreign nations for outreach, OPDs, seminars, and public awareness.
- Supports Ayush Health Centres and institutions abroad.
- Includes one-time establishment grants and recurring support for operations.

f. International Fellowship / Scholarship Programme

- Provides scholarships for foreign students to study Ayush systems in leading Indian institutions.
- Covers tuition, stipend, books, hostel facilities, and medical support.
- Conducted through ICCR and Ministry of Ayush.

g. Establishment of International Institutes / Research Centres

- Supports creation of Ayush-affiliated research centres, collaborative labs, and institutes abroad.
- Promotes joint clinical research, curriculum exchange, faculty exchange, and capacity building.

3. Major International Collaborations – Especially with WHO

WHO Global Traditional Medicine Centre (GTMC), Jamnagar

- India and WHO established the **WHO Global Traditional Medicine Centre (GTMC)** in Jamnagar, Gujarat—the first global out-posted office dedicated to Traditional, Complementary and Integrative Medicine (TCIM).
- GTMC aims to support the global traditional medicine strategy, develop evidence-based standards, build global TM data platforms, and train international professionals in Ayurveda, Unani, and other systems.
- Supports the implementation of the WHO Traditional Medicine Strategy.
- Acts as a global knowledge hub for evidence-based Traditional, Complementary, and Integrative Medicine (TCIM).
- **Key Functions Include:**
  - Developing global standards, guidelines, and terminologies.
  - Creating TM informatics platforms and virtual libraries.
  - Supporting capacity-building and training programs in collaboration with the WHO Academy.

WHO Project Collaboration Outcomes

- **Benchmark documents** for training and practice in Ayurveda and Unani (2022).
- **Terminology documents** for Ayurveda, Unani, and Siddha.
- **In 2025**, India and the WHO initiated work on:
  - **Traditional Medicine intervention categories and index for ICHI**,
  - Creation of a **dedicated Traditional Medicine module** for global health classification.

4. Ministry's International Footprint

- **~25 country-to-country MoUs** in Traditional Medicine & Homoeopathy.
- **~15 Ayush Academic Chairs** established in foreign universities.
- **~50+ Institute-level MoUs** for joint research and academic collaboration.
- **~43 Ayush Information Cells** in **39 countries.**
- **~260+ foreign students** supported under Ayush scholarship programs.

5. Beneficiaries & Benefits

Beneficiary	Scheme Benefits
Ayush Industry	Export support, incentives, and global promotion
Ayush Experts	International exposure, training, and workshops
Foreign Students	Fellowships and scholarships in India
Embassies/Missions	Support for Ayush promotion activities
Government Officers	Capacity building and international exposure

While the IC Scheme has significantly boosted global recognition of Ayurveda and Ayush, challenges persist—such as differing foreign regulatory requirements, limited awareness in non-diaspora markets, inconsistent product branding, and barriers in product registration abroad. However, emerging opportunities include WHO partnerships, AyushExcil-led export promotion, and increasing global acceptance of Ayurveda through frameworks like **ICD-11** and the developing ICHI module.

Perspective on Globalisation: The Ministry of Ayush envisions positioning Ayurveda and other traditional medicine systems as integral components of global healthcare.

- While Traditional Chinese Medicine (TCM) has gained international recognition, Ayush advocates for a more inclusive approach that promotes diverse traditional systems globally. A key milestone is the strategic collaboration with the World Health Organisation (WHO), which led to the inclusion of traditional medicine in ICD-11, enhancing Ayurveda's credibility and enabling integration into national health systems.
- To expand global outreach, the Ministry has signed flexible, non-financial MoUs with multiple countries. These open-ended agreements allow for tailored collaborations based on each country's needs. Following MoU signings, Joint Working Groups are formed to facilitate institutional engagement, leading to targeted research, capacity-building, and knowledge exchange initiatives.
- The Ministry has also established Ayush Chairs in foreign universities, which serve as academic and policy bridges, promoting Ayurveda education, identifying research gaps, and fostering bilateral dialogue. Plans to further strengthen and leverage the MoUs and Ayush chairs are under consideration.

- The Global Traditional Medicine Centre (GTMC) in Jamnagar acts as a hub for international collaboration, while India's participation in the Group of Friends of Traditional Medicine (GFTM) supports global policy advocacy and joint research efforts.
- Educational initiatives include a Foreign Exchange Program involving 102 countries, with over 70 international students annually enrolling in Indian Ayurveda colleges. These students receive both theoretical and practical training, including immersive experiences at institutions like the All-India Institute of Ayurveda (AIIA).
- Ministry is currently considering a proposal to establish an Ayurveda Training and Accreditation Board to standardize different short- and long-term courses being offered globally. This will help in legitimizing the practice of Ayurveda by professionals of different other streams of health practitioners who learn and obtain different micro-credentials and short-term skill-based courses in different therapies of Ayurveda.

Strengthening drug policy is critical for the global acceptance of Ayush systems. The Ministry is focusing on **robust licensing and quality standards by enforcing Good Manufacturing Practices (GMP), batch-wise testing, and adherence to BIS benchmarks for raw materials to ensure safety, purity, and efficacy**. Regulatory oversight is being reinforced through committees such as ASUDTAB (Ayurveda, Siddha, Unani Drugs Technical Advisory Board) and ASUDCC (Ayurveda, Siddha, Unani Drugs Consultative Committee), along with the Ministry of Ayush and State Licensing Authorities, despite challenges like manpower shortages. Documentation and traceability are prioritised through mandatory batch manufacturing records and linking products to raw materials for transparency and accountability. Patent and IPR considerations are also being addressed by clarifying limitations in patenting natural products, ensuring novelty, and managing prior art issues. With the recent addition of Ayush drugs in the scope of the scheme for Promotion of Research and Innovation in Pharmaceutical and Med-Tech sector (PRIP), a significant support of around 4250 crore is available for research and development of new Ayurveda drugs. Ministry is very confident that the major pharmaceutical companies from the Ayurveda sector will utilise the resources being offered under this scheme to bolster research and innovation in the Ayurveda sector.

Looking ahead, the Ministry also emphasizes the need for Mutual Recognition Arrangements (MRAs) to formalize acceptance of Ayush qualifications and products. It also advocates for policy standardisation across international engagements and the use of measurable indicators to ensure consistency, credibility, and impact. The Ministry is considering a proposal to create a global repository of trained Ayurveda professionals practicing across the world. The Ministry is also contemplating a global campaign to push for Ayurveda, along with plans to build the capacity of existing Ayush information cells to counter the myths and misconceptions that sometimes negatively affect the growth of Ayurveda in specific regions. Few countries, like Mauritius, Japan and Hungary, are under consideration to establish international centres of excellence for Ayurveda.

1.2 National Ayush Mission (NAM)

The National Ayush Mission (NAM), launched in 2014, is the flagship initiative of the Ministry of Ayush aimed at integrating Ayush systems, particularly Ayurveda, into the public healthcare framework. It supports the establishment of Ayush Health and Wellness Centres (AHWCs), infrastructure development of Ayush hospitals and dispensaries, and the co-location of Ayush services in existing health facilities. As of 2025, over 12,500 AHWCs, now rebranded as 'Ayushman Arogya Mandirs' have been operationalised, and more than 5,000 dispensaries and 189 integrated hospitals have been supported. Despite this progress, the scheme faces several challenges, including underutilisation of

funds, delays in infrastructure completion, and a shortage of trained Ayush professionals, especially in rural areas. The service sector suffers from limited integration with allopathic systems, while the product sector is hampered by inconsistent quality standards and a lack of global certifications.

1.3 Ayurgyan Scheme

The Ayurgyan scheme, introduced for the period 2021–2026, focuses on strengthening the educational and research ecosystem of Ayurveda. It consolidates earlier initiatives like Continuing Medical Education (CME) and Extra-Mural Research (EMR) and supports capacity building, teacher training, and interdisciplinary research through programs like Ayurveda Biology Integrated Health Research (ABIHR). While the scheme has enabled some progress in academic collaboration, its impact is limited by low awareness, underutilisation of research grants, and inadequate infrastructure in many Ayurveda institutions. The scheme offers immense potential for fostering innovation through joint research with premier institutions like AIIMS and IITs, global academic exchanges, and the incubation of Ayurveda-based startups. Strengthening intellectual property rights (IPR) frameworks and incentivizing translational research could further enhance its impact.

1.4 Ayurswasthya Yojana

Ayurswasthya Yojana is a central sector scheme that merges two earlier programs—Public Health Initiatives (PHI) and Centres of Excellence (CoE) to promote the use of Ayush systems in public health and support institutional excellence. The scheme funds projects that demonstrate the efficacy of Ayurveda in managing lifestyle diseases, maternal and child health, and geriatric care. As of the latest data, 67 PHI projects and 34 CoE projects have been sanctioned.

1.5 Ayush Oushadhi Gunvatta Evam Uttpadan Samvardhan Yojana (AOGUSY)

AOGUSY is a central sector scheme aimed at improving the quality, safety, and manufacturing standards of Ayush drugs. It provides financial assistance to Ayush drug manufacturers, pharmacies, and testing laboratories for upgrading infrastructure, achieving WHO-GMP certification, and strengthening regulatory frameworks. The scheme is crucial for addressing the long-standing issues of substandard products and lack of quality assurance in the Ayush pharmaceutical sector. However, adoption of WHO-GMP standards remains low, especially among small and medium enterprises (SMEs), due to high compliance costs and lack of technical know-how. Testing infrastructure is inadequate in many states, and there is a shortage of trained regulatory personnel. The scheme presents opportunities for creating cluster-based manufacturing hubs, implementing digital traceability systems, and enhancing export readiness through global certifications.

1.6 Conservation, Development and Sustainable Management of Medicinal Plants

This scheme, implemented by the National Medicinal Plants Board (NMPB), focuses on the conservation and sustainable use of medicinal plants that form the backbone of Ayurveda. It supports in-situ and ex-situ conservation, cultivation, and value chain development. Over 1,000 Medicinal Plants Conservation Areas (MPCDAs) have been established, and support has been extended for nurseries, herbal gardens, and post-harvest infrastructure.

Despite these efforts, the sector faces challenges such as over-reliance on wild sourcing, lack of Minimum Support Price (MSP), and fragmented supply chains. Farmers often lack access to reliable market information and face price volatility. The scheme offers opportunities for contract farming, cluster development, and export-oriented cultivation of high-demand species. Integration with digital platforms and Agri-markets can further enhance transparency and profitability.

1.7 National Medicinal Plants Board (NMPB) Schemes

The NMPB oversees a range of schemes aimed at promoting the trade, export, conservation, and cultivation of medicinal plants. It supports the formation of Farmer Producer Companies (FPCs), the development of digital platforms like e-CHARAK for trade and knowledge exchange, and the establishment of specialty warehousing and supply chains. However, the sector is constrained by data gaps in demand-supply trends, a lack of integration with mainstream Agri-markets, and limited awareness among farmers. Coordination between central and state-level boards is also weak. Nevertheless, the NMPB's initiatives hold promise for boosting exports, enhancing traceability, and integrating medicinal plant cultivation with national agricultural missions. Strengthening linkages with Krishi Vigyan Kendra (KVKs) and leveraging digital tools can significantly improve outcomes for cultivators and manufacturers alike.

B. Annexure 2- Stakeholders Interviewed

Institutions:

1.	Ministry of Ayush	9.	AyushExcil-Ayush Export Promotion Council
2.	NCISM-National Commission for Indian System of Medicine	10.	NABH-National Accreditation Board for Hospitals & Healthcare Providers
3.	CCRAS-Central Council for Research in Ayurvedic Sciences	11.	CSIR- Institute of Genomics and Integrative Biology
4.	AIIA – All India Institute of Ayurveda (New Delhi)	12.	WHO-World Health Organisation-Traditional, Complementary and Integrative Medicine Unit
5.	ITRA- Institute of Teaching & Research in Ayurveda, Jamnagar, Gujarat	13.	GTMC-Global Traditional Medicine Centre
6.	BIS-Bureau of Indian Standards	14.	FICCI-Federation of Indian Chambers of Commerce & Industry
7.	FSSAI-Food Safety and Standards Authority of India	15.	Manufacturers & Exporters of Ayurveda Products
8.	Research and Information Systems (RIS) for Developing Countries	16.	Ayurveda based Health-facility owners (national & international)

Experts:

1. **Vaidya Rajesh Kotecha, Secretary,** Ministry of Ayush.
2. **Prof. Sanjeev Sharma, VC,** NIA, Deemed to be University, Jaipur.
3. **Prof. Tanuja Nesari, Director,** ITRA, Jamnagar, Gujarat.
4. **Dr. Manoj Nesari, CMO (SAG),** CGHS, New Delhi.
5. **Dr. Kousthubha Upadhyaya, Adviser,** Ministry of Ayush.
6. **Dr. V. M. Katoch, Former-DG,** ICMR.
7. **Sh. Jasvinder Singh, Director,** Ministry of Ayush.
8. **Dr. N. Srikanth, DDG,** CCRAS, New Delhi.
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Notes

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