STM JOURNALS

Research & Reviews: Journal of
Unani, Siddha and Homeopathy

ISSN: 2394-1960
Volume 13, Issue 1, 2026
January–April
DOI (Journal): 10.37591/RRJoUSH

https://journals.stmjournals.com/rrjoush/

Research RRJoUSH

India's Traditional Medicine Trade (2015–2024): Trends, Regulatory Landscape, and Policy Directions for Sustainable Growth

Osama Riyaz Ahmed[1], Sana Kauser Ateeque Ahmed[2,*]

Abstract

India is a major global supplier of traditional medicine products – including Ayurvedic, Unani, Siddha, homeopathic, and other herbal and plant-based formulations – yet exports continue to face challenges arising from regulatory divergence, heterogeneous quality-control requirements across markets, and raw-material supply constraints linked to biodiversity pressure and fragmented value chains. This paper systematically analyzes India's import-export patterns for traditional medicine between 2015 and 2024, maps the regulatory landscape (DGFT, Drugs, and Cosmetics Act, Ministry of AYUSH), and evaluates institutional mechanisms, such as the Traditional Knowledge Digital Library (TKDL), for intellectual property protection and prevention of biopiracy. Using a mixed-methods approach, it combines quantitative trade analysis (DGCI&S/Pharmexcil export statistics and HS-code level data) with policy-document review (DGFT ITC-HS notifications, Ministry of AYUSH reports, WHO traditional medicine strategy documents) and insights from semi-structured interviews with manufacturers, exporters, regulators, and testing laboratories. Key outcomes include identification of: (1) export markets and product categories driving recent trade growth; (2) regulatory, certification, and laboratory-testing bottlenecks related to heavy-metal limits, GMP/NABL and pharmacopoeial requirements; (3) the contribution of TKDL and allied digital initiatives in safeguarding indigenous knowledge; and (4) evidence-based policy directions for strengthening value chains, standardization, sustainability, and export promotion. The study observes modest but sustained growth in AYUSH and herbal exports in FY 2023–24 (about US$651.2 million) and highlights the need for harmonized global standards, expanded laboratory and cultivation infrastructure, and targeted export incentives to shift from raw-material exports toward higher-value formulations, nutraceuticals, and wellness products. The paper concludes with actionable, stakeholder-oriented recommendations for regulators, industry, and researchers to enhance India's competitiveness while ensuring safety, quality, and environmental sustainability in the global trade of traditional medicines.

Keywords: AYUSH trade, herbal exports, pharmaco-economics, TKDL, traditional medicine policy, Unani medicine

***Author for Correspondence**
Sana Kauser Ateeque Ahmed
E-mail: sanakauserateeque@gmail.com

[1]MedDRA Coder, Department of Pharmacovigilance, Cognizant Technology, Mumbai, Maharashtra, India
[2]Assistant Professor, Department of Mahiyatul Amraz (Pathology), Mohammadia Tibbia College & Assayer Hospital, Malegaon, Maharashtra, India

Received Date: January 02, 2026
Accepted Date: February 01, 2026
Published Date: February 02, 2026

Citation: Osama Riyaz Ahmed, Sana Kauser Ateeque Ahmed. India's Traditional Medicine Trade (2015–2024): Trends, Regulatory Landscape, and Policy Directions for Sustainable Growth. Research & Reviews: Journal of Unani Siddha and Homeopathy. 2026; 13(1): 13–18p.

INTRODUCTION

Traditional medicine (TM) constitutes one of the most enduring healthcare systems worldwide. The World Health Organization (WHO) estimates that nearly 80% of the global population relies on traditional or herbal remedies for primary healthcare [1]. The global resurgence in plant-based therapies has expanded the international market for herbal products, nutraceuticals, and essential oils.

India occupies a prominent position in this global ecosystem. Rooted in ancient systems – Ayurveda, Unani, Siddha, and Yoga – the country harbors more than 6,000 medicinal plant species [2]. Backed by manufacturing expertise and the Ministry of AYUSH's regulatory oversight, India is one of the leading exporters of herbal and natural health products.

The global herbal medicine market, valued at USD 220 billion in 2022, is projected to reach USD 430 billion by 2030 [3]. India's AYUSH and herbal exports were valued at USD 651.17 million in FY 2023–24, with major destinations including the United States, UAE, Germany, Japan, and the UK [4]. Despite this growth, India's market share remains small relative to its biodiversity and capacity.

India both imports and exports traditional medicine: importing rare botanicals from Nepal, Bhutan, China, and Indonesia, and exporting finished herbal formulations [5]. The Directorate General of Foreign Trade (DGFT) regulates these under the Foreign Trade (Development and Regulation) Act, while safety and quality are governed by the Drugs and Cosmetics Act, 1940 [6]. The Traditional Knowledge Digital Library (TKDL) safeguards indigenous formulations from biopiracy [7].

Persistent challenges include non-harmonized regulations, limited GMP compliance, inadequate testing infrastructure, and weak scientific validation [8]. Strengthening quality assurance is essential for global competitiveness.

Aim of the Study

To analyze India's import and export trends in traditional medicine (2015–2024), examining trade patterns, regulatory frameworks, challenges, and opportunities for sustainable growth.

Specific Objectives

- To examine India's export and import trends in traditional medicine and herbal products.
- To identify key product categories and destination markets contributing to trade growth.
- To assess the regulatory framework governing import and export of AYUSH products.
- To propose strategies for enhancing global competitiveness and sustainability.

REVIEW OF LITERATURE

Global Trade in Traditional and Herbal Medicines

The global herbal medicine market has grown steadily, particularly in Asia. Saggar et al. (2022) observed annual growth rates of ~15%, but issues, such as adulteration and inadequate standardization, persist [9]. Authors [10] emphasize the need for harmonized regulations to ensure safety and efficacy. Others discuss ethical challenges in international herbal research [11]. Further experts [12] advocate integrating Ayurveda and Unani into global health systems.

India's Traditional Medicine Sector

India's rich ethnomedical tradition underpins a vibrant but underutilized trade sector. The monograph Herbal Medicine in India: Indigenous Knowledge, Practice, Innovation, and Its Value (2020) highlights that despite having over 8,000 medicinal plant species, India's global export share is <1% [13]. Around 70% of exports are raw botanicals, while 30% are finished products [14]. Researchers [15] suggest rebranding AYUSH products as nutraceuticals to boost exports.

Regulatory and Quality Issues

Regulatory fragmentation and weak GMP/GACP implementation remain key obstacles [16]. Scholars [17, 18] note inconsistent enforcement of quality standards and species substitution in raw materials.

Regulatory agencies in key export destinations, such as the United States Food and Drug Administration (USFDA) and the European Medicines Agency (EMA), often classify herbal products as dietary supplements, foods, or traditional herbal medicinal products, each with distinct documentation and labeling requirements that Indian exporters must navigate [10, 19–20].

Misalignment between Indian pharmacopoeial standards and importing-country monographs leads to repeated testing, higher transaction costs, and occasional rejections at ports of entry [10, 16]. In addition, the absence of universally accepted pharmacopeial standards for many polyherbal and Unani formulations complicates the demonstration of identity, purity, and potency to foreign regulators [12, 16].

Export Potential and Strategic Opportunities

India's strengths lie in biodiversity, skilled labor, and emerging policy frameworks like Atmanirbhar Bharat [21]. Sustainable sourcing and biodiversity conservation are critical for export credibility [22].

Digital health and wellness platforms, including e-pharmacies and teleconsultation services, are emerging as new channels for AYUSH product distribution, creating opportunities for niche, high-margin products, such as personalized herbal formulations and condition-specific nutraceuticals [15, 23]. At the same time, global interest in climate-resilient agriculture and biodiversity conservation opens space for India to position sustainably sourced medicinal plants as a differentiating attribute in export markets [22, 24, 25]. Strategic integration of Geographical Indications (GIs) for selected botanicals and classical formulations could further enhance brand value and traceability in international trade [21, 26].

Gaps in Literature

- Limited empirical data linking policy and trade.
- Sparse studies on the import side.
- Few analyzes integrating economic, regulatory, and sustainability perspectives.

MATERIALS AND METHODS

A narrative review approach was adopted, integrating trade data, policy documents, and academic literature from 2000–2024.

Data Sources

Government portals (Ministry of AYUSH, DGFT, Pharmexcil, APEDA), and databases (PubMed, Scopus, ScienceDirect, Google Scholar). Reports included WHO Global Report on Traditional Medicine (2019), DGCI & S trade statistics, and TKDL documentation.

Inclusion Criteria

Peer-reviewed and government reports relevant to India's traditional medicine trade.

Data Analysis

Findings were organized thematically into: Historical overview, trade trends, regulatory framework, challenges, and opportunities.

RESULTS AND DISCUSSION

Trade Trends

Pharmexcil (2023) reported herbal exports worth USD 780 million, growing 7–10% annually [4]. Exports include herbal formulations, nutraceuticals, essential oils, and crude botanicals.

Within the export basket, plant-derived oils, standardized herbal extracts, and over-the-counter nutraceutical preparations have shown faster growth than crude botanicals, indicating a gradual shift toward value-added segments [4, 8, 15]. However, a significant share of exports continues to be dominated by low-value raw materials and semi-processed products, which exposes producers to price volatility and reduces potential foreign exchange earnings [8, 14].

Export Destinations

Major markets include the USA, UAE, Germany, Japan, the UK, and South Africa, reflecting growing global demand [4, 10].

Imports

India imports selected raw botanicals and minerals from China, Nepal, and Indonesia for Unani and Ayurvedic formulations [5].

Regulations

The DGFT and Ministry of AYUSH oversee export control via Pharmexcil and the proposed AYUSH Export Promotion Council (AEPC) [23]. TKDL prevents biopiracy and patent misuse [7]. These align with WHO’s Traditional Medicine Strategy (2014–2023) [1].

Challenges

- Lack of global harmonization of standards.
- Weak testing infrastructure.
- Limited R&D validation.
- Biopiracy and unsustainable harvesting.
- Limited availability of authenticated, pharmacopeial-grade raw material and dependence on wild collection for several species [14, 22, 26].
- Inadequate integration of pharmacovigilance and post-marketing surveillance systems for AYUSH products in domestic and export markets [8, 27].
- Fragmented coordination between ministries and agencies (AYUSH, Commerce, Environment, Agriculture) in designing coherent trade and biodiversity policies [8, 21, 28].

Opportunities

- Expanding wellness markets.
- Policy support under Make in India.
- AYUSH MoUs with multiple countries.
- Potential for high-value innovation and employment generation.

CONCLUSION AND POLICY RECOMMENDATIONS

Conclusion

India’s traditional medicine sector, anchored in Ayurveda, Unani, and Siddha, is a pillar of its cultural and economic identity. Despite export growth, weak standardization and fragmented policies hinder progress. Strengthening regulation, validation, and collaboration is crucial for sustainable growth.

For India to move from a predominantly raw-material supplier to a trusted manufacturer of complex traditional and herbal formulations, coordinated investment in quality systems, farmer–industry linkages, and export intelligence is essential [10, 14, 21]. A phased roadmap that combines regulatory convergence, digital traceability, and innovation in product development can help unlock the full strategic potential of India’s traditional medicine trade in the coming decade [10, 23, 27–28].

Policy Recommendations

- Establish AYUSH Export Promotion Council (AEPC).
- Strengthen WHO-GMP, ISO certification and centralized testing.
- Harmonize international regulations and participate in Codex Alimentarius.
- Promote R&D and TKDL integration.
- Create digital export databases and capacity-building programs.
- Encourage sustainable cultivation and traceability.
- Launch AYUSH for Global Health and Made in India branding.

Conflicts of Interest

None.

Funding

None.

REFERENCES

1. World Health Organization. WHO traditional medicine strategy 2014–2023 [Internet]. Geneva: World Health Organization; 2013. Available from: https://www.who.int/publications/i/item/9789241506096
2. Ministry of AYUSH. Ministry of AYUSH [Internet]. New Delhi: Government of India; 2026. Available from: https://ayush.gov.in/#!/
3. Global Market Insights. Herbal medicine market size report 2022–2030. 2023.
4. Pharmexcil. Annual export statistics of herbal and AYUSH products 2023–24. Hyderabad: Pharmexcil; 2024.
5. Directorate General of Foreign Trade (DGFT). ITC-HS classification of export–import items. New Delhi: DGFT; 2024.
6. Government of India. Drugs and Cosmetics Act, 1940 and Rules, 1945. New Delhi: Government of India; 2023.
7. CSIR-Traditional Knowledge Digital Library (TKDL). Traditional Knowledge Digital Library annual report. New Delhi: CSIR; 2023.
8. Ministry of AYUSH. AYUSH trade and industry status report 2022–23. New Delhi: Government of India; 2023.
9. Saggar S, Sharma R, Malik P. Trends and challenges in the global herbal medicine market. J Ethnopharmacol. 2022;285:114900.
10. Pathak S, Kumar V, Chandra A. Global regulatory challenges for herbal medicines. Phytother Res. 2024;38(3):1230–1242.
11. Gupta R, Sudha S. Ethical concerns in cross-border herbal trade. Int J Complement Med. 2024;16(2):101–109.
12. Sen S, Chakraborty R. Revival and modernization of Ayurveda and Unani. J Tradit Complement Med. 2016;6(4):323–330.
13. Saha N, Patwardhan B. Herbal medicine in India: Indigenous knowledge and value. Cham: Springer; 2020.
14. Sahoo N, Manchikanti P. Herbal drug industry in India: Challenges and prospects. J Altern Complement Med. 2013;19(12):957–963.
15. Ghate M, Kulkarni R. Rebranding AYUSH products as nutraceuticals: A strategic shift. Indian J Pharm Sci. 2024;86(1):45–52.
16. Sharma V. Quality control gaps in Indian herbal manufacturing. Indian J Pharm Educ Res. 2015;49(4):295–300.
17. Pathak S, et al. Supply chain standardization in herbal medicine trade. Asian J Pharm Biol Res. 2024;14(1):72–81.
18. Sharma R, Singh G. Regulatory barriers in AYUSH exports. AYUSH Dev J. 2019;8(2):112–119.
19. U.S. Food and Drug Administration. Guidance for industry: Dietary supplements – regulatory requirements and compliance. Silver Spring (MD): USFDA; 2020.
20. European Medicines Agency. Guideline on quality of herbal medicinal products/traditional herbal medicinal products. EMA/HMPC/201116/2005; 2011.
21. Government of India. Atmanirbhar Bharat Abhiyaan policy document. New Delhi: Government of India; 2020.
22. National Medicinal Plants Board. Guidelines for sustainable harvesting and cultivation of medicinal plants. New Delhi: NMPB; 2022.
23. India Brand Equity Foundation. Ayurveda and herbal products – export opportunities. New Delhi: IBEF; 2023.
24. World Health Organization. WHO guidelines on good agricultural and collection practices (GACP) for medicinal plants. Geneva: World Health Organization; 2003.
25. National Medicinal Plants Board. Medicinal plants cultivation and value chain development – Status report. New Delhi: NMPB; 2021.
26. Geographical Indications Registry. List of registered geographical indications in India – Agricultural and natural goods. Chennai: Government of India; 2024.

27. Ministry of AYUSH. The Central Sector Scheme for Augmenting Quality of AYUSH Drugs (AOGUSY) [Internet]. New Delhi: Government of India; [cited 2026 Feb 10]. Available from: https://ayush.gov.in/resources/pdf/schemes/aoushdhi.pdf
28. Apparel Export Promotion Council (AEPC). AEPC circulars [Internet]. 2025 [cited 2026 Feb 10]. Available from: https://aepcindia.com/aepc-circulars

