

**FITM Discussion Paper Series**

# **India's G20 Presidency and Initiatives on Promotion of Traditional Medicines**

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**FITM Discussion Paper # 2**





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# India's G20 Presidency and Initiatives on Promotion of Traditional Medicines

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Rajeshwari Singh\*

**Abstract:** Traditional medicine, comprising various indigenous practices and therapies, has played a significant role in healthcare systems worldwide for centuries. The World Health Organisation (WHO) acknowledges the use of Traditional medicine in various forms, like practices, services, and products, by countries (member states). WHO reports the usage of traditional medicine by 170 of the 194 WHO Member States. Global medicine indicators show a shift from Medical Care to Health Care, encompassing preventive, promotive, and rehabilitative aspects. This has sparked interest in integrating various health systems. Traditional medicine emphasizes healthy lifestyles for disease prevention and lifestyle modifications. Post-Covid, health-seeking behavior shifts towards preventive care and well-being. This paper offers a comprehensive view of traditional healing methods across G-20 nations, serving as a valuable lens for exploring the myriad ways traditional medicine can enhance healthcare outcomes. It delves into the widespread adoption, policies, and regulatory frameworks related to traditional medicine within G-20 countries. Furthermore, it discusses the global promotional efforts by the Ministry of Ayush to popularize the Ayush system. It examines the integral role of traditional medicine in preventive, promotive, and therapeutic healthcare and recommendations to G-20 countries, aiming to encourage the widespread acceptance and integration of traditional medicine into contemporary healthcare systems.

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## Introduction

The Hon'ble Prime Minister of India during the 9th World Ayurveda Congress in Goa in December 2022, highlighted that one of the key resolutions of the Amrit Kaal is to ensure global welfare through India's scientific, knowledge and cultural experience and Ayurveda is a strong

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and effective medium for that. *“G20 Presidency is not merely a diplomatic meeting for India, it is a new responsibility and a measure of the world’s trust in India. It will be our effort that there should be no first world or third world, but only one world” “Our G-20 mantra is - One Earth, One Family, One Future”* He further added, *“It is a resolve that has been omnipresent in our thoughts through ‘Vasudhaiva Kutumbakam’.”*<sup>2</sup>

Traditional medicine, comprising various indigenous practices and therapies, has played a significant role in healthcare systems worldwide for centuries. The World Health Organisation acknowledges the use of Traditional medicine in various forms, like practices, services, and products, by countries (member states). It reports the use of traditional medicine by 170 of the 194 WHO Member States. The global indicators in medicine evolved over time to show the significant transition from Medical Care towards Health Care, which includes preventive, promotional, and rehabilitative aspects in addition to therapeutic management and treatment. This has sparked interest in traditional medicine in the post-COVID world, and there are discussions around integrating various health systems for holistic healthcare. This paper underscores the importance of promoting dialogue, the exchange of best practices, and international cooperation to harness the potential of traditional medicine to improve global health outcomes. It offers a comprehensive analysis of the status of traditional and complementary practices within the G-20 countries. It highlights the importance of recognising and integrating traditional medicine into mainstream healthcare systems while also addressing the potential benefits associated with its use. The paper aims to support policy development, and collaborative initiatives aimed at optimising healthcare delivery in the G-20 nations through the integration of traditional medicine.

## **G20 Process and Discussions on Health**

The G20 Forum is a multilateral platform consisting of 19 countries, first held in 1999. It is an annual summit attended by heads of state and government, with Sherpa tracks and other engagement groups also taking

place. India has assumed the Presidency this year from December 2022 to December 2023.<sup>3</sup> G20 Health Working Group (HWG) was established under the German Presidency in 2017 to develop a shared international agenda on issues such as strengthening healthcare systems, health-crisis management and scaling up the fight against pandemics. In 2018, the Argentinian Presidency continued the existing work on Antimicrobial Resistance (AMR) and Health System Strengthening and introduced childhood obesity and malnutrition. The Japanese Presidency in 2019, also pursued the AMR and focused on the achievement of Universal Health Coverage, response to population ageing and management of health risk and health security. In 2020, the outbreak of the COVID-19 pandemic largely dominated the work of the HWG and was more focused on pandemic preparedness and response, improving value in health systems and introducing Digital Health. Under the Italian Presidency 2021, access to vaccines, therapeutics and diagnostics was at the core of the G20 agenda, as it is under the Italian Presidency 2021. Global health system resilience and strengthening Global Health Architecture was also important during the Indonesian presidency. The harmonizing Global Health Protocols and expanding Global Manufacturing and Research Hubs for Pandemic PPR were new areas introduced during the Indonesian presidency.<sup>4</sup> Table 1 details the key issues raised during the last health working groups during G-20 presidencies.

**Table 1<sup>5</sup>: Key health priorities discussed in G-20 Health Working Group since inception**

Presidency	Place / Date (of Health Ministerial Meeting)	Key issues
Germany (2017)	Berlin /19-20 May 2017	<ul style="list-style-type: none"> <li>• Antimicrobial resistance</li> <li>• Health system strengthening</li> <li>• Global health crisis management</li> </ul>

Table 1 continued....

<p><b>Argentina(2018)</b></p>	<p>Mar De Plata/ 3-4 October 2018</p>	<ul style="list-style-type: none"> <li>• Antimicrobial resistance</li> <li>• Malnutrition: childhood overweight and obesity</li> <li>• Health systems strengthening</li> <li>• Health systems responsiveness to disasters, catastrophes and pandemics</li> </ul>
<p><b>Japan(2019)</b></p>	<p>Okayama / 19 February 2019</p>	<ul style="list-style-type: none"> <li>• Achievement of UHC</li> <li>• Response to population ageing</li> <li>• Management of health risk and health security</li> <li>• Antimicrobial resistance</li> </ul>
<p><b>Saudi Arabia (Virtual Meeting) (2020)</b></p>	<p>Riyadh / 19April 2020</p>	<ul style="list-style-type: none"> <li>• Pandemic Preparedness and Response</li> <li>• Improving Value in Health Systems</li> <li>• Digital Health</li> <li>• Patient Safety</li> <li>• Antimicrobial resistance</li> </ul>
<p><b>Italy(2021)</b></p>	<p>Rome / 5-6 September 2021</p>	<ul style="list-style-type: none"> <li>• Impact of COVID-19 on the sustainable development goals (SDG) of the 2030 Agenda</li> <li>• Preventing, preparing and responding to future pandemics</li> <li>• Tools to counter the COVID-19 pandemic</li> </ul>

Table 1 continued....



Table 1 continued...

<p><b>Indonesia (2022)</b></p>	<p><b>Bali / 27-28 October 2022</b></p>	<ul style="list-style-type: none"> <li>• Action to Strengthen Global Health Architecture</li> <li>• Building Global Health System Resilience</li> <li>• Harmonizing Global Health Protocols</li> <li>• Expanding Global Manufacturing and Research Hubs for Pandemic PPR</li> </ul>
<p><b>India (2023)</b></p>	<p><i>Undergoing</i></p>	<ul style="list-style-type: none"> <li>• Health Emergencies Prevention, Preparedness and Response (with focus on One Health &amp; AMR)</li> <li>• Strengthening Cooperation in Pharmaceutical Sector with focus on Access and Availability to safe, effective, quality and Affordable Medical Countermeasures (Vaccines, Therapeutics and Diagnostics)</li> <li>• Digital Health Innovations and Solutions to Aid Universal Health Coverage and Improve Healthcare Service Delivery</li> </ul>

**Source:** G20 Health Ministerial meetings. Available at <https://www.oecd.org/health/health-systems/g20-health-ministerial-meetings.htm> and <https://www.oecd.org/health/health-systems/g20-health-ministerial-meetings.htm> & <https://www.g20.org/en/>

During India's Presidency, the meetings of HWG were held in various places across India. Three meetings of HWG covered traditional medicine under the side events planned along with the main events. The first HWG was held in Thiruvananthapuram, Kerala on 18-20 January 2023, where the delegates discussed health priorities like health emergencies prevention and preparedness, strengthening cooperation in the pharmaceutical sector and digital health innovation and solutions. Dr Rajesh Kotecha, Secretary, Ministry of Ayush, Government of India during the side event on Medical Value Travel (MVT) emphasised the change in health-seeking behaviour of patients post Covid towards Holistic Health and wellbeing. The delegates also participated in a morning yoga session and visited the Somatheeram Ayurveda Village at Kovalam, Kerala to understand the holistic healthcare service delivery system.<sup>6</sup> Further, the various speakers highlighted the need to shift towards a citizen-centric healthcare system, integrating holistic healthcare models and using IT backbones to support Traditional Medicine<sup>7</sup> during the side event of the second Health working group from 17-19 April, in Goa. Similarly, the Ministry of Ayush emphasised translational research and its potential for R&D during the side event alongside with 3rd HWG in Hyderabad from 4-6 June, 2023.<sup>8</sup> The first WHO traditional medicine Global summit was also held on 17th to 18th August, with the theme "Towards Health and Well-being for All", alongside of G-20 health Ministerial meeting in Gandhinagar, Gujarat as a c0branded event of G-20 Presidency.<sup>9</sup>

## **Traditional Medicines in G-20 Countries**

The use of traditional medicine has been reported by 170 of the 194 WHO Member States so far, and their governments have asked for WHO's support in creating a body of reliable evidence and data on traditional medicine practices and products During 2005 and 2018, Member States implemented actions to promote the safety, quality and effectiveness of Traditional and Complementary Medicine (T&CM) in accordance with

WHO Traditional Medicine Strategies 2002–2005 and 2014–2023, as well as pertinent World Health Assembly decisions. The Member States (MS) have also developed national policies, regulatory frameworks, and strategic plans for T&CM practitioners, practices, and products to ensure the proper integration of T&CM into health systems (especially health services). Based on the findings of the first worldwide survey on T&CM, WHO released a report in 2005 on national policies regarding traditional medicine and the regulation of herbal medicines. The WHO conducted a second global survey from 2010 to 2012 (second survey) and another from 2016 to 2018 to assess global trends and the current state of T&CM. Based on these findings WHO released the “*WHO Global report on Traditional and complementary medicine 2019*” which reports 170 countries, for instance, have formally created T&CM policies, laws, regulations, programmes, and offices, while the real number of nations utilising T&CM is probably even greater.<sup>10</sup> Globally, the landscape for T&CM has been steadily improving. Among 170 countries, 98 countries have a national policy on T&CM. 109 Member States reported the presence of a legal or regulatory framework for T&CM. In many Member States, the national laws and regulations for T&CM are integrated into the national drug or medicine laws. However, many countries have an exclusive framework for T&CM; 79 countries have a national programme for T&CM; 107 Member States have a national office for TM and 75 Member States have a national research institute. A total of 34 Member States across the six WHO regions included traditional or herbal medicines in their national essential medicines lists (NEMLS).

The term T&CM encompasses both TM and CM products, practices and practitioners. Based on the WHO Traditional Medicine Strategy 2014–2023,<sup>11</sup> “Traditional Medicine” (TM) is defined as ‘the sum total of the knowledge, skill and practices based on the theories, beliefs and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention,

diagnosis, improvement or treatment of physical and mental illness'. Complementary medicine (CM) is defined as a 'broad set of healthcare practices that are not part of a country's own tradition nor part of conventional medicine and are not fully integrated into the dominant healthcare system'. However, in some countries, CM practices are used interchangeably with TM practices. The term 'alternative medicine' is used instead of standard medical treatment in a particular country (Tabish:2008).

This section comprises the status of T&CM in G-20 member countries based on *WHO Global report on Traditional and complementary medicine 2019*<sup>12</sup> and benchmark document on Ayurveda published by WHO.<sup>13</sup> India and China, as leading countries among the G-20 members, have well-regulated institutionalized networks of traditional medicine. India has a National Policy on Indian Systems of Medicine and Homeopathy, with specific regulations for herbal medicines and compliance mechanisms to ensure quality. T&CM services in India are reimbursed by both public and private health insurance.<sup>14</sup> China has national policy documents for the development of T&CM, and Traditional Chinese Medicine (TCM) is regulated by the Pharmacopoeia of the People's Republic of China.<sup>15</sup> TCM is widely practised and covered by government and private insurance systems. India China Yoga College (ICYC) was established in Yunnan Minzu University, in June 2016. To extend Yoga network across the China, ICYC is planning to open 50 branches in China.<sup>16</sup>

Australia has a national policy for T&CM integrated into the National Medicines Policy, 2000. Herbal medicines, including Ayurveda, are regulated under the Therapeutic Goods Act, 1989 and CAM providers are regulated by state legislation. Health insurers can impose requirements for T&CM practices to receive insurance benefits.<sup>17</sup> Australian Government officially recognised two training programmes in Ayurveda in 2015 – the Diploma in Ayurvedic Lifestyle Consultation,

and the Advanced Diploma in Ayurveda.<sup>18</sup> In Argentina, though there is no National Policy for TM but there is national legislation exclusive to herbal medicines (Resolution 144/1998 and Provisions 2673/99, 2671/99 and 1788/00).<sup>19</sup> The Indian embassy in Argentina has launched a collaborative project with the Argentine Federal Police to promote Yoga for the physical and mental well-being of the forces.<sup>20</sup> Argentina also has Ayurveda medical training programmes that educate conventional doctors since 2000.<sup>21</sup>

In Brazil, T&CM is part of the national health system, and there is a national policy called Integrative and Complementary Practices.<sup>22</sup> Ayurveda has also been recognized under this National Policy of Integrative and Complementary Practices since 2017.<sup>23</sup> Herbal medicines have exclusive regulations, and T&CM education and services are partially insured.

Canada classifies herbal medicines as natural health products and regulates them under specific regulations. The regulation of CAM practitioners is the responsibility of provinces and territories, with coverage for indigenous CAM services by some government agencies.<sup>23</sup> In Germany, T&CM is integrated into social code V and pharmaceutical laws. Traditional herbal medicinal products are registered under the German drugs law, and licensed Heilpraktiker can practice certain medical acts.<sup>24</sup> Though, there is no statutory recognition for Ayurveda or Unani, but there are increasing numbers of practitioners and their associations.<sup>25</sup>

In Italy, Ayurveda has been recognised since 2002 as a “medical act” by the National Federation of Medical and Dental Orders (FNOMCeO) which is the official regulatory body for medical deontology which is supervised by the Ministry of Health.<sup>26</sup> In 2018 the first elective course of “Introduction to Ayurveda” was activated for the 5th and 6th year medical students of the Faculty of Medicine of the State University of Milan.

In 2019 UNI, the Italian National Organization for Standardization has issued the normative UNI 11756:2019 for the profession of Technician (Therapist) in Ayurveda, which in this way has become an officially acknowledged and protected profession by Italian government under the Law 4/2013.<sup>27</sup>

Indonesia has a national traditional medicine policy, Indonesian herbal pharmacopoeia and specific regulations for herbal medicines and separate GMP standards exist for TM products.<sup>28</sup> Japan doesn't have a national policy for TM, but efforts have been made to standardize terminologies. Japanese regulations for evaluating Kampo and allopathic medicines are similar, and some insurance claims can be made.<sup>29</sup> In South Africa, there is a national policy on T&CM, and specific laws and regulations cover complementary medicine. T&CM practices like acupuncture, chiropractic, homeopathy, naturopathy, and osteopathy are partially covered by private health insurance.<sup>30</sup> South Africa recognizes and regulates Ayurveda and Unani medicine as allied health professions.<sup>31</sup> In Saudi Arabia, National Center for Complementary and Alternative Medicine (NCCAM) under Ministry of Health and Saudi Food and Drug Administration (Saudi FDA) are responsible for registering and regulating T&CM products.<sup>32</sup>

In South Korea, National Policy for T&CM exists. The national action plan on promotion and development of Korean medicine has been developed every 5 years since 2006 under the ambit of Promotion of Korean Medicine and Pharmaceuticals Act.<sup>33</sup> Mexico has integrated their national policy into the National Health Programme 2007–2012, For a Healthy Mexico: Building Alliances for Better Health.<sup>34</sup> In Türkiye, the 2013–2017 Strategic Plan published by the MoH aims at adoption of evidence-based T&CM practices through legislation, the definition of practices and practitioners, rules and procedures of certification of practitioners, authorization process and supervision mechanisms of practice centres and units.<sup>35</sup>

In UK, T&CM policy is integrated into the national health policy. The Department of Health has a programme to develop research expertise in T&CM and to strengthen the evidence base. It also commissions periodic surveys of the use of T&CM in the UK. There is regulation of OTC herbal medicines under the Traditional Herbal Medicines Regulation (THMR) scheme. The Complementary and Natural Healthcare Council (CNHC) is ‘the voluntary regulator for a wide range of complementary therapies’ in the UK.<sup>36</sup> There is no national policy/national plan for integrating T&CM into mainstream health service delivery in the US. An Office of Alternative Medicine was formed within the National Institutes of Health (NIH) Office of the Director in 1992. In 1999, the NCCIH was established. Dietary Supplement Health and Education Act of 1994 forms the national regulation on herbal medicines. T&CM practices and providers are regulated at the state level.<sup>37</sup> Standalone Ayurveda or Unani practice is permissible in the Health Freedom States, where Ayurvedic clinical services are provided by Ayurvedic health counsellors, Ayurvedic practitioners and Ayurveda doctor graduates.<sup>38</sup>

## **Ayush Systems of Healthcare<sup>39</sup>**

India is one of the G-20 countries with a rich heritage of traditional systems of medicine. The Ministry of Ayush is a responsible body for the promotion, development, and regulation of the Indian systems of medicine (Ayurveda, Unani, Siddha, Sowa-rigpa and Yoga), homoeopathy and naturopathy. It formulates policies, guidelines, and also supports research and development in Ayush systems and promotes their education and training. The Department of Indian Systems of Medicine and Homoeopathy (ISM&H) was established in 1995 and later renamed the Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha, and Homoeopathy (AYUSH) in 2003. It was further elevated to the status of a Ministry in 2014. The Ayush system in India has grown significantly, with 413 Ayurveda, 49 Naturopathy & Yoga, 54 Unani, 12 Siddha, and 245 Homoeopathy colleges, a nationwide network of 3,844 hospitals, 36,848

dispensaries. The National Health Mission aims to strengthen Ayush services and focus on preventive and promotive aspects of healthcare. 15422 Ayush units have been co-located at Primary Health Centres, Community Health Centres and District Hospital under the National Health Mission. The vibrant pharmaceutical industry comprises 8648 manufacturing units to support the Ayush system in India.

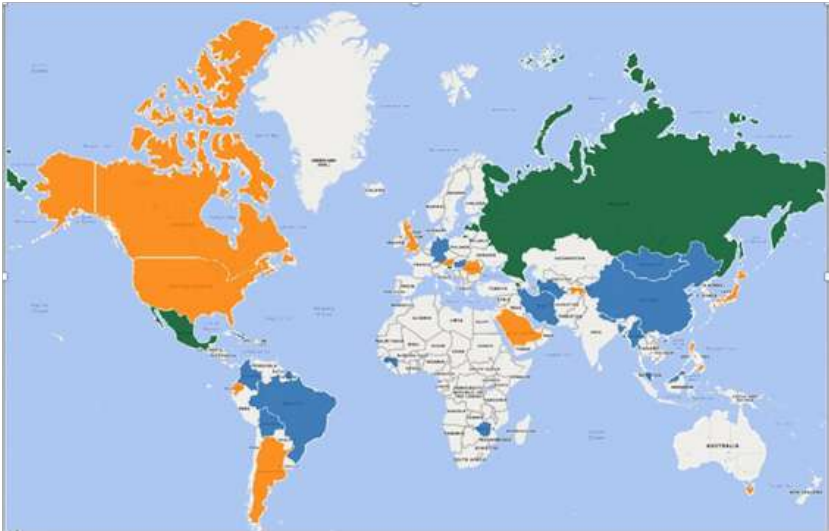
The Indian systems of medicine, i.e. Ayurveda, Siddha, Unani, and Sowa-Rigpa, (ASUS), are regulated by the National Commission for the Indian Systems of Medicine (NCISM) Act, 2020 and Homoeopathy education and practice is regulated by the National Commission for Homoeopathy (NCH) Act, 2020. Similarly, The Drug & Cosmetic Act, 1940 and Drugs & Cosmetics Rules, 1945 regulate the import, manufacture, distribution, sale, and standards of drugs and cosmetics. Chapter IVA addresses Ayurvedic, Siddha, Unani, and Homoeopathic drugs. Part XVI of the Rules, 1945, specifies the manufacturing and marketing of ASU medications. Rule 152 empowers state licencing bodies to issue licenses, while Schedule T covers Good Manufacturing Practices (GMP).<sup>40</sup>

## **Initiatives of the Ministry of Ayush for Globalization of Ayush systems<sup>41</sup>**

The Ministry of Ayush has signed 25 MoUs for cooperation in Traditional Medicine and Homoeopathy and 40 MoUs for collaborative research and academic collaboration with foreign institutes, and 16 for setting up AYUSH Academic Chairs. Additionally, 37 AYUSH Information Cells have been established in 34 countries to disseminate authentic information about Ayush systems of medicine. Every year, 104 seats are allocated to foreign students studying Ayurveda, Yoga, and Unani systems in India. At present, the scheme is providing scholarships, tuition fees, and airfare for 277 students from 32 countries.



**Figure 2: Country to Country -25 (Blue colour); Institute to Institute for Research- 40 (Orange); Academic Chair -15 (Green)**



**Source:** Author's own

***Other notable achievements of International Cooperation:*** Involvement with multilateral forums like- BRICS, IORA,SCO etc. in the field of Ayush like an India-EU Technical Working Group (TWG) on Ayurveda exists. A dedicated Working Group (WG 10 – Traditional Medicine) has been created in ISO under ISO/TC 215 – Health Informatics to formulate International Standards on Ayush Informatics and two proposals from India have been included in the Program of Work of WG 10 ( ISO/DTR 4421 ‘*Health Informatics- an Introduction to Ayurveda*’; and ISO/ PWI 6204 ‘*Health Informatics – Categorical structures for representation of Ayurvedic medicinal water – Decocting process in Ayurveda*’). Ayush Export Promotion Council under the name of Ayushexil has been registered to enhance the export of Ayush products and services globally. Ayush is actively involved with WHO for various activities like publishing WHO Benchmarks documents for the Practice and training of Ayurveda and

Unani. WHO international standard terminologies on Ayurveda have been published<sup>42</sup> which would enable comparison, assessment, and evaluation of the data internationally. Ministry is also in agreement with WHO to develop a Second Module in the Traditional Medicine (TM) Chapter of the International Classification of Diseases -11 Revision (ICD-11). The UNiCC department of WHO has also developed M-yoga application for yoga enthusiasts.

Dr Tedros Adhanom Ghebreyesus, DG-WHO and Shri Narendra Modi, Prime Minister of India announced the establishment of the WHO-GCTM on 5th Ayurveda Day, 2020, and its foundation stone was laid on 19 April, 2022. The center aims to promote global wellness, develop medicines, and research related to traditional medicine, and strengthen evidence-based research, training, and awareness.<sup>43</sup> Over the years, The Ministry of Ayush has extended its offshoots to various countries, as covered under the “Initiatives of Ministry of Ayush for Globalization of Ayush systems’ of this discussion paper and Table 2 is the elaborated engagements of the Ministry of Ayush in major G-20 countries.

**Table No.2: Global Interaction and Initiatives of the Ministry of Ayush**

<b>S. No</b>	<b>Country</b>	<b>Engagement of Ministry of Ayush</b>
1	Argentina	<ul style="list-style-type: none"> <li>• Ayush Information Cell at Indian Mission in Buenos Aires (2016)</li> <li>• MoU between Central Council for Research in Ayurvedic Sciences (CCRAS) and Instituto Universitario del Gran Rosario of Argentina and Fundacion de Salud Ayurveda Prema of Argentina for Ayurveda Chair (2016)</li> </ul>

*Table 2 continued...*

Table 2 continued....

2	Australia	<ul style="list-style-type: none"> <li>• Ayurveda Information Cell at Indian Mission. (2019)</li> <li>• Academic collaboration in the area of Ayurveda and Traditional Medicine between All India Institute of Ayurveda and Western Sydney University (2019)</li> <li>• Ayurveda Chair at Western Sydney University (2021)</li> </ul>
3	Brazil	<ul style="list-style-type: none"> <li>• Country to Country MoU for cooperation in the area of Ayurveda and Traditional Medicine (2020)</li> <li>• Institute Level MoU was signed between AIIA and University of Sao Paulo (2021)</li> <li>• Tripartite MoU signed between AIIA, The Federal University of Rio De Jenerio (UFRJ) and The Brazilian Academic Consortium for Integrative Health (CABSIN), Brazil (2022)</li> <li>• Joint task force exists between official of Brazial and Ministry of Ayush(2022)</li> </ul>
4	Canada	<ul style="list-style-type: none"> <li>• Academic collaboration between CCRAS and the Governors of the University of Alberta as Represented by the Integrative Health Institute Located in Edmonton, Alberta, Canada (2016)</li> <li>• Academic collaboration between AIIA and Canada India Foundation (CIF) (2022)</li> </ul>

Table 2 continued....

Table 2 continued....

5	China	<ul style="list-style-type: none"><li>• MoU between t Ministry of Ayush (then Department) and State Administration of Traditional Chinese Medicine (SATCAM) (2008)(2013)</li><li>• China was one of the co sponsors to the UN resolution designating June 21 as the International Day of Yoga.</li><li>• Ayush Information Cell at Embassy of India, Beijing, China (2014)</li><li>• Agreement between ICCR and Yunnan Minzu University, China to establish a Yoga College in Kunming, Yunnan Province (2016)</li><li>• Deputation of Yoga experts in China during BRICS Sports meet and INDY 2017, SCO Marathon 2018.</li></ul>
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Table 2 continued....

Table 2 continued....

6	Germany	<ul style="list-style-type: none"> <li>• Joint Declaration of Intent (JDI) to enhance cooperation in the field of health. (2017)</li> <li>• MoU for Cooperation in the field of Research and Education in Ayurveda(2017)</li> <li>• MoU between CCRH and Institute for the history of medicine, Robert Bosch foundation (2017)</li> <li>• MoU between the AIIA and Rosenberg European Academy of Ayurveda (REAA) (Birstein) (2017)</li> <li>• Study entitled ‘Understanding the molecular mechanism of Guduchyadi tablets in combating COVID-19 infection- In-vitro &amp; in-vivo study’ between AIIA and FIZ Frankfurter Innovationszentrum Biotechnologie GmbH (2019)</li> <li>• MoU between Central Council for Resaerch in Ayurvedic Sciences (CCRAS) and Department of Neurology and Complementary Medicine, Luthern, Hospital Hattingen, Germany (2019)</li> <li>• Joint Working Group exists comprsing official of Federal Ministry of Health and Federal Institute for Drugs and Medical Devices (BfArM) Germany and Ministry of Ayush (two meetings held so far)</li> </ul>
7	Indonesia	<ul style="list-style-type: none"> <li>• Ayush Information cell at Embassy of India, Jakarta and in Consulate General of India, Bali (2013)</li> <li>• MoU between UNHI (Universitas Hindu Indonesia) Bali and Gujarat Ayurveda University Ayurveda Chair at Udayana University, Bali (2015)</li> </ul>

Table 2 continued....

Table 2 continued....

8	South Korea	<ul style="list-style-type: none"> <li>• MoU between Ministry of Ayush and Wonkwang Digital University, Government of the Republic of Korea for an academic Chair in Yoga (2018)</li> </ul>
9	Japan	<ul style="list-style-type: none"> <li>• MoC between Ministry of AYUSH and Kanagawa Prefecture Government of Wellness, Japan (2018)</li> <li>• MoU signed between Shimane University, Japan and All India Institute of Ayurveda (2019)</li> <li>• MoU for research on Ayurveda and TM signed between All India Institute of Ayurveda &amp; National Institute of Advanced Industrial Science and Technology (2022)</li> <li>• Ayush Information Cell has been established at the Embassy of India, Tokyo (2023)</li> </ul>
10	Mexico	<ul style="list-style-type: none"> <li>• Two Letter of Intent (LOIs) with the Government of Mexico (2012)</li> <li>• Ayush Information Cell in Mexico at ICCR's Gurudev Tagore Indian Cultural Centre (2013)</li> <li>• MoU between CCRAS and Universidad Autonoma De Nuevo Leon (UANL), Mexico for establishment of Academic chair (2022)</li> </ul>
11	Russia	<ul style="list-style-type: none"> <li>• Ayush Information Cell established in Moscow (2013) and St. Petersburg's (2016)</li> <li>• MoU between the CCRAS and People's Friendship University of Russia (PFUR) (2018).</li> </ul>
12	Saudi Arabia	<ul style="list-style-type: none"> <li>• Institute level MoU to enhance bilateral cooperation in the field of Yoga (2021)</li> </ul>

Table 2 continued....

Table 2 continued....

13	South Africa	<ul style="list-style-type: none"> <li>• MoU between Central Council for research in Unani Medicine (CCRUM) and University of Western Cape, South Africa for establishment of Unani Chair (2010)</li> <li>• MoU between Central Council for Research In Ayurvedic sciences and Durban University of Technology, South Africa for establishment of Ayurveda Chair (2011)</li> </ul>
14	United Kingdom	<ul style="list-style-type: none"> <li>• MoU between Central Council for Research in Homoeopathy (CCRH) and Royal London Hospital for Integrated Medicine (RLHIM) (2015)</li> <li>• Ayush Information Cell at India house, Aldwych, London, UK (2017)</li> <li>• Centre of Excellence (ACE) and Research in Yoga &amp; Indian Traditional Medicine has been inaugurated in the presence of HRH, the Prince of Wales KG and Hon'ble PM of India on 18 April, 2018 at London</li> <li>• MoU on the Establishment of an Academic Collaboration in Ayurveda between AIIA and College of Medicine (UK) (2018)</li> <li>• MoU on research between AIIA and London School of Hygiene and Tropical Medicine (LSHTM). (2022)</li> <li>• Research study is undergoing on Ayurveda interventions and Yoga in promoting recovery in long-term symptoms following COVID-19 illness as a multicentric trial in India and in collaboration of AIIA with the in London UK. (2023)</li> </ul>

Table 2 continued....

Table 2 continued....

	<p>United States of America (USA)</p>	<ul style="list-style-type: none"> <li>• MoU between CCRAS and National Center for Natural Product Research (NCNPR), University of Mississippi (2015)</li> <li>• MoU between United States Pharmacopeia (USP) Convention and Pharmacopeia Commission of Indian Medicine and Homeopathy (PCIM &amp; H) (2016)</li> <li>• MoU between United States Pharmacopeia (USP) Convention and Pharmacopeia Commission of Indian Medicine and Homeopathy (PCIM &amp; H) (2018)</li> <li>• Indo-US workshop on Pharmacopoeial monographs of Ayurvedic/ herbal medicines” at New Delhi (2017)</li> <li>• MoU between AIIA and Spaulding Rehabilitation Hospital, Harvard Medical School (March, 2019)</li> <li>• MoU between CCRAS and National Cancer Institute (NCI), USA (2020)</li> </ul>
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**Source:** International Cooperation Section of Ministry of Ayush, Government of India.

## **Influence of Traditional Medicine on Mainstream Health Practices**

The United Nations General Assembly’s resolution 74/2 in 2019 on Universal Health Coverage (UHC), Heads of State and Government reaffirmed their commitment to achieving UHC by 2030, inter alia, to “*explore ways to integrate, as appropriate, safe and evidence-based traditional and complementary medicine services within national and/or subnational health systems, particularly at the level of primary health care, according to national context and priorities*”<sup>44</sup> The Declaration of Astana, adopted at the Global Conference on Primary Health Care



in October 2018, made clear that the success of primary health care will be driven by applying scientific as well as traditional knowledge and extending access to a range of health care services, which include traditional medicines.<sup>45</sup> Even the role of traditional practitioners has also been emphasised in the Declaration of Alma-Ata 1978 – *“Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford ... [PHC] relies at local and referral levels, on health workers ... as well as traditional practitioners as needed ...”*<sup>46</sup>

Recently, during the 152nd session of the Executive Board under agenda item 5 on 9th January, 2023, a report by the Director General, WHO on “Reorienting health systems to primary health care as a resilient foundation for universal health coverage and preparations for a high-level meeting of the United Nations General Assembly on universal health coverage” as a provisional agenda item (5eb152/5) mentioned specifically under clause 20 mentions “Integrating appropriate, safe and evidence-based traditional and complementary medicine is another potential area to expand services for health and well-being, including through primary health care as noted in the 2019 political declaration on universal health coverage. WHO headquarters, regional and country offices, and the WHO Global Centre for Traditional Medicine are expanding the Organization’s capacities to support Member States with evidence- and data-based strategies.”<sup>47</sup>

The Sustainable Development Goals (SDGs), which symbolise equitable social and economic development, include universal health coverage as a core health target (Wong: 2016). SDG 3 aims to improve health outcomes by reducing mortality, ending epidemics, preventing diseases, and implementing universal health coverage (UHC) for affordable, high-quality, and equitable healthcare (Cerf: 2019). Previously, communicable diseases were considered the leading causes

of morbidity and mortality impacting children under the age of 5 and were the leading cause of maternal mortality.<sup>46</sup> However, there has been a gradual but noticeable shift in the leading cause of morbidity to Non-communicable diseases (NCD)( Zodpey: 2018).

Global medicine indicators show a shift from Medical Care to Health Care, encompassing preventive, promotive, and rehabilitative aspects. This has sparked interest in integrating various health systems. Traditional medicine emphasizes healthy lifestyles for disease prevention and lifestyle modifications. Post-Covid, health-seeking behavior shifts towards preventive care and well-being. The health of an individual is shaped by the complex interplay of biology, behaviour, socioeconomic and environmental factors. Health is not merely the absence of a disease or infirmity, but a state of physical, mental and social well-being. Spiritual, emotional and environmental health are additional components that must be taken care of while talking about true health (Svalastog: 2017). Modern medicine is widely accepted worldwide due to its extensive research, protocols, and advanced technology while Traditional medicine, on the other hand, includes various methods, procedures, theories, and practices based on long usage by the communities. Combining these systems of healthcare may provides comprehensive care, ranging from therapeutic to wellness. This has led the discussion on the Integrative healthcare which envisages combining evidence-based traditional medicine practices and modern systems.

### **COVID-19 as Case study**

Covid-19 highlights the importance of traditional medicine in prevention and mitigation of Covid-19. The WHO International Clinical Trials Registry Platform lists 4778 trials, including 165 restricted to COVID-19 while the WHO COVID-19 database of global literature on coronavirus disease lists 7516 research articles on traditional medicine.<sup>48</sup> The BRICS Online Declaration in 2021 acknowledges the role of traditional medicine in preventing and controlling the Covid-19. It suggests joint research,

knowledge sharing, and evidence-based communication for adapted public policies in the area of TM.<sup>49</sup>

### **Scope for Common Dialogue and Collaborations through G20**

The WHO Global Centre for Traditional Medicine (GCTM) in Gujarat, India, focuses on evidence, learning, data analytics, sustainability, equity, innovation, and technology to maximize the contribution of traditional medicine to global health and sustainable development. At the same time, respect for local heritages, resources and rights is also a guiding principle behind the establishment of this centre.<sup>50</sup> India supports the WHO Global Centre for Traditional Medicine in Jamnagar, aiming to formulate evidence for worldwide practice and increase global consumption of traditional medicine.<sup>51</sup>

The use of traditional medicine has been reported by 170 of the 194 WHO Member States so far, which includes herbal medications, indigenous treatments, and others. Traditional medicine's sociocultural practice and biodiversity heritages are invaluable resources for evolving inclusive, diversified sustainable development. Traditional medicine is also a part of the global health, wellness, cosmetics, and pharmaceutical industries, which are worth trillions of dollars. Many pharmaceutical formulations are based on natural materials, and iconic medications such as aspirin, and artemisinin has their origins in traditional medicine. (Dias: 2012). Some traditional medicine frameworks are upheld by enormous volumes of literature and records of theoretical concepts and practical skills; others pass down from generation to generation through verbal teaching. To date, in some parts of the world, the majority of people still get their primary medical care from their own traditional medicine. Among others, the most widely used traditional medicine systems today include those of India and Africa.<sup>52</sup> Traditional Medicine contributes to the Health and Wellness of the population in three ways- preventive, promotive and therapeutic.

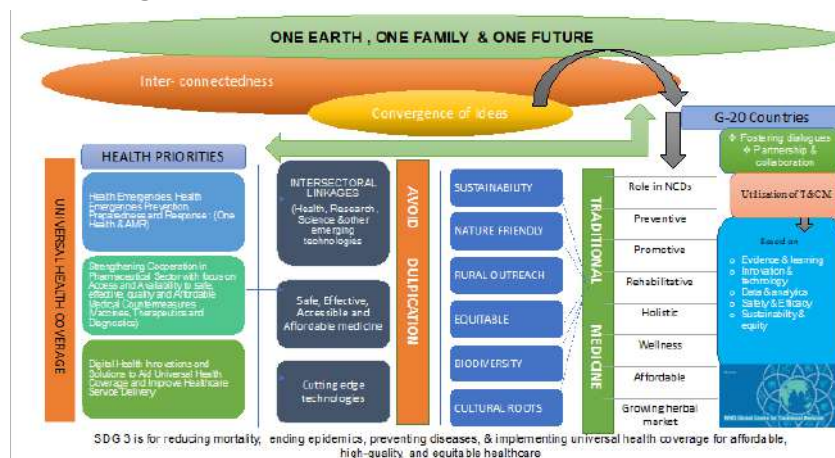
**1. Prevention:** TM incorporates medicines, practices, therapies, and advocacies to promote overall health and well-being. WHO reports 41 million people each year, equivalent to almost 71 per cent of all deaths caused by NCDs worldwide, with 77 per cent occurring in low and middle-income countries. The leading cause of death is cardiovascular disease which accounts for about 17.9 million deaths annually, followed by cancers (9.3 million), respiratory diseases (4.1 million), and diabetes (1.5 million). These four groups of diseases represent over 80 per cent of all premature NCD deaths.<sup>52</sup> The global economic burden of NCDs has been estimated to be USD 47 trillion from 2010 to 2030 (measured in real USD using 2010 as the base year), or 75 per cent of global gross domestic product (GDP) in 2010 (Kruk: 2015). There has been a gradual but definite shift in the leading cause of morbidity to NCDs (Beren: 2019). The prevention of NCDs has emerged as a major global health strategy, necessitating individualized preventive measures based on lifestyle and risk factors. Here the TM may be a ray of hope. One example of this is the Integration of Ayush practices with the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS). An NPCDCS study reported the effect of Ayurveda medication, lifestyle modification, and Yoga in integration with standard care for the management of essential hypertension in 1938 participants. Results showed that at the 6th month, systolic and diastolic blood pressure was significantly reduced ( $P < 0.01$ ) in all categories of Group I and Group II, and the dose of conventional medicine was reduced in 33.1 per cent of Group I and 30.4 per cent of Group II when compared to 0 day while conventional medicines were discontinued in 15.1 per cent of Group I and 36.7 per cent of Group II participants (Sharma: 2021). Similarly, a multi-centric, open-labelled, prospective, comparative clinical study conducted at 17 community health centres and 1 district hospital reported a significant reduction in fasting and postprandial blood sugar levels, as well as

improvement in subjective symptoms such as polyuria, polydipsia, polyphagia, blurred vision and weakness (Sharma: 2019).

2. **Promotive:** Health promotion aims to improve people's control over their health and its determinants. The 2030 Agenda for Sustainable Development (SDGs)<sup>53</sup> aims to ensure healthy lifestyles and well-being for all ages. Traditional practices, such as yoga, are recognized in UN General Assembly resolution 69/131 (2014).<sup>54</sup> The World Health Organisation launched the mYoga app in 2021 to provide guidance and support for yoga journeys. Various systemic reviews reported the potential role of Yoga in anxiety (Cramer: 2018), depression (Cramer: 2013) and stress reduction, stress-related physiological measures (Pascoe: 2017), pregnancy and many others. Ayurveda delineates the components of health ranging from proper dietary and behavioural management (ritucharya and dincharya), panchakarma (five therapy) procedures to medicaments and rejuvenation therapies. (Conboy;2009).
3. **Therapeutic Impact:** Traditional medicines are a valuable resource for finding successful treatments for a variety of diseases. Given that over 75 per cent of the population in developing countries relies on herbs and traditional remedies for primary healthcare, these can be used as preventative measures (Singh: 2021). Although it is a common misconception that traditional medicines are only used in developing countries like India, China, and other Asian and African countries, recent studies suggest the use of the truth is that traditional, complementary, and alternative medicine in developed nations like the United States, Australia, France, Canada, Germany, and others.<sup>55</sup> Moreover, natural products or their derivatives are the direct source of many new molecules. Many modern-day antihypertensives, anti-inflammatory drugs, antipyretics etc., find their origin in plant-based substances (Tewari: 2020).

We may assume, based on analysis as reflected in Figure 4, that TM could play a potential role in prevention, promotion, rehabilitation, NCDs, wellness, holistic care and as a tool to achieve universal health coverage. The role of TM may differ from country to country, such as in India, where traditional medicine is a codified system backed with well-defined frameworks of research and practice, and it is the first choice of the primary source of healthcare in far-flung areas of the country while in developed countries such as the United States and the United Kingdom, where people are more inclined towards TM for wellness.<sup>56</sup>

**Figure 4: Role of Traditional Medicine for Interconnectedness and Convergence of Ideas for Collaboration with G-20 Countries**



Source: Self-created

There is an immense possibility for fostering dialogues, partnerships and collaboration for the utilisation of T&CM in G-20 countries based on evidence learning, use of cross-cutting technology, data analytics, safety, efficacy, and quality assurance. The major recommendations aligning with the current presidency priorities for collaboration with G-20 countries:

**1. Health emergencies and pandemic preparedness:** The global pandemic prompted unprecedented inter-sectoral collaboration

to reduce mortality and morbidity. The post-Covid era offers an opportunity for stakeholder synchronization and better preparedness for future health problems. The global community, including G20 countries, must adopt the 'One Health' paradigm, combining scientifically validated Traditional Medicine with conventional healthcare methods. The success of primary health care as advocated in Declaration of Astana, relies on applying scientific and traditional knowledge and extending access to various services.

2. **Medical countermeasures:** Supplementing the existing arsenal of Conventional Medical countermeasures such as drugs, devices, diagnostics, and so on with scientifically validated Traditional Medicine based interventions such as products, procedures, lifestyle, and so on is poised to increase the ability of G20 countries to deal with pandemics such as Covid 19 in the future.
3. **Digital health:** Digital technology in healthcare is transforming the paradigm from organization-centric to citizen-centric and disease-centric models, facilitating collaborative, multidisciplinary, and cross-organizational healthcare delivery processes. Like in India, the National Health Policy 2017 envisaged the integral role of technology in healthcare delivery. Based on this foundation, the Ayush Grid is aligned with the principles of Ayushman Bharat Digital Mission. The National Ayush Morbidity and Standardized electronic (NAMASTE) portal, launched in 2017 is currently utilized for the use of national Ayurveda, Siddha, Unani morbidity codes in sync with ICD-10 for counting reason for encounter (RFE) from various Ayush facilities. Further, the portal paved the way for the development of TM-based standards under the aegis of international agencies such as WHO, ISO (through Bureau of India Standards-BIS). Ayush is also leading a topic group on traditional medicine as part of Focus Group on Artificial Intelligence for Health (FG-AI4H) for the benchmarking of Artificial intelligence (AI) in TM.<sup>57</sup>
4. **Biodiversity:** Biodiversity and traditional medicine are crucial for global health, as biodiversity loss can indirectly impact human

well-being. Ecosystems become less robust, prone to shocks, and less capable of providing vital services. Biodiversity and traditional medicine are inextricably intertwined, as many of the medicinal plants utilised in traditional medicines come from natural habitats. Human health relies on healthy environments, and biodiversity provides opportunities to explore new treatments and therapies. Research into species' chemical compounds or genetic material can help develop existing medicines and improve global health. (Alves and Rosa, 2007)

The G20 conference of Health Ministers in Argentina in 2018 mentioned in declaration which stated, “Countries may wish to integrate, where appropriate, scientifically proven traditional and complementary medicine, assuring the safety, quality and effectiveness of health services.”<sup>58</sup> At the G20 leaders' summit under the Japanese Presidency in Osaka, 2019, India's Union Minister for Health and Family Welfare, Harsh Vardhan, spoke on the ‘plurality of roads towards the attainment’ of UHC<sup>59</sup> an oblique reference to the inclusion of Traditional Medicine. G20 leaders argued for ‘traditional and indigenous knowledge’ in the context of climate change’ in their 2019 declaration.<sup>60</sup> Although it does not expressly address TM, it does allude to similar themes such as UHC, PHC, ‘health promotion, prevention and control of communicable and non-communicable diseases ... community-based integrated health’.<sup>61</sup> Hon'ble Prime Minister during his two-day G-20 summit at Osaka, Japan in 2019 made a reference of Ayush along with health during 3rd Session that *5 A's are well known in Health Services: Accessible, Affordable, Appropriate, Accountable and Adaptable*” and *Ayush is contributing significantly to all of these components*.<sup>62</sup> India's presidency G-20 health Ministerial outcome document recognised the potential role of T&CM making the intersection of traditional medicine and its contribution to healthcare systems largely based on science, evidence and global partnership. Specifically, it reads “We recognize the potential role of evidence-based Traditional and Complementary Medicine (T&CM) in health, and take note of WHO's efforts in this direction including global and collaborating centres, and clinical trial registries. We acknowledge



the potential of evidence-based T&CM practices in public health delivery systems, provided they are rigorously and scientifically validated to be safe and effective as per WHO TM Strategy 2014-23, extended till 2025. We acknowledge efforts to integrate evidence-based T&CM, as appropriate, into health systems and services by some member states, and efforts to regulate T&CM practices according to national laws and regulation".<sup>63</sup> It will certainly embark the evolution in the area of T&CM with the transformative path of ancient wisdom with modern thoughts and technology and also assures India's leadership in this field.

Traditional medicine is an integral part of many countries and may offer valuable insights and solutions not only in public health but also in research and development. These practices may help in the preservation and protection of the natural environment, biodiversity and promote sustainability. Countries all over the world have taken a variety of initiatives and measures over the years to improve their healthcare infrastructure and make health services available, affordable, and accessible to everyone. Health is presently linked to economic security and the overall well-being of societies. We have witnessed a paradigm shift in the health-seeking behaviour of patients after Covid towards Holistic Health and well-being. The dream of a New Healthy, Self-Reliant Health System is only possible when high-quality, affordable and accessible health services are being provided to all equitably. Increasing service accessibility to various healthcare systems leveraged with evidence, accreditations, and the latest medical technologies can be achieved strategically through Integrated healthcare, where modern and TM health systems have their role to play according to their systems' strengths. It could be an innovative new tool for achieving Universal health coverage. Integrative healthcare based on evidence-based traditional medicine practices and modern systems would be helpful in achieving Universal Health Coverage through quality; efficiency; equity; accountability, sustainability, and resilience. This would impart various benefits, including increased system efficiency, enhanced user experience,

continuity of care, promotion of value-based healthcare, affordability, and, certainly, which would be good for Global health and well-being. As a country, we believe in the principle of *Vasudhaiva Kutumbakam*, which means the whole world is considered as a whole family where everybody is equal, which is also aligned with this year's G-20 presidency theme is One-Earth-One Family - One Future.

### **Recommendations for G-20 Countries:**

- Creation of a framework under a Health working group for regular interaction in the field of various aspects of TM among G20 countries.
- Promotion of TM in G-20 countries in line with WHO-GCTM mandates, which are largely based on developing and gathering evidence and data on traditional and complementary medicine to inform national policy discourse and construct frameworks for regulatory and compliance while keeping as a guiding principle for local heritage, resources, and rights.
- Promotion of TM-based R&D activities in G-20 countries by fostering dialogues and activities with high-end laboratories for basic and clinical research activities based on the concept of translational research.
- Developing a knowledge exchange platform and creating a mechanism for the exchange of ideas, students, faculty and researchers in the area of TM and integrative health.
- Developing platforms for the use of cutting-edge technologies, digitisation and other technologies in TM
- Defining the role of TM in achieving Universal health Coverage by adopting an integrative healthcare model for value-based healthcare

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## About FITM

The *Forum on Indian Traditional Medicine (FITM)* is a joint initiative by the Ministry of AYUSH and Research and Information Systems for Developing Countries (RIS). The Forum has been established with a broad objective to undertake/commission/promote studies on sociology, economy, political-economy, value chain, trade & investment and international cooperation in traditional medicines; prepare policy and strategy responses on emerging national and global developments; provide critical inputs such as policy briefs, briefings and reports to the Government of India; and to facilitate interactions with experts, stakeholders and policy-makers from India and abroad. It facilitates policy discussions/Consultations and talks by national and international subject experts. FITM also provides fellowships and scholarships for studies in the area of traditional medicines.



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