



सत्यमेव जयते
NITI Aayog



Annual Report

2021-22





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NITI Aayog

ANNUAL REPORT

2021-22



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SECTION-I



**NITI AAYOG:
FRAMEWORK**

NITI AAYOG: FRAMEWORK

CONSTITUTION

NITI Aayog was formed via a resolution of the Union Cabinet on 1 January 2015. It is the premier policy think tank of the Government of India, providing directional and policy inputs. Apart from designing long-term policies and programmes for the Government of India, NITI Aayog also provides relevant strategic and technical advice to the Centre, States, and Union Territories.

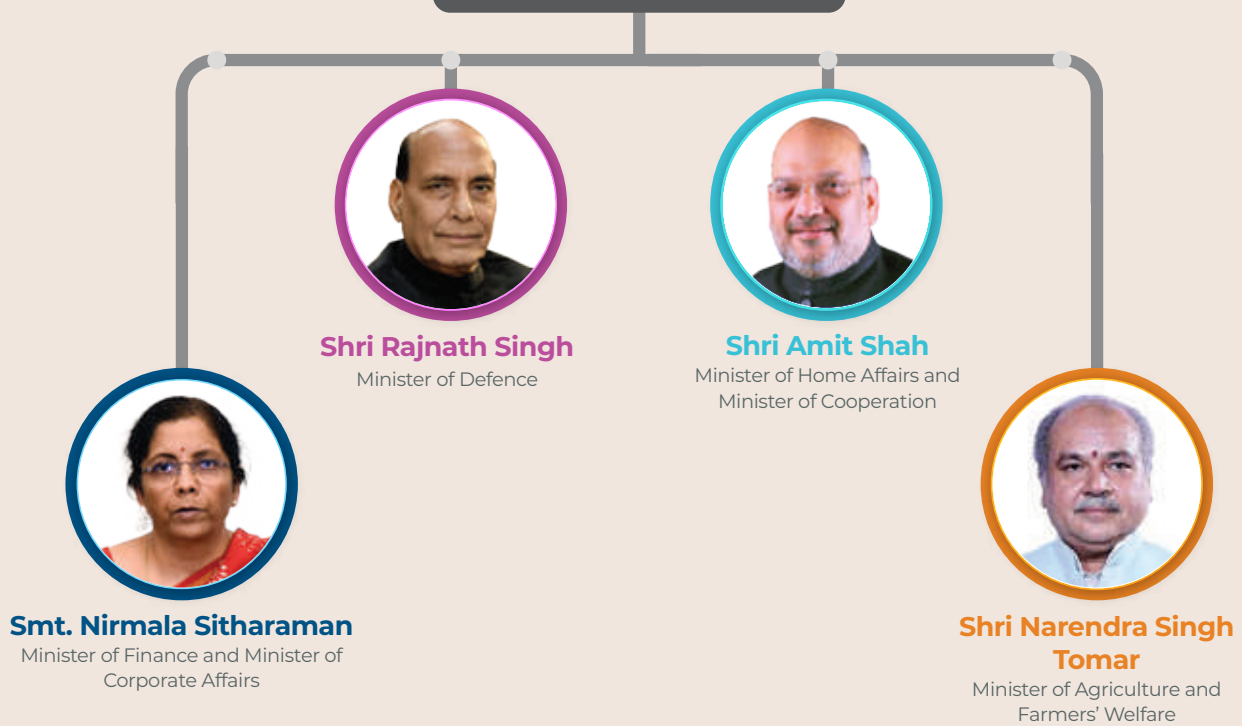
NITI Aayog acts as the quintessential platform for the Government of India to bring States to act together in national interest and thereby foster cooperative federalism.

On 18 September 2021, the Chairperson approved the reconstitution of NITI Aayog.





Ex-Officio Members



Special Invitees



OBJECTIVES AND FEATURES

- To evolve a shared vision of national development priorities, sectors and strategies with the active involvement of States.
- To foster cooperative federalism through structured support initiatives and mechanisms with the States on a continuous basis, recognizing that strong States make a strong nation.
- To develop mechanisms to formulate credible plans at the village level and aggregate these progressively at higher levels of the government.
- To ensure, on areas that are specifically referred to it, that the interests of national security are incorporated in economic strategy and policy.
- To pay special attention to the sections of our society that may be at risk of not benefiting adequately from economic progress.
- To design strategic and long-term policy and programme frameworks and initiatives, and monitor their progress and their efficacy. The lessons learnt through monitoring and feedback will be used for making innovative improvements, including necessary mid-course corrections.
- To provide advice and encourage partnerships between key stakeholders and national and international like-minded think tanks, as well as educational and policy research institutions.
- To create a knowledge, innovation and entrepreneurial support system through a collaborative community of national and international experts, practitioners and other partners.
- To offer a platform for the resolution of inter-sectoral and inter-departmental issues in order to accelerate the implementation of the development agenda.
- To maintain a state-of-the-art resource centre, be a repository of research on good governance and best practices in sustainable and equitable development as well as help their dissemination to stakeholders.
- To actively monitor and evaluate the implementation of programmes and initiatives, including the identification of the needed resources so as to strengthen the probability of success and scope of delivery.
- To focus on technology upgradation and capacity-building for implementation of programmes and initiatives.
- To undertake other activities as may be necessary in order to further the execution of the national development agenda, and the objectives mentioned above.

NITI Aayog is developing itself as a state-of-the-art resource centre with the necessary knowledge and skills that will enable it to act with speed, promote research and innovation, provide strategic policy vision for the government, and deal with contingent issues. It is supported by two attached offices—Atal Innovation Mission (AIM) and Development Monitoring and Evaluation Office (DMEO)—and an autonomous body, National Institute of Labour Economics Research and Development (NILERD).

NITI Aayog's entire gamut of activities can be divided into four main heads:

1. Policy and Programme Framework
2. Cooperative Federalism
3. Monitoring and Evaluation
4. Think Tank, and Knowledge and Innovation Hub

The different Verticals, Cells attached offices and autonomous body of NITI Aayog provide the requisite coordination and support framework needed to carry out its mandate. The list of Verticals and Cells is given below.

VERTICALS/CELLS

Administration and Support Units
 Agriculture and Allied Sectors
 Aspirational Districts Programme Cell
 Communication and Social Media Cell
 Data Management and Analysis, and Frontier Technologies
 Economics and Finance Cell
 Education
 Governance and Research
 Governing Council Secretariat and Coordination
 Industry-I
 Industry-II
 Infrastructure-Connectivity
 Infrastructure-Energy
 Micro, Small and Medium Enterprises
 Natural Resources and Environment, and Island Development
 Project Appraisal and Management Division
 Public-Private Partnership
 Rural Development
 Science and Technology
 Social Justice and Empowerment, and Voluntary Action Cell
 Social Sector-I (Skill Development, Labour and Employment, and Urban Development)
 Social Sector-II (Health and Nutrition, and Women and Child Development)
 State Finances and Coordination
 Sustainable Development Goals
 Water and Land Resources

GOVERNING COUNCIL OF NITI AAYOG

The Governing Council of NITI Aayog, comprising Chief Ministers of all the States and Union Territories with legislatures and Lt Governors of other Union Territories, came into effect on 16 February 2015 via a notification by the Cabinet Secretariat. The Governing Council was reconstituted vide a notification dated 19 February 2021 by the Cabinet Secretariat.

The Governing Council is the premier body tasked with evolving a shared vision of national priorities and strategies, with the active involvement of States, in shaping the development narrative. The Governing Council, which embodies the objectives of cooperative federalism, presents a platform to discuss inter-sectoral, inter-departmental and federal issues to accelerate the implementation of the national development agenda.

So far, six meetings of the Governing Council have been held under the Chairmanship of the Hon'ble Prime Minister with Chief Ministers/Lt Governors of the States/UTs and other members of the Governing Council.

Sixth Governing Council Meeting



The sixth meeting of the Governing Council of NITI Aayog was held on 20 February 2021 under the Chairmanship of Hon'ble Prime Minister Shri Narendra Modi via video conferencing. It was attended by 26 Chief Ministers, three Lieutenant Governors and two Administrators, apart from Union Ministers who are Ex-Officio Members, and Special Invitees. NITI Aayog's Vice Chairman, Members and CEO; Principal Secretary to the PM and other senior officers from PMO; Cabinet Secretary; and Chief Secretaries of States/Union Territories also attended the meeting. Raksha Mantri Shri Rajnath Singh moderated the meeting.

The Hon'ble Prime Minister highlighted that cooperative federalism is the foundation of India's progress. Cooperative and competitive federalism should be made more effective and taken to the District level. The country has succeeded in managing the challenges posed by the Covid-19 pandemic only because the Centre and the States have worked together in a spirit of partnership.

The Hon'ble Prime Minister emphasized the significance of the Governing Council meeting in providing an opportunity to brainstorm and further strengthen cooperative and competitive federalism.

The sixth meeting was preceded by a detailed interaction with senior State officials on 6 February 2021, the feedback for which was duly incorporated while curating the agenda of the meeting. The agenda comprised the following items:

1. Making India a Manufacturing Powerhouse
2. Reimagining Agriculture
3. Improving Physical Infrastructure
4. Accelerating Human Resource Development
5. Improving Service Delivery at Grassroots Level
6. Improving Health and Nutrition



The Council deliberated on several steps for making India a manufacturing powerhouse, such as reducing compliance burden, initiating reforms at the State level, improving logistics, promoting exports through District-level competition, and creating jobs. States/UTs mentioned efforts made to improve water accessibility, supply of quality and reliable power, internet connectivity and bandwidth availability, quality healthcare services, and sustainable agricultural practices to mitigate the risks of climate change. They also mentioned undertaking suitable reforms to build an advanced manufacturing and innovation ecosystem, thereby bolstering exports through the One District One Product initiative, apart from building on futuristic technology and inclusive governance models. The Chief Ministers also noted marked improvement in the development of physical infrastructure, including digital connectivity, across the North-Eastern region, along with a greater thrust on the Act East Policy, with the aim of providing impetus to the economies of the NE States.

Keeping in mind the aspirations of a young country like India, the Hon'ble Prime Minister stressed on the need to build modern infrastructure. He reiterated that innovation must be encouraged, and more technology should be used to provide better opportunities for education and skill development.

The Governing Council meeting seeks to build on the strength of every State so that everyone can learn from each other's best practices. The Council members deliberated on strengthening institutions for skilling, reskilling, and upskilling of the workforce. Focus was also laid on improving service delivery at the grassroots level, by ensuring digital infrastructure for the rural regions.

The Hon'ble Prime Minister emphasized on policy frameworks and better coordination between the Centre and the States. He welcomed the rich discussion and constructive suggestions by the Council members.

The Governing Council meeting paved the way for synergies across all tiers of the Government, with substantial collaboration and cooperation in the agenda items. The meeting provided an opportunity to address the objectives of advancing economic, social, and demographic welfare.



SECTION-II

**POLICIES AND
PROGRAMMES**

POLICIES AND PROGRAMMES

INTRODUCTION

NITI Aayog plays an integrative role—with the active involvement of States, the civil society, and other think tanks—in the development of a shared vision of national priorities and strategies in critical areas of human and economic development.

One of the main objectives of NITI Aayog is to design strategic and long-term policy and programme frameworks and initiatives and monitor their progress and efficacy. In 2021–22, NITI Aayog took the lead in setting up sectoral targets and fostering an environment of innovation and cooperation by bringing together technology, enterprise, and efficient management at the core of policy formulation and implementation.



Department of Agriculture and Cooperation Ministry of Agriculture and Farmers Welfare Government of India Directorate of Agriculture Govt. of Assam, Charaideo Assam Agricultural University Jorhat, 781 013		SOIL HEALTH CARD Farmer's Details		Krishi Vigyan Kendra, Udalguri																																																																				
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ASPIRATIONAL DISTRICTS PROGRAMME

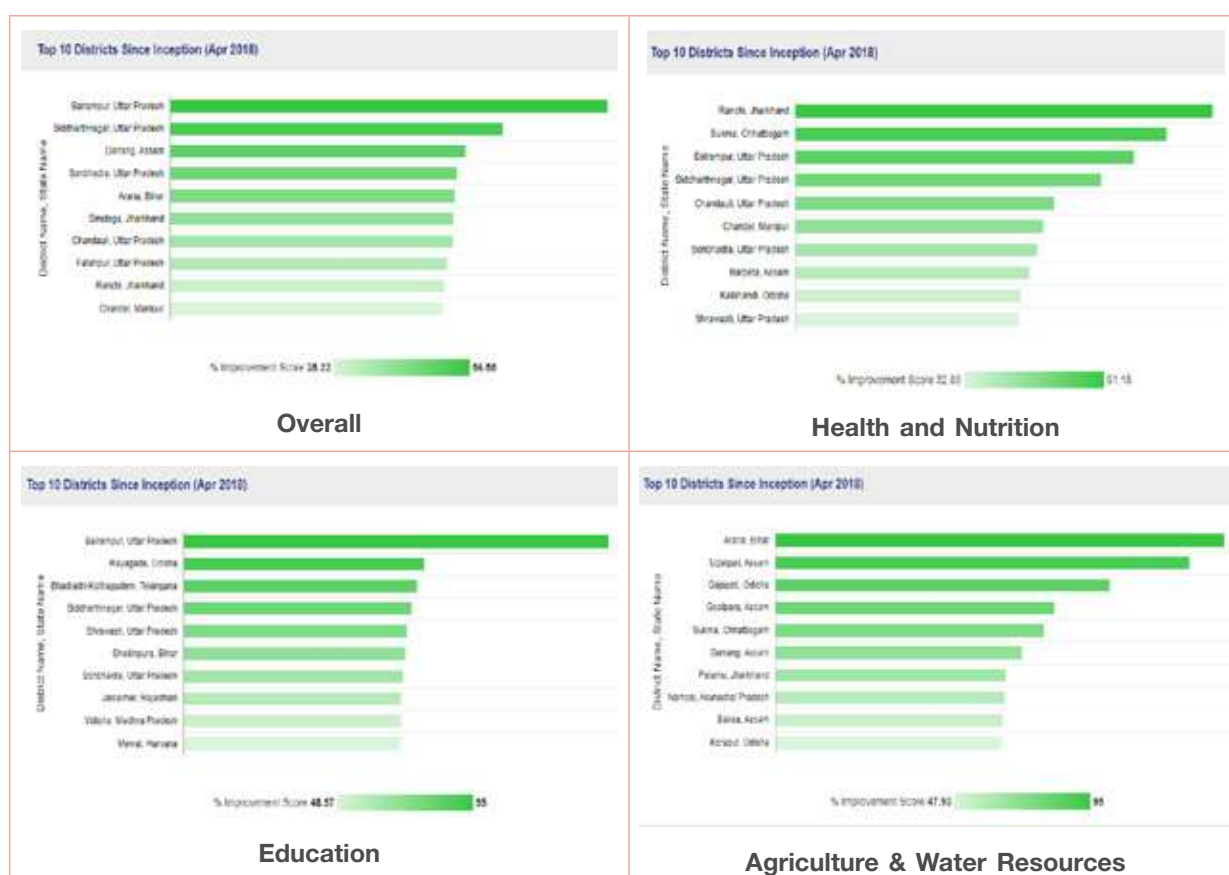
The Aspirational Districts Programme (ADP) completed four years in January 2022—with nearly two of those years in the throes of the Covid-19 pandemic. As such, the ADP has been part of an unprecedented period in the lifetime of the Districts—and what has emerged is promising.

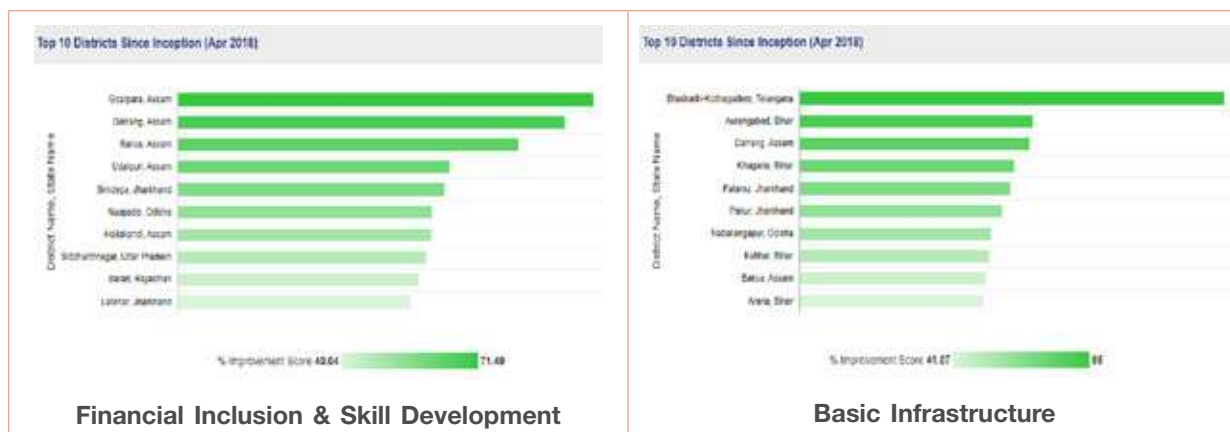
Since its launch, the Programme has been devising strategies to work with the Districts based on its three ‘Cs’ approach: studying ways to enable *convergence* of District, State and Central-level initiatives; facilitating *collaborations* between civil society organizations, communities and District Administrations towards a common goal; and fostering a healthy spirit of *competition* by releasing monthly ranks on the Districts’ performances.

Despite being severely affected by the second wave, the Districts showed remarkable agility in maintaining their focus on the delivery of basic services. The Districts have managed to revive performance on various key indicators under the Programme, despite the arduous task of vaccinating the eligible population, which was an additional responsibility for them this year.

The Champions of Change dashboard—which monitors the performance of all 112 Aspirational Districts on the key performance indicators under the five thematic categories of ‘Health and Nutrition’, ‘Education’, ‘Agriculture and Water Resources’, ‘Skill Development and Financial Inclusion’ and ‘Basic Infrastructure’—in its upgraded version facilitates advanced data analytics and additionally provides monthly performance and data quality reports to the Districts.

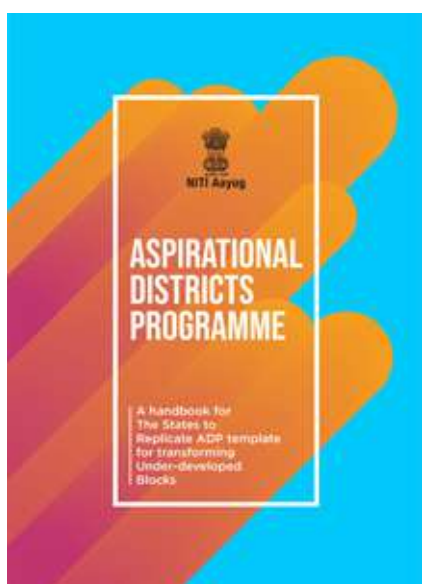
Since the inception of the Programme, all the Aspirational Districts have shown improvement across socio-economic indicators, overall- and sector-wise, as illustrated below.





The ADP has also been striving towards bridging the uneven growth among the Districts. The Programme has consequently emerged as a platform for collaboration with the community, including civil society organizations, NGOs, and development partners, to resolve District-specific issues. Whether it is the improvement of foundational literacy and numeracy or health and nutrition outcomes, the ADP has enabled focused efforts towards long-standing development goals. Identification of a core set of indicators has facilitated the alignment of priorities of the Government as well as non-government organizations. Notably, as a development partner, Piramal Foundation has collaborated to work across all the 112 Aspirational Districts.

This forms part of the future course that the Programme has been charting for itself. Specifically, the Programme has been focusing on outreach activities and the involvement of communities in bringing about transformation in these Districts. This has resulted in the creation of the Aspirational Districts Collaborative by involving hyper-local contributors and community stakeholders to drive social-behaviour change at scale, and to achieve better results in the parameters of ‘Education’ and ‘Health and Nutrition’. The initiative involves association with local institutional players (like local NGOs, colleges, media, women self-help groups, panchayat samitis and faith leaders) to leverage deep community knowledge and facilitate behaviour change at the community level.



To date, 914 NGOs have been onboarded to channelize their efforts towards meeting the emerging needs of the Districts and to ensure that there is no duplication of efforts.

Another direction in which the Programme will continue to focus its efforts is towards guiding all State Governments in replicating the ADP template at the block level. Special focus on development at the block level is crucial for the rapid and sustainable transformation of these Districts—but sustainably. While block-level governance has been a matter of discussion for decades, the Programme’s focus on the same in some of the most backward Districts, along with enabling them to build technological capacity, holds immense potential. NITI Aayog has created a handbook for the transformation of under-developed blocks, which has been shared with the Chief Secretaries of all the States and the District Magistrates/Collectors of all the Aspirational Districts.




“Our vision to improve the quality of life of citizens in the most backward Districts of the country through the Aspirational Districts Programme has been translated into reality in a short span of time. As much as 95% of those 112 Districts have made significant progress in key sectors such as health, nutrition, financial inclusion and basic infrastructure. They have surpassed the State average values. However, in those Districts, some blocks continue to lag. In 2022-23, the programme will focus on such blocks in those Districts.”

NIRMALA SITHARAMAN
Finance Minister

#AatmanirbharBharatKaBudget

In September 2020, the Programme was independently appraised by the United Nations Development Programme (UNDP), which released its report on the ADP in June 2021. The appraisal was largely positive and reaffirmed several key strategies deployed. The UNDP said that the Programme was ‘proving to be a successful model for stimulating local development’ and recommended replication across the globe to attain Sustainable Development Goals equitably at the grassroots level. The report’s evaluation further concluded that the Aspirational Districts, on average, have been on an upward trajectory since the inception of the Programme and have even outperformed other Districts. Capacity-Building at the grassroots level and improvement in the quality of data were highlighted as areas that require further work. Consequently, NITI Aayog is devising strategies to tackle these in the next phase of the Programme.

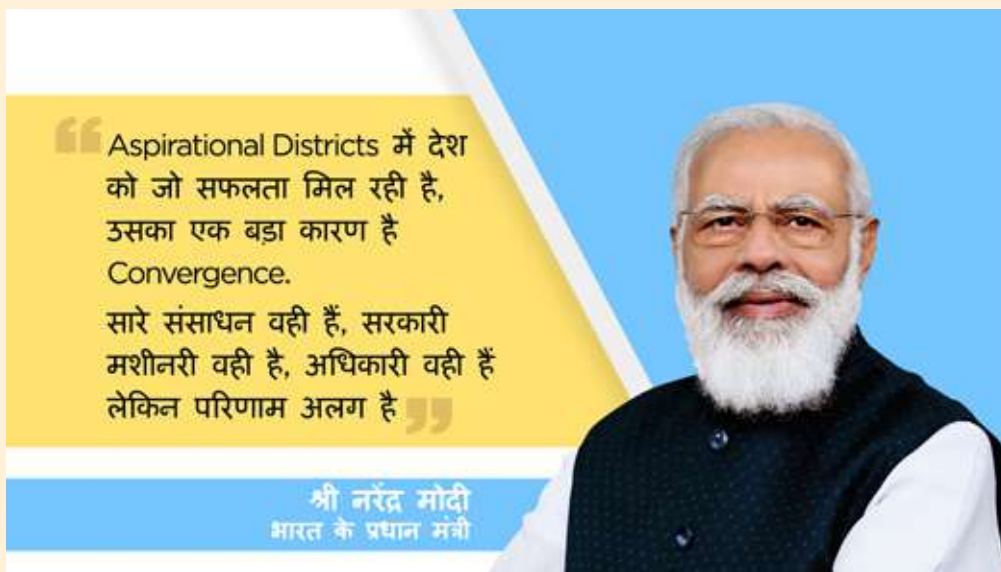


On 22 January 2022, the Hon'ble Prime Minister in an interaction with the DMs/DCs of various Districts, including Aspirational Districts, lauded the Programme for ensuring holistic development.

The Hon'ble Prime Minister said Aspirational Districts are eliminating the barriers to progress of the country. They are becoming an accelerator instead of an obstacle.

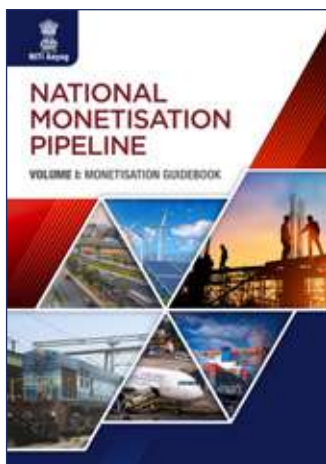
The Hon'ble Prime Minister noted that convergence is a major reason for the country's success in the Aspirational Districts. All the resources are the same, the government machinery is the same, the officials are the same, but the results are different.

He noted that during the last four years, a new energy has been infused in people's lives. He added that the Aspirational Districts have more hard-working and courageous people, who are capable of taking risks, and this strength should be recognized and replicated.



ASSET MONETISATION

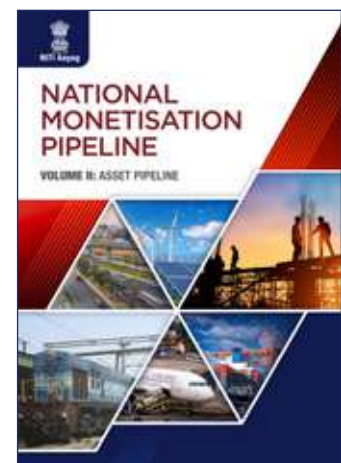
National Monetisation Pipeline



Pursuant to the announcement made in the Union Budget, 2021–22, NITI Aayog prepared the National Monetisation Pipeline (NMP) in consultation with the infrastructure Line Ministries and based on an assessment of the available asset base.

The NMP is a pioneering initiative to establish a medium-term pipeline, along with a roadmap for monetisation-ready assets listed under various Ministries that will be monetized over a four-year period, from FY 2022–25.

The Central Government. It will unlock value from brownfield infrastructure assets and serve as a medium-term roadmap for identifying potential



monetisation-ready projects across various infrastructure sectors, including roads, railways, aviation, power, oil and gas, and warehousing.

The NMP report is organized into two volumes. Volume I is structured as a guidebook, detailing the conceptual approaches and potential models for asset monetisation. Volume II is the actual roadmap for monetisation, including the pipeline of core infrastructure assets under the Central Government.

Asset monetisation is not just a funding mechanism but a paradigm shift in infrastructure operations, augmentation and maintenance by tapping into the private sector's resource efficiencies and ability to dynamically adapt to the evolving global and economic realities. New models, such as Infrastructure Investment Trusts (InvITs) and Real Estate Investment Trusts (REITs), will also enable the public to participate in this asset class, thereby opening new avenues for investment.



National Workshop on Asset Monetisation with States/UTs

NITI Aayog is handholding the States/UTs in undertaking asset monetisation through innovative structures such as InvITs/REITs/securitization for various sectors and the appointment of transaction advisers.

A national workshop on asset monetisation with States/UTs was conducted in 2021, which was chaired by the Hon'ble Finance Minister and attended by the Chief Secretaries and officials of various States.

The workshop emphasized the need for collaborative participation by both the Centre and the States to evolve a shared vision of infrastructure development and to actively monitor and evaluate the implementation of the Asset Monetisation Programme. Towards this end, the creation of core groups and the appointment of nodal officers for the collection and collation of information on various assets to support the transaction advisers/consultants in undertaking feasibility studies and transactions were found to be imperative. Subsequently, nodal officers for 26 States/UTs were appointed; and a few States have also provided a preliminary asset list.

NITI Aayog has also organized multiple webinars with the State infrastructure departments for guidance on asset identification and pipeline finalization. So far, webinars have been conducted for Punjab and Goa; more are in the pipeline for other States/UTs.

Notable Transactions in FY21-22

Monetisation of identified assets under the NMP will be undertaken through two categories of models: (i) brownfield public-private-partnership concessions (such as operate, manage and develop, toll-operate-transfer (TOT), and others) and (ii) capital market vehicles, (such as InvITs, REITs, etc.). Many Line Ministries have already begun work on the roll-out of the initially identified assets.

Among the assets identified for FY22, India's central transmission utility Powergrid launched its first public sector InvIT. The National Highways Authority of India (NHAI) has recently placed its InvIT for toll roads and bidding for three TOT bundles is underway. Transactions in other sectors, such as natural gas, railways, ports, airports, are in advanced stages of approval or bidding.

The successful implementation of the NMP hinges on an effective governance framework, with an escalation matrix for real-time monitoring of progress. A multi-layer institutional mechanism, including a dashboard, is envisaged for the overall implementation and monitoring of the Programme. With the release of the NMP, Ministry-wise targets have been assigned and their identified assets and corresponding transactions for FY22 mapped.

A core group of secretaries on asset monetisation (CGAM), under the Chairmanship of the Cabinet Secretary, was constituted with the approval of the Cabinet as part of the institutional mechanism. During the year, three review meetings by the CGAM for core assets were held to monitor the progress of transactions and resolve structural issues, if any. NITI's PPP Vertical prepares the agenda, action-taken report, and the presentation for these meetings as well as identifies and flags delays and issues for deliberation.

HEALTH AND NUTRITION

Catalysing and Reforming Senior Care in India

India currently enjoys a young demographic. However, by 2050, the ageing population (60+ years) will be 19% of the total population, or 330 million individuals.

Currently, the National Programme for Health Care of the Elderly (NPHCE) and National Action Plan for Senior Citizens (NAPSrC) have laid down the policy, governance framework and working guidelines for elderly healthcare, along with enhancement of the existing infrastructure.

As this market is poised for growth, a regulatory framework is essential, which includes accreditation standards, licensing requirements, policy support to providers, and clinical guidelines. Further, given that current efforts towards meeting this goal are being piloted by different Ministries, NITI Aayog held stakeholder consultations and identified key areas for catalysing these reforms.

R&D and Innovation for Pharma and Med-Tech

A high-level committee—comprising senior representatives of NITI Aayog and other Central Ministries, along with industry captains—was constituted in May 2020 to finalize a policy on research and development (R&D) and innovation in the pharmaceuticals and medical devices sectors. NITI Aayog contributed to the formulation of the sections on 'industry-academia linkage', 'regulatory enablement', and 'governance and infrastructure' in the draft policy report. The Department of Pharmaceuticals will take the recommendations forward.

Integrative Medicine

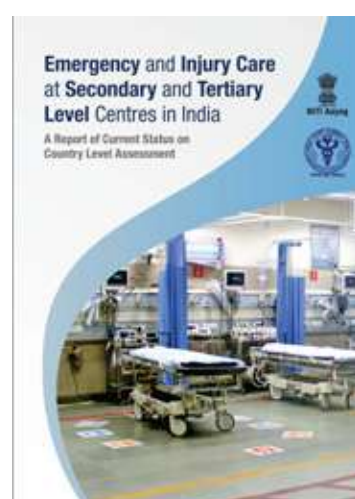
NITI Aayog was mandated to prepare a policy paper on integrative medicine. Consequently, a committee was constituted for developing an integrative health policy paper. So far, seven meetings have been held. The committee constituted four working groups, with more than 50 experts across

the country, to provide deeper insights and recommendations in the areas of education, research, clinical practice and public health and administration. All four groups have submitted their reports. The task of synthesizing the recommendations of the reports and finalizing the draft is in progress.

White Paper on Promoting Domestic Manufacture of Medical Devices

The paper analyses various scenarios for the manufacturing of different medical technologies and makes recommendations to augment and strengthen production in each scenario.

The paper recommends comprehensive regulatory overhauls, review of the existing taxation structure, a calibrated customs duty, extended coverage of the Production-Linked Incentive scheme, strengthening the research and innovation ecosystem as some of the measures that can potentially favour the promotion of domestic manufacturing of medical devices. The report is nearly finalized and will soon be released.



Emergency and Injury Care at Secondary- and Tertiary-Level Centres and District Hospitals

NITI Aayog carried out a study on the status of emergency and injury care in the country, in collaboration with the Department of Emergency Medicine, JPNATC, AIIMS, New Delhi. The consequent report assesses the prevailing status of 100 emergency and injury care centres in Government and private hospitals in 28 States and two Union Territories, in addition to 34 District hospitals. The report highlights the spectrum and load of emergency cases and exposes the prevailing gaps in ambulance services, health infrastructure, human resources and equipment in the provision of optimal care. The outcomes of this study will

provide policy inputs to improve and strengthen emergency care services at all tiers of healthcare facilities in India.

Study on Not-For-Profit Hospital Model in India

A comprehensive study was undertaken on the not-for-profit hospital model in the country in a step towards closing the information gap on such institutions and facilitating robust policymaking in this area. The study provides insights into the operation model of not-for-profit hospitals. It presents research-based findings on this sector, which provides not only curative but also preventive healthcare. This sector links healthcare with social reform, community engagement, and education. It uses government resources and grants to provide cost-effective healthcare to people without being concerned about profits. The findings were compiled and published in a report in June 2021.



Investment Opportunities in India's Healthcare Sector

A study was conducted to map the investment opportunities in the healthcare sector. India has the opportunity to boost its domestic manufacturing of pharmaceuticals, supported by the recent PLI schemes, apart from offering investment avenues in segments like contract manufacturing and research, over-the-counter drugs and vaccines, among others. Artificial intelligence, wearables and other mobile technologies, along with the Internet of Things, also offer numerous avenues for investment.

The report, 'Investment Opportunities in India's Healthcare Sector', outlines the range of such opportunities in the various segments of India's healthcare sector, including hospitals, medical devices and equipment, health insurance, telemedicine, home healthcare, and medical value travel.



INDUSTRY REFORMS

Foreign Trade Policy

The Foreign Trade Policy (FTP) of India provides the basic framework for promoting India's exports and trade. India's new Foreign Trade Policy (FTP) is being prepared against the backdrop of Covid-19, whose impact will be felt even after the pandemic has receded.

The previous Foreign Trade Policy (2015–20), despite containing many important provisions and simplifying many procedures, such as the MEIS (Merchandise Exports from India) and SEIS (Service Exports from India), came into effect during a general slowdown of trade across the world. India's merchandise exports dipped from USD 336.61 billion in 2013 to USD 260.33 billion in 2016. In the first two years of the FTP 2015–20, India's merchandise exports were USD 264.38 billion and USD 260.33 billion, respectively. Since 2017, merchandise exports rose and reached USD 300 billion during April–December 2021, indicating a growth of 48.8% over the corresponding period of the previous year.

The Industry-I Vertical provided a set of recommendations for the new FTP. The suggestions include the promotion of hi-tech exports as a focus area, development of sector-specific action plans for major exports, evaluation of the EXIM policy by the Department of Commerce to make it more transparent with minimal restrictions to ensure the Indian industry has access to raw materials and intermediates not available in the country, and help attract investments from firms aiming to diversify their supply chains.

Task Force on Enforcement of Contract

Economies where courts effectively enforce contractual obligations and speedily resolve commercial disputes have more developed financial/credit markets and showcase a higher level of overall development. As per the Doing Business Report 2020, India ranked 163 out of 190 economies assessed on the Enforcing Contract indicator. On a scale of 100, India scored 41.2, while Mexico scored 67, and China scored 80.9.

To improve India's performance, the Government introduced the Commercial Courts Act 2015. However, there is still work required on the ground and gaps in implementation must be filled.

A task force under the Chairmanship of Vice Chairman, NITI Aayog, has been constituted to review the implementation of the Act and suggest remedial measures, etc. The task force is cross-functional, comprising key Ministries and selected States. So far, it has deliberated on a range of issues.

Production-Linked Incentive Scheme

To provide an impetus to manufacturing in India and boost exports from the country, the Industry-Vertical, in consultation with the concerned Ministries and Departments, anchored the introduction of a Production-Linked Incentive (PLI) scheme in ten key sectors (in addition to the three sectors approved earlier) for five years. The schemes were approved by the Union Cabinet on 11 November 2020.

The PLI scheme is designed to incentivize incremental production for a limited number of eligible anchor entities in the selected sectors. These entities are required to invest in technology, plant and machinery, as well as R&D. The scheme will also have beneficial spillover effects by creating a wide supplier base for the anchor units established under the scheme. Together with the anchor units, the supplier units will help to generate a significant number of primary and secondary employment opportunities. The key feature of the PLI scheme is that it can be implemented in a targeted manner to attract investments and strategically enter certain segments of the global value chain.

The Hon'ble Finance Minister, in her speech on Union Budget 2022-23, said the PLI scheme has received an excellent response. It has the potential to create 60 lakh new jobs and an additional production of Rs 30 lakh crore in the next five years.

The list of sectors, implementing Ministry/Department, and sector-wise approved outlays is provided below:

Sr. No.	Ministry/ Department	PLI Scheme for	Outlay (in crores)	Products
1	Department of Pharmaceuticals	Key Starting Materials (KSMs), Drug Intermediates (DIs) and Active Pharmaceutical Ingredients (APIs)	6,940	41 Products (KSM), (DI) & (APIs)
2		Pharmaceuticals	15,000	High-Value Pharmaceutical Products
3		Medical Devices	3,420	Medical Devices across 4 Target Segments
4	Ministry of Electronics and Information Technology	IT Hardware	40,951	Laptops, Tablets, All-in-one PCs, Servers
5		Large Scale Electronics Manufacturing	5,000	Mobile Phones and Specified electronics components (IT Hardware)
6	Department of Telecommunications	Telecom and Networking Products	12,195	Core Transmission Equipment, 4G/5G, Enterprise Equipment, Routers
7	Ministry of Food Processing Industries	Food processing Industry	10,900	Ready to Cook/Eat; Fruits and Vegetables, Marine Products, Mozzarella Cheese
8	Department of Promotion of Industry and Internal Trade	White Goods	6,238	ACs and LEDs

Sr. No.	Ministry/ Department	PLI Scheme for	Outlay (in crores)	Products
9	Ministry of New and Renewable Energy	High-Efficiency Solar PV Modules	4,500	Solar PV Modules
10	Department of Heavy Industries	Automobiles, and Automobile Components	57,042	Electric Vehicles and Components
11		ACC Battery	18,100	ACC Batteries
12	Ministry of Civil Aviation	Drones and Drone Equipment	120	Drones and Drone Equipment
13	Ministry of Steel	Speciality Steels	6,322	Speciality Steels
14	Ministry of Textiles	Textiles and Apparel	10,683	MMF Textiles and Apparel

All the schemes are currently under implementation. NITI Aayog is also developing a PLI dashboard to monitor all PLI schemes.

WOMEN AND CHILD DEVELOPMENT

Poshan Abhiyaan

The fourth Poshan Abhiyaan progress monitoring report, 'Preserving Progress on Nutrition in India in Pandemic Times', was submitted to the Prime Minister's Office (PMO) in August 2021. The report examines the progress in rolling out all Poshan Abhiyaan interventions. It highlights the importance of the nutrition agenda against the backdrop of the Covid-19 pandemic and recommends actions to accelerate progress towards achieving India's nutrition-related goals.



Pradhan Mantri Matru Vandana Yojana

A comprehensive monitoring report on the Pradhan Mantri Matru Vandana Yojana, highlighting the achievements and limitations of the scheme, was prepared and submitted to the PMO in May 2021. Since the launch of the scheme, NITI Aayog has been monitoring it every quarter and has submitted ten quarterly reports and a final comprehensive report to the PMO.

Rice Fortification

A meeting was held under the Chairmanship of Hon'ble Minister, Consumer Affairs and Public Distribution, with Member (Health) and CEO, NITI Aayog, along with other stakeholders, on rice fortification. CEO, NITI Aayog, spoke on the importance of rice fortification in comparison to other available options such as bio-fortification and unpolished rice. Subsequently, on 15 August 2021, the Hon'ble Prime Minister announced the universalization of rice fortification in social safety net schemes by 2023. NITI Aayog has been tasked to conduct an audit study on the preparedness of the ecosystem of rice fortification. The study is being done by the Development Monitoring and Evaluation Office in collaboration with NITI's Women and Child Development Vertical.

URBAN DEVELOPMENT

Reforms in Urban Planning Capacity

India is home to 11% of the total global urban population. By 2027, India will surpass China as the most populous country in the world. Unplanned urbanization, however, exerts great strain on our cities. The Covid-19 pandemic has revealed the dire need for the planning and management of our cities.

In the coming years, urban India will power the growth of our economy. Urban challenges, including town planning, need greater policy attention in our country.

Urban planning is the foundation for the integrated development of cities, citizens, and the environment. Unfortunately, it has not received its due attention so far. The existing urban planning and governance framework is complex, which often leads to ambiguity and a lack of accountability.

There is a compelling need to plug the gaps in urban planning capacity in the country, else a huge opportunity for rapid, sustainable and equitable growth would be at risk of being missed.



Launch of 'Reforms in Urban Planning Capacity in India' report

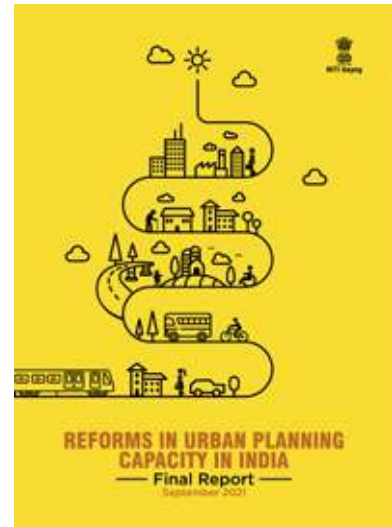
Considering the projected trend of urbanization, the multiple challenges being faced in the cities, and India's commitments to the global agenda, NITI Aayog constituted an advisory committee on 'Reforms in Urban Planning Capacity in India' in October 2020.

Over nine months, extensive consultations were held and the final report of the committee was released on 16 September 2021.

The report comprises recommendations on various aspects of urban planning education, demand-supply of human resources, and governance. Key interventions include:

- A Central Sector Scheme, '500 Healthy Cities Programme', for five years, wherein priority cities and towns would be selected jointly by the States and local bodies.
- Development control regulations should be strengthened based on scientific evidence to maximize the efficiency of urban land (or planning area). The report recommends a sub-scheme, 'Preparation/Revision of Development Control Regulations', for this purpose.

- Vacant positions of town planners must be filled; additionally, about 8000 town planners' posts as lateral entry positions should be sanctioned for a minimum period of three years and a maximum of five years.
- Requisite amendments in town planners' recruitment rules must be made to ensure the entry of qualified candidates.
- The role of the private sector must be strengthened to improve the overall planning capacity in the country. This should include the adoption of fair processes for procuring technical consultancy services, strengthening project structuring and management skills in the public sector, and the empanelment of private sector consultancies.
- Constitution of a high-powered committee for re-engineering the urban-planning governance structure.
- Strengthening of existing Centres of Excellence established by MoHUA to regularly build the skills and expertise of urban functionaries. Identify and strengthen some the Central/State-level training institutions as lighthouses.
- Constitution of a National Council of Town and Country Planners as the statutory body of the Government of India.
- Establishing a National Digital Platform of Town and Country Planners to enable self-registration of all planners and to evolve the same as a marketplace for potential employers and urban planners.



To ensure further outreach, Dr K Rajeswara Rao, Special Secretary, NITI Aayog, extensively engaged with the public sector, professional planners in the private sector, researchers and academia at 'Plan OK Please', an international event organized by GIZ-India and CEPT Research and Development Foundation (CRDF) on 29 September 2021. This was followed by two roadshows, one at SPA New Delhi on 11 October 2021 and another at ITPI on 19 October 2021. All three events received a tremendous response, with the participation of over 1000 stakeholders. The recommendations in the report and their short-term as well as long-term impacts were discussed with the functionaries.

NITI Aayog will be soon organizing regional workshops in collaboration with MoHUA, MoPR, and MoE to further discuss the suggested reforms and enable a dialogue on planning for productive urbanization.



Colloquium to discuss the report at SPA New Delhi

AZADI KA AMRIT MAHOTSAV

To commemorate 75 years of progressive India, the Government is celebrating the Azadi ka Amrit Mahotsav from 12 March 2021 to 15 August 2023.

The Mahotsav is dedicated to the people of India who have not only been instrumental in bringing the country thus far in its evolutionary journey, but also hold within them the power and potential to enable the Hon'ble Prime Minister's vision of activating India 2.0, fuelled by the spirit of Atmanirbhar Bharat.

NITI Aayog is organizing a series of events from November 2021 to April 2022 on the occasion of the Mahotsav under five major themes—Aspirational Districts Programme, Atal Innovation Mission, Women Entrepreneurship Platform, Innovative Agriculture, and E-Mobility. The final events are scheduled to be held from 25–29 April 2022.

In November 2021, a national workshop on natural farming was organized by the Agriculture Vertical, NITI Aayog.

In December 2021, Atal Innovation Mission held a series of events—such as water innovation challenges, initiating a Vernacular Innovation Programme and innovations for the differently-abled—to commemorate the joy and spirit of innovation.



SECTION-III



MONITORING AND EVALUATION

MONITORING AND EVALUATION

INTRODUCTION

Evidence-based policymaking is integral to the overall governance structure of New India. To achieve this, it is important to be able to track performance, determine outcomes to understand how well a scheme is performing, help diagnose reasons for poor performance, and generate recommendations for course corrections. This requires not only the collection of data but also putting in place proper frameworks with measurable parameters to strengthen the effective management of limited public resources and achieve a deeper and broader impact of schemes.

The Development Monitoring and Evaluation Office (DMEO), an attached unit of NITI, is driving accountability in governance through proper monitoring and evaluation, along with the other Verticals.

Apart from this, NITI Aayog has also developed several indices and dashboards by focusing on effective management and better outcomes backed by data analysis.



DEVELOPMENT MONITORING AND EVALUATION OFFICE

DMEO is the apex monitoring and evaluation (M&E) office of the Government of India. Its ambit of work also includes technical advice to the States, under NITI Aayog's mandate of cooperative and competitive federalism.

DMEO's role is to: (i) monitor the progress and efficacy of strategic and long-term policy and programme frameworks as well as initiatives to facilitate their improvements, including necessary mid-course corrections; and (ii) actively monitor and evaluate the implementation of programmes and initiatives to strengthen the probability of success and scope of delivery.

DMEO's major projects in 2021–22 included:

1. Output-Outcome Monitoring Framework
2. Data Governance Quality Index
3. Global Indices for Reforms and Growth
4. Infrastructure Sector Review
5. Institutionalizing and Promoting Evaluations
6. Engagement with States (*Section IV: Cooperative Federalism*)
7. Partnerships with Academic Institutions
8. Capacity-Building
9. Other Activities for Institutional Strengthening

Output-Outcome Monitoring Framework

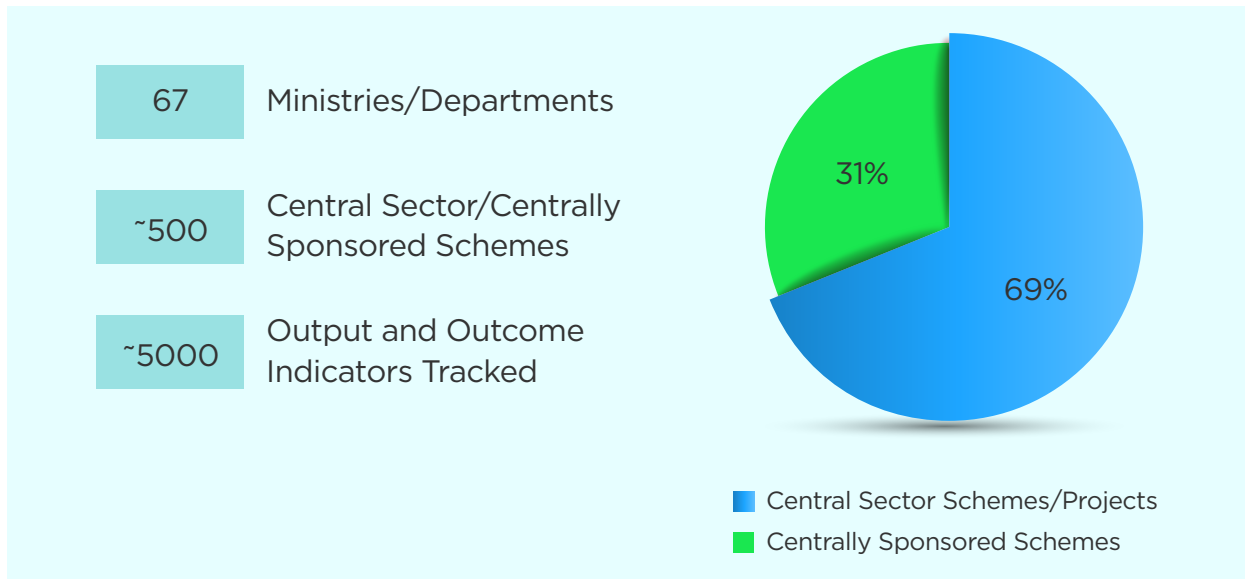
Since 2018, DMEO has been undertaking a rigorous process to compile the Output-Outcome Monitoring Framework (OOMF). The framework has nearly 5,000 output and outcome indicators for around 500 Central Sector (CS) and Centrally Sponsored Schemes (CSSs), which form the primary mode of Government service delivery to beneficiaries.

The CS and CSSs in the OOMF exercise together cover Rs 12 lakh crore of the total Union Budget of over Rs 34 lakh crore in 2021–22. By juxtaposing this financial outlay with quantitative measurements of scheme performance, more judicious use of and greater accountability to public expenditure are intended.

DMEO has worked closely with 67 Ministries and Departments in setting quantitative targets for measurable output and outcome indicators, tracked quarterly progress with the help of dashboards, collected scheme performance data for FY20, FY21 and FY22, and facilitated review meetings.

Outcome-Based Reviews of Schemes

In 2020–21, thirty-eight review meetings with Ministries/Departments were completed. To review the progress on OOMF for 2021–22, 54 meetings were proposed, of which 43 have been completed (as of 20 January, 2022).



Coverage under OOMF 2021-22

Revised Template for Expenditure Finance Committee (EFC)/Standing Finance Committee (SFC)

A committee was constituted by the Secretary, Department of Expenditure (DoE), to undertake a detailed review of various sections of the EFC/SFC template to improve its accuracy and relevance and enhance the coherence of information.

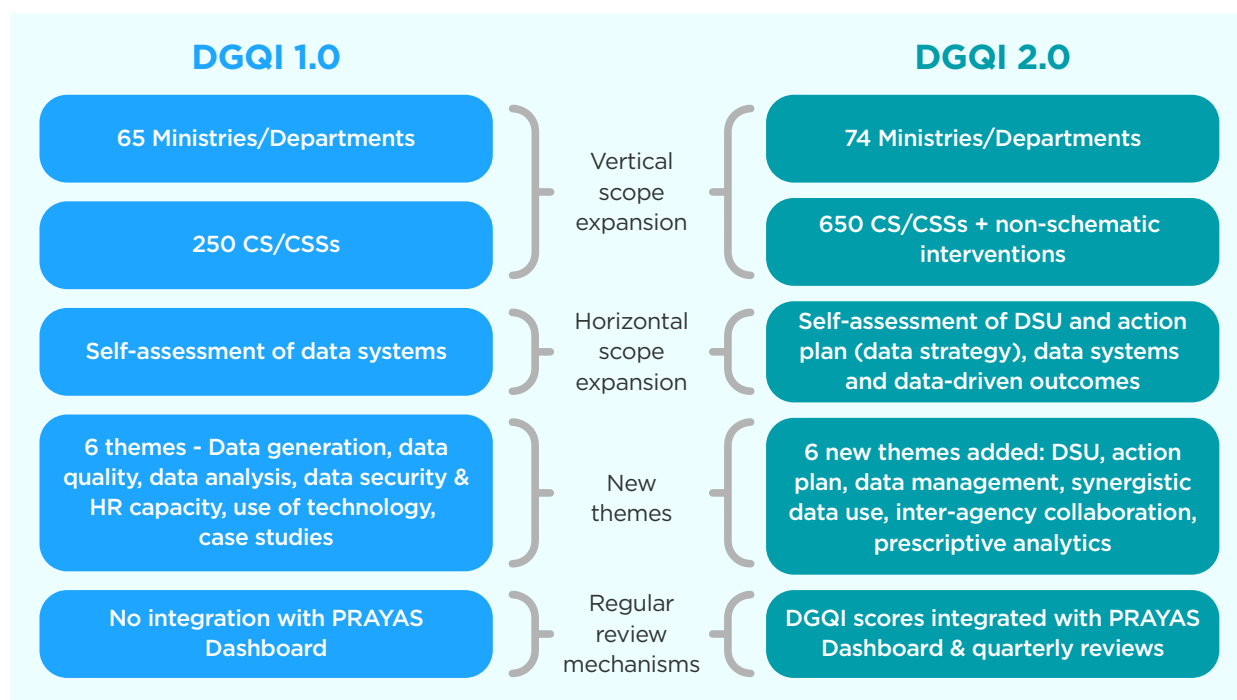
The committee was chaired by Deputy Director-General, DMEO, and included members from DMEO, DoE and the Project Appraisal and Management Division of NITI Aayog. Several recommendations were made by the committee, most notably, the inclusion of the logical framework approach, which is a globally accepted best practice for outlining elements about a scheme's design as well as its monitoring and evaluation. The recommendations of the committee were accepted by Secretary, DoE, and the revised EFC/SFC template came into effect on 1 September 2021.

Data Governance Quality Index

The Data Governance Quality Index (DGQI) exercise was initiated in May 2020 to assess the data preparedness of Ministries and Departments using a standardized framework. DGQI 1.0—undertaken between May 2020 and February 2021—focused on assessing the data systems for nearly 250 CS/CSSs across sixty-five Ministries and Departments. On the basis of this assessment, areas for improvement were highlighted. Ministries and Departments were advised to prepare an action plan for attaining the frontier DGQI score, along with establishing a data and strategy unit (DSU) to steer the formulation and implementation of this plan.

Subsequently, DGQI became a regular exercise for measuring data preparedness levels as well as identifying and implementing the necessary reform actions to improve performance across Ministries and Departments by December 2022. The DGQI 2.0 exercise includes most CS/CSSs as well as the non-schematic interventions of Ministries/Departments.

Through webinars, one-on-one meetings and training of resources, DMEO has provided regular hand-holding to Ministries and Departments to help them achieve the frontier DGQI scores. A detailed Terms of Reference (ToR) for setting up the DSU, along with an indicative outline of the Ministry/Department level action plan, have also been shared.



Enhanced scope of DGQI 2.0 exercise compared to DGQI 1.0

Sector Reviews

Since 2017, DMEO under its 'sector reviews' initiative has been facilitating regular monitoring and review of key infrastructure and social sectors. These reviews, held in coordination with the concerned Ministries/Departments, have played a crucial role in broadening the policy dialogue, developing tailored policies, facilitating critical reforms, and resolving inter-ministerial issues.

As part of the reviews, key performance metrics have been defined for every sector, and annual targets agreed upon in consultation with the respective Ministries/Departments. The progress on these metrics is tracked through a web-based interactive sector review dashboard maintained by DMEO. In June–July 2021, power and energy, transport and telecom sectors were reviewed by the Hon'ble Prime Minister. Sector performance notes for 2021–22 have also been prepared and shared with the PMO, Cabinet Secretariat, Department of Expenditure and Department of Economic Affairs.

Institutionalizing and Promoting Evaluations

Constitution of Development Evaluation Advisory Committee

The Development Evaluation Advisory Committee (DEAC) was reconstituted under the Chairmanship of Vice Chairman, NITI Aayog, on 30 June 2021. The members of the committee include CEO, NITI Aayog; Secretaries, Finance, Expenditure, and Rural Development; Director, National Institute of Public Finance and Policy; DG, DMEO; and two experts.

The DEAC will provide leadership for institutionalizing the evaluation of Government schemes; promoting the evaluation culture and ecosystem; steering evaluation studies for course corrections and scheme rationalization; and guiding the creation of capacity in States for evaluation. In a meeting held on 28 July 2021, the DEAC approved a three-year evaluation plan covering all CS schemes between 2021–24 (Table 1), followed by the evaluation of all CSSs between 2024–26.

Table 1: Evaluation plan of DMEO (2021-26)

Year	Policies/Schemes under Central Sector
Year 1: 2021–22	<ul style="list-style-type: none"> a. All subsidies b. Specific schemes requested by DoE c. BIS, Scheme for enhancement of competitiveness in Indian capital goods sector, health and wellness centres d. Social infrastructure (education, health, culture, water, and sanitation)
Year 2: 2022–23	<ul style="list-style-type: none"> a. Connectivity b. Energy c. Urban and rural development d. Communication and digital infrastructure e. Security (those that are not sensitive, and subject to internal clearances)
Year 3: 2023–24	<ul style="list-style-type: none"> a. Rest of Livelihood b. Social Justice c. Knowledge and technology d. Sustainable Development e. Regional Balance f. Economic Growth g. External Interface h. Governance i. Financial Inclusion

Evaluation of Flagship Schemes

DMEO is undertaking evaluations of various subsidy programmes of the Government related to fertilizers, petroleum, agricultural credit as well as the National Food Security Act. These evaluations assume particular importance as subsidy programmes account for a large share of the Government's budgetary allocation. Further, survey-based evaluations of Central Sector Schemes in the areas of education, health, culture, and sports are also being undertaken.

Evaluations Requested by Department of Expenditure

Based on a request from DoE for conducting evaluations/thorough assessments of thirty-one schemes, DMEO undertook a desk-level analysis to determine the nature of evaluation (desk-based, mailed questionnaires, tender floated among empanelled institutions or sample surveys conducted by agencies sourced through an open tender route) best suited for each of them.

DMEO has organized extensive consultative meetings with the respective Ministries, NITI Verticals and the internal technical methodology committee to formulate the ToR for these evaluations/assessments. Expressions of Interest for seeking proposals from empanelled institutions as per the M&E guidelines have also been floated for select DoE schemes. ToRs for eight DoE schemes have been shared with the interested institutions. The survey firms have to submit the report by January 2022.

Third-Party Evaluation of Umbrella Centrally Sponsored Schemes

To consider the continuation of Umbrella Centrally Sponsored Schemes (UCSSs) in the 15th Finance Commission cycle, DMEO undertook evaluations of 125 schemes under twenty-eight UCSSs. These

were done through a sectoral approach: i) agriculture, animal husbandry and fisheries; ii) women and child development; iii) human resource development; iv) urban transformation; v) rural development; vi) drinking water and sanitation; vii) health; viii) jobs and skills; ix) water resources, environment and forest; and x) social inclusion, law and order, and justice delivery.

Consulting firms were engaged through an open tender process. The schemes were assessed based on the internationally recognized REESI framework (relevance, efficiency, effectiveness, sustainability and impact). The framework was contextualized to include equity (REESI+E) in line with our national priorities. The evaluation reports have been shared with DoE and the respective Line Ministries/ Departments for consideration. Compendia of best practices emerging from these studies have also been shared with the Chief Secretaries of the States.

Partnerships with Academic Institutions

DMEO has signed Statements of Intent with various academic institutions including the Institute for Competitiveness, Evaluation Community of India (ECOI), Bill and Melinda Gates Foundation (BMGF), Asia-Pacific Evaluation Association, Atal Bihari Vajpayee Institute of Good Governance and Policy Analysis, Grassroots Research and Advocacy Movement (GRAAM), Tata Institute of Social Sciences, and the National Council of Applied Economic Research. Each of these partnerships has specific focus areas, such as building practical M&E resources; developing and augmenting the M&E curriculum; organizing joint courses, workshops, forums, and seminars; conducting evaluation studies; and assisting the management of outsourced evaluations.

Capacity-Building

M&E Competency Framework and Curriculum

DMEO has drafted a dedicated M&E curriculum and competency framework for Government officers in consultation with key knowledge partners, such as the World Food Programme (WFP), Abdul Latif Jameel Poverty Action Lab (J-PAL), United Nations Children's Fund (UNICEF), Sambodhi, Evaluation Community of India (ECOI), and the Indian School of Business (Mohali). Upon finalization, the curriculum and competency framework will be institutionalized through courses at the Central and State Administrative Training Institutes (CTIs/ATIs), online and classroom learning sessions, as well as Massive Open Online Courses (MOOCs) through the iGOT-Mission Karmayogi platform.

National Conference on Monitoring, Evaluation and Learning

From 18–19 March 2021, DMEO, in collaboration with several partner agencies, organized a national M&E conference. The theme of the conference was 'Institutionalizing M&E Practices for Sustainable Impact'. The conference was attended by 1028 evaluators, policymakers, and representatives of international organizations, academic/research institutions, think tanks, and NGOs from over 47 countries.

DMEO Conversation Series

In 2020, DMEO launched a conversation series aimed at bringing together leading M&E practitioners from the development sector to discuss theory and emerging practices in the field. Till August 2021, four sessions were organized as part of the conversation series. The fourth session focused on 'Designing Governments' Evaluation Strategies: Key Considerations'. It was conducted by J-PAL and responded to the emergent need for evidence-based policymaking to improve the effectiveness of Government programmes.

Webinars and Training Sessions with External Experts and Partners

In June 2021, DMEO participated in the second edition of the gLOCAL International Evaluation Week, through three webinars, organized by the CLEAR initiative and supported by the World Bank. Each of the three webinars was attended by more than 200 evaluation practitioners and researchers from across the globe. Brown bag sessions were organized with external experts from organizations such as J-PAL, 3ie and Institute for Competitiveness to build capacity within DMEO and NITI Aayog around key M&E concepts.

M&E Knowledge Resources

DMEO has been building a repository of key resources, both in-house and external, for supporting M&E practitioners. Various guidelines and toolkits have been developed and made available on the DMEO website for practitioners, Government officials, and other stakeholders to access tools and knowledge in the M&E domain.

In March 2021, DMEO released a toolkit on DGQI to enable Government agencies, at the Central and State levels, to undertake a detailed self-assessment of the data preparedness levels of their programmatic interventions and accord objective scores to them. Further, a procurement toolkit, for assisting Government agencies in engaging technical consultants for M&E, has been developed and shared on the DMEO website. The toolkit, which is updated regularly, also provides insights for private sector organizations to better understand the decision-making process about procurement.

Other Activities for Institutional Strengthening

Research and Analysis Work

In 2021, DMEO launched its 'Research and Analysis Work (RAW)' initiative. Through this initiative, DMEO endeavours to foster a strong research environment by encouraging its staff to pursue research ideas. Till October 2021, 51 DMEO staff members had developed and presented their RAW proposals. Fifteen such seminars had been organized on various social and economic policy issues by internal and external experts till October 2021.

Appraisal

For initiating a new scheme or continuation of an existing scheme, proposals are received from the Ministry/Department as EFC/SFC/PIB appraisals. DMEO outlines outputs, outcomes, and their measurable indicators, helping Ministries establish what they should be measuring to monitor the implementation of a scheme. Recommendations are also made regarding the inclusion of a logical chain for the scheme as well as making provisions for mid-term and end-line evaluations, with a separate earmarked budget. DMEO provided inputs for 179 proposals in 2020 and 321 proposals till October 2021.

Monitoring Framework for Government e-Marketplace (GeM)

DMEO in consultation with GeM and DoE has developed a monitoring framework for the GeM portal.

Covid-19 Related Actions/Initiatives

To combat the second wave of Covid-19, the Government of India had set up the 'Covid Aid: Coordination Cell' to coordinate the receipt and disbursement of Covid aid items received from overseas. DMEO extended monitoring support to the multi-departmental team comprising representatives of the MoHFW, Indian Red Cross Society, HLL (Logistics Partner), and NITI Aayog.

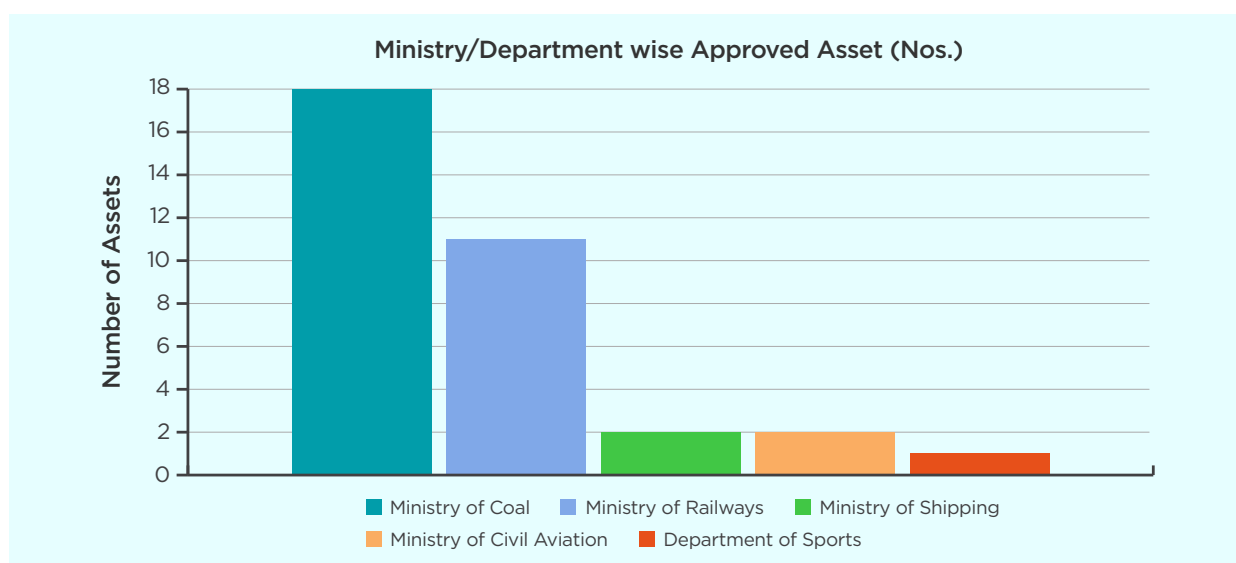
PERFORMANCE DASHBOARDS

Asset Monetisation Dashboard

As part of a multi-layer institutional mechanism for the overall implementation and monitoring of the Asset Monetisation Programme, a dashboard has been created to facilitate real-time data input and monitoring of individual transactions.

The list of assets to be monetized has been finalized and NITI Aayog is handholding the Line Ministries/Departments/CPSEs in uploading the assets onto the dashboard via training sessions and calls.

The portal is functional and Ministries have already begun uploading information on assets expected to be rolled out shortly for the public.



Atal Tinkering Labs

Atal Innovation Mission's Atal Tinkering Labs' (ATLs) dashboard 'MyATL' presents the status of such laboratories across the country in a single snapshot. The dashboard presents the distribution of ATLs across the Districts of a particular State. The information of a school of a particular District is available with details, such as the board the school is affiliated to, associate partners, social media handles, etc. ATL schools are supposed to furnish their monthly reports on the MyATL dashboard, thereby giving Atal Innovation Mission an opportunity to recognize their active participation, innovation journey, achievements, and to determine the suitability for disbursement of subsequent tranche(s) of grants.

Regular updation of the dashboard by the schools also enables AIM to identify the top performers. The focus is on the quality of learning rather than just recording higher numbers.

The consistently top-performing schools are recognized based on different parameters and rewarded, which further incentivizes them to perform better.

The ATL schools are also visible on the Ministry of Education's GIS portal. The geo-tagged map of an ATL school helps in understanding the clusters spread across the District, along with easy identification of areas that need more schools, ensuring the efficacy and quality of the programme.

Champions of Change

The Champions of Change dashboard opened for public viewing on 1 April 2018. The dashboard has been so named to emphasize the critical role played by the District Collectors/Magistrates and

their teams in the progress of Districts. The Aspirational Districts Programme hinges on inducing competition among 112 Districts through regular ranking, which is dynamic and reflects the incremental (delta) improvement made every month. Districts are encouraged to improve their data collection and maintenance mechanisms to enter up-to-date data on the dashboard.

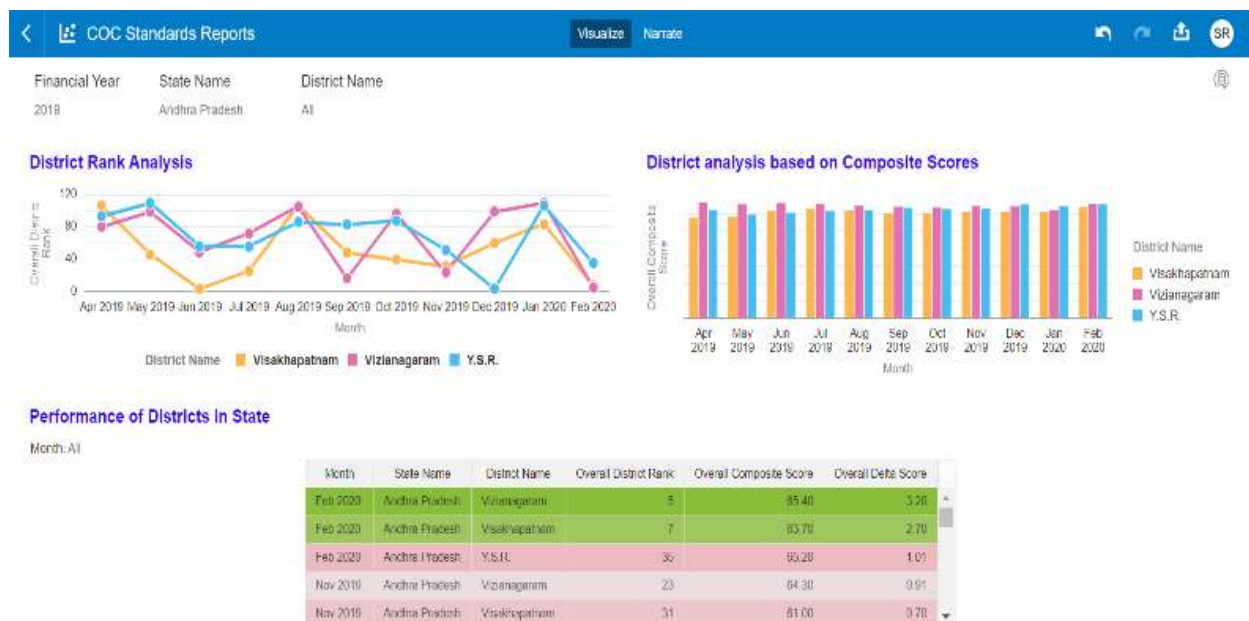


The Champions of Change portal (CoC 2.0) has been upgraded to further empower the District Administrations towards data-driven governance and evidence-based policymaking. CoC 2.0 hosts many new features such as citizen reports and feedback, advanced analytics, project management, geospatial maps and other AI/ML solutions.

The citizen reports comprise three dashboards based on the analysis of the CoC data:

1. Performance of Aspirational Districts since inception
2. Delta rankings of Districts that are released every month
3. Indicator-level progress across all themes for the 112 Districts

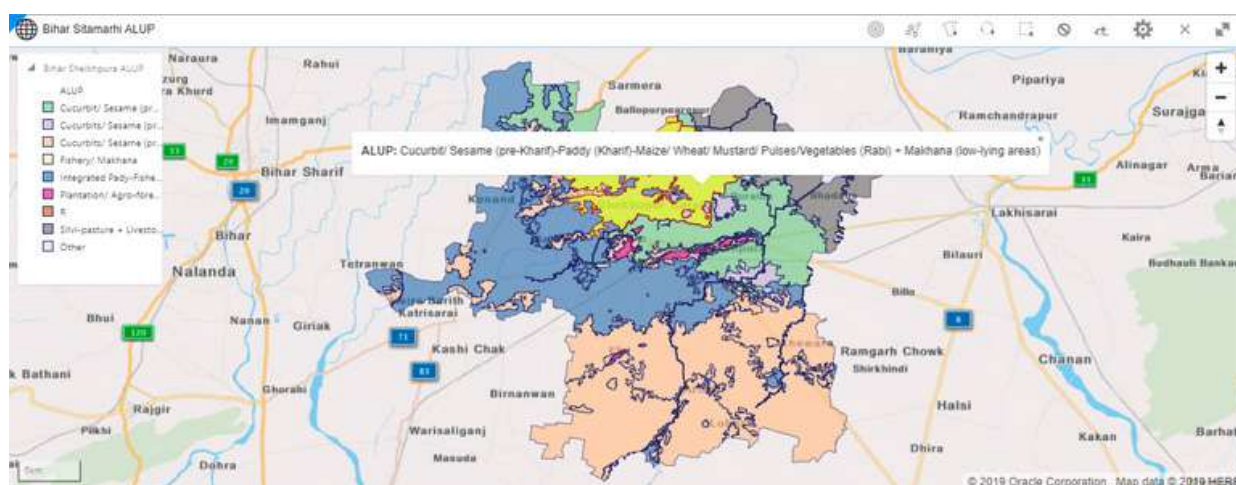
In addition to these reports, the District Administrations also have access to a data visualization tool to perform advanced analytics for analysing their performance using the CoC data.



The Districts can compare their performance with others in the State or the best among all the Aspirational Districts; triangulate their analysis with other data sources, such as NHFS, Census and third party survey data; and upload block-level or gram panchayat-level data for analysis.



COC 2.0 also comes with a fully digitized project management workflow. District authorities can use this portal to obtain additional funds under the Externally Aided Programme (EAP-SDG) of NITI Aayog and through CPSEs' Corporate Social Responsibility. The Advanced Project Management System assists the Districts in the preparation of relevant projects that can directly or indirectly impact the socio-economic indicators in these Districts. The project management workflow also has a provision to monitor the implementation of the projects as well as the fund flow in the Districts with minimal paperwork. The Districts have provision to upload the pictures as evidence to support the completion and impact of the project as part of the monitoring framework.



In order to take concrete steps towards realizing the Hon'ble Prime Minister's Vision to improve farmers' incomes, NITI Aayog, in collaboration with the National Bureau of Soil Survey (Indian Council of Agricultural Research), mapped the Aspirational Districts to support the administrations in sustainable farming and agriculture. The geospatial analytics platform provides mapping for (i) alternate land-use planning to improve farmers' incomes, diversify crops and maintain ecological balance in the Districts, and (ii) soil and water conservation to reduce soil erosion and contamination, improve irrigation facilities and provide probable check dam locations.

One of the most important features of this new platform is the automated system-generated mailers on data quality and monthly performance. Automatic mailers are sent to the Districts highlighting any discrepancies in the data entered by them, based on pre-configured logic in the system. This has helped enhance the overall data quality of the programme and subsequently the analysis of the performance of the Districts. System-generated monthly performance reports are also sent to the District Magistrates/District Collectors, Central Prabhari Officers/State Prabhari Officers, and the Chief Secretaries of the State, detailing their performance on various indicators.

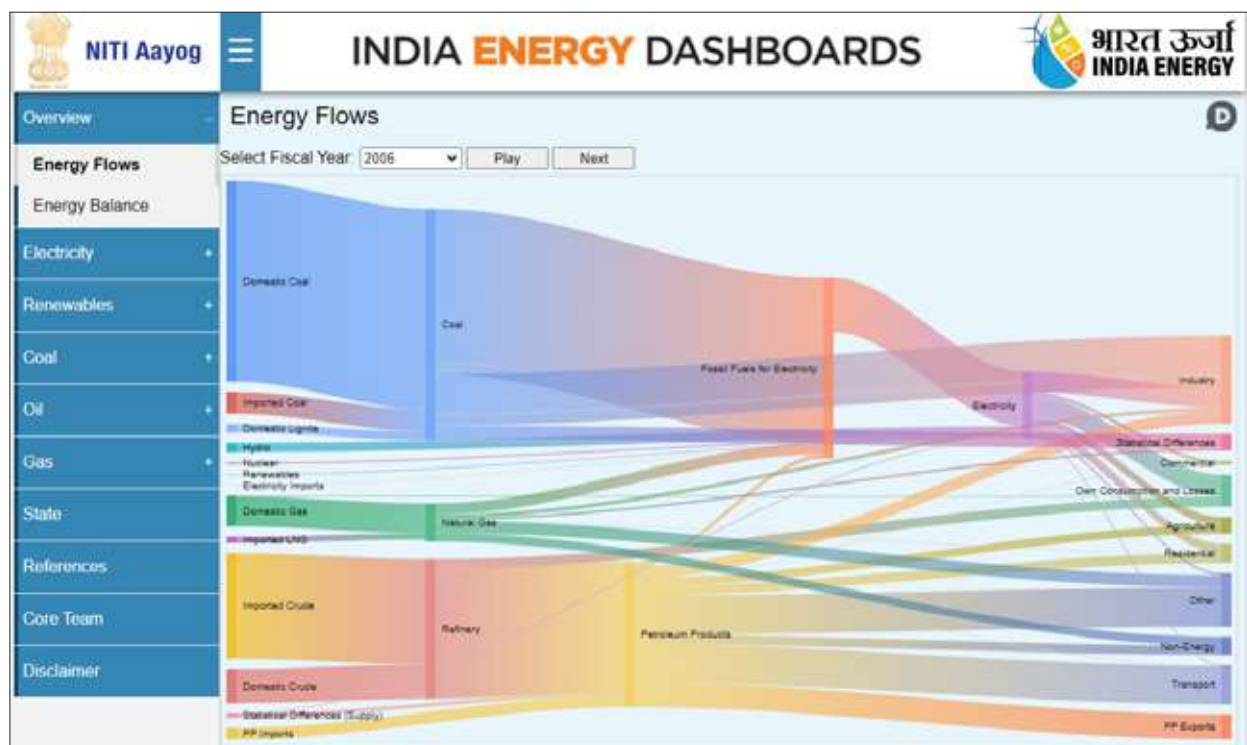
India Energy Dashboards

The India Energy Dashboards aim to provide single-window access to energy data in the country. They are a step towards building a comprehensive, open, and freely accessible energy data portal for India.

The first version of the dashboards was launched in 2017 and the second in April 2021.

The key features of the enhanced version are:

1. Provision of time series' data from FY 2005–06 to FY 2019–20
2. Easy download of data
3. Availability of data at sub-yearly frequencies.



The Energy Vertical of NITI Aayog is in the process of integrating the demand-side data into the dashboards based on the reports of the subgroups on energy data management (*discussed in Section G: Sectoral Achievements*). Efforts are also being undertaken to bridge the supply-side data gaps.

Global Indices for Reforms and Growth

DMEO is supporting the Cabinet Secretariat in monitoring India's performance in 30 global indices.

The goal of the exercise is to use these indices as tools for self-improvement and bring about reforms in policies while improving the last-mile implementation of Government schemes.

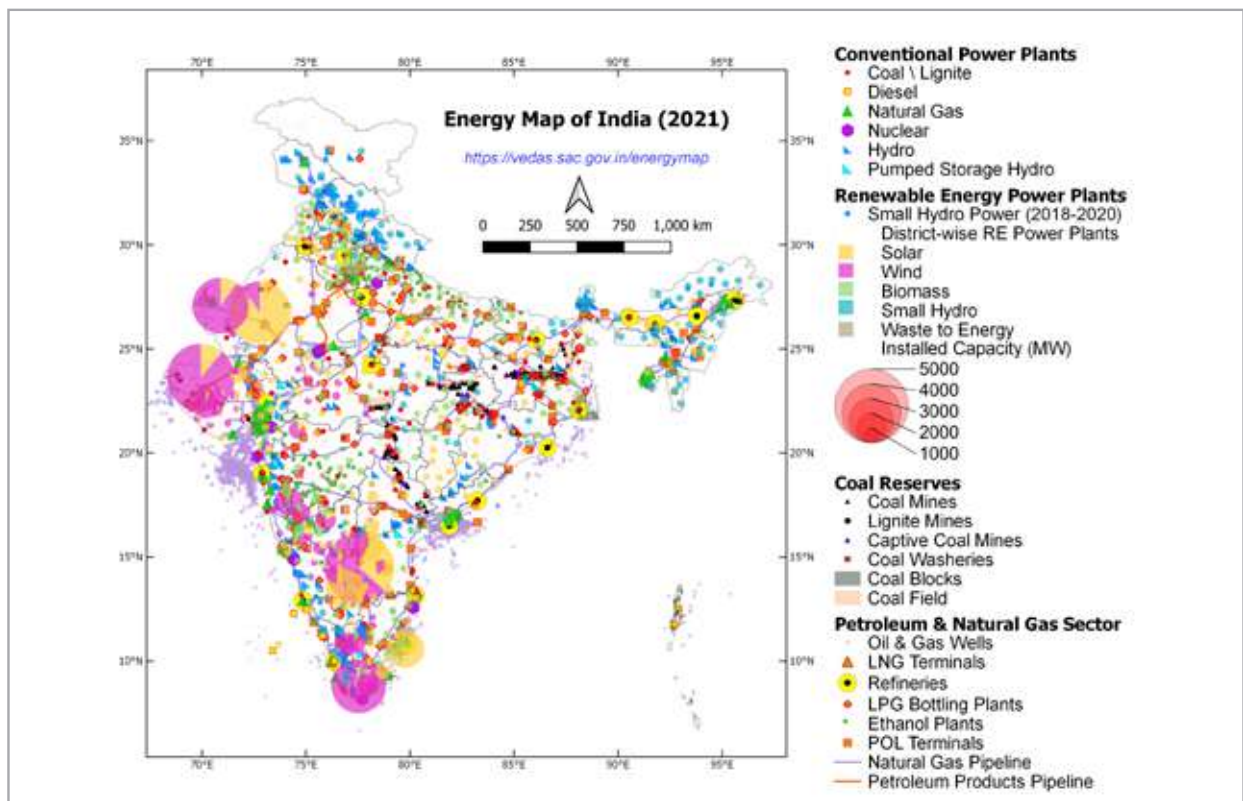
The 30 global indices have been assigned to 19 nodal Ministries and Departments of the Government of India.

A single, informative dashboard has been prepared for all the indices. The dashboard allows for the monitoring of the parameters as per official data as well as the data sources used by the publishing agencies.



So far, training videos and manuals on the Global Indices for Reforms and Growth (GIRG) dashboard were shared with all nodal Ministries and Departments and made available for public access on the landing page of the dashboard in June 2021. Module-wise training for the GIRG dashboard was held for all nodal Ministries during July–August 2021.

Geospatial Energy Map of India



NITI Aayog, in collaboration with the Indian Space Research Organization (ISRO), has developed a comprehensive Geographic Information System (GIS) Energy Map of India, with the support of the Energy Ministries. The GIS map provides a holistic picture of all the energy resources of the country, which enables visualization of installations such as power plants, oil and gas wells, petroleum refineries, coal fields and coal blocks, District-wise data on renewable energy power plants, etc., through 27 thematic layers.

The map attempts to identify and locate all primary and secondary sources of energy and their transportation/transmission networks to provide a comprehensive view of energy production and distribution in the country. It is a unique effort aimed at integrating energy data scattered across multiple organizations, and presenting it in a consolidated and visually appealing graphical manner.

SDG India Index Dashboard



The SDG India Index dashboard allows users to visualize and explore the data in the SDG India Index reports. The dashboard is updated annually—every time a new edition of the index is launched—and has cross-sectoral relevance for policymakers, civil society, business and academia. Additionally, two interactive dashboards have also been developed for the North-Eastern Region District SDG Index and the SDG Urban Index.

KEY INDICES TO PROMOTE COMPETITIVE FEDERALISM

Composite Water Management Index

The Composite Water Management Index assesses the incremental improvement made by States/UTs on water-management initiatives. The exercise was delayed in 2020 due to the Covid-19 pandemic. In 2021, assessments were done for the years 2018–19 and 2019–20, and the report will be released in 2022.

Gender Index

NITI Aayog is in the process of developing a National Gender Index. The Gender Index seeks to measure the progress and identify the persisting gaps in gender equality to make informed policy decisions. It will serve as a tool to map the progress of India's States and UTs on defined gender metrics and build the foundation for positive change. The index will support policy action and advocacy around gender and will be aligned to the framework of Sustainable Development Goals.

Global Innovation Index

NITI Aayog has been continuously working towards improving India's ranking in the global indices, including the Global Innovation Index. The Science and Technology Vertical is the nodal division in NITI for improving India's ranking in the Global Innovation Index. The Vertical has been in touch with the publishing agency World Intellectual Property Organization as well as Line Ministries to address gaps in the availability of reliable data. NITI Aayog is working proactively towards bringing policy interventions that could leverage India's underlying potential. Due to NITI Aayog's sustained efforts, India has been on a rising trajectory in the Global Innovation Index—from a rank of 81 in 2015, India rose to the 46th position in 2021. An inter-ministerial coordination committee has been constituted under the Chairmanship of CEO, NITI Aayog, which suggests reforms for improving India's rank. Two meetings of the coordination committee to improve the India's rank in the index were held on 11 January 2021 and 8 June 2021, respectively, under the Chairmanship of CEO, NITI Aayog.

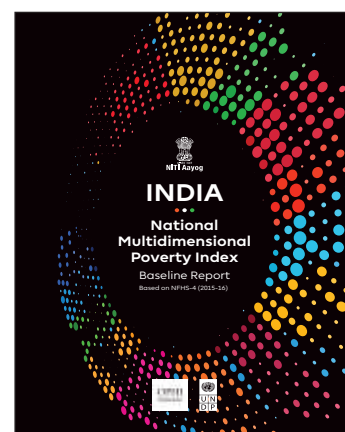


India Innovation Index

The India Innovation Index is released by NITI Aayog and the Institute for Competitiveness every year. The index attempts to create an extensive framework for the continuous evaluation of the innovation environment in all States and Union Territories. NITI Aayog released the second edition of the index on 20 January 2021. Overall, Delhi topped the list, while Chandigarh was a major gainer, and Karnataka and Himachal Pradesh led in their respective categories. NITI is handholding States and UTs in improving their rankings in the index, which will subsequently result in the improvement of India's ranking in the Global Innovation Index. For the next edition, the number of indicators has been increased from 36 to 89, to match, to the extent possible, the 80 indicators of the Global Innovation Index 2021.

Multidimensional Poverty Index

The Multidimensional Poverty Index (MPI) is an internationally accepted high-resolution household-level measure of non-monetary poverty covering over 100 developing countries. Under the Cabinet Secretary's Global Indices for Reforms and Growth (GIRG) initiative, NITI Aayog is the nodal Ministry for the MPI. The national MPI project is aimed at deconstructing the global MPI and creating a globally aligned but customized Indian MPI for drawing up comprehensive reform action plans with the larger goal of improving India's position in the global MPI rankings. In the latest report, Kerala, Goa, Sikkim, Tamil Nadu and Punjab have registered the lowest poverty across India. The national MPI baseline report is based on NFHS-4 (2015–16) and serves as a useful source for measuring the situation at baseline i.e., before the large-scale rollout of nationally important schemes on housing, sanitation, electricity, cooking fuel, nutrition, etc. This will help in measuring the changes over time when compared to NFHS-5 (2019–20).



School Education Quality Index

The School Education Quality Index (SEQI) evaluates the performance of States and UTs in the school education sector. In line with NITI Aayog's mandate to foster the spirit of competitive and cooperative

federalism, the index strives to facilitate the sharing of knowledge and best practices across States and UTs. NITI Aayog successfully released the first edition in September 2019. Now, as per the inputs received from various State Governments, the SEI indicators are being revisited/ revised and the next version will be launched after the release of the National Achievement Survey (NAS) 2021.

State Energy and Climate Index

NITI Aayog has developed a draft State Energy and Climate Index to assess the performance of States on indicators such as discoms' viability and competition; access, affordability and reliability of energy; clean energy initiatives; energy efficiency; generation capacity; and environmental sustainability and new initiatives. The index will help States to efficiently manage their energy resources and provide better access to energy to the people.

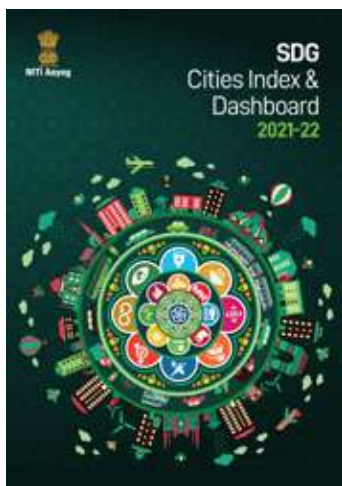
Sustainable Development Goals India Index

The Sustainable Development Goals (SDGs) India Index has been comprehensively documenting and ranking the progress made by the States and UTs towards achieving the Sustainable Development Goals. The third edition was released in June 2021. This year, the top three States were Kerala; Himachal Pradesh and Tamil Nadu (tied at the second position); Andhra Pradesh, Goa, Karnataka and Uttarakhand (tied at the third position), respectively. The SDG India Index 2020–21 is more robust than the previous editions on account of wider coverage of targets and indicators. The 115 indicators incorporate 16 of the 17 SDGs, with a qualitative assessment of Goal 17, and cover 70 SDG targets. This is an improvement over the 2018–19 and 2019–20 editions of the index, which had utilized 62 indicators across 39 targets and 13 Goals, and 100 indicators across 54 targets and 16 Goals, respectively.



Sustainable Development Goals North-Eastern Region District Index

NITI Aayog released a first-of-its-kind North-Eastern Region (NER) District SDG Index and dashboard in August 2021. East Sikkim ranked first in the region followed by Gomati and North Tripura Districts in the second position. The NER District SDG Index focuses on the North-Eastern Region, which is of critical significance to the country's development trajectory. The index ranks the Districts of the eight States of the NER—Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura—based on their relative performance on Sustainable Development Goals and their corresponding targets. (Read more in Section VII: Sectoral Achievements.)



Sustainable Development Goals Urban Index

The SDG Urban Index, a result of the NITI Aayog–GIZ and BMZ collaboration, is focused on driving SDG localization in Indian cities, under the umbrella of Indo-German Development Cooperation. The index ranks 56 urban areas on 77 SDG indicators across 46 targets of the SDG framework. Shimla, Coimbatore, and Chandigarh and Thiruvananthapuram (tied at the third position), respectively, were adjudged the top three urban areas. The data on these indicators have been sourced from official sources such as NFHS, NCRB, U-DISE,

and data portals of various Ministries and other Government sources. The index and dashboard are meant to strengthen SDG localization and institute robust SDG monitoring at the city level. It highlights the strengths and gaps of ULB-level data, monitoring, and reporting systems.

State Health Index

The State Health Index is an annual tool to assess the performance of States and UTs. It is a weighted composite index based on 24 indicators grouped under the domains of 'Health Outcomes', 'Governance and Information', and 'Key Inputs/Processes'.

The index is being compiled and published since 2017. The reports aim to nudge States/UTs towards building robust health systems and improving service delivery. The importance of this annual tool is reemphasized by MoHFW's decision to link the index to incentives under the National Health Mission. This has been instrumental in shifting the focus from budget spending and inputs to outputs and outcomes.

Among the 'Larger States', in terms of annual incremental performance, Uttar Pradesh, Assam and Telangana were the top three ranking States.





SECTION-IV

**COOPERATIVE
FEDERALISM**

COOPERATIVE FEDERALISM

INTRODUCTION

NITI Aayog has been constituted to actualize the important goal of cooperative federalism and to enable good governance in India. On the premise that strong States make a strong nation, NITI Aayog acts as the quintessential platform for the Government of India by bringing States together as 'Team India' to work towards the national development agenda.

NITI Aayog has also established models and programmes for the development of infrastructure and to reignite and establish public-private partnership, such as the Development Support Services to States and Union Territories, and the Sustainable Action for Transforming Human Capital programme.

Further, with the aim of correcting regional developmental imbalance, NITI Aayog has taken special steps for areas requiring special attention and support, such as those in the North-East, Andaman and Nicobar and Lakshadweep islands, and the Himalayas. NITI Aayog has constituted special forums to identify these areas' constraints and formulate policies to ensure sustainable development while protecting the abundant natural resources in these regions.



DEVELOPMENT SUPPORT SERVICES FOR STATES AND UNION TERRITORIES

Development Support Services for States (DSSS) is an initiative by NITI Aayog with the vision to achieve transformational and sustained delivery of infrastructure projects. The key objective behind the initiative is to create public-private-partnership success stories and reboot infrastructure-project-delivery models so that a sustainable infrastructure creation cycle can be established.

The projects under the initiative are assisted by NITI Aayog with the support of external consultants in transaction-structuring, strategy and bid-process management.

Currently, four projects are underway.

1. A vision document for Ladakh was prepared and approved by the UT. Further, specific projects for development in the UT are being identified.
2. The pre-feasibility report for a solar power project in Ladakh was prepared and accepted by the UT. A meeting was also organized to present the findings of the report to the developers and understand their additional requirements for participation in the project at Kargil.
3. A techno-economic feasibility report and a project-structuring report on integrated solid waste management in the Roorkee Cluster of Uttarakhand were submitted to the State Government.
4. A pre-feasibility report on a convention centre in Uttarakhand was submitted to the State Government.

HOLISTIC DEVELOPMENT OF ISLANDS

India has 1382 islands spread across nine States and four UTs. Identified islands can be developed for the purposes of maritime trade, shipping, fisheries, eco-tourism, undersea mining, etc.

India's islands are strategically positioned in the Indian Maritime Zone and central to the country's security concerns. Great Nicobar Island is only 90 km from the western tip of Malacca Strait, an important shipping route between Indian Ocean and South China Sea. Similarly, Minicoy Island in Lakshadweep lies near Nine Degree Channel, one of the busiest shipping routes. If left unattended, there may be security risks, such as incidences of smuggling, criminal activities, etc.



Therefore, a need was felt for a holistic strategy for the development and protection of these islands. Consequently, NITI Aayog was mandated to steer the process of sustainable development of identified islands in the region.

In the first phase of the process, a consultant was engaged to prepare the concept and detailed master plans for the islands identified under Package I (Long, Aves, Smith and Ross islands of Andaman and Nicobar) and Package III (Minicoy, Bangaram, Thinnakara, Cheriya and Suheli islands of Lakshadweep). Accordingly, the final master and infrastructure plans were prepared for these nine islands.

Assessment of Carrying Capacity of Islands

The carrying capacity of an island for tourism is the maximum number of tourists the island can support without disturbing its ecological balance.

Accordingly, the carrying capacity of the nine islands was assessed by NITI Aayog, through a reputed consultant, and environmental zoning was carried out to ensure sustainable development.

Master Plans

The development plans for the nine islands contain appropriate strategies for the promotion of tourism, export of seafood and coconut products, organic farming of high-value crops, etc. The plans seek to create employment opportunities and provide additional income to the islanders while maintaining the ecological stability of the region.

Identified Tourism Projects

Post a systematic analysis, seven tourism projects (four in Andaman and Nicobar Islands and three in Lakshadweep) were planned, with the participation of the private sector and the support of the islanders.

For Lakshadweep Islands, in addition to the land-based projects, water villas were also planned—as supported by a SWOC analysis. Lakshadweep has a large lagoon area of 4000 sq km. A strategy for the development of water villas in the three islands—Kadamat, Suheli and Minicoy—of the archipelago was accordingly devised.

The proposal for the water villas was agreed upon by the Ministry of Environment, Forest and Climate Change for implementation on a pilot basis. It was only after the approval of SFC/PPAC that the projects in Lakshadweep incorporated water villas.

The projects in Andaman and Nicobar Islands are land-based. Bids have been invited for establishing eco-tourism resorts in Long Island, Aves Island, Smith Island and Shaheed Dweep.

Initiatives for Holistic Development

The following initiatives have been taken for the development of the identified islands in Phase I:

Incentives for Setting Up Industries

The Lakshadweep and Andaman and Nicobar Islands Industrial Development Scheme (LANIDS) 2018 was notified by the Ministry of Commerce and Industry on 1 January 2019 to provide incentives to new and existing industrial units undertaking substantial expansion in the manufacturing and services sectors in the region.

Web Connectivity

For improving web connectivity in Andaman and Nicobar Islands, satellite bandwidth was augmented from 1.118 Gbps to 3.49 Gbps. Physical VSAT installation was completed at Rangat, Mayabunder, Diglipur, Port Blair, Shaheed Dweep, Little Andaman, Kamorta and Campbell Bay. Optical fibre cable installation, with an initial capacity of 200 Gbps between Chennai–Port Blair and 100 Gbps between Port Blair and other segments, was also done. In Lakshadweep Islands, the augmentation of bandwidth from 318 Mbps to 1.71 Gbps has been approved by the Telecom Commission.

Air Connectivity

Infrastructure for civil flight operations is ready at Shibpur Airport. A committee has been constituted to resolve land-related issues to develop a new greenfield dual-purpose airport in Minicoy Island. Based on the report of the committee, legal provisions have been amended. The Ministry of Defence (MoD) is in the process of preparing a report, with the consultation of the Airports Authority of India (AAI), for the construction of the Minicoy airport. AAI is undertaking a pre-feasibility study for the expansion of the Agatti Airport runway, from 1206 meters to 2300 meters, which will allow bigger Automatic Tray Return System (ATRS) to operate on Agatti Island.

Road Connectivity

A special package has been sanctioned for the maintenance/upgradation of rural roads in Andaman and Nicobar Islands. The Andaman Trunk Road (NH4) is being widened and the bridges of Humphrey and Middle Strait are being completed early to ensure better inter-island connectivity in Andaman Islands.

Power Generation

The Solar Energy Corporation of India has been entrusted to establish a 4 MWh floating solar power plant, with a 1 MWh battery energy storage system, at Kalpong, Diglipur, by October 2022.

Packages IV & V

In order to replicate the success of the Phase-1 projects, consultants were engaged to prepare a feasibility report for the holistic development of islands under Package IV (11 sites in Andaman and Nicobar Islands) and under Package V (Agatti, Bitra, Kadmat, Chetlat and Kalpeni in Lakshadweep Islands). Accordingly, they have submitted inception reports, draft and final site development reports.

NITI FORUM FOR NORTH-EASTERN REGION

The NITI Forum for North-East was set up in February 2018 to address various challenges in the region and recommend requisite interventions to achieve sustainable economic growth. The forum is led by Shri Jitendra Singh, Minister of State for Development of North-Eastern Region, and Dr Rajiv Kumar, Vice Chairman, NITI Aayog. The first meeting was held on 10 April 2018 in Agartala, Tripura.





The second meeting was held in Guwahati, Assam, in December 2018. The focus areas identified were:

1. Bamboo
2. Dairy
3. Pisciculture
4. Tea
5. Tourism

These were discussed in five parallel sessions involving experts from Central and State Governments, academia and industry. To push the five sectors identified by the forum, action points were discussed by experts, and Line Ministries were asked to act on specific points. All the Ministries concerned were directed to prepare a roadmap for the implementation of the recommendations that emerged in the second meeting. These are being monitored.

Further, to expedite the implementation of the recommendations of the forum, a joint working group was constituted by NITI Aayog in September 2020 under the chairmanship of Special Secretary, Ministry of Development of North-Eastern Region. During the first meeting of the group, held on 18 September 2020, the Line Ministries were requested to put in more efforts to develop and promote the five focus areas as recommended.

Reducing Compliance Burden in NE States

Reducing the compliance burden in the North-Eastern States is a step towards facilitating private investment, livelihood creation and economic growth.

So far, three meetings between Vice Chairman, NITI Aayog, and Chief Secretaries and Secretaries of the States and five Line Ministries have been held.

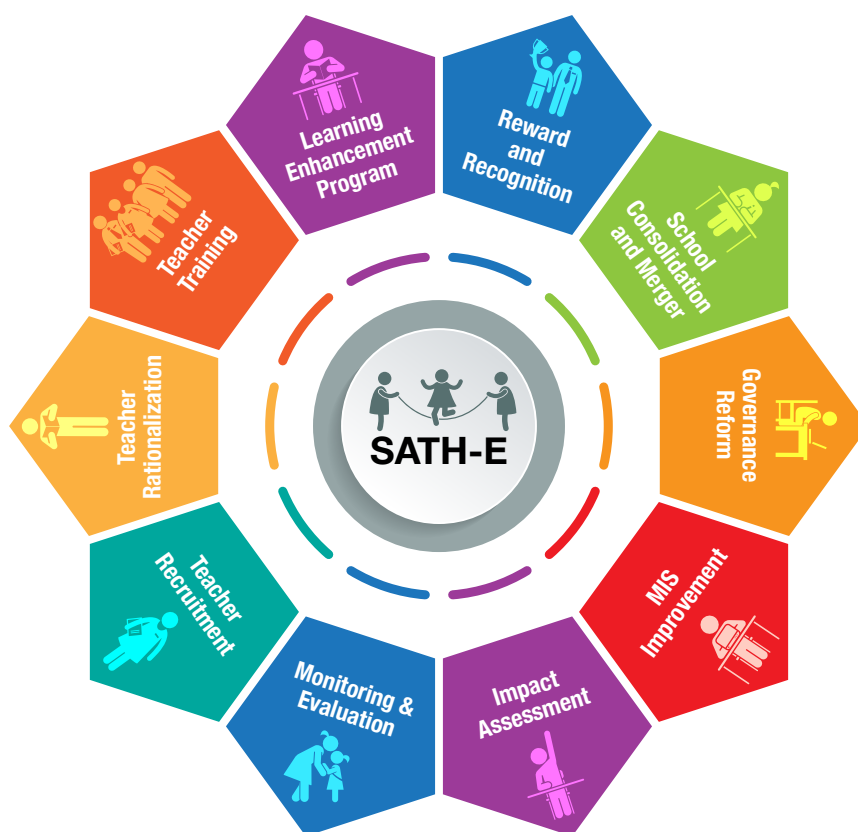
PROJECT SATH-E

Project SATH-E, 'Sustainable Action for Transforming Human Capital-Education', was launched in 2017 to identify and build three 'role model' States for the school education sector. After an elaborate selection process, Jharkhand, Odisha and Madhya Pradesh were chosen.

The first phase of SATH-E was completed in March 2020; the project impacted 2.3 crore students, 4.5 lakh teachers, and 2.3 lakh Government schools.

Significant strides were made in increasing access to education, with a focus on out-of-school children and dropouts; improving learning outcomes; facilitating governance reforms, teacher training, recruitment, assessment, accountability, and IT-enabled monitoring of schools, among others.

Key Interventions



Based on the requests received from all the three State Governments, the second phase of the project, SATH-E 2.0, was commenced by NITI Aayog for two years, from October 2020.

SATH-E 2.0 Roadmap

To deliberate on the progress of SATH-E 2.0, the National Steering Group met for the sixth time under the Chairmanship of CEO, NITI Aayog, on 12 October 2021.

NITI laid out seven key priorities for all the States, in line with the reopening of schools.

1. Ensure the safety of children and the school staff.
2. Plan the curriculum considering learning losses.
3. Collect and track baseline learning data.

4. Calibrate the curriculum and design interventions according to the baseline data, which may be different for different Districts and schools.
5. Build digital habits and assets.
6. Ensure the return of children to school who have dropped out, especially girls.
7. Prepare teachers to deliver better learning outcomes.

The roadmaps for SATH-E 2.0 for Jharkhand, Madhya Pradesh, Odisha were also released during this meeting.

The SATH-E Experience Report

On 16 November 2021, NITI Aayog released 'The SATH-E Experience', a report underlying measures to improve school education in India, especially learning outcomes, based on the experiences and learnings of the three SATH-E States and four others, Rajasthan, Haryana, Andhra Pradesh and Himachal Pradesh. The report was released in a national webinar in the presence of NITI Aayog Vice Chairman, Member (Education), CEO, and Adviser (Education). The report has two parts: (i) principles and interventions for the systemic transformation of school education (ii) 12 implementation toolkits.

The report captures the challenges pertaining to ensuring quality school education in the Indian context and shares bold and path-breaking reforms undertaken by the SATH-E and partner State Governments to overcome these challenges.

The report forms a comprehensive compendium that documents, consolidates and showcases the learnings from these States on their unique journey towards transforming their education landscape.

If replicated in other States, these reforms would become instrumental in achieving Sustainable Development Goal 4.



National Webinar, Project SATH-E

HOW SATH-E ENSURED UNINTERRUPTED LEARNING DURING COVID-19

Jharkhand

1. A mix of online and offline student-learning sessions was held
2. Nearly 14 lakh schoolchildren were connected via WhatsApp groups
3. Over three hours of learning/teaching via TV and radio was done regularly
4. Gyan Setu books were distributed for enhancing learning outcomes
5. Over 95,000 elementary schoolteachers were trained on the Diksha platform in 42 courses
6. Mohalla classes were organized when the situation permitted
7. Nearly 60,000 elementary schoolteacher vacancies were addressed, along with restructuring and recruitment for the Jharkhand Council of Educational Research and Training





Madhya Pradesh

1. Hamara Ghar Hamara Vidyalaya 2.0 was launched
2. 21 lakh parents of schoolchildren in classes I and II were connected via WhatsApp groups
3. Teachers were trained online on home-based learning
4. Learning planners/kits were distributed to 67% of the State's students
5. Teachers and students were connected via phone calls regularly
6. Weekly quizzes were conducted via WhatsApp
7. Mohalla classes were organized when the situation permitted
8. As many as 9200 CM RISE schools were planned
9. Schools were made Covid-safe

Odisha

1. YouTube live telecasts were done for all the grades
2. Radio Pathshala was launched for the elementary grades, along with TV shows for the secondary grades
3. Teachers and students were connected via phone calls
4. Remediation textbooks/learning material were distributed
5. A dedicated TV channel through Swayam Prabha has been planned
6. Community classes were organized if the situation permitted
7. A State project monitoring unit was established for foundational literacy and numeracy



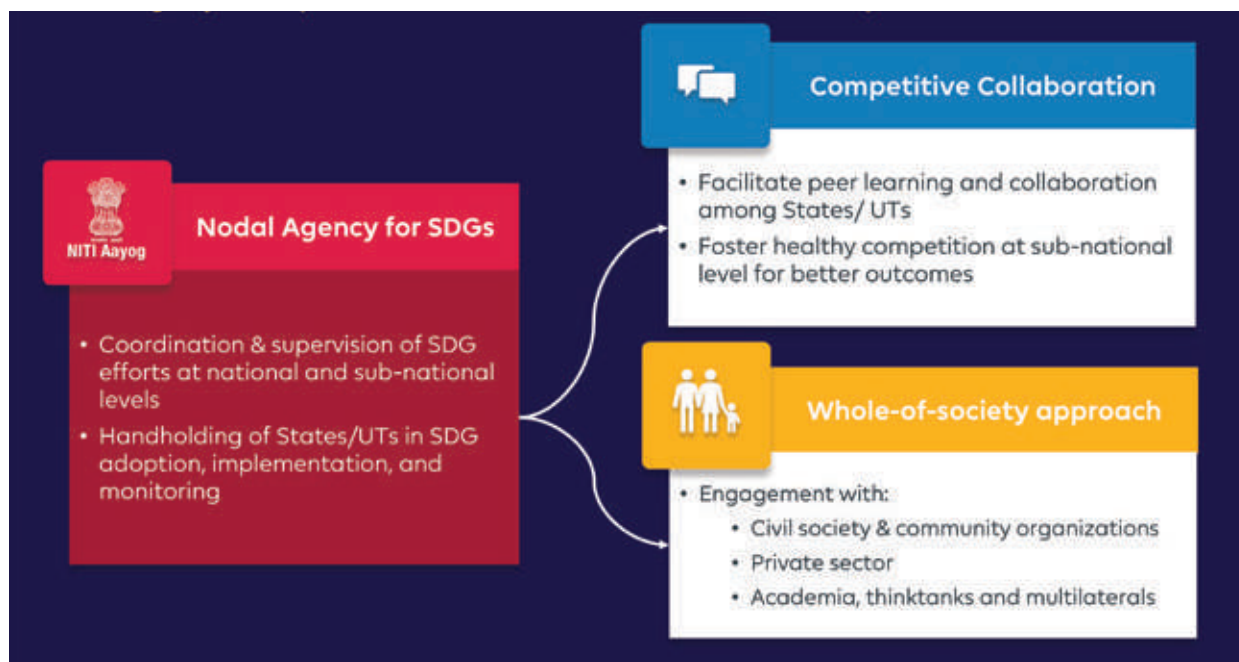
SDG LOCALIZATION

Localization of the Sustainable Development Goals is crucial to any strategy aimed at achieving the 2030 Agenda. Essentially, localizing SDGs involves understanding, adapting, planning, implementing, and monitoring the SDGs from the national to the local levels by relevant institutions.

It begins with setting the national as well as the subnational context of the 2030 Agenda and moving forward to adapting the Goals and targets, identifying indicators, designing the local means and structures of implementation, and creating monitoring frameworks from the national to the local levels. In terms of engagement and collaboration of institutions, it is consequential how the Centre, State and local governments work together to achieve the SDGs at the national level, and how SDGs provide a framework for subnational and local policies, planning, and action for the realization of the SDG targets at the local levels.

Under the Seventh Schedule, the State List gives almost exclusive power to States with respect to 61 items, which include public health, education, agriculture, water, transport and communication, public order, and local government. This means that the States have the power and functions to set up and execute policies in relation to almost all the SDGs and their associated targets. They are the key actors in the process of localization of the SDGs, with the Central Government and allied institutions playing an enabling role.

As a quintessential federal institution, NITI Aayog progressively devised a strategy for the implementation of SDGs, which has been firmly ensconced in a participatory and bottom-up approach and incremental localization of SDGs.



NITI Aayog's approach to SDG localization

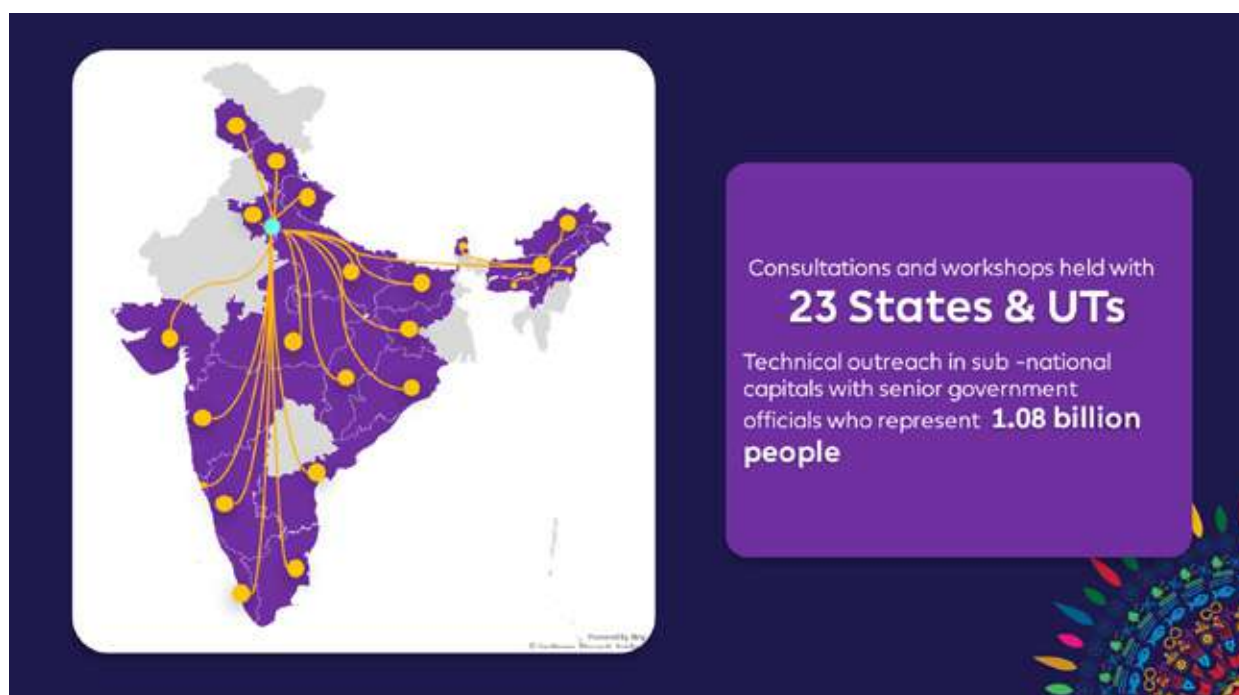
All the States and UTs have identified and tasked nodal departments for the implementation of the SDGs. Departments dealing with planning and finance have been given this responsibility. Several States have also created nodal mechanisms within every department and at the District level to make coordination, convergence and data management more precise and predictable.



Steps in SDG Localization

High-level committees have been established at the State level to provide continuous guidance, oversee implementation and monitoring, and put in place mechanisms for ensuring coordinated action on the SDGs. These Committees are usually chaired by the Chief Secretary of the State with all the departmental heads as members. In a few cases, the States also have such committees headed by the Chief Minister, which lend more thrust to the SDG reviews. Meetings of these high-level committees are held at high frequency (at least once a quarter), which further strengthens its catalytic efficiency. The fact that the States and UTs are increasingly adopting such a structure testifies to its effectiveness.

Localization and Sensitization Workshops



In 2021–22, the SDG Vertical held high-level consultations and workshops with the Government/ Administration of 23 States and UTs on monitoring of progress, evaluation of actions, and implementation of targeted reforms to accelerate progress in the SDGs.

The two-day workshops are usually chaired by the State's Chief Secretary and hosted by either the State planning department or the State's directorate of economics and statistics. They serve as a platform for strengthening inter-departmental collaboration within the State and as a larger national platform for Centre-State dialogue. The high-level nature of the workshops combined with its technical, data-driven approach enables on-site identification and resolution of data gaps and the identification of reforms and linkages.

In these workshops, NITI Aayog's flagship SDG India Index serves as the principal monitoring and evaluation tool for driving the discussion forward.

State workshops – outcomes and impact		
1	Participation of CM/CS, ministers, and ACSs give much-required push for focused action at State and district levels	All States
2	Quick policy action at top-most level for addressing key issues	Assam, Karnataka
3	Trigger to set up institutional structures with long-term vision	Odisha, Jammu & Kashmir
4	Push for data-driven monitoring frameworks resulting in State and District Indicator Frameworks	Gujarat, NER, Uttar Pradesh
5	Any-time monitoring made possible through technical tools such as SDG dashboards	Andhra Pradesh, Gujarat, Uttarakhand, UP
6	New partnerships for resource mobilization, institutional structures, and robust monitoring	Jammu & Kashmir, Odisha
7	Block-level interventions, taking localization further	Karnataka

Regional Consultation: North-Eastern Region District SDG Index

The regional consultation for the North-Eastern Region District SDG Index, in collaboration with the Ministry of Development of North-Eastern Region, was held in April 2021 in Shillong, with the aim of developing a District-level tool for monitoring the progress on the SDGs in the region. Representatives from all the eight States participated in the three-day consultation, in which they shared extensive insights into their data systems, policy priorities and field experiences. The consultation also provided a platform for inter-State exchange of knowledge, strengthening of partnerships and opened pathways for further support and collaboration.

The highly localized insights received during the consultations alongside the active engagement of the States in the post-consultation follow-up meetings were crucial in the development of India's first regional District-level SDG monitoring tool.

SUSTAINABLE DEVELOPMENT OF INDIAN HIMALAYAN REGION

The Indian Himalayan Region is spread across 13 Indian States/UTs (namely Jammu and Kashmir, Ladakh, Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Assam and West Bengal) and stretching across 2500 km. Nearly 50 million people reside in this region, which is characterized by a diverse demographic and versatile economic, environmental, social and political systems.

Webinar on Agroecology and Market Development

In partnership with the Indian Himalayan Central University Consortium (IHCUC), NITI Aayog organized a webinar on agroecology and market development in the Indian Himalayan Region. Chaired by Vice Chairman, NITI Aayog, the webinar was attended by the Vice Chancellors of 13 Central Himalayan universities, officials of State departments, members from Agricultural and Processed Food Products Export Development Authority (APEDA), and team coordinators, among others.

Resource Book on Springshed Management

NITI Aayog, along with the Swiss Agency for Development and Cooperation and the International Water Management Institute, has compiled a book on springshed management in the Indian Himalayan region. The book contains guidelines for policymakers and development practitioners working on the revival of springs.



WORKING WITH STATES/UTS

During 2021-22, NITI Aayog undertook a major drive to strengthen the Centre-State relationship and support States and UTs in addressing various challenges across different sectors.

In order to provide an effective platform for the resolution of issues of the State Governments with various Central Ministries/Departments and vice versa, and to provide guidance to the States to develop pathways for growth, it has been decided to hold biannual meetings with every State and UT. These Meetings with the Chief Ministers of the States/UTs are being led by the Vice Chairman/ Members/CEO of NITI Aayog.

Meetings with 23 States/UTs have been held during April–December 2021. These interactions are proving instrumental in resolving or finding solutions to many pending issues of the State Governments with various Central Ministries/Departments and also towards taking up the issues of the Central Ministries/Departments with various State Governments/UT Administrations, such as stalled infrastructure projects, efficient implementation of schemes, resolving policy bottlenecks, etc.

These meetings also serve as an important platform to discuss strategies and devise action plans for the growth of the State/UT, and provide specific sectoral inputs.



Dr VK Paul, Member, NITI Aayog, along with the Science and Technology Vertical, visited Ranchi and discussed various issues with the Chief Minister of Jharkhand on 15 September 2021



Dr VK Saraswat, Member, NITI Aayog, met with the Chief Minister of Nagaland on 12 October 2021 to discuss infrastructure development, agriculture, civil aviation and ways to improve the health infrastructure in the State



Vice Chairman, NITI Aayog, held a meeting with the Chief Minister, Chief Secretary and other officials of Uttar Pradesh between 20-21 September 2021 on the action plan for the State



During a meeting with the Chief Minister and other senior officials of Odisha on 15 December 2021, Vice Chairman, NITI Aayog, highlighted that the State has made substantial improvement in the last two decades, both in macroeconomic and socio-economic indicators



NITI Aayog Member Prof. Ramesh Chand and senior officials held a meeting with the Chief Minister of Rajasthan and his Cabinet on 6 August 2021

Development Monitoring and Evaluation Office

Apart from NITI Aayog, DMEO also partners with States to share knowledge, experiences and best practices in the domains of output–outcome monitoring and evaluation. Aligned with NITI's mandate of promoting cooperative federalism, DMEO has been engaging with the planning departments of States/UTs for capacity-building activities and sharing guidelines and toolkits on evaluation studies. This also entails working closely with state civil servant training institutions.

Statements of Intent with Meghalaya, Tamil Nadu and Andhra Pradesh

In March 2021, DMEO signed a Statement of Intent with the Meghalaya Basin Development Authority, Government of Meghalaya, to provide technical support in building a robust M&E system in the State. The engagement is focused on institutionalizing a block-level monitoring system in Meghalaya, training State Government officials, and sharing insights from national and international best practices. In July 2021, DMEO signed another Sol with the planning department of the Government of Tamil Nadu to strengthen the M&E ecosystem in the State. DMEO also signed an Sol in December 2021 with the Government of Andhra Pradesh to rationalize schemes and institutions under departments based on performance and put in place guidelines for the procurement of technical consultancy, among other areas of engagement.

Evaluation Diagnostic Tool for Institutional Assessment

To assess the capacity of evaluation systems in States, DMEO—in consultation with evaluation experts from the Bill and Melinda Gates Foundation (BMGF), WFP, J-PAL, and UNICEF—has developed a diagnostic tool. This tool covers various dimensions, such as (i) framework for evaluation in the State (ii) structure of the evaluation function (iii) system for evaluation planning (iv) demand for evaluation in the State (v) assessment of individual and systemic capacities in the State, and (vi) dissemination of evaluation insights.

Data from the diagnostic tool will deepen our understanding of the existing capacity for conducting evaluation in States as well as nudge them towards better performance.

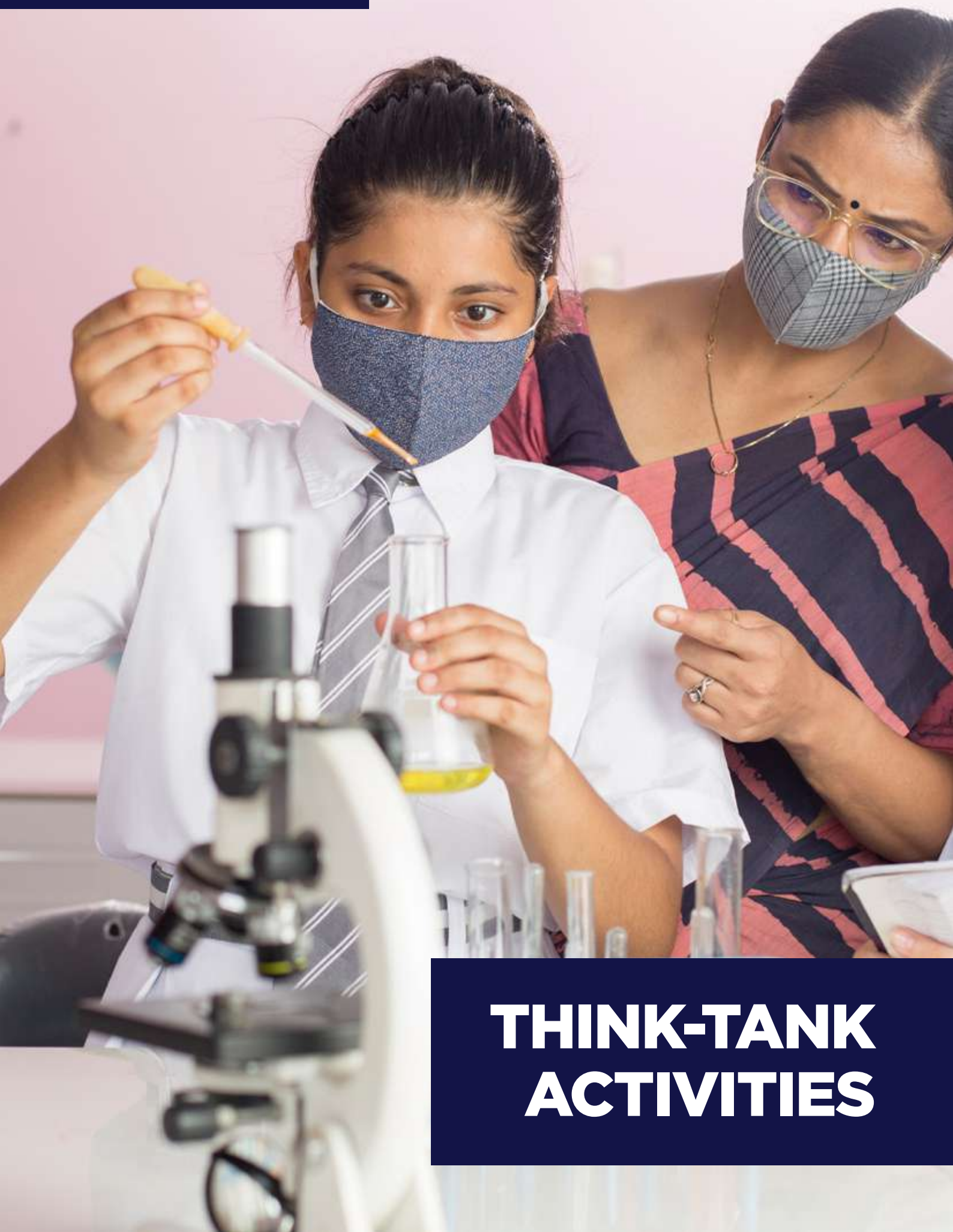
Webinars and Training Sessions for States/UTs on Capacity-Building

Till January 2022, DMEO had organized five webinars with States and UTs to share insights from DMEO's evaluation studies on the urban, health, agriculture, jobs and skills, and education sectors. In addition, a webinar was conducted with States and UTs on the evaluation diagnostic tool. To highlight the importance of building M&E capacities across the country and provide an overview of DMEO's key initiatives, a knowledge-sharing session was also organized with over 500 participants from across 22 States and seven UTs.

On 28 September 2021, DMEO conducted a one-day training session for the planning department, Government of Rajasthan, in collaboration with the WFP for strengthening the M&E capacity in the State.

Further, a virtual workshop on output and outcome monitoring was organized for the officials of the planning department of the Government of Rajasthan on 15 November 2021. A one-day training session on OOMF was also conducted on 22 December 2021 for capacity-building of Government officials in Jammu and Kashmir.

SECTION-V



**THINK-TANK
ACTIVITIES**

THINK-TANK ACTIVITIES

INTRODUCTION

In 2021–22, NITI Aayog undertook significant steps towards mainstreaming technology for achieving the development goals of the Government. It actively collaborated with the private sector to help the country address grave challenges in the wake of the Covid-19 pandemic, apart from continuing to explore the many economic and social potential of artificial intelligence and other emerging technologies.

This year, India pledged to cut its emissions to net-zero by 2070 in the COP26 Summit in Glasgow, UK. NITI Aayog has taken several steps to promote the growth of clean and green energy in the country, such as the FAME I and II schemes, methanol and hydrogen economies, decarbonizing transport initiative, among others.

In 2021–22, NITI Aayog continued with old partnerships and built new ones with various countries, think tanks, and educational and policy research institutions to create a knowledge, innovation and entrepreneurial support system.

Finally, any discussion on NITI Aayog's contribution towards building a robust research and innovation ecosystem in the country is incomplete without the mention of Atal Innovation Mission and NILERD.



TECHNOLOGY COMMONS

In May 2020, the Hon'ble Prime Minister entrusted NITI Aayog with the responsibility of working with the private sector to develop cutting-edge technology products that would enable India to leapfrog in the post-Covid era. These products were to be grounded in the principles of 'Technology Commons', namely:

- Open Architecture, Modular Design and Interoperability
- Transparent and Secure with Ease of Access
- Multilingual: Built for Bharat
- Rapid, Iterative and Agile

Several private sector companies (Tata, Reliance, Mahindra, Khan Academy, IBM, PhonePe, Amul, BigBasket, Amazon Web Services, Apollo Hospitals, etc.) and Government bodies (National Industrial Corridor Development Corporation [NICDC], Ministry of Civil Aviation, Ministry of Road Transport and Highways, Ministry of Finance, Quality Control of India, Bank of Baroda, SBI) came together to develop seven such products.

Unified Logistics Interface Platform

Aimed at digitizing India's supply chain, the Unified Logistics Interface Platform (ULIP) is designed to provide an integrated, vendor-agnostic platform that can be effectively utilized for connecting various logistics stakeholders spread across multiple Ministries, enterprises, and associations. ULIP puts into practice the vision of PM GatiShakti, built as an open-source mobility stack for achieving the following:

- A nationwide single window logistics platform for end-to-end visibility for the efficient movement of goods
- A logistics gateway of integrated information across Government agencies throughout the logistics supply value chain
- A secure data exchange between Government and private entities
- Turbocharge India's performance in the Global Competitive Index

ULIP is currently being led and developed by NICDC in consultation with NITI Aayog.



So far, 24 logistics systems of six Ministries/Departments have been mapped through 78 application programming interfaces (APIs), covering nearly 1454 fields; more are underway. To further strengthen the ecosystem and engage citizens in the process, NITI Aayog in collaboration with Atal Innovation Mission, NICDC, and NICDC Logistics Data Bank Services Limited (NLDSL), is organizing a hackathon

to crowdsource ideas that will benefit the logistics industry. The winning solutions will not only be provided capital support but also an opportunity to be a part of the solution propelling PM GatiShakti.



NITI Aayog

“The data exchange among all mode operators will be brought on ULIP, designed for API. This will provide for efficient movement of goods through different modes, reducing logistics cost and time, assisting just-in-time inventory management, and eliminating tedious documentation. Most importantly, this will provide real-time information to all stakeholders and improve international competitiveness. Open-source mobility stack, for organizing seamless travel of passengers will also be facilitated.”

NIRMALA SITHARAMAN
Finance Minister

#AatmanirbharBharatKaBudget

SamShiksha

SamShiksha is India's first virtual university with a curated catalogue of courses mapped to the UGC curricula with high-quality, low cost, flexible, outcome-driven degree offerings. Since its beta version was launched in February 2021, the platform has enlisted 1200+ free courses relevant for 70% students and educators; 22 subjects across six disciplines mapped to college syllabi and created three personalized learning pathways (guided library, holistic development, and educator development).

Unnati

A technology platform to digitally enable livelihood access for 22 crore blue and grey collar workers, Unnati is open, multi-channel and uses AI backend to match job providers with seekers. With the vision to empower 'Bharat ka Har Shramik', Unnati aims to become National Career Service 2.0—providing predictive intelligence-based skilling suggestions for job-seekers via integration with States, Districts, blocks and ITIs of the country. Over 10,000 job seekers and more than 150 employers have explored the product and expressed a strong affinity for it.

KYC Setu

This is an instant, cost-effective and completely digital solution to enable KYC using UPI as an interoperable infrastructure layer. As simple as making a UPI digital payment, this is an easy plug-and-play utility that requires minimal work by NPCI, banks and fintech and yet allows instant, secure and fully-digital e-KYC platform on any mobile phone. The product has already established its capabilities via a pilot that successfully completed over 5 million transactions with SBI cards and Phone Pe. The product, powered by a set of APIs, is housed at NPCI and has a dedicated team working on it.

Kaashi

Kaashi is a low-risk lending product for the lower-middle-income class that leverages Direct Benefit Transfer (DBT) income for underwriting. The product, currently being led by DFS and NITI Aayog, is

in the final stages of development and integration with various entities and systems, such as banks, UIDAI, NSDL, etc.

Swasth

The Swasth Alliance aims to leverage digital technologies to drive healthcare inclusion in the country and improve health outcomes. Swasth has a strong core team, over 200 volunteers and an independent board led by Kris Gopalakrishnan.

Krishi Neev

Krishi Neev helped in identifying use cases of a technology platform to promote technology intervention in agriculture. However, it could not translate into conceptualizing an actual common platform. The Ministry of Agriculture and Farmers' Welfare is currently working on an agri-stack, which essentially is a data aggregator platform.

FRONTIER TECHNOLOGIES

Responsible AI

1. The National Strategy on Artificial Intelligence (NSAI) released in 2018 highlighted the economic and social potential of artificial intelligence (AI). AI is expected to boost India's annual growth rate by 1.3% by 2035 and has the potential for large-scale adoption in a variety of social sectors towards 'AI for All'. The growth of AI has not been without challenges. Examples of bias, lack of explainability, and privacy violations have raised concerns around the world and inhibited the adoption and growth of AI in India.
2. The Data Management and Analysis, and Frontier Technologies Vertical held a series of consultations, with support from the WEF, for identifying a strategy for responsible management of AI in India. Part 1 of the two-part strategy document focusing on principles was released in February 2021, while Part 2 covering the proposed enforcement mechanisms was released in August 2021.
3. Future discourse in the direction of specific sectoral approaches for Responsible AI is currently in progress.

Emerging Technologies

In addition to the above, the Vertical is currently working on policy documents on various other areas, including XR Strategy, promoting ed-tech and legal-tech in a seamless manner, building bio-banks, etc.

Pilot Projects

1. **Clinical Decision Support System:** A study to assess the feasibility of the use of declarative AI-based Clinical Decision Support System and pathway technology for maternal and pediatric health journeys was carried out in collaboration with Lady Hardinge Medical College, Elsevier-Relix and Piramal Swasthya. The project was implemented in Bagraich, Uttar Pradesh; it concluded in May 2021, with the project report released subsequently.
2. **AI Anthropometry:** Identification of low birth-weight babies using AI-enabled and smartphone-based anthropometry for timely medical interventions was undertaken. The research study on the same is being conducted in the Aspirational Districts of Balrampur,

- Uttar Pradesh, and Baran, Rajasthan, in collaboration with Wadhvani AI, Piramal Swasthya and PGIMER, Chandigarh.
3. **Diabetic Retinopathy:** The pilot is being implemented in Moga and Mohali, Punjab, to study the use and adoption of AI platforms for early detection and screening of non-communicable diseases in a public health setting.
 4. **Blockchain for Trade Finance:** The Vertical is working with the Port of Rotterdam, ICICI Bank and Indian Ports Association to test the efficacy and understand the governance-related challenges of blockchain technology in trade finance.
 5. **Augmented Reality Education:** A project was launched to study the effectiveness and scalability of augmented reality as a self-facilitated learning tool in schools with a lower PTR (pupil-teacher ratio) enabling continuity in both learning and improved comprehension of STEM subjects.

Medicines from the Sky

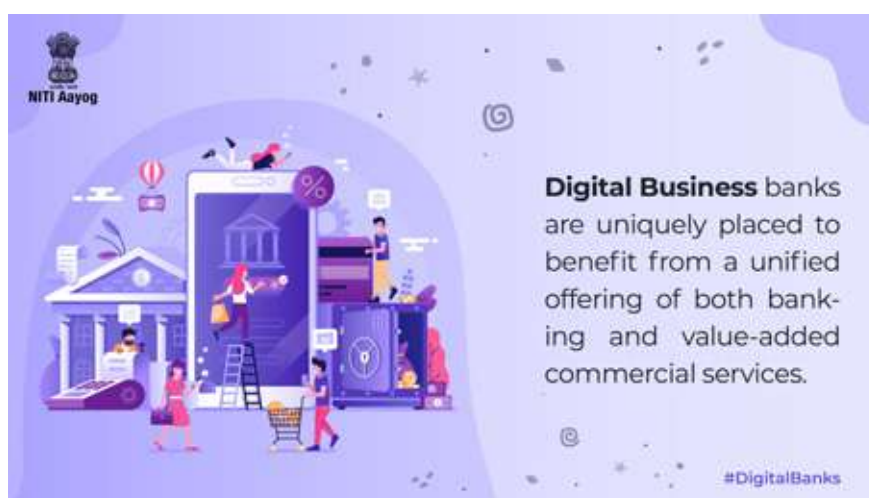
NITI Aayog, in collaboration with the Government of Telangana and the World Economic Forum (WEF), launched the 'Medicines from the Sky' project on piloting the use of unmanned aerial systems for the delivery of vaccines in remote areas. These drone trials are focused on laying the groundwork for a drone delivery network that will improve access to vital healthcare supplies for remote and vulnerable communities. The scope includes deliveries of MMR (maternal mortality rate), flu and Covid-19 vaccines.

In September 2021, Telangana became the first Indian State to deliver vaccines using Beyond the Visual Line of Sight (BVLOS) drones in the Vikarabad District. Eight participating consortia delivered vaccines using BVLOS drones. Sixteen corridor air envelopes were designated for the experiments. The industry core group was commissioned with Public Health Foundation of India (PHFI), NITI Aayog, and the Government of Telangana. There was comprehensive data capture for decisions and improvisations. A record 26-km route was covered for the delivery of 300 tubercvax doses, reducing the delivery time by approximately 50%. Currently, discussions on permanent operationalization of the corridors are in progress.

A similar project proposal is under discussion with the Governments of the North-Eastern States and Himachal Pradesh.

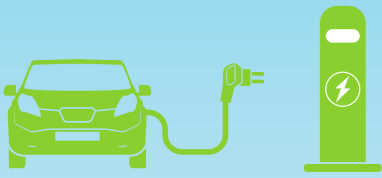
Digital Banking

A discussion document on 'A Proposal for Digital Banks in India: Licensing and Regulatory Regime' has been released for stakeholder consultations. The document proposes a template and roadmap for digital bank licensing and a regulatory framework in India.



Agri-Tech

An expert committee has been constituted under the Chairmanship of Member, Agriculture, NITI Aayog, to identify the challenges and propose a way forward to promote agri-tech in the country.



NATIONAL MISSION ON TRANSFORMATIVE MOBILITY AND BATTERY STORAGE



To drive clean, connected, shared, sustainable, and holistic mobility initiatives in India, the National Mission on Transformative Mobility and Battery Storage was set up in NITI Aayog in March 2019.

Phase II of the Faster Adoption and Manufacturing of (Hybrid and) Electric Vehicles (FAME) scheme was launched with an outlay of Rs 10,000 crore to promote the manufacture of electric and hybrid vehicles and the development of technology in this area.



Steps to Reduce Cost of EVs

Under FAME-II, the following actions have been taken to reduce the cost of electric two- and three-wheelers and e-buses:

1. Upfront incentives for two-wheelers have been increased
2. The Aggregation Model has been adopted for three-wheelers
3. The Opex Model and Lighthouse Cities' approach have been taken for electric buses



PLI for ACC Battery Storage

The Government has also approved the Production-Linked Incentive (PLI) scheme for the manufacturing of Advanced Chemistry Cells to bring down the prices of batteries in the country. A drop in battery price will result in the reduction of the cost of electric vehicles (EVs). The programme was approved by the Cabinet with an outlay of Rs 18,000 crore for five years, and PLIs worth Rs 25,938 crore were sanctioned for automobiles and auto components, with a focus on EVs and fuel-cell technologies, for five years.

Also, a majority of the states have come up with their EV policies and NITI is handholding the others for the development of the same.



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Shoonya Campaign

In September 2021, NITI Aayog, with the support of Rocky Mountain Institute, launched Shoonya: an initiative to promote zero-pollution delivery vehicles by working with consumers and industry. The campaign aims to accelerate the adoption of EVs in the urban deliveries segment and create consumer awareness about the benefits of zero-pollution delivery.



E-Amrit Portal

India launched 'E-Amrit', a web portal on EVs at the COP26 Summit in Glasgow, UK, in November 2021. E-Amrit is a one-stop destination for all information on EVs—their purchase, investment opportunities, policies, subsidies, etc. The portal has been developed and hosted by NITI Aayog under a collaborative knowledge exchange programme with the UK government and as part of the UK–India Joint Roadmap 2030, signed by the Prime Ministers of the two countries. E-Amrit intends to complement the initiatives of the Government on raising awareness on EVs and sensitizing consumers on the benefits of switching to electric vehicles.



Collaboration with IITs

NITI Aayog holds regular interactions with the Indian Institutes of Technology (IITs) to create a world-class ecosystem for research and innovation in transformative mobility. So far, nine IITs have come forward to develop courses and R&D programmes to accelerate the adoption of EVs in the country.

Collaboration with Asian Development Bank

NITI Aayog and Asian Development Bank (ADB) are working together on several high-level initiatives through technical assistance to promote EVs in India. Some of the important activities under this collaboration include credit enhancement for various EV fleet operators and other stakeholders in the value chain, supply-chain assessment for EVs, and EV infrastructure component manufacturing in India.

Other Steps

1. Mapping of global best practices
2. Strengthening the EV startup ecosystem in the country
3. Developing comprehensive e-mobility plans for tier-1 cities
4. Continuous engagements and consultations with industry, academia and think tanks to address challenges in the adoption of EVs and charging infrastructure.

METHANOL ECONOMY

India is poised to play a significant role in the global energy space. It is likely to account for 25% of the rise in global energy demand by 2040. Our country's energy demand is expected to rise at a compounded annual growth rate (CAGR) of 3.5% by 2040. However, the dependence on crude oil and natural gas has increased from 73% and 17% in 2005–06 to 81% and 40% in 2015–16, respectively.

Methanol and dimethyl ether (DME) can play an important role to curtail rising imports and improve the energy security of India. Methanol production and usage are in the initial stages in India; however, due to methanol's wide applications, there is tremendous scope for growth. NITI Aayog has been driving national efforts towards the widespread adoption of a methanol economy in India.

A white paper on the blending of 15% methanol in gasoline was prepared by NITI Aayog and shared with the PMO, requesting the issuance of a policy directive to all stakeholders to include the M15 blend as part of an alternative fuel strategy for cutting down the import of fossil fuels.

The Bharat Heavy Electricals Limited (BHEL) launched India's first plant in Hyderabad to convert high ash coal into methanol using indigenous technology. BHEL has developed a fluidized bed gasification technology suitable for high ash Indian coal to produce syngas and to convert syngas to methanol with 99% purity. This pilot project, with a methanol generation capacity of 0.25 metric tonnes every day, has been initiated by NITI Aayog and funded by the Department of Science and Technology (DST) under the Clean Energy Research Initiative.

Dr VK Saraswat, Member, NITI Aayog, met with representatives of the Society of Indian Automobile Manufacturers, Mahindra and Mahindra Limited, Hero Moto Corps, Indian Oil Corporation Limited (IOCL) and Automotive Research Association of India (ARAI) to review the status of testing of vehicles with 15% methanol blended in petrol and the protocols for the endurance study on M15.

With the effort of NITI Aayog, the IOCL and ARAI have conducted emission as well as material compatibility tests with the M-15 blend in two- and four-wheelers.



Various other tests, especially on drivability and durability, are being carried out by the ARAI with funding from the DST. On 4 October 2021, ARAI conducted a flag-off event for the performance evaluation of M15 two- and four-wheelers.

ARAI submitted its report on the results of the emissions tests for E10 (90%) + M15 (10%), E10 (50%) + M15 (50%), E10 (10%) + M15 (90%) blends. The results were found to be very encouraging, particularly in the reduction in CO and NOx with these blends. After the completion of the remaining tests, the M15 programme is slated to be launched in the North-Eastern Region.

In Assam's Tinsukia District, the IOCL has built the infrastructure for the first M15-dispensing stations. These stations will become operational by January 2022. The IOCL has partnered with Assam Petrochemicals Limited to get 30 MTPD (38 KLPD) of methanol for mixing with gasoline.

To help boost the methanol-blending programme in India's North-Eastern States, Assam Petrochemicals Limited has increased its capacity to 600 TPD methanol and committed to providing 50% of it to the M15 programme.

To use methanol as a cooking fuel, the Bureau of Indian Standards has prepared a preliminary draft on the domestic methanol cookstove-canister. The final draft will be made public once the comments from all the stakeholders are received by the Bureau of Indian Standards.

HYDROGEN ECONOMY

As per a directive of the PMO, NITI Aayog is undertaking efforts towards the development of a hydrogen economy in India. NITI has organized several brainstorming sessions on the same under the Chairmanship of Vice Chairman, NITI Aayog, with relevant stakeholders. A presentation on hydrogen economy was made by leading industries in the sector to Vice Chairman, NITI Aayog, on 22 April 2021. Based on their suggestions, the Science and Technology Vertical and Atal Innovation Mission have jointly formulated a framework for enabling stakeholders and innovators in the ecosystem.

COLLABORATION WITH THINK TANKS

Governance and Research



Discussion with Leading Think tanks

NITI Aayog has started a series of interactions with major think tanks of the country. The objective behind these meetings is to provide a platform to deliberate and exchange ideas on critical aspects of the Indian economy.

The first such meeting was held in February 2021, the second in May, and the third in August. In the fourth meeting, which was held in November, 73 major think tanks were invited.

Such interactions bring a broader perspective to policymaking from across sectors and geographies.

Consultation with Expert Group on Food Security and Management

A consultation with experts from 20 major think tanks was organized under the Chairmanship of Member (Agriculture), NITI Aayog, on 13 July 2021 on various aspects of food security and management, including procurement, distribution under Public Distribution System (PDS), issues in the sugar sector; and DBT in fertilizers, among others.

Economics and Finance

Discussion on Economic Prospects

A meeting was organized on the 'Mid-Pandemic Perspective' on 18 May 2021 with representatives of 35 think tanks and institutions. Another meeting was held on the 'State of the Indian Economy' on 17 November 2021 with 73 think tanks and institutions.

Health and Nutrition

Discussion on Post Covid-19 Health System in India

A consultative meeting was organized under the Chairmanship of Member (Health), NITI Aayog, with 28 health-sector experts to propose a resilient post-Covid health system for India that can withstand pandemics like Covid-19.

The key ideas that emerged during the discussion were:

1. Need for higher expenditure and economic contractions to improve the spending efficiency and public financial management systems
2. Collaboration of health-sector startups with local governments
3. Tapping into the high potential of the Ayush system
4. Creation of a system under the 'One Health' approach
5. Use of technology to reduce the burden of reporting
6. Strategic shifts required on how to move from low to more efficient spending, thereby reducing the out-of-pocket expenditure of patients
7. Risk stratification of people cured of Covid-19
8. Optimizing CSR-funding and community-funding for healthcare spending
9. Focus on the upgradation of primary health centres and sub-centres to avoid the occupation of beds for non-serious/avoidable cases
10. Convening consultative meetings of this nature at the State/UT level for application of region-specific solutions
11. Leveraging Panchayati Raj institutes and the sarpanch network to enhance the health system

Engagement on mental health with NIMHANS and others

The Health and Nutrition Vertical, in collaboration with NIMHANS, has been envisaging comprehensive mental health services. So far, NITI Aayog has undertaken efforts in:

1. Creation of exhaustive landscape and service-mapping of mental health in India
2. Collaboration with stakeholders on community psychiatry training
3. Developing a network of telemedicine services for mental neurological and substance use disorders
4. Exploring service gaps through non-specialist allied health workers
5. Strengthening community awareness and ownership in line with the Mental Healthcare Act

Managing Urbanization

Consultation with Expert Group

Special Secretary, NITI Aayog, met with representatives of international organizations, academia and think tanks on 28 June 2021 to deliberate on new ideas and approaches related to urban definitions, metropolitan governance, local self-governance models, urban management and health systems, etc.

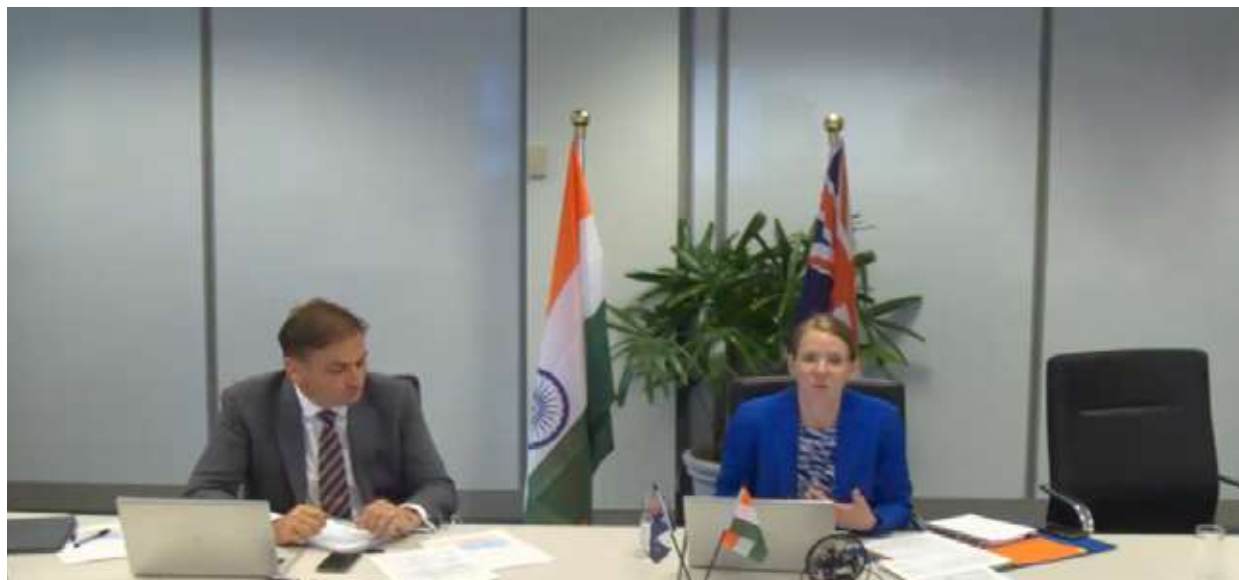
INTERNATIONAL COOPERATION

Collaboration with Countries

Australia

A Statement of Intent (Sol) was signed between NITI Aayog and the Australian Treasury on 14 July 2017 to share insights into key economic policy questions; undertake joint research projects on topics of mutual interest; exchange visits of suitable personnel for enhancing mutual understanding; and organize an annual economic policy dialogue.

The former Prime Minister of Australia Tony Abbott AC visited NITI Aayog on 5 August 2021 to build momentum for the Australia–India Comprehensive Economic Cooperation Agreement. Currently, the two sides are planning to establish an Australia–India infrastructure forum to match project opportunities with investors to facilitate two-way investment in infrastructure; share regulatory experience and expertise; and enhance business relationships.



The second NITI Treasury Dialogue was led by Lisa Elliston, Head of the International Economics and Security Division, Australian Treasury

Russia

India–Russia Strategic Economic Dialogue (IRSED): A Memorandum of Understanding (MoU) between NITI Aayog and the Ministry of Economic Development, Russia, was signed on 5 November 2018 to create a platform for enabling partnerships, sharing experiences in the field of economic policy, and organizing regular interactions and cooperation between the subjects of the Russian Federation and India.

The third IRSED was held on 15 April 2021. During the dialogue, the six coordination committees set up under IRSED presented their recommendations. The following key areas of cooperation were identified for prioritization:

1. **Development of Transport Infrastructure and Technologies:** To operationalize the International North–South Transport Corridor.
2. **Small and Medium Business Support:** Linkage of National Small Industries Corporation’s MSME Mart with a similar portal on the Russian side.
3. **Cooperation in Trade, Banking, Finance, and Industry:** Facilitate interactions between exporters and importers using conference and recognition and reward platforms.
4. **Digital Transformation and Frontier Technologies:** Ensure the advancement of cyber-security and information security technologies, biometrics, and ICT-trusted environments, among others.

India–Russian Far East and the Arctic: An MoU between NITI Aayog and the Ministry for the Development of Russian Far East and the Arctic was signed to boost the strategic partnership between India and Russia by strengthening cooperation in the spheres of trade, economics, and investment in these two regions. As per the MoU, both sides would prepare a programme for the development of the Russian Far East and Arctic region for 2020–25. The programme would form the basis for

interaction between the regions to increase bilateral cooperation in the implementation of investment projects and to increase trade.



Dr K Rajeswara Rao, Special Secretary, NITI Aayog, signed the statement for the third IRSED on the Indian side

European Union

During the 15th India–European (EU) Summit in July 2020, a joint task force on AI was constituted. The task force sought to identify and implement mutually beneficial sectoral AI use-cases for deployment and possible scaling; collaborate for imaging biobanks; and create a connected AI-research ecosystem. The first meeting of India–EU AI was jointly chaired by Anna Roy, Senior Adviser, NITI Aayog, and Lucilla Sioli, Director, DG Connect, on 24 June 2021.

Germany

An MoU between NITI Aayog and the German Federal Ministry for Economic Cooperation and Development (BMZ) was signed on 23 November 2021 to boost the strategic partnership between India and Germany in various sectors, such as agroecology, frontier technologies, climate, and Sustainable Development Goals.

China

NITI Aayog–Development Research Centre (DRC) Dialogue: The MoU between NITI Aayog and DRC was signed on 15 May 2015 to establish a dialogue to deliberate on issues aimed at promoting bilateral economic cooperation, by way of joint research and visits, workshops, and seminars to facilitate the exchange of best practices between the two sides. So far, five dialogues have taken place and a joint study to identify opportunities for Chinese investment in India has been published.

India–China Strategic Economic Dialogue: The MoU between the erstwhile Planning Commission and the National Development and Reform Commission (NDRC) was signed in December 2010. Through this MoU, the India–China Strategic Economic Dialogue (SED) was established to discuss challenges and explore possibilities of cooperation between sectors that are strategically important for the economic growth of the two countries. So far, six SEDs have taken place.

Denmark

As part of the Indo-Danish Bilateral Green Strategic Partnership, Atal Innovation Mission and Innovation Centre Denmark (ICDK) have collaborated to host an open innovation water challenge as part of the 'Next Generation Water Action', which is an international event organized by the Denmark Technical University.

At the Next Generation Water Action finals in May 2021, AIM and ICDK selected ten teams, including six by students and four by startups, from among 400 applicants.

Saudi Arabia

Saudi Centre for International Strategic Partnership

NITI Aayog and the Saudi Centre for International Strategic Partnership (SCISP) have been identified as nodal departments of the respective countries to engage in discussion to identify the areas for strategic partnership on economic sectors. The second senior officials' meeting between India and the SCISP was held on 8 April 2021 and chaired by CEO, NITI Aayog, and CEO, SCISP. Both the nations are in continuous discussions to identify investible projects in priority areas.

USA

India–USA Strategic Clean Energy Partnership

Under this collaboration, NITI Aayog and USAID lead the 'Sustainable Growth' pillar. Work has been undertaken in areas such as low carbon technologies, energy data management, and transition and decarbonization of heavy industries.

India Energy Modelling Forum

USAID–NITI Aayog jointly launched the India Energy Modelling Forum (IEMF) on 2 July 2020. The forum aims at engaging stakeholders in modelling and long-term energy planning exercises. Several steering committee and inter-ministerial meetings have been held to finalize topics and the scope of six modelling studies. To meet the Panchamrit commitments of COP26, IEMF is expanding the scope of its activities to include climate and economic modelling, and evolving India into a climate- and energy-modelling forum.

Collaboration with Agencies

Adobe

Atal Innovation Mission and Adobe have offered Adobe Creative Cloud and Spark services to all Atal Tinkering Labs—so far, more than 100 schools have utilized them. Teacher-training sessions on the same have been conducted in seven States. Adobe creative educator sessions for mentors have also been organized.

La Fondation Dassault Systèmes

AIM, in collaboration with La Fondation Dassault Systèmes in India, launched the third series of the Student Entrepreneurship Programme (SEP 3.0).

The theme of SEP 3.0 is 'Made in 3D: Seed the Future Entrepreneurs', conceptualized and rolled out earlier in France in 2017 by La Main à la Pate Foundation and La Fondation Dassault Systèmes Europe.

As part of this programme, one team from each ATL school will be allocated seed-funding towards creating their startup, designing and prototyping their innovation using 3D printing, preparing marketing campaigns, defining product pricing, and creating an expansion strategy.

Dell

AIM has collaborated with Dell in developing an ATL gaming module platform that has gained traction and garnered over 13,000 registrations. So far, 882 schools have used it and more than 5000 students and 300 teachers trained on the same. The partnership has helped in skill development and provision of infrastructure support, etc.

Dell also runs SheCodes as part of the Student Innovator Programme. Top 100 all-girl teams of the ATL Marathon 2020 are undergoing the SheCodes programme, whereby mentors from Dell teach them essential digital and soft skills as well as enhance their prototypes to the next stage.

IBM

AIM has collaborated with IBM for the ATL teacher- and mentor-training programmes. IBM has been a support system in providing training to more than 2200 teachers in the last one and a half years. AIM and IBM also organized Unbox Tinkering, a teacher-training session with LLF and other implementing partners.

IBM has also partnered with AIM to conduct the Student Innovator Programme. In 2021, IBM India offered internships to 66 neo-innovators from among the top 200 ATL Marathon winners from 23 schools.

International Energy Agency (IEA)

NITI Aayog, in collaboration with IEA, has taken up the following activities:

1. **Report on Renewable Integration in India:** Based on national and regional workshops held in 2018 and by focusing on India's low carbon transition strategy for renewable energy integration, along with a series of workshops in Maharashtra, Gujarat and Karnataka between 2020 and 2021, this report provides an international framework for the integration of renewables and highlights a full repertoire of power system flexibility solutions.
2. **Capacity-Building:** NITI Aayog and IEA jointly work with the States for capacity-building and training programmes on better energy data management.

INQ

INQ is facilitating and assisting NITI Aayog in curating a series of ongoing innovation and entrepreneurial ecosystem exchange programmes to support and enrich startups and scale-ups between Australia and India. INQ has also extended support for the establishment of programmes for the soft-landing and startup innovation launch pads between India and Australia.

LEGO

AIM and LEGO Education have collaborated for the adoption of 100 ATLs and organization of teacher-training sessions.

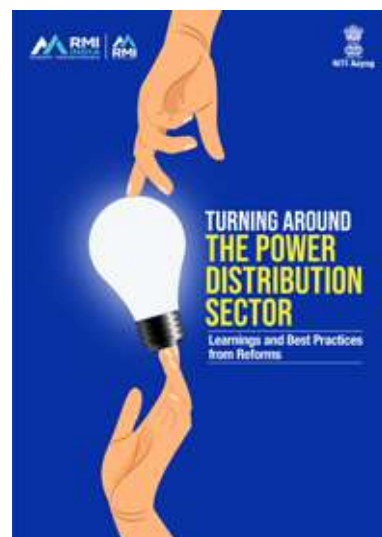
Monsha'at

AIM and Monsha'at aim to exchange knowledge and experience to strengthen the institutional infrastructure of micro, small and medium enterprises. The collaboration with Monsha'at focuses on

the exchange of information on business opportunities and supports innovation incubation and the startup ecosystem.

Rocky Mountain Institute

NITI Aayog and the Rocky Mountain Institute released the report ‘Turning Around the Power Distribution Sector’ on 3 August 2021. The report presents reform pathways that can transform the country’s power distribution sector in a step towards improving policymaking in this area.



UNICEF

NITI-UNICEF Microsimulation Study on Social Protection Schemes

NITI Aayog and UNICEF are working together to build an integrated social protection framework for India through the microsimulation of social protection programmes in the country.

In this respect, an advisory group was constituted under the Chairmanship of Vice Chairman, NITI Aayog, to provide expert and independent views on the study from the contextual and methodological perspectives.

A technical group was also constituted under the Chairmanship of Adviser (Social Justice and Empowerment) to provide expert guidance for the study.

On 19 July 2021, the Economic Policy Research Institute and UNICEF made a presentation virtually on the second phase of the study. Another meeting was held with UNICEF on 30 September 2021 to discuss the progress of the third phase of the study.

AIM-UNICEF

AIM and UNICEF have collaborated on skilling students and teachers, and identifying and scaling up promising innovations. So far, AIM and UNICEF have hosted several innovation events and boot camps such as the Gandhian Challenge, ATL Young Champions, and 100-Day Tinker Fest.

UNDP



Release of the Handbook on Sustainable Urban Plastic Management

NITI Aayog and UNDP released a handbook on sustainable urban plastic waste management on 11 October 2021. The handbook is a repository of 18 case studies/best practices from India and other Asian countries. The book also covers crucial aspects of the entire plastic-waste-management service chain. It will enable urban local bodies and other stakeholders involved in the sector to learn from the successful business and service models covered under this handbook.

For effective implementation of the best practices and models, a NITI Aayog and UNDP have held two regional workshops, one in Mumbai on 22 November 2021 and another in Tirupati on 24 December 2021.

VISA

AIM and VISA have collaborated to provide mentorship and support to startups. VISA has planned to conduct a fintech workshop for AIM startups and a fintech roadshow to highlight global emerging trends and products in the area. It also organizes virtual roundtables with key fintech stakeholders for the Government of India to jointly work on areas of strategic interest.

World Bank

Under the Technical Assistance programme, World Bank is assisting NITI Aayog in the preparation of a report on battery demand assessment. The report will encompass (i) a study on the preparation of a grid-level policy and regulations framework for energy storage demand (ii) a demand study at the level of the ISTS (Inter-State Transmission System), and (iii) another demand study at the distribution level (in the States) for energy storage requirements. The final report is awaited.

World Food Programme

A Statement of Intent was signed between the World Food Programme and NITI Aayog on 20 December 2021 to work towards strengthening climate resilience and food security in India.

Over the next three years, the two organizations will document good practices around mainstreaming millets; provide technical support to State Governments, the Indian Institute of Millets Research, and others; organize a national consultation for the Line Ministries, concerned State departments, academic institutions and others; and leverage India's expertise through various knowledge platforms.

ONLINE DISPUTE RESOLUTION

The Covid-19 pandemic resulted in a large section of the society being unable to receive timely access to justice. The pandemic also led to a deluge of disputes further burdening the already lengthy court processes. As the premier policy think tank of the Government of India, NITI Aayog undertook a transformative initiative to use technology and innovation to help bring affordable, effective and timely justice to those who need it the most.

Online Dispute Resolution (ODR) has the potential to help reduce the burden on courts and efficiently resolve several categories of cases. It may also be integrated to support the judiciary through technology integration in court-annexed Alternative Dispute Resolution (ADR) centres, via e-lok adalats, and can also be introduced within Government Departments for resolving internal disputes.





Accordingly, a committee was constituted at the peak of the Covid crisis by NITI Aayog on ODR in 2020, under the Chairmanship of Supreme Court Justice (Retd) AK Sikri. Constituent members of the Committee included CEO, NITI Aayog; Secretary, Department of Legal Affairs; Secretary, Department of Justice; Secretary, Ministry of Micro, Small and Medium Enterprises; Secretary, Department of Consumer Affairs, Secretary, Department for Promotion of Industry and Internal Trade and, Secretary, Ministry of Corporate Affairs.

Consequently, NITI Aayog released 'The ODR Policy Plan for India' report in November 2021 to scale dispute avoidance, containment and resolution online. The roll-out of the stated recommendations in the report can make India a world leader in using technology and innovation through ODR for effective access to justice for every individual.

The report recommends measures at three levels to tackle challenges in adopting the ODR framework in India.

The report serves as the starting point for a long-term plan of making India the global leader in implementing ODR on a large scale. It sets out the roadmap for how ODR can be scaled up as a point of first contact for dispute avoidance, containment, and when applicable, resolution.

NATIONAL INSTITUTE OF LABOUR ECONOMICS RESEARCH AND DEVELOPMENT

The National Institute of Labour Economics Research and Development (NILERD), an autonomous institute under NITI Aayog, has evolved as a centre of excellence in the field of labour and development and gained worldwide recognition over the years.

The primary objectives of NILERD include research, consultancy, education and training, and monitoring and evaluation. Various issues in the field of development have become the central focus in the backdrop of which inclusive growth and welfare are looked into meticulously.

General Council Meeting

The 52nd meeting of the General Council of NILERD was held under the Chairmanship of Vice Chairman, NITI Aayog, on 24 November 2021. Representatives from the Ministry of Labour and Employment, Ministry of External Affairs, Ministry of Skill Development and Entrepreneurship participated in the meeting. The Director-General of NILERD apprised the council members on the work undertaken by the institute in 2021-22:

1. NILERD has completed 15 research/evaluation studies, generating an internal revenue of Rs 3 crore, while simultaneously initiating new/ongoing studies, with expected revenue of Rs 1.28 crore.
2. The institute has also initiated proposals for undertaking international training programmes online under the e-ITEC scheme of the Ministry of External Affairs.



Proceedings during the 52nd meeting of the General Council

Executive Council Meeting



Proceedings during the 101st meeting of the Executive Council

The 101st and 102nd meetings of the Executive Council of NILERD were held under the Chairmanship of CEO, NITI Aayog, on 27 July and 27 October 2021, respectively.

Annual Report

The Annual Report, 2020–21, and Annual Audited Accounts, 2020–21, of NILERD as approved by the General Council were presented in Lok Sabha on 20 December 2021 and in Rajya Sabha on 21 December 2021 by Hon'ble Minister Rao Inderjit Singh.

Training Programmes

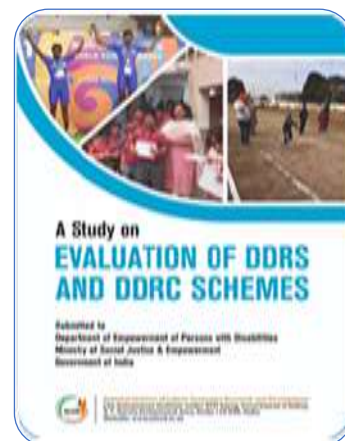
The following training programmes were held in 2021–22:

- A two-week online training programme on research methodology and application of econometrics in research, sponsored by the Indian Council of Social Science Research, was held between 23 August–3 September 2021. The programme was attended by 30 participants from various academic institutions.
- A ten-day international training programme on monitoring and evaluation under the e-ITEC scheme was held from 6–17 September 2021, and attended by 50 participants from 16 countries.
- Another ten-day-long international training programme on manpower information system, also under the e-ITEC scheme, was conducted from 29 November–10 December 2021. Twenty-eight participants from 12 countries attended the programme.

The institute has also submitted proposals for training programmes to the Assam Industrial Development Corporation, the Department of Empowerment of Persons with Disabilities, and the National Health Mission Department of the Government of Uttar Pradesh.

Research Studies

1. A study was sponsored by the Department of Empowerment of Persons with Disabilities (DEPwD) to evaluate the Deendayal Disabled Rehabilitation and District Disability Rehabilitation Centres schemes. The study assessed nine model projects, such as pre-schools and early intervention and training, and special schools for children with disabilities, etc.
2. A study was sponsored by DEPwD on the State Spinal Injury Centre (SSIC) scheme to evaluate the outcome and impact of the initiative.



3. Sponsored by the CBM Trust, a study was undertaken to evaluate disability-inclusive farmer producer organizations in India. The study sought to understand the economic sustainability of these organizations; analyse their impact on farming practices and income; evaluate their role in the socio-economic empowerment of farmers with disabilities; and examine the scope for scalability and wider adoption of this model.
4. The Ministry of Skill Development sponsored a study on Enhancing Skill Development Infrastructure in the North-Eastern States scheme to investigate its

- effectiveness in terms of performance, achievement of targets, quality and delivery of services, and overall skill development of the region.
5. DEPwD sponsored a third-party evaluation of the Assistance to Indian Spinal Injury Centre scheme to assess its outcome and impact.
 6. A peer review of the Indian Institute of Public Administration (IIPA) was commissioned by the institute itself. The review sought to assess whether IIPA has achieved the objectives for which it had been established and if similar functions are also being undertaken by other organizations, in which case, if there is scope for merging or winding up the organization.
 7. A third-party evaluation of the Shastri Indo-Canadian Institute was commissioned by the institute itself. The overall objective of the study was to evaluate whether the institute has successfully met its core objectives and assess the overall physical, financial and human resource progress of the institute.
 8. NILERD has currently undertaken a study awarded by NITI Aayog on the learning lessons from the implementation of welfare initiatives for migrant workers. Another study is being conducted on the evaluation of the Rubber Board and Coffee Board, sponsored by DMEO.



SECTION-VI



**ATAL
INNOVATION
MISSION**

ATAL INNOVATION MISSION

INTRODUCTION

Atal Innovation Mission (AIM) is the Government of India's flagship initiative to promote a culture of innovation and entrepreneurship in the country. It was set up in 2016. AIM has taken a holistic approach to nurture a problem-solving innovative mindset among schoolchildren and create an ecosystem of entrepreneurship in universities, research institutions, private sector and MSME.

All the initiatives of AIM are currently being monitored and managed systematically using real-time MIS systems and through dynamic dashboards. To ensure continuous improvements, AIM has its programmes regularly reviewed by third-party agencies.



ATAL TINKERING LABS

Atal Tinkering Labs (ATLs) is a flagship initiative of AIM to nurture an innovative mindset amongst high-school students.

ATLs encourage students to come up with out-of-the-box ideas. The programme is designed to equip students with skills such as design thinking, critical thinking, computational thinking, and digital fabrication.

Under the ATL scheme, grant-in-aid of up to Rs 20 lakh is provided to select schools to set up an Atal Tinkering Lab. ATL has four aspects:

Select

As of December 2021, 9550 ATLs have been sanctioned, covering over 90% of all districts, including 99 Aspirational ones, in both Government and private schools.

Establish

AIM, along with its partners, conducted several teacher-training programmes, such as ‘Unbox Tinkering’. To date, more than 3800 teachers have been trained. Training sessions for teachers have also been conducted on app development, ATL game development, ethics and leadership in innovation, design thinking, etc.

Enable

In 2021–22, several new online modules on innovation and technology were launched for students, including ATL Artificial Intelligence Module, ATL Gaming Module, ATL CollabCAD Module, ATL App Development Module, and ATL Python Learning Module. Over 100 webinars were conducted for students and teachers, and over 10,000 students and 3500 teachers were engaged. AIM also continued with its flagship competitions and events such as ATL Marathon, ATL Tinkerpreneur, ATL Space Challenge, and ATL Community Day.

Celebrate

AIM recognizes and encourages all students, teachers, and mentors for their efforts and good work through multiple platforms and initiatives such as Wall of Fame, Exemplary Teachers of Change, ATLs of the Month, Student Innovator Programme, Student Entrepreneurship Programme (SEP).



Mentor India

Robust partnerships forged with different stakeholders are crucial to the ATL initiative. Sustainable institutional frameworks that draw upon the capacity, resources, technical know-how of different partners are key to ensuring the success of the programme. Moreover, since tinkering as a concept is still new in our country, to advance the idea requires continuous handholding by mentors from the corporate world, academia, higher education institutes, the Government and so on. Given that ATL is non-prescriptive by nature, mentors are expected to be enablers rather than instructors. Technical know-how, innovation and design, business and entrepreneurship are some of the areas of contribution by the mentors.

In 2021–22, AIM engaged with 5179 mentors and 90 regional mentors of change.

The partners also help in expanding the technical horizons of the students by providing internship opportunities and organizing other programmes.

This year, AIM conducted the Mentor Roundtable, a flagship event to recognize top mentors, and published the GeM book to share and celebrate the exceptional work done by the Mentors of Change.

ATAL INCUBATION CENTRES

Atal Incubation Centres (AICs) aim to foster the entrepreneurial spirit while creating a supportive ecosystem for start-ups and entrepreneurs in India. AIM has been tasked with establishing and supporting world-class incubators.

Under this initiative, AIM supports 59 greenfield AICs and nine established incubation centres (EICs).

Journey So Far

Nineteen subsequent tranches, with a total outlay of Rs 38.05 crore, have been processed in 2021–22.



Impact Generated in the Startup Ecosystem

Creating World-Class Incubation Ecosystem

To make its AICs and EICs world-class incubators, AIM follows a structured approach.

Real-Time Monitoring

AIM continues to strengthen its data- and KPI-driven approach to evaluate the performance of its incubators using an online dashboard. The dashboard captures over 10 critical parameters that help AIM in taking corrective actions and supporting the AICs/EICs in a timely manner.

Capacity-Building

AIM conducts regular capacity-building workshops with the core teams of the AICs to support them with toolkits. The workshops are facilitated by industry thought leaders and experts. They also present a platform for ideating and collaborating on new projects.

AIM also runs a weekly knowledge-sharing session where experts and thought leaders share their experiences with incubator CEOs/managers and mentors. In 2021–22, AIM conducted over 40 sessions covering a number of topics.

Bridging the Gap

AIM has been running the Atal Tinkering Marathon for the last three years to provide the best student teams with an opportunity to accelerate their entrepreneurial journey.

With the success of the Student Innovator Programme (SIP) in the last two years, AIM launched SIP 3.0 in 2021–22. Under SIP, the top 100 teams of ATL Marathon work with AICs for three months to build a working prototype.

Strategic Collaboration and Partnerships

AIM has partnered with Marico Innovation Foundation to support its startups via mentorship and scale-up. AIM has also collaborated with MathWorks for no-cost licences of Matlab/SIMULINK to support the scale-up of startups' products from conceptualization to the production stage.

AIM has partnered with GivFunds Social Ventures, an impact investment organization supporting small to medium-sized social enterprises in India, to gain access to growth or working capital in the form of low-cost debt funding. AIM, Amazon and UInccept have also joined hands to support the pre and post minimum viable product stage ed-tech startups with the best resources, expertise, and funding.



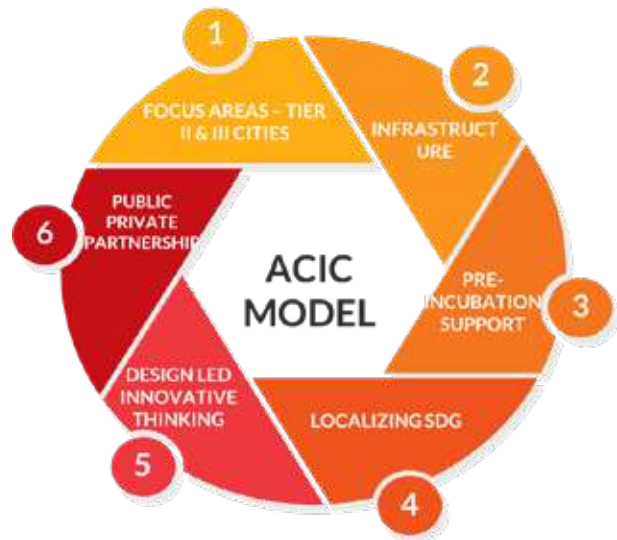
Success stories created so far

ATAL COMMUNITY INNOVATION CENTRES

Atal Community Innovation Centres (ACICs) are a means to drive innovations towards achieving the Sustainable Development Goals through novel solutions.

ACICs seek to promote and propagate the benefit of technology-led innovations through:

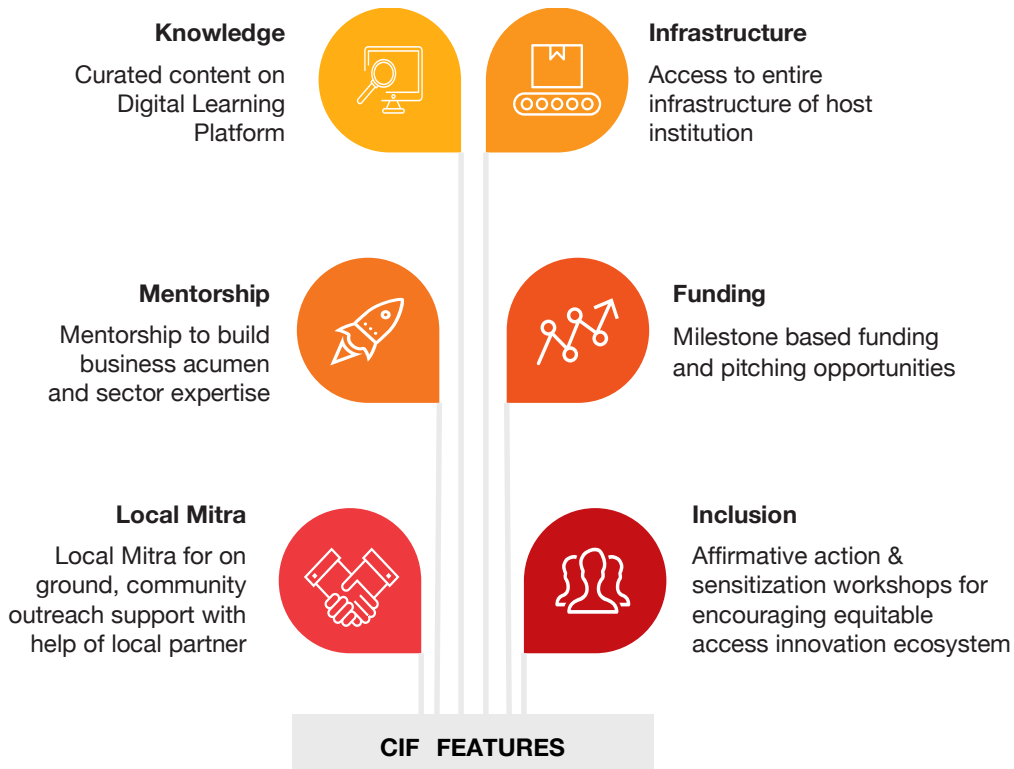
1. Suitable infrastructure for operating facilities;
2. Financial support through AIM grant-in-aid fund of Rs 2.5 crore, provided matching contribution is offered;
3. Knowledge and capacity support (training and workshops, detailed operations manual, and networking connections); and
4. Youth-centric community innovator fellowship.



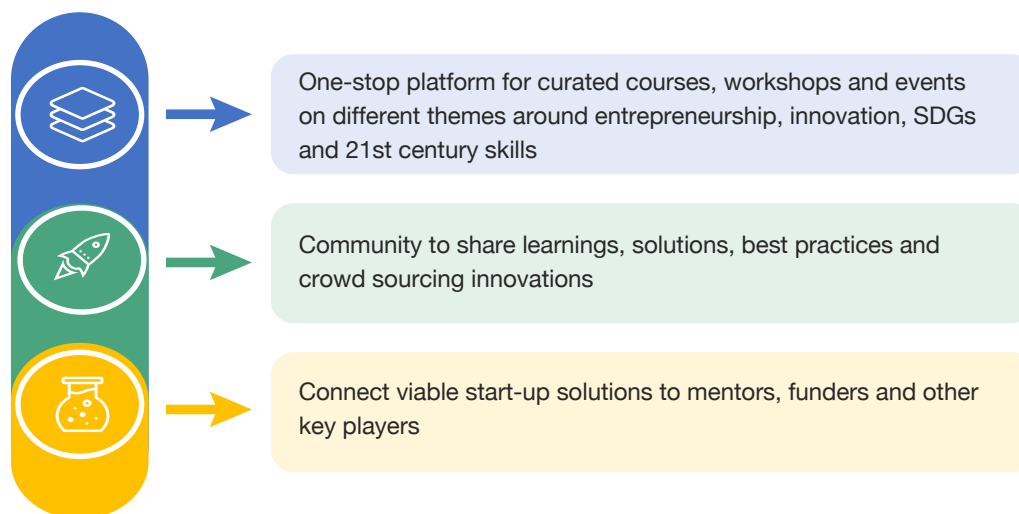
Planned Interventions

Community Innovator Fellowship

The yearlong Community Innovator Fellowship (CIF) programme aims to facilitate knowledge-building and provide infrastructure and financial support to aspiring innovators.



Digital Learning Platform



Digital Learning Platform (DLP) is an interface for knowledge sharing on thematic areas relevant for youth-led innovation and social entrepreneurship. The aim is to bring together ecosystem enablers and practitioners to share knowledge based on experience and facilitate online collaborations.

Key Highlights

1. Nineteen applicants have been shortlisted in the first cohort for setting up an ACIC in their respective regions.
2. Twelve ACICs have been operationalized across 10 States, with eight undergoing compliance checks.
3. Over 2500 registrations were made for the second cohort.
4. Forty-eight shortlisted applicants from the second cohort will undergo the screening-cum-selection committee evaluation.
5. AIM intends to establish over 50 ACICs by the end of 2022.

S.No	Name of the Operational Educational Host Institution/ Organization	Region
1	BML Munjal University	Gurgaon, Haryana
2	Chaitanya Bharathi Institute of Technology	Ranga Reddy, Telangana
3	Chandigarh Engineering College	Mohali, Punjab
4	Indian Institute of Technology (Indian School of Mines), Dhanbad	Dhanbad, Jharkhand
5	Kalasalingam Academy of Research and Education	Virudhunagar, Tamil Nadu
6	Koneru Lakshmaiah Education foundation	Guntur, Andhra Pradesh
7	Meerut Institute of Engineering and Technology, Meerut	Meerut, Uttar Pradesh
8	Vivekananda Global University (a unit of Bagaria Education Trust)	Jaipur, Rajasthan
9	GIET University	Rayagada, Odisha
10	Mar Ephraem College	Kanyakumari, Tamil Nadu
11	Audisankara College of Engineering and Technology	Nellore, Andhra Pradesh
12	Jagruti Sewa Sansthan	Gorakhpur, Uttar Pradesh

From the operationalized ACICs

To date, a total of Rs 6.95 crore has been disbursed to operationalized ACICs across India	Over 55 startups have been supported, of which 10 are led by women/economically weaker section	Over 122 events for outreach and fundraising have been conducted	As many as 22 partnerships, with the corporates as well as academia, have been established.
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ACIC-Specific Events

The first ACIC at Vivekananda Global University Foundation, Jaipur, was launched on 18 September 2021.

Knowledge and Capacity-Building

To understand the rural ecosystem better, over 35 knowledge sessions have been conducted since April 2020.

To enhance foundational literacy and competency of young people, an orientation was organized for 'Training the Trainers' who would deliver such courses to the young innovators/fellows supported by ACIC.

PFMS and Utilization Certificate Training

A training session on the PFMS portal and utilization certificate preparation was organized for the operationalized ACICs to help them understand how to submit interest-bearing details, tranche bifurcations, etc.

M&E Dashboard

A monitoring and evaluation dashboard has been designed to track and evaluate the progress of ACICs while enabling their feedback.

Friday Forums

AIM conducts 'Friday Forums', a series of weekly webinars, with ACICs and AICs. To date, 21 Friday Forums have been conducted to build core competencies and expertise in innovation and entrepreneurship.

ATAL NEW INDIA CHALLENGE

Atal New India Challenge (ANIC) is an initiative aimed towards selecting, supporting, and nurturing innovations based on advanced technologies in areas of national importance and social relevance, through a grant-based mechanism, while addressing bottlenecks due to which innovators are unable to access resources for piloting, testing, and market creation

Format

ANIC follows an open innovation challenge format.

The received applications move through three rounds of evaluations, including in-person presentations by the shortlisted applicants before a technical screening and selection committee.

The winners are supported through a tranche-based grant-in-aid of up to Rs 1 crore and through AIM's innovation network.

ANIC's first cohort was launched in partnership with five ministries across 24 challenge areas.

Selection and Grant-in-Aid

The grant entails funding of up to Rs 1 crore for product development and early-stage commercialization of deep-tech products. Each subsequent tranche is dependent upon the achievement of goals and deliverables and adherence to the budget, along with the established SoP of the programme. The support is extended for a period of 12–18 months with the objective of taking the prototype to the commercialization stage.

A total of 30 projects were approved for the final grant-in-aid and associated support from AIM.

In 2021, a total grant-in-aid worth Rs 22.85 crore was approved. The first tranche, which is 30% of the total, worth Rs 6.85 crore has been disbursed to the grantees. In FY21, the compliance check and the review of goals and deliverables are in progress for the disbursement of the second tranche. To date, only one start-up has successfully qualified for the second tranche disbursement.

APPLIED RESEARCH AND INNOVATION IN SMALL ENTERPRISES-ATAL NEW INDIA CHALLENGE

The Aatmanirbhar Bharat ARISE–Atal New India Challenges programme seeks to proactively collaborate with Union Ministries and associated industries to catalyse research and innovation and facilitate innovative solutions to sectoral problems.

The objective is also to provide a steady stream of innovative products and solutions for which the Central Ministries/Departments can become the potential first-buyers.

So far, AIM has identified 15 critical challenge statements with five Ministries/Departments.

ARISE–ANIC received a tremendous response, with over 900 registrations and 175 completed applications. Around 65 applications were shortlisted for 13 challenge areas. Twenty-five projects were approved for the final grant-in-aid and associated support from AIM. In 2021, 18 shortlisted applicants were supported with a grant-in-aid for developing their prototypes; of whom seven are in the process of completing their due diligence requirements.

AIM has also organized several webinars in collaboration with external experts to recognize innovations and initiatives being taken in various sectors, and encourage startups and MSMEs to apply in the Aatmanirbhar Bharat ARISE-ANIC.

INDIA-AUSTRALIA CIRCULAR ECONOMY (I-ACE) HACKATHON

The idea of I-ACE originated on 4 June 2020 during a virtual summit between Hon'ble Prime Minister Narendra Modi and Australian Prime Minister Scott Morrison to explore innovative technologies and measures to boost the circular economy in India and Australia.

More than 1000 applications were received from both countries. Eight applications were selected for a unique bilateral hackathon, wherein students and start-ups of both nations worked together in the following areas:

1. Innovation in packaging: reducing packaging waste
2. Innovation in food supply chains: avoiding waste

3. Creating opportunities for plastics waste reduction
4. Recycling critical energy metals and e-waste

Nineteen students and 20 start-ups were shortlisted; they presented in front of an Indo-Australian jury. Four student winners and four start-up winners, one for each challenge, were selected.

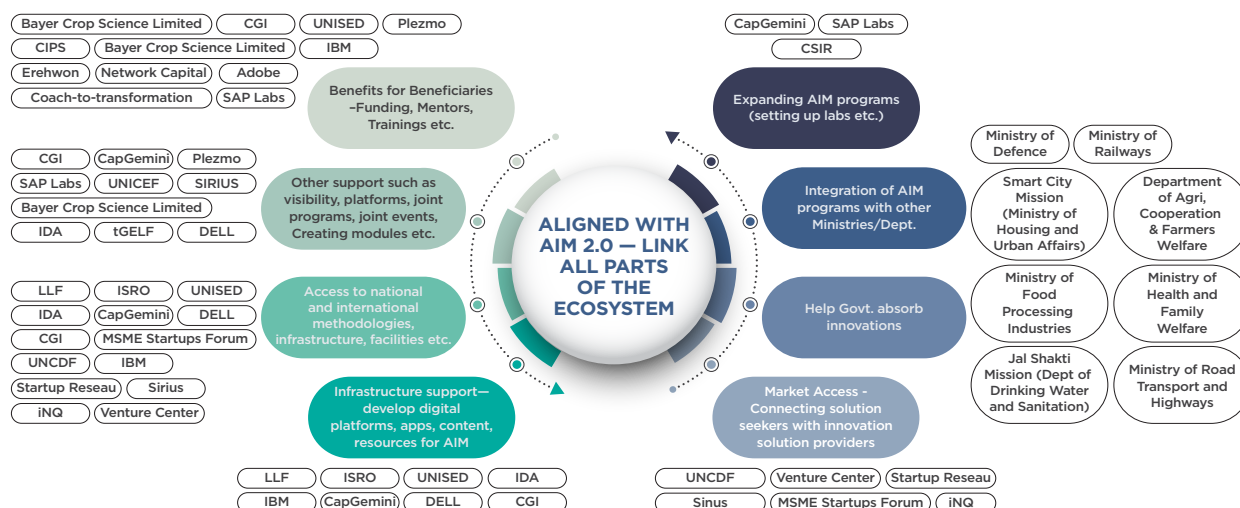
The winners will be supported by the innovation and incubation ecosystems of both AIM and CSIRO Australia to enable them to develop their solutions into products.

AIM ECOSYSTEM DEVELOPMENT TEAM (AEDT)

AEDT team strengthens the innovation and entrepreneurship ecosystem by building networks of relevant stakeholders to provide additional value to AIM beneficiaries beyond the framework of structured programmes.

PARTNERSHIPS

AIM has forged over 50 partnerships with various corporates and foundations and engaged with industry leaders and faculty that support AIM beneficiaries through infrastructure and technology, market and investor access, creation of modules, and adoption of ATLS. An outcome-based mapping of partnerships achieved is given below.



STRATEGIC PROGRAMMES

AIM-iLEAP (Innovative Leadership for Entrepreneurial Agility and Profitability)

AIM-iLEAP is a series of enterprise and investor demo days in collaboration with Startup Réseau to support startups in overcoming bottlenecks in market and investor access. AIM-iLEAP was launched in 2021 and has so far completed four editions.

As many as 33 startups have pitched to over 70 investors, such as the Indian Navy, Ministry of Housing and Urban Affairs, VISA, Paytm, Kotak, Nippon, Yes Bank, Apollo Hospitals, Indian Angel Networks, Bharat Innovation Fund, 9Unicorns, Celesta capital.

Success stories include projects from the Defense Forces, Prophaze-granted PoC with NIC and connected with NCIIPC, and Vivalyf funded by Shark Tank.



AIM-iCREST (Incubator Capabilities Enhancement program for a Robust Ecosystem)

Launched in 2021–22, AIM-iCREST was designed for AICs and EICs, supported by the BMGF and implemented by the Wadhvani Foundation.

AIM-PRIME (Programme for Researchers in Innovation and Entrepreneurship)

AIM-PRIME seeks to support science-based, deep-tech start-ups to achieve the goal of 'lab to land'. So far, 19 potential investors have shown interest.

Global Innovation Platform (GIP)

The Global Innovation Platform was launched on 22 July 2021, in partnership with UNCDF, Centre for Financial health, BMGF, Rabo Foundation, the International Fund for Agricultural Development, and Bayer. The platform seeks to enable the cross-border exchange of innovations and investments to help Indian startups enter global geographies such as Africa and South-East Asia.

HER & NOW with GIZ

AIM has collaborated with GIZ under the project Her & Now with Dhriiti Foundation and designed the WINcubate Training Programme, to provide AIM incubators with a gender-focused approach. Ten AICs have undertaken Level-1 training and five, Level-2.

Headstart Network

The Headstart Network sought to strengthen the AIM incubators through mentoring support.

India-France Innovation in Information Technology

AIM supported the Embassy of India in France in an event held between 24 and 30 November 2021 to build partnerships in the spheres of digital technology, innovation, and startup ecosystems in India and France/EU. The event had panel discussions and weeklong startup exhibitions; over 70 startups of AIM exhibited in the event.

SECTION-VII



COVID-19 MANAGEMENT

COVID-19 MANAGEMENT

INTRODUCTION

India began its fight against the novel coronavirus when the first case was reported in January 2020. Soon the world was ensnared in the grip of a ferocious pandemic. In India, the number of cases peaked in May 2021. By January 2022, the cumulative case count in the country since the first case was more than 4 crore.

As the country continues its battle against the virus and its several mutations, a collaborative approach, involving the Government, the public and the private sectors, is the only way to defeat Covid-19. Several milestones were achieved this year, the most notable being India achieving the 100-crore vaccination mark in October 2021.

On its part, NITI Aayog has been playing a crucial role during the Covid-19 pandemic, more specifically through the Empowered Groups headed by its Member (Health) and CEO.



OVERVIEW

The impact of Covid has been largely disruptive in terms of economic activity as well as a loss of human lives. With most sectors adversely affected, the economy witnessed a contraction of 7.3% during 2020–21. Both the Central and State Governments came out with a series of responses to protect lives and livelihoods, improve healthcare facilities, ramp up vaccinations, and undertake measures for social protection. Economic reform packages were also announced to quickly bring the economy back to the growth path. As a result, GDP growth is expected to rebound to 9.2% in 2021–22.

NITI Aayog has been playing an instrumental role in enhancing the country's preparedness and response capabilities, providing technical guidance as well as active support by setting up the CovAid portal and through partnerships with civil society organizations, the private sector, and multilateral institutions. NITI's contribution through the Empowered Groups, headed by its Member and CEO, has been critical for ensuring timely action in combating the virus.

NITI's involvement ranges from leading and participating in Empowered Group meetings, providing trends of the pandemic for informed policymaking, ensuring health system preparedness and vaccine management to testing and genomic surveillance, providing guidance on school reopening, and setting up a dedicated portal—CovAid—for transparent and faster distribution of all foreign aid to end beneficiaries.

EMPOWERED GROUPS LED BY NITI AAYOG

Empowered Group 1: Medical infrastructure and Covid-management plan, chaired by Dr VK Paul, Member (Health), NITI Aayog.

Empowered Group 5: Vaccination (including procurement, manufacturing, import, logistics, daily supply, utilization, and wastage monitoring), chaired by Member (Health), NITI Aayog.

Empowered Group 7: Coordinating with private sector, NGOs, and international organizations for response-related activities, chaired by Amitabh Kant, CEO, NITI Aayog.

CONTRIBUTION OF EMPOWERED GROUPS

Dr VK Paul, Member (Health), NITI Aayog, is heading the Empowered Groups on emergency management plan and vaccination, and the National Expert Group on Vaccination Administration for Covid (NEGVAC).

Under the leadership of Dr Paul, NITI Aayog also participated in the activities of the National Task Force on Covid-19. In addition, NITI's Health Vertical also contributed to the proceedings of the Empowered Groups on the augmentation of manpower (EG 3) and oxygen (EG 4).

Covid Trends for Informed Policymaking

Dynamic trends of the pandemic, at the international, national, State and District levels, were provided, as needed, often on a daily/weekly basis to inform the highest offices for shaping policies.

Health Systems' Preparedness

As many as 50 Empowered Group 1 meetings have been held so far under the Chairmanship of Dr Paul. Key decisions taken in consultation with relevant stakeholders and experts during these

meetings proved as crucial guidance for other EGs, the Ministry of Health and Family Welfare, and State Governments.

Framework documents were prepared in the early phase of the pandemic, prior to the first wave, which aided in planning. The following frameworks were submitted by EG 1:

- Requirements and norms for Covid Care Centres in India
- Setting up of Covid hospitals in India
- Population and State-wise estimates for Level-2 Covid hospital beds in India
- District-Readiness Assessment Tool for managing the Covid-19 outbreak

Vaccination

Twenty Empowered Group 5 and 30 NEGVAC meetings have so far been conducted. Key decisions involving vaccine manufacturing, availability, procurement, import, logistics, utilization, and ramping up of the IT infrastructure were taken in these meetings.

Engagement with State Governments and other key stakeholders, such as the National Technical Advisory Group on Immunization (NTAGI), to plan the roll-out of vaccinations was also undertaken. A guidance document was prepared on the prioritization and phasing of vaccines during the first phase of the immunization drive.

DEVELOPING VULNERABILITY CRITERIA OF DISTRICTS

NITI Aayog developed vulnerability criteria of Districts for Empowered Group 1 to aid in strategizing and guiding efforts for controlling the pandemic. Using easily available data and considering prior exposure to Covid and two-dose vaccination coverage, the Districts were categorized into four categories.

Special Focus	Assumptions	No. of Districts
Category 1	Prior confirmed Covid exposure less than 0.5% and vaccination less than 50%	99
Category 2	Prior confirmed Covid exposure between 0.5 to 2.5% and vaccination less than 50% or prior Covid exposure below 0.5% and vaccination above 50%	212
Category 3	Prior Covid exposure above 2.5% and vaccination less than 50% or prior covid exposure between 0.5 to 2.5% and vaccination above 50%	299
Category 4	Prior Covid exposure above 2.5% and vaccination above 50%	104

Note: National average for prior Covid exposure is 2.5% and the second dose of Covid vaccination is 50% as on 30 December 2021

Districts in categories 1 and 2 represent a high vulnerability to the Omicron variant. The Ministry of Health and Family Welfare shared these criteria with the States and UTs to ensure rapid scale-up of the second dose of vaccination in the Districts in categories 1 and 2, in addition to all-round health preparedness (beds, ICUs), testing, medicines, oxygen, home-care support, etc.

Augmenting Health Resources

NITI Aayog participated and contributed to eight Empowered Group 3 discussions and meetings on human resources (HR). The framework document on the setting up of Covid-hospitals in India, which also mentions HR needs, was used as a starting point for planning.

A web portal for the registration of volunteer medical doctors was also developed by NITI. Around 40,000 volunteers registered on this portal. The data was shared with MoHFW and the EG 3 on augmenting HR for optimal deployment.

Further, policy options to incentivize healthcare professionals were prepared. These were extensively discussed, and final decisions included permitting the deployment of medical interns for Covid-management duties under the supervision of their faculty, using the services of final-year MBBS and PG students, employing BSc/GNM qualified nurses for teleconsultation and monitoring of mild Covid cases, and recognizing and incentivizing Covid duty by PGs and residents. All such professionals thus engaged were covered under the insurance scheme of the Government for health workers fighting Covid. These measures were announced by the Prime Minister on 3 May 2021.

Testing and Genomic Surveillance

EG 1 prepared a scientific document that paved the way for the development of the Indian SARS-CoV-2 Genomics Consortium (INSACOG). NITI Aayog released the guidelines on 'Sharing of Biospecimen and Data for Research Related to Covid-19', which helped in the set-up of multiple Covid-19 biorepositories, and the subsequent formation of the INSACOG.

Mapping of testing laboratories across the nation during the initial phase of the pandemic was also undertaken, for planning the ramping up of capacities.

Oxygen Planning

NITI Aayog participated and contributed to three Empowered Group 4 discussions and meetings on oxygen planning.

A guidance document, 'Preparedness to Meet Oxygen Requirements for Possible Future Surge of Covid-19 Cases', was also prepared by NITI in consultation with DPIIT, Petroleum and Explosives Safety Organization (PESO), and MoHFW.

Enabling Availability of Critical Consumables

NITI Aayog supported the MoHFW to coordinate inter-state transportation and delivery of essentials, such as medicines, medical devices, and Covid-related emergency supplies, during the lockdowns.

Setting Up Temporary Health Facilities in Hotels

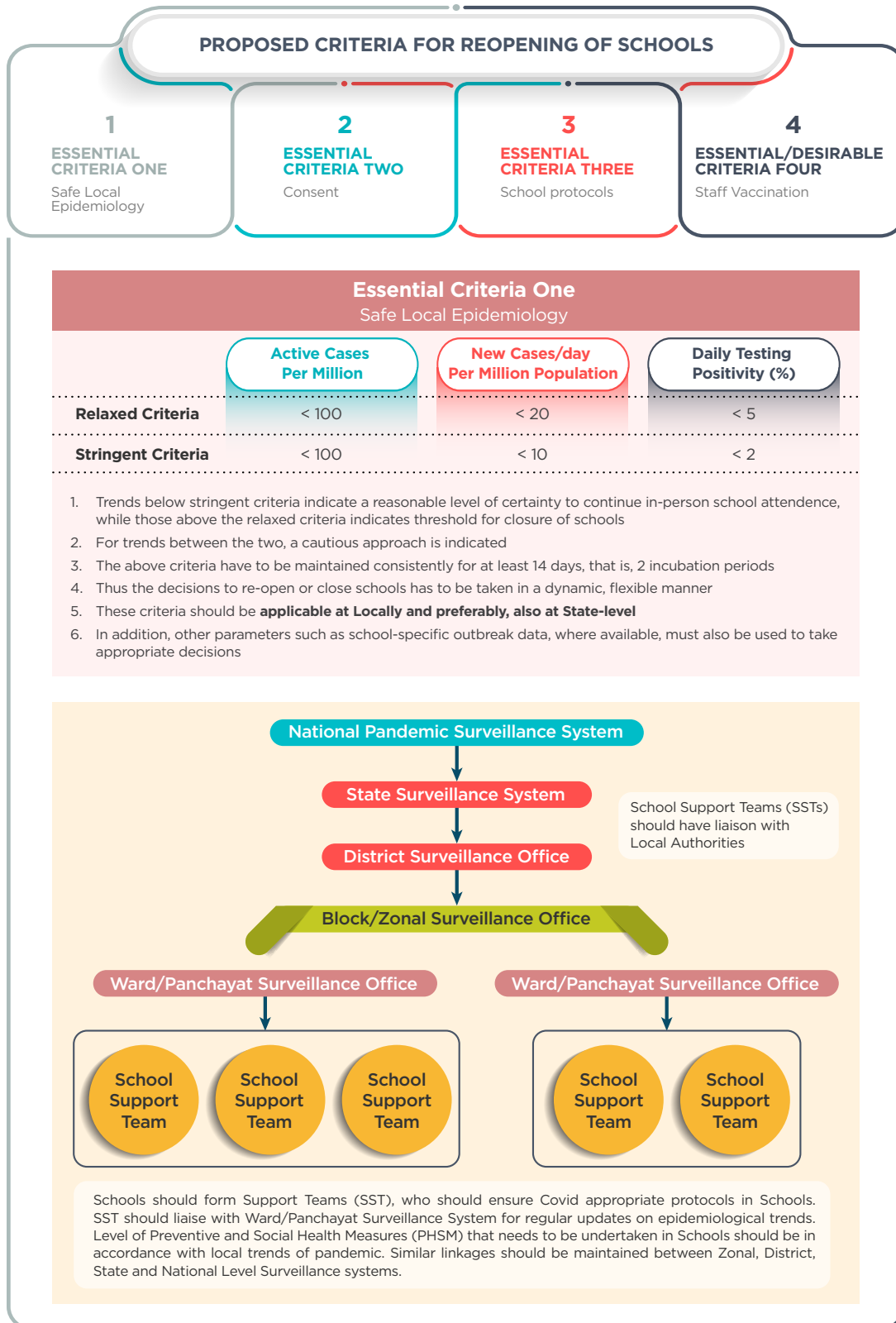
During the second wave, in the face of a huge demand for healthcare facilities, the hotel industry offered to help Covid patients by offering beds for self-isolation, accommodation for healthcare professionals, and units for temporary treatment centres. NITI Aayog prepared a note on the types of services offered by the hotels, along with relevant advisories that were issued by the Ministry of Health and Family Welfare. Further, NITI Aayog requested all States and UTs to explore partnerships with hotels in their jurisdiction to provide accommodation to healthcare professionals and Covid patients.

Supporting Innovation

Broad-basing laboratories for approving investigational products, technologies, drugs and devices, aimed at reducing bottlenecks in the validation process and expediting the approval and availability of innovative diagnostic products in the market were also undertaken.

Guidance on School-Reopening

NITI Aayog developed evidence-based protocols for guiding the reopening of schools during Covid. This was discussed with the Ministry of Education and incorporated in the national guidelines for the reopening of schools.



Evidence-based protocols for the reopening of schools

Compendia for Dissemination

NITI Aayog released two compendia chronicling the best practices of States/UTs for managing Covid during the first phase of the pandemic and on home-care management of cases during the second phase, respectively. These were widely disseminated for use by a large group of stakeholders/State Governments/other developing nations.

Empowered Group 7

The Empowered Group 7 coordinates with the private sector, NGOs, international organizations for Covid-related response activities. It is headed by CEO, NITI Aayog. So far, more than 41 meetings have been held with stakeholders.



During 2021–22, the Empowered Group 7 undertook the following decisions/activities:

1. During the second wave of the Covid-19 pandemic, between April and May 2021, EG 7 invited NGOs and other development partners to support State and District Administrations to combat the spread of the disease. It reached out to more than 1.2 lakh NGOs, appealing to them to aid Government efforts to combat the situation.
2. The State and District Administrations were sensitized and guided from time to time to engage with civil society organizations/NGOs to create awareness, distribute masks, sanitizers, PPE kits, provide food, shelter, medical aid, and free ambulance service, etc.
3. By partnering with the Bill and Melinda Gates Foundation and the Ministry of Health and Family Welfare, EG 7 carried out a massive mask-awareness campaign in eleven languages through an open-source platform, www.indiafightscovid.com.
4. NITI Aayog intensively collaborated with various UN agencies—the UN Resident Coordinator for India, WHO, UNICEF, UNDP, WFP. The UN in India prepared a joint response plan with prevention, treatment, and essential supplies as key components. The

- UN agencies partnered actively with the Government across various response and relief initiatives, including technical and equipment support; risk communication and community engagement; outreach on Covid-related information on safety behaviours; online classrooms in partnership with 17 State Governments and e-learning materials; and digital apps to improve outreach to vulnerable communities.
5. EG 7 coordinated with the Ministry of Health and Family Welfare for all assistance coming through private associations/individuals.
 6. A Covid logistics task force was constituted in April 2021 to facilitate, coordinate, and monitor end-to-end support for all private-to-government donations received by the Indian Red Cross Society (on behalf of the Government of India) from all over the world. A team at NITI Aayog undertook nuanced and complex coordination between international donors, Central and State Government Ministries/Departments, and diplomatic missions.
 7. Various UN agencies (WHO, UNICEF, UNDP), pharma majors (Roche, Pfizer), USISPF, USIBC, HSBC, Bosch, Amazon, Philip Foundation, Boeing, etc., reached out to NITI Aayog for facilitation and end-to-end support. NITI Aayog rose to the expectations through a dedicated war-room with 24x7 presence of a team of highly motivated and focused officers who went beyond the call of duty.
 8. As an immediate response, NITI Aayog also launched the Covid portal, as a one-stop solution for individuals and organizations from abroad to send their aid and equipment to India.
 9. Further, NITI developed the ULIP Sanrakshan app, with the active support of industry partners. ULIP allows end-to-end visibility and tracking of donations of all categories—private to government, government to government, and government procurements. Key items that the team facilitated include PSA plants, 20MT oxygen containers, BiPAP and CPAP machines, ventilators, cryogenic cylinders, testing kits, drugs, consumables, and oxygen concentrators.
 10. EG 7 harnessed the power of the youth by mobilizing various youth organizations, including National Cadet Corps (NCC), National Service Scheme (NSS), Kendriya Sainik Board (KSB), Nehru Yuva Kendra Sangathan (NYKS). NYKS and NSS reached out to more than 3.42 crore citizens and 2.64 crore citizens, respectively, through various initiatives.
 11. EG 7 played a major role in the Government's decision to ease out the import of key medical equipment through the waiver of import duties and zero GST on the select items, including oxygen generators, storage tanks, and cylinders.
 12. Timely intervention by EG 7 brought huge relief to citizens, especially migrant workers, the homeless and the destitute, divyangjan, the elderly, and other marginal communities, in terms of getting food, shelter, medical assistance, counselling, and other protective equipment, etc.



SECTION-VIII

**SECTORAL
ACHIEVEMENTS**

SECTORAL ACHIEVEMENTS

INTRODUCTION

The various Verticals, Divisions and Units are the spokes of the wheels that drive NITI Aayog.

Each Vertical specializes in a particular domain and is mandated to provide technical input and expertise on that sector, deal with the respective Line Ministry/ Department, and lead in evidence-based policymaking.

The Verticals provide the requisite support needed to develop NITI Aayog as a state-of-the-art resource centre with the necessary knowledge and skills, which will enable it to act with speed, promote research and innovation, provide strategic policy vision for the Government, and deal with contingent issues.



AGRICULTURE

Statement of Intent with Gujarat University

NITI Aayog and Gujarat University signed a Statement of Intent (Sol) in September 2021 in the presence of Dr Rajiv Kumar, Vice Chairman, NITI Aayog. The Sol focuses on technical collaboration between the two institutions to strengthen knowledge-sharing and policy development in India. The objective is to encourage and promote cooperation in the field of agriculture and allied sectors. The Sol is expected to give a thrust to India's efforts towards achieving the Sustainable Development Goals. The parties will conduct capacity-building programmes on farm sector development, agripreneurship, natural farming, climate change, etc. The two institutions will also undertake activities to build awareness around the best practices of the agriculture value chain management, marketing methods, conservation of natural resources, climate change and other identified areas to improve the generation and uptake of evidence in policymaking.



Knowledge-Sharing Workshop on Natural Farming

As part of the 'Azadi ka Amrit Mahotsav', the Agriculture Vertical organized a national workshop on natural farming on 30 November 2021. The Hon'ble Governor of Gujarat, Shri Acharya Devvrat, participated in the event. During the workshop, discussions were held on the need to shift to natural farming for improving farmers' income, human and soil health and ensuring the conservation of the environment. The workshop was also broadcast live on YouTube and attended by over 1000 participants from across the country.

Website on Natural Farming

The Agriculture Vertical launched an exclusive website on natural farming on 30 November 2021. The bilingual website has exhaustive information on all aspects of natural farming—from area coverage under this practice in India, to its various components, methods and techniques and more. The

website also details the numerous benefits of natural farming, success stories, research papers, and similar international practices. The website can be accessed at <https://naturalfarming.niti.gov.in/> and seeks to serve as a knowledge repository.



Task Force on Promotion of Organic Fertilizers and Economic Viability of Goshalas

A task force on the production and promotion of biofertilizers, with a special focus on improving the economic viability of goshalas, was constituted in September 2021, under the Chairmanship of Prof. Ramesh Chand, Member (Agriculture), NITI Aayog. The task force will recommend policy interventions for the effective utilization of livestock by-products in the production of biofertilizers, among others. The technical support to the task force is being provided by the Department of Agriculture, Cooperation and Farmers' Welfare; Department of Animal Husbandry; National Centre of Organic Farming; Ministry of New and Renewable Energy; and domain experts. So far, one meeting of the task force has been held. Suggestions and success stories about effective utilization of livestock by-products were invited from State Governments and other stakeholders.

National Workshop on Bamboo Development Mission

NITI Aayog organized a national-level workshop on bamboo development on 30 December 2021. Minister of State (Independent Charge) of the Ministry of Science and Technology and Earth Sciences Dr Jitendra Singh inaugurated the workshop. Through the workshop, participants sought to understand all components of the bamboo value chain—plantation, production, processing, standardization, and utilization—to develop strategies and a roadmap for the development of a circular economy



in the sector. As many as 150 participants—from Central Ministries, State Governments, Krishi Vigyan Kendras, industry, academic and research institutions, and NGOs—attended the workshop, both online and offline.

Telemedicine for Livestock Health and Safety

To complement the existing veterinary infrastructure, NITI Aayog has initiated the development of telemedicine for livestock health and safety. The Agriculture Vertical has developed a framework and formulated guidelines for practising telemedicine for livestock in India. A workable web-based system, as an attempt to develop an operational model, titled 'NITIVeT', has also been developed (<https://nitimed.herokuapp.com/>). Services such as real-time consultation on vaccination, artificial insemination, medicine, health education, and livestock insurance will be provided.

Agroforestry for Transforming Land Use and Promoting Sustainability and Livelihood

An agroforestry suitability index for wasteland regions of the country was developed in collaboration with ISRO and the National Remote Sensing Centre (NSRC), using GIS integration of six variables: land use, wasteland, desertification, slope, soil organic carbon, and surface. The generated maps delineate the wasteland in the country (District-wise) into four classes: high, moderate, low and very low, and unsuitable for agroforestry plantation. A customized android application was developed, in collaboration with ISRO, for data collection from the Districts (vedas.sac.gov.in/data-collection). Two training sessions on the methodology of ground data collection and updating of the android application were organized by the Agriculture Vertical. A meeting with State nodal officers under the Sub-Mission of Agroforestry (SMAF) was held to appraise and encourage them to contribute data on local nurseries, tree species exempted from transit and felling permits, sustainable agroforestry models and success stories that could be linked with the maps.

DATA MANAGEMENT AND ANALYSIS, AND FRONTIER TECHNOLOGIES

National Data Analytics Platform

The National Data Analytics Platform (NDAP) is a portal aimed at increasing the access and usability of Government data. NDAP is being developed as a user-friendly web platform that will provide easy access to public datasets in clean, machine-readable formats. The platform will enable evidence-based policymaking, cross-sectoral research, data-driven discourse and innovation. The beta version of the platform was launched on 15 August 2021; the public launch is planned for February 2022.

Women Entrepreneurship Platform

The Women Entrepreneurship Platform (WEP) is a first-of-its-kind unified-access portal that seeks to overcome information asymmetry in the women entrepreneurial ecosystem. It is an aggregator platform that showcases initiatives promoting women entrepreneurship and supports women with relevant domain knowledge, and leverages technology to seamlessly provide information. In its most recent phase, WEP Nxt was launched with new features powered by artificial intelligence, natural language processing for advanced analytics-driven engagement of women entrepreneurs and partners.

Cloud Innovation Centre

NITI Aayog, in collaboration with Amazon Web Services (AWS) and Intel, has established a new experience studio at Yojana Bhavan. The studio will help showcase the potential of technologies such as AI, machine learning (ML), Internet of Things (IoT), augmented reality and virtual reality (AR/VR), blockchain, and robotics to accelerate their application in public sector use cases. The studio will encourage open innovation and serve as a hub for the Government, startups, and research institutes to showcase their solutions. It will also provide startups with an option to access the necessary support to enhance and scale their solutions.



Digi Yatra Central Ecosystem Challenge

The Ministry of Civil Aviation (MoCA) has formulated the 'Digi Yatra-Biometric Boarding System' (DY-BBS) initiative to provide a seamless and paperless journey for air-travellers by leveraging facial recognition technology. The initiative will be developed, operated and maintained by the Digi Yatra Foundation, a not-for-profit company under Section 8 of the Companies Act 2013 incorporated on 20 February 2019, and is backed by the Airports Authority of India (AAI), Cochin International Airport Ltd, Bangalore International Airport Ltd, and the GMR group.

The Digi Yatra team approached NITI Aayog for assistance with the implementation of a proof-of-concept (PoC) for the Digi-Yatra central ecosystem. In this regard, NITI Aayog has partnered with Atal Innovation Mission and AWS to launch a challenge, identify a startup that can develop the PoC and deploy the solution across the three airports in India. NITI Aayog has also set up an expert committee to review the proposals, oversee the technical requirements and guide the development of the PoC. Three startups have been selected for the development of the minimum viable product (MVP). On 17 November 2021, the MVP contract was signed with Dataevolve at Bangalore airport.

Frontier Technologies

For promoting frontier technologies, the Vertical has adopted a dual approach of undertaking seminal research and release of various strategy documents in key areas as well as demonstrating the efficacy of solutions through pilot projects. These pilot initiatives allow for understanding intricate challenges, specific governance issues, regulatory hurdles as well as the ‘human element’ in any potential large-scale implementation. A framework is under development, which will enable the potential pilots to be scaled up further. These applications encompass a range of sectors, including health, agriculture, education, etc.

ECONOMICS AND FINANCE CELL

Macroeconomic Analysis

Bulletin for Hon’ble Prime Minister

A monthly bulletin, with real-time performance analysis of India and the global economy, is submitted to the Hon’ble Prime Minister. In addition, a monthly presentation on the assessment of the Indian economy based on an analysis of 55 high-frequency indicators across 11 sectors is also made.

Strategic Disinvestment and Performance Improvement of CPSEs

Recommendations for Disinvestment of Strategic-Sector CPSEs

The Economics and Finance Cell is mandated to conduct analysis and make recommendations for the disinvestment of strategic-sector CPSEs. Since the Budget Announcement for FY21–22, 11 CPSEs have been recommended for disinvestment, including two public sector banks and one public sector general insurance company. Recommendations were discussed with Secretaries of Line Ministries and subsequently submitted to the Department of Investment and Public Asset Management.

MoU Target-Setting and Evaluation Process of CPSEs

The Cell participated in inter-ministerial meetings with the Department of Public Enterprises and Line Ministries to discuss MoU target-setting and the evaluation process of CPSEs for 2021–22. Recommendations were made for improving their performance.

Study on Classification, Autonomy, and Incentive Structure of CPSEs

The Cell has undertaken a study on the classification, autonomy, and incentive structure of CPSEs to enhance their competitiveness and potential contribution to the economy. Recommendations will soon be submitted to the Department of Public Enterprises.

G20 and Engagement with Multilateral Institutions

India’s G20 Presidency

The Cell is mandated to be the Secretariat for the G20 Engagement Groups on Civil Society (C20) and Think Tanks (T20) in the run-up to and during India’s G20 Presidency. An in-depth analysis of previous G20 presidencies was conducted and stakeholder consultations were organized to deliberate on the key priorities, strategies, and goals for the engagement groups on C20 and T20.



Inputs for G20 Speakers' (P20) Summit

A note was prepared on 'Rebooting Economic Growth in Terms of Social and Environmental Sustainability' for the seventh G20 Speakers' Summit. A meeting was also held with the Hon'ble Speaker of Lok Sabha on the same on 28 September 2021.

International Monetary Fund Article IV Consultations

A virtual meeting under the Chairmanship of CEO, NITI Aayog, was held with the International Monetary Fund (IMF) on 15 July 2021 for India Article IV Consultations 2021. Inputs were provided to the Department of Economic Affairs (DEA) on the draft concluding statement of the IMF Mission.

Webinar on Global Economic Prospects

A webinar was organized under the Chairmanship of Vice Chairman, NITI Aayog, on global economic prospects on 30 April 2021. A presentation was made by the World Bank, followed by a discussion with senior officials from various Ministries, think tanks and the private sector.

Discussion on S&P's Annual Credit Review

A discussion was held under the Chairmanship of CEO, NITI Aayog, on 7 December 2021 on India's current macroeconomic performance and the most notable structural reforms.

Other Key Projects

MSME Financing

The Cell conducted an in-depth study on MSME financing by the banking sector and SIDBI. A stakeholder consultation was held under the Chairmanship of Vice Chairman, NITI Aayog, on 27 July 2021. Presentations were made by Nandan Nilekani, Co-founder, Infosys, and Adviser, iSPIRT, on 'Fast-Tracking Economic Recovery: Account Aggregator for Cash Flow-Based MSME Lending', and World Bank on 'Development Banks' Landscape and Lessons from Efficient SME Development Banks'.

Study on Taxation in Energy Sector

The Cell conducted a detailed study on the prevailing structure and tax revenues of the energy sector and suggested the inclusion of electricity in GST. A presentation was made during a meeting of the consultative group on economics and finance, chaired by Vice Chairman, NITI Aayog, on 15 July 2021 to deliberate and seek policy inputs from leading economists and experts.

Roadmap for USD-10-Trillion Indian Economy

A consultative meeting was held on 18 November 2021 to discuss recommendations on policy reforms for pushing India's growth to the next level. The Cell presented a model highlighting that the economy would cross the USD-10-trillion mark in FY30, FY32 and FY36 in the optimistic, baseline and pessimistic scenarios, respectively.

Optimal Credit Architecture in India

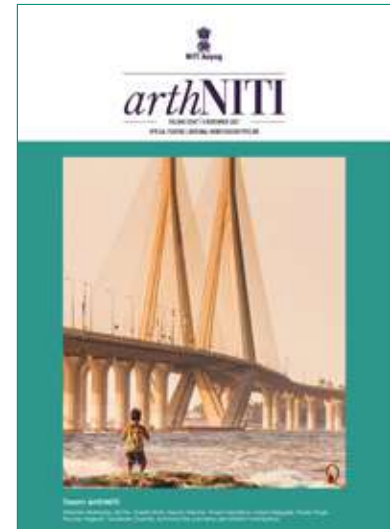
The Cell worked on a roadmap for creating an optimal credit architecture, aimed at increasing the share of private credit and enhancing the role of the corporate bond market in boosting the economy. Among

other activities, several meetings and discussions on the state of the economy and outlook were held with senior economists and experts.

ArthNITI

ArthNITI is a newsletter published by the Cell to provide a snapshot of global trends relevant to India and quick analyses of India's recent macroeconomic performance, and put a spotlight on the Government's flagship schemes.

In FY 2021–22, two issues have been released with special features on the DMEO and National Monetisation Pipeline.



EDUCATION

Policy and Governance

In 2021–22, the Education Vertical participated in various meetings of the Ministry of Education on Samagra Shiksha, Midday Meal Scheme, Pandit Madan Mohan Malviya National Mission on Teachers and Teaching, Rashtriya Uchchar Shiksha Abhiyan, National Initiative for Design Innovation, National Council of Educational Research and Training (NCERT), National Commission for Protection of Child Rights (NCPCR), etc.

The Vertical also represented NITI Aayog and provided inputs in the various meetings of the Department of Higher Education on the Higher Education Funding Agency (HEFA). The Vertical also participated



in meetings organized by the National Council of Teacher Education (NCTE), the National Institute of Educational Planning Administration, and others. The progress of major flagship programmes such as Samagra Shiksha and Midday Meal Scheme was analysed by the Vertical.

Strategy Paper on Improving Public-School Education

The learning outcome crisis as reported in various Governmental and non-governmental reports is the harsh reality of the current school-education system in India. These reports have rightfully pushed the Central Government and the State Governments to undertake systemic reforms. There have been encouraging results from different parts of India. This, however, is also an opportunity to step back and reflect on what quality education means and how we can achieve the same in public-school education.

Towards this end, NITI Aayog conducted a series of brainstorming workshops, whereby academicians, representatives of grassroots organizations and officials from various State Governments together explored the challenges in school education at the systemic and sub-component levels.

NITI Aayog is working on a strategy paper to unpack the conceptual ideas of what constitutes quality education. The paper will provide a framework/implementation roadmap and inform State Governments of the tools they can consider when designing interventions suited to their contexts.

Higher Education Commission of India

NITI Aayog has played a key role in identifying challenges and contributing to reforms in higher education regulatory frameworks. After the first phase of the reforms, which were implemented through the UGC regulations and guidelines, NITI Aayog contributed substantially to the development of the Higher Education Commission of India, under the National Education Policy 2020, in collaboration with the Department of Higher Education.

Collaborations

The Vertical has reviewed the performances of the Department of School Education and Literacy and Department of Sports against the indicators on OOMF, under the chairmanship of Member (Education) and Member (Sports), in collaboration with DMEO. Reviews of the Department of Higher Education and Department of Youth Affairs will be done soon.

The Vertical also participated actively in the evaluation study of UCSS for the education sector and provided terms of reference and critical observations at various levels. The Vertical also provided terms of reference and critical comments at all levels on research studies on the education sector under the Research Scheme of NITI Aayog.

Appraisals

During the year 2021–22, the Vertical appraised 14 SFCs/EFCs, four Cabinet Notes, one CCEA Note, and four PPRs.

Youth Affairs and Sports

During 2021–22, the Vertical represented NITI Aayog in the meetings of the Project Appraisal Committee and the Departmental Project Approval Committee of Khelo India, and the Project Appraisal Committee for financial assistance to voluntary organizations and Nehru Yuva Kendra Sangathan under the National Programme for Youth and Adolescent Development.

ENERGY

Transition towards Green Hydrogen

Green hydrogen has proved to be a game-changer in the renewable energy space. India should aim at replacing all grey hydrogen with green. The country has the potential to become the world leader in green hydrogen and associated technologies like electrolyzers. The green hydrogen strategy document, which has been finalized after several rounds of consultation with different stakeholders, encourages industries to consider opting for it.

India Energy Security Scenario 2047 (Version 3.0)

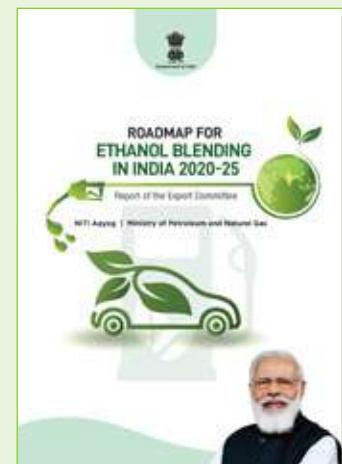
NITI Aayog has partnered with IIT Bombay to update India's national calculator India Energy Security Scenario (IESS) 2047. The model has been finalized, which will be helpful for related Ministries to develop their Vision, 2047.

Hon'ble Prime Minister's Interaction with CEOs of Global Oil and Gas Companies

NITI Aayog, in consultation with the Ministry of Petroleum and Natural Gas, organizes an annual interaction of the Hon'ble PM with the CEOs and experts of global oil and gas companies. The event is being held since 2016, with the objective of creating a global platform to understand best practices, discuss reforms, and plan strategies for accelerating investments in the Indian oil and gas value chain.

Report on Roadmap for Ethanol Blending in India 2020-25

On 5 June 2021, the Hon'ble Prime Minister released a report on ethanol blending in India, by the expert committee headed by Additional Secretary (Energy), NITI Aayog. According to the report, 20% ethanol blending is within reach. The report further laid out an annual plan for the gradual roll-out of E20 ethanol in the country.



GOVERNANCE AND RESEARCH

Review of Population Coverage Criteria under National Food Security Act 2013

Under the National Food Security Act (NFSA) 2013, the existing criteria of 75:50 (Rural:Urban) is based on the population coverage ratio of the 68th Household Consumption Expenditure Survey (Census, 2011). States/UTs have been requesting the Department of Food and Public Distribution (DFPD) to re-examine the methodology for calculating the State-wise percentage share of rural and urban population under NFSA. Accordingly, DFPD requested NITI Aayog to review the coverage of the NFSA population criteria under the Act, which was developed by the erstwhile Planning Commission. Subsequently, NITI Aayog undertook in-depth deliberations, under the Chairmanship of Prof. Ramesh Chand, Member, NITI Aayog, with concerned stakeholders, including the Ministry of Statistics and Programme Implementation (MoSPI), DFPD, Chief Economic Adviser, and other experts.



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Identification of Beneficiaries under NFSA 2013

NITI Aayog has given detailed inputs to DFPD on the criteria for beneficiary inclusion/exclusion under NFSA. Harmonization of the beneficiary identification criteria across States/UTs would help in reducing the gap in coverage of rightful beneficiaries under the Act.

Review of OOMF for CSS and CSSSs

Four review meetings with the Departments of Fertilizers, Chemical and Petrochemicals, and Consumer Affairs and Food and Public Distribution on 22 September, 16 October and 28 October 2021, respectively, were held under the Chairmanship of Prof. Ramesh Chand, Member, NITI Aayog. The review meeting of the Department of Personnel and Training was held under the Chairmanship of Vice Chairman, NITI Aayog, on 14 December 2021.

Screening Committee Meetings of Department of Administrative Reforms and Public Grievances

Governance and Research is the nodal vertical to represent NITI Aayog in the meetings of the screening committee to examine proposals for financial assistance received from different States/UTs under the State Collaboration Initiative of the Department of Administrative Reforms and Public Grievances.

Revival of Closed Urea Units

An inter-ministerial committee under the Chairmanship of CEO, NITI Aayog, has been actively monitoring the setting up of five new urea plants at Ramagundam, Talcher, Gorakhpur, Sindri and Barauni, and resolving various issues encountered during the process. These include three closed urea units of the Fertilizer Corporation India Limited and two of the Hindustan Fertilizer Corporation Limited, which are being set up by a consortium of public sector undertakings. Several meetings of the inter-ministerial committee were held during the year. These five plants, each having a production capacity of 12.5 lakh metric tonnes, will produce 6.35 million metric tonnes/PA urea. It is expected that once these projects start, India's reliance on imported urea would go down significantly. The Ramagundam plant

and Gorakhpur started operations in March 2021 and December 2021, respectively, while the Barauni and Sindri plants are expected to be operationalized by March 2022. The Talcher unit, India's first plant based on coal gasification, is expected to be on stream by September 2024.

Inter-Ministerial Committee to Discuss Fixation of NBS Rates

NITI Aayog is an important part of the inter-ministerial committee constituted under the Chairmanship of Secretary (Fertilizers) to fix nutrient-based subsidy rates for fertilizers. The committee has recommended the inclusion of a new fertilizer subsidy regime based on the application of the manufacturer/importer and its need as appraised by ICAR. In recommending subsidies for nutrients N, P, K and S under the Nutrient-Based Subsidy policy, the committee seeks to ensure the availability of a sufficient quantity of fertilizer to farmers at an affordable price at an appropriate time. This will enable the smooth production of fertilizers in the country, and in case of any shortfall, the timely import of fertilizers, along with encouraging their judicious use.

New Research Scheme of NITI Aayog Guidelines 2021

A new set of guidelines for the Research Scheme of NITI Aayog was launched in 2021. The updated guidelines aim at broad-basing research work, including institutional and individual research, besides aiding reputed institutions in organizing seminars, workshops and conferences, and providing non-financial support through the use of the NITI logo for various events.

[A list of research studies approved, studies completed, and logo support provided can be found in Annexure I.]

Integration of Libraries across Central Ministries

Currently, many Ministries/Departments have their own libraries. While these have abundant high-quality resources, the usage is sub-optimal, including due to user preference towards the digital mode. There is a need to integrate libraries across all Central Ministries/Departments to ensure greater accessibility to users. In the long run, the public can also be given access to these libraries. Towards this end, NITI Aayog has set up a task force for the integration of libraries under the Chairmanship of Prof. Ramesh Chand, Member, NITI Aayog. The task force had one meeting in 2021 and set up a project monitoring committee under the Chairmanship of Prof. Ramesh C Gaur, Dean and Head of Indira Gandhi National Centre for the Arts.

HEALTH AND FAMILY WELFARE

Compendium of Ayush-Based Practices for Covid-19

The States/UTs have adopted the advisories/guidelines on Covid-19 issued by the Ministry of Ayush, and some have even come up with their policies. Information related to the initiatives/best practices undertaken by the States and UTs were sought and documented in a report titled 'Mitigation and Management of Covid-19: Compendium of Ayush-Based Practices from Indian States and UTs'. The report will be released soon.





Home-Based Management of Covid-19

Home-based care is a low-cost model and can reach many people at the same time with the help of digital tools such as telemedicine/call centres/apps, etc. The States successfully implemented the concept of home-based care as a viable and effective healthcare delivery mechanism. ‘Home-Based Management of Covid-19’ chronicles the innovative measures adopted by different States and presents a holistic picture of various home-based-care models. Several of these successful strategies can be replicated and scaled up.

Health Insurance for India’s Missing Middle

Released in October 2021, the report ‘Health Insurance for India’s Missing Middle’ outlines the current landscape, existing gaps and articulates broad recommendations and pathways to increase health insurance coverage. The report is an effort to re-invigorate the dialogue on increasing financial protection for health and for achieving the broader goal of Universal Health Coverage. It offers a starting point for bigger discussions on solutions and specific products to improve insurance coverage for the targeted segment of the population, i.e., the missing middle.



Best Practices in Performance of District Hospitals

Despite the critical role of District hospitals in providing inclusive secondary-level healthcare services and the generous funds allocated to them under the National Health Mission, there is no comprehensive system to assess their performance. Therefore, NITI Aayog was mandated to track the performance of the country’s District hospitals.

In collaboration with the Ministry of Health and Family Welfare (MoHFW) and the World Health Organization (WHO), an assessment framework was designed with 10 key performance indicators across the domains of ‘Structure’ and ‘Output’. The National Accreditation Board for Hospitals and Healthcare Providers (NABH) conducted the on-ground

data validation of the District hospitals.

In the first round, 707 District hospitals participated in the assessment. The Health Management Information System (HMIS) data for the year 2017–18 was used as the baseline for this exercise. The top-performing District hospitals for FY 2017–18 were identified and their best practices collected and documented in the report titled ‘Best Practices in the Performance of District Hospitals’. District Hospital Index Round II is currently underway.

Appraisal

The Health and Family Welfare Vertical at NITI Aayog reviewed and gave its comments on draft EFCs, SFCs, and Cabinet memos about the Department of Health and Family Welfare, Department of Health Research, Department of Pharmaceuticals, and Ministry of AYUSH in 2021–22.

Sr. No.	Ministry / Department	Total EFCs reviewed	Total SFCs reviewed	Total Cabinet Notes reviewed	Total
1.	Department of Health & Family Welfare	17	17	9	43
2.	Department of Health Research	—	5	—	5
3.	Department of Pharmaceuticals	—	—	1	1
4.	Ministry of AYUSH	4	6	2	12

INDUSTRY-I

Research Studies

Study on 'Integration of MSMEs on E-Commerce Platforms'

A sustainable business via e-commerce can be achieved by introducing a digital infrastructure platform connecting MSME sellers and traders to existing nationwide marketplaces. A study on the 'Integration of MSMEs on e-Commerce Platforms' was commissioned in October 2020, which is currently underway. It aims to cover the evaluation of the entire e-commerce and MSME ecosystem in India and develop a roadmap for the integration of MSMEs into e-commerce platforms. The final report will soon be released.



White Paper on Steel

Steel is integral to modern economic development and India possesses the requisite enablers to become a global player in this sector in terms of availability of raw material, skilled manpower, and demand.

To holistically review the segment, a white paper on the steel sector has been drafted. The paper analyses the trends in the development of the steel industry, the market demand-supply scenario, availability of raw materials, the fiscal space related to the industry, such as the taxation structure, key challenges to growth, disruptive trends in both production and consumption of steel, and the road ahead for the industry to be a global player by 2030. The paper also recommends a policy prescription for the Government to support the industry's growth.

Competitiveness of Capital Goods Sector

Manufacturing is a key contributor to the economic development of any nation. The capital goods sector is critical to the manufacturing sector as it provides the much-needed machinery and equipment in engineering, construction, infrastructure, consumer goods, etc. Currently, the capital goods sector contributes approximately 12% to India's manufacturing output against the target of 20% by 2025 as envisioned by the National Capital Goods Policy, 2016.

The Industry Vertical has analysed the sector and identified sub-sectors. These are heavy electrical equipment, heavy power equipment, machine tools, textile machinery and earth-moving and mining machinery. These sub-sectors have been further analysed to identify products that need to be facilitated for enhancing production domestically and reducing the trade deficit.

Free Trade Agreements

Free Trade Agreements (FTAs) are arrangements between two or more countries or trading blocs that primarily agree to reduce or eliminate customs tariff and non-tariff barriers on substantial trade between them. Globally, there has been an increasing trend with respect to entering into FTAs.

While multilateral trade liberalization may continue to remain an option, it could be that the World Trade Organization process may be overtaken by preferential trade agreements. Against this background, India has a strategic choice to make on how it will move forward and engage in FTAs.

The strategy around trade agreements need to be changed and a roadmap developed for the industries likely to be impacted by the agreements and how the situation could be mitigated, and the agreements properly leveraged.

During the year, the Industry Vertical prepared briefing notes on FTAs to help understand the evolution of international trade policies where FTAs fit in, and an evaluation of FTAs with the way forward.

Study on Export Promotion Councils

Export Promotion Councils (EPCs) assist exporters in international market exploration and product development. They also play a significant role in information dissemination to Indian exporters regarding the existing and new export promotion schemes by the Government, thereby helping in bridging the gap between the Government authorities and the exporters. Over time, there has been a growing perception that EPCs should be re-examined to formulate appropriate strategies to reorganize the institutional support provided to Indian exporters for augmenting exports. Accordingly, NITI Aayog has commissioned a study to review the performance of the EPCs at the Central, State, and District levels.

Logistics

There is a need to develop an integrated approach to the logistics sector, along with steps to develop it. The Industry Vertical has supported project proposals to help the Government's efforts to strengthen

the sector's institutions, meet key capacity-building needs, and conduct studies to further deepen reforms and develop a policy framework.

Other Studies

The Departments of Commerce and Revenue periodically request NITI Aayog to undertake specific studies or provide inputs on specific matters. The Industry Vertical as part of its responsibilities provides inputs and undertakes specific studies as requested.

Inter-Ministerial Consultations

Inputs are periodically sought on the schemes of the Departments of Commerce and Revenue. The Vertical not only provides inputs on the schemes/proposals of both the Departments but also helps and support certain schemes.

Minerals

In 2021–22, the Minerals Division examined the following two sub-committee reports on Rare Earths (RE) and held discussions with stakeholders.

Establishing Technologies for RE Extraction from Red Mud

An MoU was signed between the National Metallurgical Laboratory (NML), Institute of Minerals and Materials Technology (IMMT), Jawaharlal Nehru Aluminium Research Development and Design Centre (JNARDDC), National Aluminium Company (NALCO), HINDALCO Industries and VEDANTA for RE extraction from Red Mud. The total cost of the project is Rs 511.51 lakh—50% of which is being borne by HINDALCO, NALCO and Vedanta and the remaining is to be funded by NML, IMMT and JNARDDC. The deliverables of the MoU are as follows:

1. Process for the pre-concentration of Rare Earth Elements (REEs) in Red Mud after beneficiation at 100 kg/batch RM feed scale
2. Process for recovery of iron value from bauxite residue at 100kg/h RM feed scale
3. Process for recovery of alumina value from bauxite residue at 100kg/batch RM feed scale
4. Process for recovery of titania values from bauxite residue at 100kg/batch RM feed scale
5. Process for recovery of REEs from bauxite residue at 100kg/batch RM feed scale
6. Master flow sheet with complete mass and energy balance to recovery values from selected grades of bauxite residue and its techno-economic feasibility.

Establishing the Prospects of RE Conversion into Magnets

The recommendations of the report have been briefly discussed with the Bhabha Atomic Research Centre (BARC), Defence Metallurgical Research Laboratory (DMRL) and IREL India Limited. BARC and DMRL have been mandated to prepare a detailed project report and work out the modalities for technology transfers.

Committee on Aluminium Issues

To address the issues of demand augmentation, capacity addition and growth factors in the aluminium sector, a committee on aluminium issues has been formed to examine the following issues:

1. Freight re-classification for Red Mud/freight incentive scheme similar to fly ash
2. Formulation of BIS quality standards for aluminium scrap

3. Creating separate HS code for metallurgical & non-metallurgical grade calcined alumina
4. Average sale price of bauxite.

Mining Innovation Summit

A Mining Innovation Summit between India and Australia was held to explore collaboration in various aspects of Rare Earths and other critical minerals. Steps are being initiated to facilitate B2B engagements between the industries of both the countries in minerals such as lithium, cobalt, nickel, graphite, Rare Earths, vanadium, and titanium.

The Division is also engaged in the process of framing the National Mineral Index, in association with the Ministry of Mines.

INDUSTRY-II

Circular Economy

To give an impetus to the Aatmanirbhar Bharat Abhiyaan, NITI Aayog, in consultation with the Ministry of Environment, Forest and Climate Change, has identified 11 areas to facilitate the transition from a linear to a circular economy.

The 11 areas are municipal solid and liquid wastes; scrap metal (ferrous and non-ferrous); lithium-ion (li-ion) batteries; tyre and rubber recycling; gypsum; end-of-life vehicles; electronic waste; toxic and hazardous industrial waste; used oil waste; agriculture waste; and solar panels.

These areas either continue to pose a considerable challenge or are emerging as new areas that must be addressed urgently.

In March 2021, NITI Aayog constituted committees on circular economy in these 11 areas. The uniqueness of this initiative is that the ownership for assessing and implementing the strategies rests with the respective Ministries/Departments. The reports prepared by the committees were discussed with all the stakeholders to firm up action plans to strengthen the ecosystem for circular economy in these sectors.

S. No.	Focus Area	Concerned Line Ministry
1.	Municipal Solid Waste and Liquid Waste	Ministry of Housing and Urban Affairs
2.	Scrap Metal (Ferrous and Non-Ferrous)	Ministry of Steel
3.	Electronic Waste	Ministry of Electronics and Information Technology
4.	Lithium Ion (Li-ion) Batteries	NITI Aayog
5.	Solar Panels	Ministry of New and Renewable Energy
6.	Gypsum	Department for Promotion of Industry and Internal Trade
7.	Toxic and Hazardous Industrial Waste	Department of Chemicals and Petrochemicals
8.	Used Oil Waste	Ministry of Petroleum and Natural Gas
9.	Agriculture Waste	Ministry of Agriculture and Farmers' Welfare
10.	Tyre and Rubber Recycling	Department for Promotion of Industry and Internal Trade
11.	End-of-life Vehicles (ELVs)	Ministry of Road Transport and Highways

The Hon'ble PM in his address on Independence Day 2021 has also emphasized the transition to a circular economy.

The action plans were finalized in November 2021 and include short- or medium-term regulatory and developmental actions/initiatives. The progress of these initiatives is being periodically reviewed.

Several cross-cutting areas have emerged from these action plans—developing a robust extended producer responsibility (EPR) framework, infrastructure, standards for secondary raw materials, incentives/disincentives, eco-labelling, green procurement, design for the environment, to name a few.

The next phase of projects has been also initiated.

Blue Economy

NITI Aayog in April 2021 constituted the blue economy coordination committee, under the Chairmanship of Vice Chairman NITI Aayog. Six sub-groups were set up in the following areas:

1. National Accounting Framework;
2. Marine fisheries, aquaculture and fish processing;
3. Logistics, infrastructure and shipping (including transshipments);
4. Coastal and deep-sea mining, new and renewable offshore energy and R&D;
5. National Coastal Marine Spatial Planning Framework; and
6. Security and international engagement.

Initiatives in the six clusters are being coordinated by the respective Ministries.

Textile and Apparel Sector

The Ministry of Textiles initiated two major schemes in 2021: PLI in the textiles sector and PM Mitra Park. The Industry-II Vertical was actively involved in the formulation of these two schemes. The Vertical also appraised the older schemes of the Ministry.

Recognizing the potential for growth and employment in the man-made fibre (MMF) sector, the PLI scheme for textiles has been formulated with an approved outlay of Rs 10,683 crore over a five-year period. The objective is to enable the textile sector to achieve size and scale and become competitive.





The PM Mitra Park scheme envisages helping India in achieving Sustainable Development Goal 9, 'Build Resilient Infrastructure, Promote Sustainable Industrialization and Foster Innovation'. The scheme is inspired by the 5F vision of the Hon'ble Prime Minister: Farm to Fibre to Factory to Fashion to Foreign. World-class industrial infrastructure would attract cutting-edge technology and boost FDI and local investment in the sector. The scheme has been notified for setting up seven Mega Integrated Textile Region and Apparel (PM MITRA) parks, with a total outlay of Rs 4,445 crore.

Participation in Inter-Ministerial Committees

The Industry-II Vertical participated in several inter-ministerial committee meetings of the Ministries of Textiles, Food Processing, and Steel, and the Department of Heavy Industry.

Other Initiatives

The Vertical is also carrying out studies on 'Supply-Side Constraints in Food Processing Sector in Specific Fruit Segments', 'Life Cycle Assessment for Regeneration of Waste Oil to Base Oil', and 'Resource Security: Utilization of Low-Grade Iron Ore'.

INFRASTRUCTURE-CONNECTIVITY

Railways

Committee for Monitoring of Railway Safety Fund

An independent committee was formed under the Chairmanship of CEO, NITI Aayog, in 2017–18 to monitor the Rashtriya Rail Sanraksha Kosh (RRSK).

The RRSK is a corpus fund of Rs 1 lakh crore over five years (2017–22) to improve the standards of railway safety through periodic monitoring.

The members of the committee include Additional Member (Planning), Railway Board; Joint Secretary (PFC-II), Department of Expenditure, Ministry of Finance; and Adviser (Infrastructure-Connectivity), NITI Aayog, who is the convener.

The committee discussed various issues, such as the installation of communication-based train control (CBTC), train collision avoidance systems (TCAS), automated doors for suburban railways and the need to focus on system-wide reforms. It was observed that there was a reduction in train accidents and the number of fatalities since the inception of the fund. In October 2021, the committee recommended the extension of the fund for another five years.

Dedicated Freight Corridor

The Infrastructure-Connectivity Vertical is responsible for monitoring the progress of the economically significant Dedicated Freight Corridor (DFC) project. To this effect, quarterly review meetings are held. The total number of kilometres completed in both the corridors is 1100. The development of a private freight terminal and multimodal logistic parks through public-private partnership is in progress.

The next bid for the DFC's goods shed development is underway. The Dedicated Freight Corridor Corporation of India (DFCCIL) has transported 12 billion GTKM (gross tonne-kilometre) of goods (7832 million GTKM via the Eastern Corridor and 4422 via the Western Corridor).

Output-Outcome Monitoring Framework

Dr VK Saraswat, Member, NITI Aayog, reviewed the Output-Outcome Monitoring Framework of the Ministry of Railways (MoR) on 15 December 2021. NITI Aayog suggested various improvements such as business restructuring of production units of rolling stock and the redevelopment of stations.

Appraisal

The Vertical undertook a detailed appraisal of various railway projects, which were received as EBR Memoranda and PPRs. These projects include line-doubling, capacity augmentation, laying of new lines, electrification, development of suburban railway networks, and the elimination of manned level crossings. The Vertical also appraised projects related to the Regional Rapid Transit System.

Research Studies

The Vertical has carried out research studies for policy formulation, on (a) improvement of the operating ratio in the Railways (b) freight-terminal efficiency at DFCs (c) reasons for delays in the completion of railway projects.

Ports and Shipping

Appraisal

In the current financial year, the Vertical evaluated nine SFC proposals, three EC proposals and one EFC proposal. The Vertical has also appraised one PPR.



The Vertical has been playing an important role in policy formulation by examining Cabinet Notes about ports, shipping and waterways. The Vertical also examined the Draft Cabinet Note for grant of a moratorium for loan availed by the Cochin Port Trust.

Roads and Highways, and Logistics

Board Meetings of National Highways Authority of India

CEO, NITI Aayog, is part-time member of the board of the National Highways Authority of India (NHAI). NHAI undertakes quarterly board meetings. The Vertical examines the detailed agenda prepared by NHAI for the meetings and provides necessary inputs and suggestions through CEO, NITI. Several important issues, such as alternative revenue sources, implementation modes of road construction, and monetisation of assets, are discussed and deliberated upon.

Policy Research

The Vertical is part of the research and advisory committee of the Ministry of Housing and Urban Affairs for guiding, evaluating and appraising research projects related to the urban transportation sector. Such projects include the impact of e-mobility on other modes of transport, an impetus for shared mobility, ropeways, urban logistics, parking management, etc.

Appraisal

In the current financial year, the Vertical evaluated 45 SFC and four EFC packages. It also appraised 11 PPRs. The Vertical has also evaluated nine projects of the North-East Special Infrastructure Development scheme, and one project of the Committee on Establishment Expenditure.

The Vertical is also part of the Project Appraisal and Technical Scrutiny Committee (PATSC) of the National Highways Authority of India. As part of the PATSC appraisal mechanism, the Vertical appraised over 60 project packages and provided detailed comments and suggestions on ways to improve their viability.

The Vertical also appraised seven Cabinet Notes on roads and highways.

Civil Aviation

Hyperloop Technology

The Vertical looks after the introduction of hyperloop technology, a high-speed transportation system, in the country. The Vertical has constituted an expert committee under Dr VK Saraswat, Member, NITI Aayog, to study the technological and commercial viability of the hyperloop system. Four meetings have been held so far and sub-committees constituted.

The sub-committees suggested that:

1. Hyperloop system be permitted to be built, owned and operated by the private sector and the Government act as a facilitator by providing certification, permissions, tax benefits and land (if possible), etc. The Government will not invest its fund and private players will take full business risks.
2. A blueprint be prepared to develop indigenously built hyperloop technology.

Appraisal

During 2021–22, the Vertical examined six EBR/DIB/PPR/Cabinet Notes/SFCs/EFCs.

Decarbonizing Transport Initiative

NITI Aayog has collaborated with the International Transport Forum and GIZ India for Decarbonizing Transport in Emerging Economics (DTEE) initiative and National Determined Contribution Transport Initiative Asia.

The progress of the two projects is reviewed monthly and actions are taken regularly to achieve the targets. So far, three reports, one on e-mobility and low-carbon passenger road transport and two on EV charging infrastructure and grid integration, have been released in February and August 2021, respectively.

A campaign to educate Delhiites about the benefits of EVs, 'Switch Delhi' was also launched in February.

In August 2021, the Forum for Decarbonizing Transport was launched by NITI Aayog and World Resources Institute India. The forum seeks to provide a dedicated platform to all the mobility and energy-sector stakeholders to initiate dialogues and work together to develop solutions.

Several workshops, webinars and discussions were also organized in 2021–22 on decarbonizing India's transport.

MANAGING URBANIZATION

Waste-Wise Cities: Best Practices in Municipal Solid Waste Management

'Waste-Wise Cities' documents best practices of 28 cities in 15 States. The report is the result of a country-wide study and survey jointly conducted by NITI Aayog and the Centre for Science and Environment. The repository of best practices is the result of five months of extensive on-ground research initiated in July 2021. The report examines the entire gamut of municipal solid waste management from a cross-section of 10 different aspects that explains a sustainable value chain. These thematic aspects range from source segregation, material recovery and technological innovations to the management of different kinds of wastes and systems such as biodegradables, plastics, e-waste, C&D waste and landfills. The report was launched in December 2021.



Planning and Architecture Framework for Hilly Regions

The hilly regions of India are home to spectacular biodiversity and spellbinding beauty. They are thronged by tourists for rejuvenation and retreat. Unfortunately, this, along with rapid urbanization, has led to overexploitation of natural resources.

A committee comprising architects, civil engineers, planners, and environmental experts was constituted in June 2021 to prepare a planning and architectural framework for the hilly regions.

The framework, which is expected to be completed in this financial year, will include the following aspects:

1. Formulation of a methodology for creating scientific building bye-laws and construction norms suitable to the topographical context, safety, health, traditional architectural practices, and culture of the hilly regions.
2. Devising planning regulations and tourism management strategies to ensure carrying capacity-based urbanization in these regions.
3. Formulation of guidelines/methodology for multi-sectoral hierarchical spatial planning.
4. Policy recommendations for strengthening the legislative and institutional mechanisms for effective plan enforcement in planned areas, and prevention of haphazard development in urban as well as rural areas.
5. Preparation of decision-making tools for District authorities, urban and rural local bodies to streamline building approvals in hilly towns and 'No Objection Certification' systems for construction in rural areas.

Redefining 'Urban' in India

Although Census 2011 has designated 8000 towns as 'urban' for population estimation, half of them, known as census towns, are still administratively 'rural'.

Census towns have contributed to over 30% of the net increase in urban population between 2001 and 2011—indicating the nature of transformation that is taking place in the rural areas. An assessment of their contribution to societal and economic growth, and appropriate recognition as 'statutory towns' is crucial for deriving the benefits of urbanization in the country. The opportunity of reaping the benefits of planned urban development in such towns may remain unutilized if they keep growing without a comprehensive spatial development strategy under statutory master plans. Haphazard growth, unplanned construction, and ad-hoc provisioning of infrastructure, over a long period, will put them at major risks.

The Managing Urbanization Vertical is deliberating on this issue with other think tanks and undertaking research internally.

Addressing Issues in Urban Governance

In most Indian cities, the mayor is endowed with limited executive responsibilities, except those in the States of Madhya Pradesh and West Bengal. Also, while the term of a municipal corporation is five years, the mayor's tenure varies from one State to another and ranges between 1–5 years. This is in stark contrast to the mayoral models followed in other cities around the world.

The Vertical is deliberating on this issue with other think tanks and research organizations and preparing a white paper on the same. The need for strong city-level leadership has been discussed with the State Governments for appropriate action.

Strengthening Urban Health Management Systems

It is crucial to map the challenges and best practices and devise efficient strategies to make the urban health management system more robust—never has this been more urgently felt than now, in light of the Covid-19 pandemic. Accordingly, Dr K Rajeswara Rao, Special Secretary, NITI Aayog, met with Dr Anuradha Jain, Adviser (Health), USAID, and Shriya Sethi, Country Director, International Innovation Corps on 3 September 2021. Possible areas of collaboration and the scope of work were discussed. Consequently, a concept note on the way forward has been prepared, and the first stakeholder meeting held in November 2021.

Strategies for Modernization of Urban Land Records

To improve urban land governance and make it more transparent and accessible for institutionalized credit and secure investments, the Vertical is developing a strategy paper that can be used as a ready reference by States/UTs. To take this forward, a brainstorming session to discuss various technologies, modernization ideas, best practices and the way forward was held in November 2021.

Best Practices in Municipal Finance Systems of Urban Local Bodies

The Managing Urbanization Vertical has initiated a study to compare the implementation models adopted by certain Indian States for the financial reforms of their urban local bodies. The comparison would objectively bring out the commonalities amongst the models as well as the unique features of each model. Based on this, the study would attempt to draw lessons for the States undertaking reforms currently.

Appraisal

In 2021–22, the Vertical appraised/examined four EFC, DIB, PIB Memoranda, Cabinet Notes and PPRs of MoHUA, the States of Tamil Nadu, Himachal Pradesh and Karnataka, and metro rail projects of Delhi and Surat.

MSME

The MSME Vertical deals with matters concerning the policies and programmes of the micro, small and medium enterprises (MSME) sector in India.

MSME clusters have mushroomed over the years due to proximity to raw material sources, suppliers and business partners, better coordination and economies of scale. The Government has adopted the cluster development approach as a key strategy for enhancing MSME productivity and competitiveness. In this context, it is imperative to evaluate the performance of the clusters based on their productivity, competitiveness, export orientation, and innovative capabilities. Also, it is essential to identify the key challenges and the requirements of the clusters to enhance their performance.

The Vertical commissioned a research study on ‘MSME clusters to improve productivity and quality, with a focus on the creation of common infrastructure’, which is currently underway.



NATURAL RESOURCES AND ENVIRONMENT

Expert Committee for Biodegradable Alternative to Plastic

The Vertical, in collaboration with experts from the Ministry of Environment, Forest and Climate Change, Ministry of Science and Technology, and industry, has facilitated the development of a product as a biodegradable alternative to plastic. Two rounds of meetings have been held so far and a sub-committee report is planned to be finalized by February 2022.

Developing Decarbonization Pathways for India

The Vertical planned the strategy for the implementation of India's COP26 pledge, Panchamrit, at the Glasgow Summit in 2021. The Vertical undertook studies on sectoral transition and climate finance mobilization.

Mapping of Jhum Cultivation in North-Eastern States

Under NITI Aayog's leadership, ISRO has commissioned a study on 'Area under Shifting Cultivation in NER and Estimation of the Jhumia Families Depending on it'. The study, which is in the final stages of completion, shall form the basis for informing a transformational approach on the practice of shifting cultivation in the North-Eastern Region.

Policy Guidelines on Behaviour Change for Waste Segregation at Source

A policy note on the need and challenges associated with waste segregation at the source was prepared. The note mentioned the current policy and governance landscape, and recommended best practices. The paper also presented certain policy suggestions to nudge behavioural change for waste segregation at the source. The note was prepared in association with IIM Bangalore and IRG Systems South Asia.



National Dialogue on Plastic-Free Cities and Oceans

The Vertical organized a high-level national dialogue on plastic-free cities and oceans by Cyrill Gutsch, Founder and CEO, Parley for the Oceans. The dialogue was chaired by Dr Rajiv Kumar, Vice Chairman, NITI Aayog, and Shri Bhupender Yadav, Hon'ble Minister of Environment, Forest, and Climate Change, was the Chief Guest.

PROJECT APPRAISAL AND MANAGEMENT DIVISION

Appraisal of Public Programmes, Schemes and Projects

NITI Aayog through its appraisal memoranda has been instrumental in suggesting and bringing about systemic improvements aimed at the efficacy of public sector schemes and spending in terms of delivery and outcomes.

During 2021–22 (up to 31 December 2021), appraisal of 150 schemes/projects (comprising 300 sub-schemes) contained in EFC/PIB/EBR proposals and involving an outlay of Rs 30,40,918.85 crore was undertaken. The sectoral distribution of projects appraised from 1 April–31 December 2021 is illustrated in the table below.



SECTOR-WISE NUMBER AND COSTS OF EFC/PIB PROPOSALS APPRAISED BY PAMD
(1 April 2021 to 31 December 2021)

S. No.	SECTORS	2021-22	
		No.	Cost (Rs cr.)
AGRICULTURE			
1	Agriculture and Allied Sectors	5	7,86,795.92
ENERGY			
2	Power	5	9,981.57
3	New and Renewable Energy	8	54,775.32
EXTRACTION INDUSTRY			
4	Coal		
5	Petroleum and Natural Gas	1	41,520.00
TRANSPORT			
6	Railways		
7	Road Transport and Highways	1	7,270.00
8	Civil Aviation	2	5,805.00
9	Ports Shipping and Waterways	1	2,500.00
INDUSTRY			
10	Heavy Industries and Public Enterprises	2	28,469.44
11	Micro, Small and Medium Enterprises	5	25,229.56
12	Steel and Mines	1	98.48
13	Petrochemicals and Fertilizers		
14	Textiles	8	72,944.22
15	Food Processing Industries		
16	Commerce and Industry	10	23,510.62
SCIENCE and TECHNOLOGY			
17	Biotechnology		
18	Science and Technology	8	23,219.82
19	Scientific and Industrial Research		
20	Ocean Development		
21	Earth Sciences	4	5,561.00
SOCIAL SERVICES			
22	Education/HRD	5	60,001.66
23	Culture	3	2,751.64
24	Youth Affairs and Sports	2	4,582.09
25	Health and Family Welfare	5	4,75,400.76
26	Women and Child Development	2	75,169.94

S. No.	SECTORS	2021-22	
		No.	Cost (Rs cr.)
27	Labour and Employment	1	832.30
28	Social Justice and Empowerment	4	3,640.37
29	Housing and Urban Poverty Alleviation	2	8,961.99
30	Rural Development	5	7,41,055.41
31	Minority Affairs	4	39,345.04
32	Tribal Affairs		
33	Drinking Water Supply and Sanitation		
34	Food and Public Distribution		
COMMUNICATION			
35	Information and Broadcasting	3	4,433.12
36	Post		
37	Electronics and Information Technology	5	21,483.12
38	Posts and Communication	3	10,371.30
OTHERS			
39	Home Affairs	6	5,777.29
40	Tourism	4	7,578.37
41	Environment and Forests	1	592.05
42	Law and Justice		
43	Jal Shakti and Water Resources, River Development Ganga Rejuvenation	8	2,56,899.33
44	North-Eastern Region (DONER)		
45	Consumer Affairs	5	64,304.00
46	Finance/Corporate Affairs	7	31,570.19
47	Planning Commission/NITI Aayog	1	933.00
48	External Affairs	1	5,110.61
49	Statistics and Program Implementation	1	5,120.30
50	Parliamentary Affairs		
51	Panchayati Raj	1	21,617.49
52	Housing and Urban Affairs	7	96,908.25
53	Skill Development and Entrepreneurship	1	1,435.28
54	Personnel, Public Grievances and Pensions		
55	Cooperation	1	2,783.00
56	Defence	1	4,580.00
Total		150	30,40,918.85



PUBLIC-PRIVATE PARTNERSHIP

The Public-Private Partnership (PPP) Vertical works at the forefront for deepening the reach of PPPs as the preferred mode for implementation and operation of public infrastructure. To this end, the Vertical makes policy-level recommendations and provides transaction structure guidance to implementing agencies. The Vertical is also engaged in steering the asset monetisation programme, monitoring of transactions, investment structures, progress and deliberations on issues, if any.

Appraisal of Central Sector Public-Private Partnerships

During 2021–22 (up to 31 January 2022), 74 PPP projects, with a total cost of Rs 1,03,523 crore, were appraised by the Vertical. The sector-wise distribution of the projects appraised is as follows:

PPP Projects Appraised in FY 2021–22 (Up to 31 January 2022)

Sl. No.	Project Appraised	No. of Projects	Total Cost (in Rs Crore)
1	Road	50	53,890
2	Ports	9	9,398
3	Eco-Tourism	2	90
4	Hospital	3	2,422
5	Silos	4	865
6	Ropeway	1	410
7	Telecom	1	20,643
8	Railway Stations	2	1,454
9	Railway Freight Corridor	1	9,369
10	Pipeline	1	4,982
	Total	74	1,03,523

This year several path-breaking initiatives were undertaken by the PPP Vertical for promoting private and foreign direct investments in the infrastructure sector.

Task Force on Conciliation Mechanism

To promote ease-of-doing-business for those who deal with the Government and to instil confidence in private investors, the Hon'ble Finance Minister, in her Budget speech of FY 2021–22, announced the setting up of a conciliation mechanism. Subsequently, a task force was constituted under the Chairmanship of CEO, NITI Aayog, with participation from key Central Ministries and Departments in March 2021.

The task force was mandated to develop an effective conciliation mechanism for timely and cost-efficient resolution of disputes arising out of contracts and legal relationships between the Government and private investors/contractors. After extensive discussions with the stakeholder Ministries, the task force formulated the 'Guidelines for Resolution of Disputes between Government and Private Entities via Conciliation' as part of its recommendation.

Applicable to all Central Ministries, CPSEs, and statutory authorities, the prescribed mechanism entails a timebound facilitatory process—enabling the parties to arrive at a mutually agreeable settlement with the aid of conciliators. It is to be accessible both by the Government and any private party at any stage of the pendency of the dispute—before, during or after initiation of arbitration or litigation proceedings.

Model Concession Agreement-Ports

In 2021–22, the Ministry of Ports, Shipping and Waterways undertook the process of revising and updating its Model Concession Agreement (MCA)-Ports through an inter-ministerial consultation. MCA-Ports is a model concession document that guides the project structure and concession framework of all PPP projects undertaken by major ports. This revision is largely aimed at enhancing the viability of projects, and consequently the biddability and bankability of the MCA and the projects thereunder.

The PPP Vertical, in its appraisal of the Ministry's various PPP projects over the last three years, provided detailed comments and suggestions for improving the concession terms. And during the MCA-Ports 2021 formulation, the Vertical integrally participated in the process through multiple rounds of deliberations/meetings with the Ministry representatives and written submissions. The 'Model Concession Agreement 2021', finalized on the basis of NITI Aayog's inputs and suggestions, was issued on 12 November 2021.

SuBaH: Supporting States in Solarization of Health Institutions

NITI Aayog has launched the 'SuBaH' (Sun's Blessings and Health) initiative to provide solar power via the installation of solar panels on the rooftops of health institutions at low prices all over the country, without any capital investment by the institutions or any subsidy from the Government. The project is being rolled out by NITI Aayog in States/UTs with technical assistance from the World Bank. The project will be funded by attracting investment from the private sector, which would get its returns through committed purchase of power by the concerned health institutions. In this regard, a nationwide workshop with the States and UTs was held in September 2021. The guiding principles for the programme were also developed during the year.

Indian Public Procurement Reforms (Alternatives to 'L1')

Currently, significant Government expenditure is incurred towards the procurement of goods, works and services. There is a long-standing need for reviewing the efficacy of the existing methodology of bidder selection through the Least Cost Selection (or L1) method. In high-impact projects and state-of-the-art equipment—involving a high-level of customization, specialization and cutting-edge technology—where innovation, quality, experience, and competence of the bidder are important, the present method of selection of the lowest bidder often results in suboptimal delivery, non-performances, higher life cycle cost, delays, and arbitrations.

Based on detailed deliberations with various stakeholders, NITI Aayog has come up with several alternative procurement strategies for inclusion in the General Financial Rules (GFR) 2017, to enable public procurement authorities and agencies to transparently select the appropriate method depending on project-specific requirements.

Basis these recommendations, the Procurement Policy Division of the Ministry of Finance issued general instructions on 'Procurement and Project Management' on 29 October 2021. The instructions have introduced the Fixed Budget-Based Selection (FBS) method for engaging consultancy service and allowed Quality- and Cost-Based Selection (QCBS) in the procurement of works and non-consultancy services. The newly defined concept of Quality-Oriented Procurement (QOP) is a step towards bringing Value for Money (VfM) into the procurement process rather than merely focusing on the lowest cost (or L1). This shall empower procurement authorities with more options and enable them to make effective decisions in the public interest.

Redevelopment of Jawaharlal Nehru (JLN) Stadium

During the year, the Vertical worked closely with the Ministry of Youth Affairs and Sports in finalizing the strategy for the redevelopment of the JLN Stadium in Delhi through PPP. The project will leverage the mixed-use/real-estate development potential available around the stadium. The key objectives of this project are to promote the development of the stadium and develop the unutilized/underutilized spaces for complementary commercial activities to maximize revenue streams. NITI Aayog, along with the Ministry of Youth Affairs and Sports, undertook a pre-feasibility analysis of the project to assess the viability and initial feasibility of the project through PPP.

The Vertical is assisting the Ministry in the launch activities. During the year, the bidding process was initiated by the Ministry for the appointment of a transaction adviser, who is expected to commence work soon.

Augmentation, O&M of Four ESIC Healthcare Facilities

NITI Aayog worked closely with the Employees' State Insurance Corporation (ESIC), the Ministry of Labour and Employment, to provide transaction process assistance in finalizing the strategy for augmentation, operation and maintenance of ESIC healthcare facilities in four identified locations through PPP.

Structuring of BharatNet

NITI Aayog, along with the Department of Telecommunications (DoT), finalized the strategy for implementing the BharatNet Project through PPP. Phase I of the project has already been implemented, while Phase II, which is currently under different stages of implementation, is now proposed to be completed through PPP. This will enable leveraging of infrastructure already created by the Government while capturing private sector efficiencies, quality and investment for incremental development and impact.

The PPP Vertical, along with DoT, undertook a detailed analysis of various aspects of the project to arrive at an optimal and commercially viable PPP structure—moving from a model of total financing through public funds to one that would bring in private investment in projects with partial equity support from the Government. The structure was deliberated and finalized based on inputs of various committees, investor interactions and stakeholder consultations. Bid documents were prepared and finalized with active support from the Vertical. Post approval of the Cabinet, the bidding process is underway.

Development of Strategic Petroleum Reserve Facilities (Phase II)

NITI Aayog assisted the Indian Strategic Petroleum Reserves Limited (ISPRL) in implementing Phase II of the strategic petroleum reserve through PPP. ISPRL is developing an additional reserve of 4.0

million metric tonnes at Chandikhol in Odisha and 2.5 million metric tonnes at Padur in Karnataka. The project will strengthen India's energy security and serve as a cushion during any supply disruption. Phase I has already been implemented, while Phase II is now proposed to be taken up through PPP. NITI Aayog has proactively worked with ISPRL and MoPNG for structuring the project on PPP mode and preparing the bid documents. The PPPAC appraisal for the projects has been concluded and post the recently received Cabinet approval, the bidding process will soon be initiated.

High-Speed Rail Projects

NITI Aayog organized two joint committee meetings for the Mumbai–Ahmedabad High-Speed Rail Project. Further, the biggest-ever infrastructure tender in India was awarded in 2021–22. Construction under three civil packages also commenced during the year. Civil works tenders for the Sabarmati and Vapi section will also be awarded this year, as about 96% of the land acquisition has been completed. The supervision consultancy work of civil packages has also been awarded to an Indian entity-led consortium.

RURAL DEVELOPMENT

The Rural Development Vertical of NITI Aayog provides overall policy guidance to the Department of Rural Development, Ministry of Rural Development (MoRD). It also monitors the progress of the various schemes and programmes implemented by the Ministry.

Coordinating Hon'ble PM and VC's State Visits

The physical and financial status of the schemes of the rural development sector—MGNREGS, PMAY-G, DAY-NRLM, NSAP, SAGY, SPMRM and PMGSY—was prepared and provided for Hon'ble PM's/VC's visits to the States.

The Vertical coordinated with the Ministry of Rural Development (MoRD) in providing reply/clarifications regarding various issues raised by the States for meetings between VC/Members of NITI Aayog and Chief Ministers of the States as part of 'Reinvigorating Cooperative Federalism' exercise.

Review of OOMF 2021–22

The Vertical coordinated a meeting of the officials of the MoRD with DMEO to review the updation of the output-outcome monitoring framework.

The process of finalization of indicators for the next year (2022–23) is underway. The comments were given to DMEO for rationalizing indicators and updating OOMF for 2021–22 with respect to CS/CSS under the Department of Rural Development.

Appraisal

The Vertical appraised one Cabinet Note, four EFC proposals and two PPRs this year.

SCIENCE AND TECHNOLOGY

Consultation Group on Science and Technology

The first meeting of the consultation group on science and technology (S&T) was held on 24 June 2021 under the Chairmanship of Dr VK Saraswat, Member, NITI Aayog, to discuss various issues related to the sector.

The following points emerged during the meeting:

1. The crucial role of critical technologies in making India a global technology leader and the need to become self-reliant to achieve that aim.
2. Reforms for bringing the academia, industry, and the national laboratories to work together for taking science to the market, designing products, supporting industrial R&D, and bridging the gap vis-à-vis imported technologies.
3. A greater focus needs to be on the areas of emerging technologies, such as molecular electronics, neuro-morphic computing, cyber-security and cyber physical systems, seabed mining, drug discovery, carbon capture utilization and storage, alternate fuels such as hydrogen and methanol, clinical research, synthetic biology, quantum technologies, desalination of water, etc.

Third-Party Review of Bureau of Indian Standards

DMEO, in association with the S&T Vertical, is conducting a third-party review of the Bureau of Indian Standards (BIS). A joint team, from DMEO and the S&T Vertical, is doing the initial literature review to prepare a ToR for the proposed evaluation of BIS.

A meeting was held under the Chairmanship of DG, DMEO, on 30 July 2021, wherein DG, BIS, made a detailed presentation on the activities of BIS. Secretary, Department of Consumer Affairs, Senior Adviser (S&T), and other officers of NITI Aayog attended the meeting, whereby the ToR and the way forward for the review were discussed.

BharatNet

The Vice Chairman, NITI Aayog, monitors the monthly progress in the implementation of the BharatNet project. Up until 30 July 2021, 98% GPs were connected through BharatNet in Phase-1 and 28.37% in Phase-2.

Seaweed Cultivation

The S&T Vertical is closely working with the Ministry of Environment, Forest and Climate Change (MoEFCC) to promote seaweed cultivation in India and resolve outstanding issues and concerns in the area.

A field survey report on seaweed cultivation in the Gulf of Mannar was submitted in early 2021 by Director, National Centre for Sustainable Coastal Management, Chennai, to MoEFCC. The report indicated the technical feasibility of cultivating seaweeds along the coast of the Gulf of Mannar in five designated areas.

The report of a joint study by the Central Marine Fisheries Research Institute, National Centre for Sustainable Coastal Management and the Central Salt and Marine Chemicals Research Institute, after completing five cycles of cultivation, will be submitted in 12 months—post the clearance of the necessary grants and approvals—to MoEFCC and NITI Aayog.

Boosting India's Nuclear Power Sector

With a rising demand for power from various sectors, the Government of India is planning to increase the nuclear energy capacity threefold in the next decade to reduce the country's carbon footprint.

This exercise would require a concerted effort to evaluate the feasibility of small- and medium-scale nuclear power plants and to further assess their benefits and challenges.

NITI Aayog, along with other stakeholders, is formulating the necessary policies for addressing existing challenges, regulatory aspects and long-term issues, safety features, etc., in the area.



A national committee under the Chairmanship of Vice Chairman, NITI Aayog, was constituted on 13 May 2021 to examine the techno-commercial feasibility of small-scale nuclear power plants. The first meeting of the committee was held on 24 May 2021, in which various measures for encouraging private sector participation in the setting up of small-scale reactors were discussed.

The second meeting was held on 21 June 2021 and the third on 9 August 2021.

SKILL DEVELOPMENT, LABOUR AND EMPLOYMENT

Strengthening Apprenticeship System and Enhancing Employability of Youth

Based on stakeholder consultations and a study of best international apprenticeship models, the Vertical submitted recommendations to the Ministry of Skill Development and Entrepreneurship for making the programme more effective and accessible for apprentices as well as employers.

Critical Analysis of Aspirational Districts' Skill Development Plans

The skill development plans prepared by Districts under the Sankalp initiative were analysed for 15 Aspirational Districts (six top-performing and nine laggards). The Vertical collaborated with the ADP team to identify these Districts based on their rankings on the Champions of Change dashboard. Observations, findings and recommendations for skill development were compiled in a report to be shared with the Ministry of Skill Development and Entrepreneurship. The Vertical made a presentation on the exercise and discussed the recommendations of the report. Consequently, it was decided that NITI would continue to engage with the Ministry of Skill Development and Entrepreneurship on strengthening and improving skill planning in the Districts.

Assessing Skills' Demand to Strengthen Skill-Training in Construction Sector

The Vertical prepared a report on the skill-gap assessment in the construction sector based on secondary data. The report highlights supply-side factors that affect the availability of skilled workforce in the sector, such as inadequate coverage of all relevant job roles, capacity limitations in training institutes, and infrastructure investment constraints. Besides the issues related to training capacity, other factors impacting skill demand and supply and responsible for low productivity in the sector were also highlighted. The report included suggestions for reducing the skill gap and recommended better identification of target groups in the schemes for construction workers. The report has been shared with the Ministry of Skill Development and Employment.

Consultation on Digital Apprenticeships

To address the widening skills gap issue in India, exacerbated by the Covid-19 pandemic, the Vertical organized a consultation with experts, such as Coursera, LinkedIn Learning, Khan Academy, UNDP India, International Labour Organization (ILO), Just Jobs Network, Assocham, FICCI, and FISME, to discuss the feasibility of digital apprenticeships. It was decided that a small cross-sectoral team will be set up, including select stakeholders, to develop a pre-feasibility report on digital apprenticeships. It was also decided that ed-tech leaders will propose working models to industries and develop pilots on the same.

Recommendations to Strengthen Skilling Ecosystem

The Alliance of Skill Training Partners (ASTP) made a presentation before NITI Aayog Vice Chairman and the Vertical in June 2021 on greater skill development and improved employability of the youth, particularly in the context of the Covid-19 pandemic. After a preliminary discussion and comments from the Ministries of Skill Development and Entrepreneurship, Labour and Employment, Rural Development, and Education, ASTP was asked to draw a detailed action plan. ASTP submitted its recommendations, and a meeting was organized on 11 October 2021 under the Chairmanship of Vice Chairman, NITI Aayog. NITI steered the discussion on strengthening skill development with skill-training providers and the stakeholder Ministries.

Study on Gig and Platform Economy

A research team—led by the Vertical and with experts from the VV Giri National Labour Institute, Ola Mobility Institute, Centre for Development Studies, and BITS Pilani—was constituted for carrying out a study on the gig and platform economy. The study aims to gauge the relevance of the economy for India, estimate its size, determine the characteristics of platform labour, and recommend policy measures to leverage the economy to unlock jobs, protect livelihoods, and enhance social and financial inclusion.

Study on Understanding Barriers to Female Labour Force Participation

The Vertical held discussions with BMGF on barriers that prevent women from participating in the labour force and measures that can enhance their involvement. BMGF is undertaking a study to better understand the issue. The study focuses on new and enhanced survey methods and instruments to understand female labour force participation across five sample states—Delhi, Jharkhand, Karnataka, Madhya Pradesh, and Rajasthan. It aims to identify gaps in the labour market that dissuade women as well as the extent of and causes for the gender gap in earnings. The study will explore the influence of policies on women's participation in the labour force to come up with recommendations for effective measures.

Policy Brief on Enhancing Employment Opportunities in Care Sector

It has been found that expanding care services, particularly for children, the elderly and the ailing, can positively impact women's participation in the labour force. The Vertical has collaborated with ILO for developing a policy brief on enhancing employment opportunities in the care sector. The brief explores models for job creation in the care sector, presenting estimates related to demography, skilling needs, and infrastructure investments required in the sector.

Study on Welfare Initiatives for Migrant Workers

The Vertical has collaborated with NILERD on a study that brings together learnings from the implementation of different welfare initiatives for migrant workers. The States of migration considered are Bihar, Madhya Pradesh and Odisha and the destination States are Delhi, Punjab, Maharashtra and Kerala. The study looks at implementation mechanisms and the impact of initiatives on the lives of migrant workers. It makes recommendations for policy measures on inter-State migration, building an effective database of workers, and institutional mechanisms for implementing welfare initiatives for migrant workers.

Exercise to Study Convergence of Skill Schemes

The Vertical has undertaken an exercise to study the different skill development schemes that are being implemented by different Ministries and States. An analysis was done to understand the different target groups of beneficiaries covered by the schemes and their duration. Strategic suggestions for convergence of schemes have been prepared and submitted to the Ministry of Skill Development and Entrepreneurship.

SOCIAL JUSTICE AND EMPOWERMENT



New Mechanisms for SCSP and TSP

The Division undertook a major exercise to review and revise the Scheduled Castes Sub-Plan (SCSP) and the Tribal Sub-Plan (TSP) Guidelines 2017 to frame a new mechanism for the allocation of funds. Consequently, an institutional mechanism was developed by NITI Aayog, along with the nodal Ministries, to monitor allocations and expenditures on a real-time basis—e-uthan.gov.in for SCSP and stcmic.gov.in for TSP. For better utilization of funds allocated under SCSP and TSP, the Division has developed another mechanism for the Ministry of Finance.

Identification of Nomadic Tribes, De-Notified Tribes and Semi-Nomadic Tribes

The PMO constituted a committee under the Chairmanship of Vice Chairman, NITI Aayog, for the identification of De-Notified Tribes (DNTs), Nomadic Tribes (NTs), Semi-Nomadic Tribes (SNTs), and tribes not yet formally classified. The committee commissioned an ethnographic study through the Anthropological Survey of India (AnSI). AnSI has so far studied 24 communities out of 268 and submitted its report to NITI Aayog. It was later decided that AnSI should complete the study of the rest of the communities and make its recommendations in one consolidated report.

Impact of Covid-19 on Education of SC/ST Students

It was decided in a meeting held on 8 July 2021, under the Chairmanship of Vice Chairman, NITI Aayog, that a study will be conducted to assess the impact of Covid-19 on the education of SC/ST students. Various proposals were invited for the study, which was subsequently awarded to the Institute of Human Development.

Evaluation of Implementation of SCSP and TSP by Central Ministries/Departments

The Division will evaluate the performance of 41 Central Ministries/Departments with respect to the implementation of the SCSP and TSP Guidelines 2017 for the allocation of funds and initiation of schemes for the welfare and development of SCs and STs.

Engagement with Experts

The first meeting of the consultative group on social justice and empowerment and voluntary sector was held on 30 June 2021, under the Chairmanship of Prof. Ramesh Chand, Member (Social Sector) NITI Aayog, with experts and development partners. Action points that emerged during the meeting were shared with the concerned Ministries/Departments for compliance.

Appraisal

In 2021–22, the Division examined five Cabinet Notes, 11 EFC Proposals/Memorandum, five SFCs, two CCEA Notes and one PIB Memorandum.

STATE FINANCES AND COORDINATION

Database on States and UTs

The Vertical maintains a State-wise database on key macro, social and financial indicators. It also maintains information on Central transfers, which is updated on a monthly basis and uploaded on the Knowledge Management System (KMS) of NITI Aayog. The database is used by NITI for providing important policy inputs to the States on various matters.

Promoting Cooperative Federalism

An action plan on cooperative federalism was conceptualized by the Vertical for better and continuous engagement with States/UTs, including the organization of meetings/interactions with every State/UT at least twice a year. The Vertical also undertook the exercise of reallocation of States/UTs amongst the Vice Chairman/Members and senior officers of NITI Aayog. This year, the Vertical facilitated meetings/interactions of the Vice Chairman/Members/CEO, NITI Aayog, with respective State Governments/UT administrations for providing inputs on key macroeconomic and financial indicators.

Interactions with 23 States/UTs had been held between April and December 2021.

State Finance Briefs

Using the information available in State budgets, 2021–22, the Vertical analysed the impact of Covid-19 on each States' fiscal and financial health by assessing their performance in various key indicators.

Cross-State analysis of key macroeconomic indicators was also undertaken, which is used in regular interactions/meetings with the State Governments/UTs to provide inputs for future growth.

Allocation to States

The Vertical acts as the nodal for all recommendations made from NITI Aayog to the Department of Expenditure, Ministry of Finance, for 'special assistance to the States under the demand 'Transfers to States'. A total amount of Rs 1996 crore was released in FY21 to various States/UTs as one-time support for capital projects.

State Factsheets

To provide 'At-a-Glance' information about the various sectors of a State—including health, labour and employment, education, agriculture, industry, finance, growth and economy, urbanization, water and sanitation, women and child development—and track their performance in flagship schemes of the Government, a template made by the Vertical has been shared with all the State Verticals of NITI.

This year, the Vertical provided requisite support to the State Verticals in the development of these factsheets.

Governing Council Meeting Issues

The Vertical coordinates with different Ministries/Departments and Verticals within NITI for action taken on issues raised by the States/UTs in the Governing Council meetings. The Vertical examined the action points emanating from the oral and written speeches of the Chief Ministers/LGs/Administrators of States/UTs during the 6th meeting of the Governing Council and segregated them Ministry- and Department-wise. A total of 330 suggestions/recommendations were collated and taken up with the Ministry/Department concerned for comments/action-taken report.

UNSDF 2018–22



Fifth steering committee meeting of UNSDF

NITI Aayog and United Nations Resident Coordinator (UNRC) in India have signed the Government of India-United Nations Sustainable Development Framework (GoI-UNSDF) 2018–22, which is a five-year roadmap outlining the action-oriented response of UN agencies to key national developmental priorities, integrating the Sustainable Development Goals. The seven priority areas under UNSDF are (i) poverty and urbanization; (ii) health, water and sanitation; (iii) education and employability; (iv) nutrition and food security; climate change, clean energy, and disaster resilience; (v) skilling, entrepreneurship and job creation; and (vi) gender equality and youth development.

A joint steering committee has been set up, chaired by Vice Chairman, NITI Aayog, and UNRC in India, to monitor the progress under UNSDF. The fourth meeting of the committee was held under the Chairmanship of Dr Rajiv Kumar, Vice Chairman, NITI Aayog, and Renata Lok-Dessallien, United Nations Resident Coordinator, on 20 April 2021 to discuss the progress and overview of the GoI-UNSDF 2018–22, and set up the roadmap for the UN Sustainable Development Cooperation Framework (UNSDCF) 2023–27. The meeting focused on food and nutrition security in India.

The fifth meeting of the committee was held under the Chairmanship of Dr Rajiv Kumar, Vice Chairman, NITI Aayog, and Deidre Boyd, United Nations Resident Coordinator, on 17 August 2021. Participants deliberated upon the common country analysis, which is the first step towards the development of the new Cooperation Framework 2023–27. The meeting also reviewed the developments regarding the evaluation of the current sustainable development framework.

Coordination with Department of Economic Affairs

The Vertical coordinates with the Department of Economic Affairs (DEA), Ministry of Finance, on the status of the ongoing Union Budget announcements about NITI Aayog over the last seven years. The progress of Budget announcements is periodically reviewed by the Union Government at various levels.

Capacity-Building

Certain State Governments are in the process of revamping their State Planning Departments to make them more robust. These revamped Departments will be instrumental in guiding State-level policies, monitoring schemes at the State level, and tracking the progress of SDG goals in the States. To

facilitate this transition of State Planning Departments, the Vertical has provided knowledge support to the planning department of Uttarakhand.

SUSTAINABLE DEVELOPMENT GOALS

SDG India Index and Dashboard 2020-21



NITI Aayog carries the mandate of overseeing the adoption and monitoring of the Sustainable Development Goals in the country. However, SDG action cannot be restricted to the national level. Given the federal structure of the country and the division of powers and responsibilities between the Central and the State Governments, for the SDGs to be achieved at the national level, it is imperative that the States take charge. This approach led to the creation of the SDG India Index—the world's first Government-led sub-national measure of SDG progress.

The first edition of the index was launched in December 2018, the second on 30 December 2019 and the third on 3 June 2021.

The consistent annual publication of the SDG India Index and the subsequent engagement with States and UTs by the SDG Vertical have resulted in the index becoming the most widely accepted measure of SDG action nationally. Given the expansive nature of the Goals, the modular structure of the index makes it a robust singular policy tool and a ready reckoner for gauging progress across a wide spectrum of thematic areas, including health, education, gender, economic growth, institutions, climate change and environment.

The SDG India Index computes goal-wise scores on the 16 SDGs for each State and Union Territory. Overall State and UT scores are generated from goal-wise scores to measure the aggregate performance of the sub-national unit based on its performance across the 16 SDGs. These scores range between 0–100, and if a State/UT achieves a score of 100, it signifies that it has achieved the 2030 targets. The higher the score of a State/UT, the greater the distance to the target travelled.






North-Eastern Region District SDG Index 2021–22

Constructed from 84 indicators, covering 15 Goals and 50 SDG targets, the North-Eastern Region District SDG Index 2021–22 captures the progress on SDGs for more than 100 Districts in the eight States of the North-Eastern Region.



The construction of the index and its methodology embodies the central objectives of measuring the performance of Districts on the SDGs and ranking them, i.e., supporting States in identifying areas that require more attention, strengthening statistical and monitoring systems, and promoting healthy competition among them.

Objectives of NER District SDG Index

-  To fast-track **SDG achievements and balanced regional development** in NER
-  To institute a comprehensive **progress monitoring and ranking tool** at the district level in social, economic, and environmental sectors
-  To enable the States and Districts to **identify critical sectoral gaps**
-  To promote **competition and peer learning** in the region among States and districts
-  To facilitate sectoral and sub-regional **resource allocation**

All aspects related to the selection of indicators and computation methodology followed extensive consultation with all eight States.

An interactive dashboard was also prepared to allow users to explore and visualize the data in the NER District SDG Index Report. The dashboard is a powerful tool for extracting District and regional insights critical from the index data.

The index will help in identifying crucial gaps and inform interventions to fast-track progress towards achieving the SDGs in the region and act as a ready reckoner for gauging the progress of the Districts, among others.

The NER District SDG Index is another milestone in NITI Aayog’s efforts in localizing the SDGs from ‘global to national to local’.

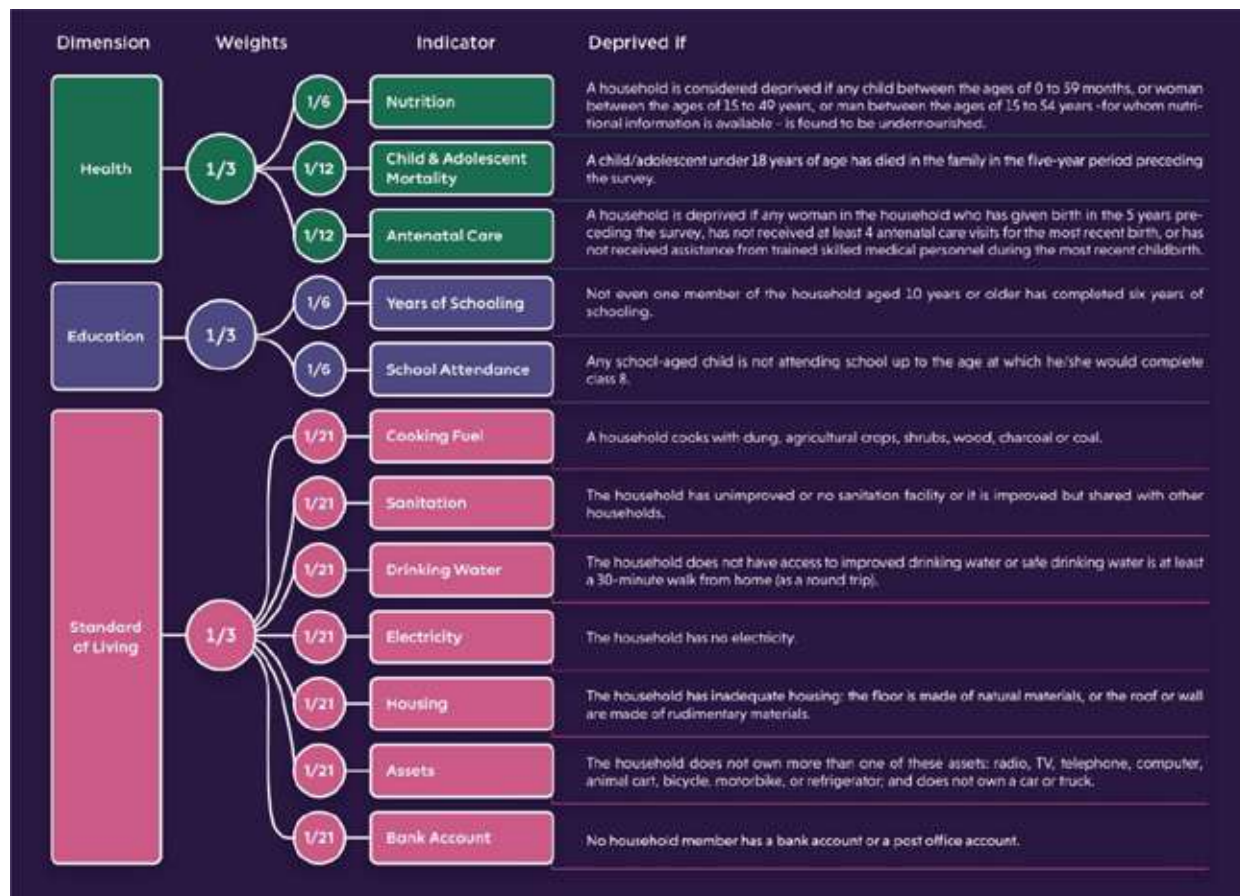
National Multidimensional Poverty Index

NITI Aayog has been assigned the nodal responsibility for the global multidimensional poverty index (MPI) in India. As part of this mandate, NITI Aayog is responsible for monitoring the progress, reviewing the States/UTs rankings and performance, preparing reform action plans, and constructing a customized yet globally comparable national MPI.

Therefore, the National Multidimensional Poverty Index: Baseline Report based on NFHS-4 (2015–16) has been developed by NITI Aayog in consultation with 12 Line Ministries and in partnership with State Governments and the index publishing agencies—Oxford Poverty and Human Development Initiative (OPHI) and United Nations Development Programme (UNDP).

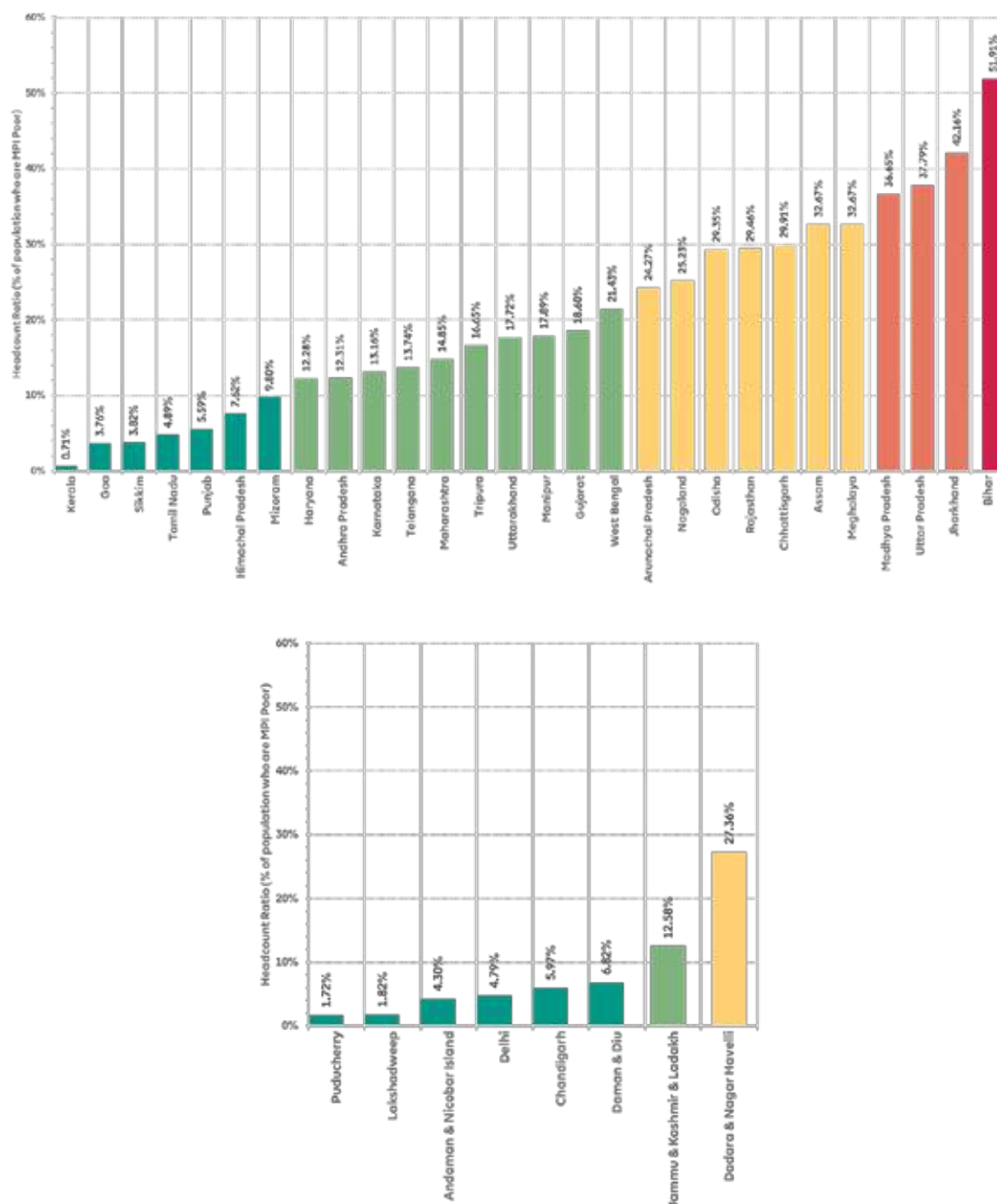
The MPI is a high-resolution household-level measure of non-monetary poverty. It captures the deprivation faced by a household across the three dimensions of Health, Education, and Standard of Living across 12 indicators, 10 indicators from the global MPI and 2 additional indicators capturing the national priorities of maternal health and financial inclusion.

The customized national MPI aims to provide opportunities to the Central and State Governments to understand the multiple factors that are hindering growth and assist them in making interventions more effective, high impact, and durable.



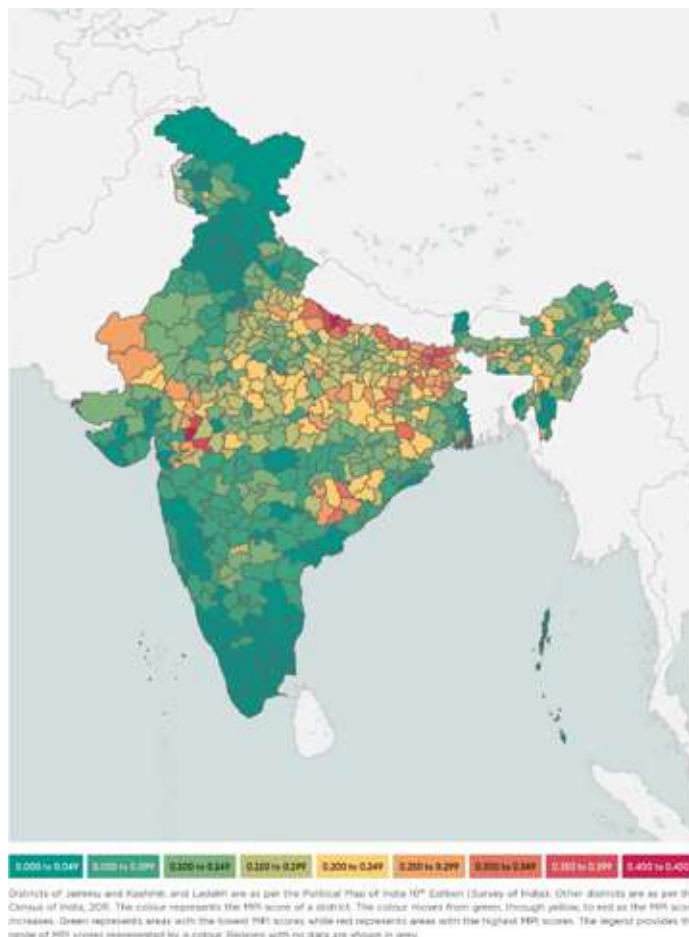
Indicators in India’s National MPI

Estimates of the national MPI headcount ratio and intensity have been prepared not only for the States and Union Territories but also for all the Districts, which is a unique feature of the report. This will not only enable the analysis of comparative and relative performance among States and UTs but will also enable States to undertake a comparative analysis of their Districts, thus highlighting regional disparities. This assumes salience given the federal structure of the country and the importance of the involvement of district administrations for the effective implementation of interventions and schemes.



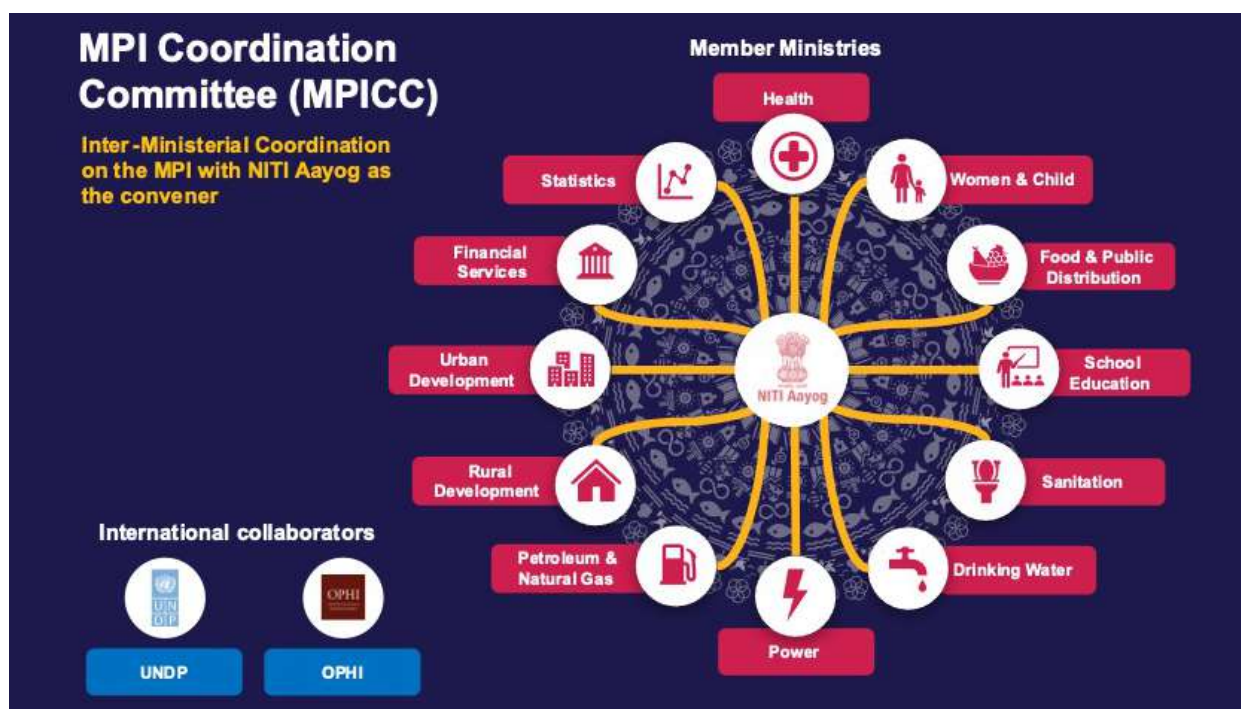
Headcount Ratio (% of the population who are MPI poor). The States are depicted in ascending order of their respective MPI headcount ratio.

Preliminary observations from the summary data factsheets and state reports of the NFHS-5 (2019–20) are encouraging and suggest improvement in access to clean cooking fuel, sanitation, and electricity, which in turn translates to a reduction in deprivation. These improvements, along with others, indicate an overall direction of significant reduction in the incidence of multidimensional poverty in the forthcoming edition of the index based on NFHS-5 (2019–20).



District-level estimates of multidimensional poverty

Based on the disaggregated analysis, the identification of priority indicators and the development of reform action plans to address the pressing challenges of multidimensional poverty in the States and UTs is undertaken by the inter-ministerial MPI Coordination Committee (MPICC) comprising 12 member Ministries, with NITI Aayog as the convener.



SDG Investment Facilitation Platform

To meet the gap in SDG financing in India, it is imperative to attract private sector capital and investment from a broad range of investor classes and funding structures. As a key step in this direction, the SDG Vertical, in partnership with Primus Partners and UNDP, is developing a web-based technology platform (SDG Marketplace) that will provide a common plank for attracting investment for SDGs in India. It is aimed at connecting investors who are looking to invest in SDG-related themes and projects, and investees who are seeking funding support.

The platform will incentivize funding into the SDGs by:

1. Supporting the Government in incorporating SDGs in the planning processes
2. Mitigating the information asymmetry faced by investors
3. Facilitating matchmaking between investors and implementing agencies
4. Dovetailing risk capital and private investment
5. Enabling multiple stakeholders to work in a cohesive manner
6. Organizing webinars to educate investors on the regulatory processes in India
7. Supporting regular monitoring and evaluation by investors and the Government

Technology-led sharing of best practices and investor-connect sessions can not only improve project quality but also facilitate fundraising.

TOURISM AND CULTURE

Strategy Paper on Enhancing Buddhist Tourism

The Vertical prepared a strategy paper to look at the potential of Buddhist tourism in India and lay out a roadmap for growing the same.

Promoting Adventure Tourism

The Vertical prepared another paper on promoting adventure tourism in the country, as India's diverse terrain and climatic conditions offer excellent opportunities for adventure sports.

Revival of Tourism Sector Post Covid-19

The tourism sector was hit hard by the pandemic. The Vertical has prepared a paper discussing the possible strategies that can be taken to revive the tourism economy.



Challenges Faced in Heritage Management in India and Policy Imperatives

The Vertical, in collaboration with Dronah, prepared a report on the 'Challenges faced in Heritage Management in India'. This first-of-its-kind report attempts to understand the quantum, nature and location of heritage sites across the country to arrive at some primary policies and guidelines for their long-term protection, conservation and promotion.

Appraisal

In 2021–22, the Vertical appraised one Cabinet Note, three PPRs, and 12 EFC/SFC/PIB Memoranda.

VOLUNTARY ACTION CELL

NITI-CSO Standing Committee

This committee was constituted under the Chairmanship of Vice Chairman, NITI Aayog, and comprises 30 members from various civil society organizations (CSOs) and development partners of different sectors. The committee was reconstituted in June 2020 for four years as a standing forum for sustainable engagement with CSOs.

In 2020, 17 subgroups were constituted on different thematic areas for identifying bottlenecks, operational difficulties, policy constraints and best practices. The subgroups comprise members of the NITI-CSO Standing Committee, development partners, Central Ministries/Departments, and UN agencies.

The subgroups held several meetings where challenges and constraints were identified and experiences learnt deliberated. Consequently, the observations and suggestions of each subgroup were shared with the NITI-CSO Standing Committee for its consideration.

NGO Darpan Portal

The Cell maintains a database of NGOs registered under the Societies Registration Act, the Indian Trust Act, and Section 8 of the Companies Act. As mandated by the Government, VAC issues a unique identification number to all registered NGOs, which can be used by them for grants. The Public Finance Management System, under the Controller General of Accounts, verifies the unique ID of the NGOs before releasing the grants.

In 2020, amendments were made to the Foreign Contribution (Regulation) Act (FCRA), which mandated a unique ID issued by NITI Aayog for granting permission to NGOs, including for renewals. Similarly, amendments were also made to the Income Tax Act, mandating a unique ID to apply for the 80G exemption.

In 2021–22, 43 Ministries/Departments budgeted grants for NGOs, under various Central Sector and Centrally Sponsored Schemes.

As of 5 January 2022, 1,30,282 NGOs had signed up on the portal.

WATER AND LAND RESOURCES

Compendium of Best Practices in Water Management

The compendium details various unique and effective strategies applied in water management across different geographies in the country. Most of these areas were highly water-scarce and populated by the economically weaker strata. The compendium comprises success stories from fields such as groundwater management, watershed management, climate change mitigation, agriculture, etc.

Guidelines and Procedure for Restoration and Rejuvenation of Waterbodies

The restoration and rejuvenation of waterbodies have gained wide momentum in the country following mass campaigns and community mobilization initiatives of the Government of India. Various governmental and non-governmental agencies have been actively engaged in such efforts. In this context, there was felt a need for disseminating standard operational guidelines and the procedure for the restoration and rejuvenation of waterbodies. The Vertical has prepared a document, in collaboration with an NGO, for this purpose.



Best Water Management Practices and Their Replication

A wide disparity exists among the States in the efficient management of water—while some perform better despite scanty rainfall, others are not able to harness the available potential to its fullest extent. The Vertical studied best water management practices across the country for replication.

Mechanism and Guidelines for Water-Trading and Role of Water Regulation Authority

Water-trading is an internationally acclaimed best practice in water management; however, it has not gained much ground in India. The role of the Water Regulation Authority and the possible mechanism and guidelines for water-trading were examined and a draft report was prepared. It is expected that this will serve as a directional input in augmenting water conservation efforts.

GIS-Based Study to Assess Extent of Infringement in Flood Plain Zones

Irrational and unscientific land use and encroachment have exacerbated the severity of natural calamities, particularly flooding. In this context, a GIS-based pilot study was undertaken by the Vertical to assess the infringement on flood plain zones in selected sites in Gujarat. The study was done in association with the Bhaskaracharya Institute for Space Applications and Geo-Informatics. The study is expected to be helpful in the assessment and management of floods and reduction of the incidences of calamities by enforcing flood plain zoning.

Research Study on Model Agriculture Land Leasing Act 2016

A research study for analysing the experiences in the implementation of the Act is being carried out in Andhra Pradesh, Madhya Pradesh, Uttar Pradesh and Uttarakhand, in collaboration with IIM Ahmedabad, NRM Centre for Land Governance, Bhubaneswar, and OP Jindal Global University. Among other objectives, the study aims to understand the informal leasing systems and institutions and how they influence agrarian relations and transformations, especially in the context of tenure security and access to entitlements.

Appraisal

The Vertical is assisting DMEO in the preparation of a report on the evaluation of CSSs. In 2021–22, the Vertical appraised two Cabinet Notes, 11 PPRs, and 10 EFC/SFC/PIB Memorandum.

WOMEN AND CHILD DEVELOPMENT

Improving Dietary Diversity through Nutri-Cereals

The Women and Child Development (WCD) Division is working towards enhancing the production and consumption of millets through their inclusion in the Public Distribution System (PDS) and safety net programmes like Integrated Child Development Services (ICDS) and Midday Meal (MDM).



A national consultation was held under Member (Health), Member (Agriculture), and CEO, NITI Aayog, in December 2021 to promote millets in ICDS and MDM schemes. NITI Aayog will work towards addressing the issues raised by the States during the consultation.

Millets-based recipes and other IEC material can be found in NITI's Poshan Gyan portal (<https://poshangyan.niti.gov.in>). A compendium on State-level best practices on the production and consumption of millets is under preparation.

Poshan Gyan

The Poshan Gyan portal, a national digital repository on health and nutrition, was launched on 13 April 2021 by Vice Chairman, NITI Aayog. The portal has been developed by the Division in partnership with BMGF and Ashoka University. The Poshan Gyan repository was conceptualized as a resource enabling the search of communication materials on 14 thematic areas of health and nutrition across diverse languages, media types, target audiences and sources. Content for the repository has been sourced from the Ministries of Health and Family Welfare and Women and Child Development and developmental organizations. The website provides an intuitive interface (multi-parametric search, multiple downloads at a point in time, easy sharing of materials via social media and easy viewing on any type of smartphone).

Early Childhood Care

Policy Paper

Member (Health), NITI Aayog, chaired several meetings on early childhood care and development, especially in the age group of 0–3 years. States were invited for a consultation on 3 March 2021 to share their models on early childcare and development. Post several internal discussions and consultations, a draft paper has been prepared on the topic.

BvLF Survey

NITI Aayog, in collaboration with BvLF, has undertaken an exercise to assess the impact of Covid-19 on the health, nutrition, learning, and caregiving of young children, and the workload and well-being of their caregivers. The survey was conducted by Dalberg and Kantar. The study covers 11 States: Andhra Pradesh, Assam, Bihar, Haryana, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, and Uttar Pradesh.

Quantitative data from a telephonic survey of 10,112 primary/secondary caregivers and 2916 frontline workers (1422 Anganwadi workers, 1334 ASHAs, and 160 VHNs) and qualitative data from telephonic interviews with 16 primary caregivers and 14 frontline workers (seven Anganwadi workers and seven ASHA workers) was analysed.

Nutrition Strategy in High-Burden Districts

A comprehensive situational analysis of high-burden Districts was undertaken to understand the trends in health and nutrition indicators in these areas.

The health and nutrition profiles of three Aspirational Districts—Begusarai, Araria and Aurangabad—were prepared using multiple administrative data sets and shared with the Districts to improve their performance in these indicators.

Based on NFHS-5, the Division prepared the State nutrition profiles of 19 States and UTs, which were released on 30 September 2021. District nutrition profiles are also being prepared.

A NITI-NFHS 5 collaborative committee has been formed, chaired by Member (Health), NITI Aayog, in collaboration with BMGF, IFPRI, IIPS and other partners, to conduct a unit-level analysis of NFHS-5 data for specific priority questions identified by NITI.

Take-Home-Ration Practices across States

NITI Aayog undertook an exercise, in collaboration with the World Food Programme, to collate State-level good practices implemented across the take-home-ration value chain. A draft report was prepared and shared with MoWCD and States/UTs for their comments. As many as 22 States/UTs provided inputs on the procurement, production models, THR products, quality management, etc. Details received were mapped against the good practices criterion.



Strengthening Poshan Abhiyaan in 15 Districts of Uttar Pradesh

Under the guidance of Vice Chairman, NITI Aayog, a partnership with ICAN (a consortium of various civil society organizations) has been made for the promotion of health and nutrition activities in one block each of 15 Districts of UP. The focus areas are on addressing demand-side issues for improving health and nutrition outcomes and carrying out an extensive door-to-door SBCC campaign.

Addressing Rising Obesity

The incidences of overweight and obesity are increasing among children, adolescents and women in India. A national consultation on the prevention of maternal, adolescent and childhood obesity was organized under the Chairmanship of Member (Health), NITI Aayog, on 24 June 2021 to discuss policy options to tackle the issue. NITI Aayog, in collaboration with IEG and PHFI, is reviewing the evidence available to understand the actions India can take, such as front-of-pack labelling, marketing and advertising of HFSS foods and taxation of foods high in fats, sugar and salt.

India Policy Insights

India Policy Insights is a comprehensive geo-visual online data platform of policy-relevant population health and development indicators derived using novel statistical techniques at multiple geographic levels. The collaborative partner in this effort is Harvard University (<https://geographicinsights.iq.harvard.edu/india>).

Nutritional and Health Problems of Migrants

The Division has prepared a review paper highlighting the nutritional and health problems of India's migrants. The draft paper highlights the need for inclusive planning of health- and nutrition-service delivery for migrants and their better coverage under the safety net and social security programmes, especially in urban areas.

Achievement of Health-Related SDGs

NITI Aayog has compiled a list of indicators and targets tabulating India's progress in achieving the global nutrition targets of the World Health Assembly and 19 additional health and women-empowerment indicators. The list has been shared with MoWCD.

Behavioural Insights Unit

The Unit has conducted two research studies to improve complementary feeding practices and the uptake of IFA tablets among pregnant women, and one on the steps required to improve ANC utilization.

The Unit also provided SBCC support under the Sewapuri Vikas Abhiyaan by developing BCC toolkits and training around 300 people in Sewapuri on the same.

Global Hunger Index

The Division undertook an in-depth analysis of the methodology of the Global Hunger Index. A meeting on the 2021 edition of the index was held on 12 October 2021 under the Chairmanship of Vice Chairman, NITI Aayog. The way forward to improve India's ranking in the index was discussed with relevant stakeholders.

SECTION-IX



ADMINISTRATION AND SUPPORT UNITS

ADMINISTRATION AND SUPPORT UNITS

INTRODUCTION

The NITI Administration functions in accordance with the service rules and Government of India instructions issued by DoPT. The administration is concerned with all aspects of service conditions of officers and staff, recruitments, promotions, postings, transfers, retirements, deputations, court cases related to service matters, and provides information under the RTI Act on these matters as well. It is also entrusted with the strategic communications of NITI's policies in the public domain. The Hindi section continued its efforts towards the greater use of Hindi in official work during the year.



ATTRACTING BRIGHTEST TALENT FOR TEAM NITI

NITI Aayog's staff is a mix of Government officials as well as domain experts and specialists. The latter are engaged through open advertisements on a lateral induction basis. To permit and facilitate this necessary induction of specialists, the UPSC waived off its mandatory consultation. Consequently, NITI Aayog embarked upon new forms of recruitment for attracting the brightest professionals and specialists from a talent pool available countrywide.

The total number of personnel in the erstwhile Planning Commission was around 1500. After NITI Aayog was constituted, a task force was set up under the Chairmanship of the then CEO, NITI Aayog, with Secretary, DoPT, Establishment Officer and Secretary, Department of Expenditure, as members, which went through the structure of the organization. The task force emphasized the need for inducting thinking professionals rather than filling regular duty posts and recommended that the large number of supporting staff be shed. As a result, the staff strength in NITI Aayog was reduced to a total number of 500 persons, including both professionals and support staff. This has since risen to 714 with the addition of staff in the Development Monitoring and Evaluation Office and the Atal Innovation Mission.

Over the years, with NITI Aayog's evolution as the Government's premier policy think tank, it has been successful in attracting the professional talent from both within and outside the Government. In order to attract the best professionals available, NITI Aayog finalized the flexi-pool guidelines, in consultation with Department of Personnel and Training, to bring in domain experts/specialists from various sectors—Government, public and private sectors as well as multinational and multilateral institutions. These guidelines have been rigorously followed and have resulted in a substantial intake of high-quality professionals in NITI Aayog.

During 2021–22, recruitment for the regular GCS posts was conducted by the UPSC at various levels—from Economic Officers to Joint Advisers. In addition, following the flexi-pool guidelines, NITI Aayog successfully completed the recruitment for various professional posts, which were re-designated to indicate their professional nature—Senior Lead, Lead, Senior Specialists, Specialists, Senior Associates and Associates. All of them have been appointed on short-term contacts or fixed-term-deputation basis and selected through a fair, transparent and rigorous procedure.

It is a matter of immense satisfaction for Team NITI that it has been able to attract talent of the highest order—many of whom have taken significant pay cuts to work for the organization. We have been able to attract professionals who want to make a nationwide impact as NITI Aayog offers them an unparalleled canvas and opportunity to utilize their skills to make a difference in their chosen sectors. With the accumulated experience in successfully attracting and recruiting talent independently, NITI Aayog feels much more confident of being able to attract the professional talent required to meet the requirement of a vibrant think tank.

In addition, in terms of consultancy guidelines NITI Aayog has been successful in engaging domain experts through the well-defined and regulated consultancy guidelines under the extant provisions of General Financial Rules 2017.

Currently, NITI Aayog has a judicious balance of administrative and domain professionals who join NITI through various recruitment channels. The total number of personnel and their category-wise distribution in NITI Aayog, including the staff engaged in DMEO and AIM, is given below in Table I. It may be pointed out that currently, the number of professionals recruited laterally or engaged as consultants numbers 87 (from the Additional Secretary to Under Secretary levels and excluding young professionals) as compared to 115 staff directly engaged or deputed from Government channels. This balance will be further improved in the coming years.

S. No.	Level of Officers	Government	Lateral Entrant Professionals	Other Professionals Outsourced	Total
1	Additional Secretary and equivalent	6	2	—	8
2	Joint Secretary and equivalent	10	2	6	18
3	Director and equivalent	21	23	—	44
4	Deputy Secretary and equivalent	27	3	10	40
5	Under Secretary and equivalent	51	19	22	92
6	Section Officer and equivalent	84	19	*74	177
7	Assistant Section Officer and equivalent	55	—	—	55
8	Other support staff	163	—	—	163
8	Outsourced Personnel	—	—	117	117
Total		417	68	229	714
*Young Professionals					

The NITI Aayog internship scheme was initiated in 2016. It has elicited significant response and was continued in 2021–22. Strict and transparent guidelines for internship were formulated in November 2018. Further, in pursuance of the guidelines, a comprehensive internship portal was set up, which has enabled decentralization and streamlining of this scheme, leading to efficiency and effectiveness. The scheme seeks to engage students pursuing undergraduate/postgraduate degrees or research scholars enrolled in any recognized university/institute within India or abroad as interns.

Launched in 2016, the NITI Fellowship Programme seeks to tap into the best minds from across the world. It has continued in accordance with the fellowship guidelines of 29 December 2016. NITI Aayog has taken on board ten expert professionals as fellows under the scheme.

COMMUNICATIONS AND SOCIAL MEDIA CELL

The Communications and Social Media Cell comprises the charts, maps and equipment and photostat units, and the editorial and social media cell.

The charts, maps and equipment unit is a centralized designing and technical support unit of NITI Aayog. It provides logistical, technical and equipment support to all Verticals and Divisions of NITI Aayog. During FY 2021–22, the unit provided support for PM-level meetings as well as for various other virtual meetings and seminars.



The Editorial and Social Media Cell is currently being managed by two full-time functionaries, who regularly interact and liaise with all Verticals, attached bodies, and senior officers of NITI Aayog, the creative and digital media amplification agencies, and the Press Information Bureau to provide editorial, news, social media and PR-related support.

GOVERNING COUNCIL SECRETARIAT

The Governing Council Secretariat (GCS) coordinates the activities of all the Verticals/Divisions/Units of NITI Aayog. It also circulates various correspondence received from different Ministries/Departments/States/UTs to the concerned Verticals. The Secretariat carried out a number of activities in 2021–22:

1. It coordinated the sixth meeting of the Governing Council of NITI Aayog on 20 February 2021, under the Chairmanship of the Hon'ble Prime Minister. The Secretariat also organized a detailed interaction preceding the sixth Governing Council Meeting on 6 February 2021, with over 250 senior State officials, including Chief Secretaries, Principal Secretaries of State departments, and Principal Secretaries/Secretaries to Chief Ministers. The feedback from this meeting was duly incorporated while curating the agenda for the Governing Council Meeting. The Secretariat coordinated with the respective Ministries/Departments for the action taken report on the decisions taken during the fifth meeting of the Governing Council and the preparation of agenda notes for the sixth meeting.
2. As a coordination focal point, the Secretariat organizes weekly senior officers' meetings, under the Chairmanship of the Vice Chairman, NITI Aayog.
3. The Secretariat organized meetings of the senior management committee, which has recently been reconstituted as the senior management council, under the Chairmanship of Vice Chairman, NITI Aayog.
4. GCS coordinated and collated information from the Verticals/Divisions for various references received from the PMO and Cabinet Secretariat, such as achievements of NITI Aayog, policy decisions about NITI Aayog in last six years, action taken report on the points emanating from Independence day speeches of various years.

HINDI SECTION

The Hindi Section continued its efforts towards the greater use of Hindi in official work during the year, keeping in view the annual programme issued by the Department of Official Language, Ministry of Home Affairs, and the Official Language Policy of the Union, for implementation of the Official Language Act, 1963, and Official Language Rules, 1976, made thereunder.

Quarterly progress reports were sent to the Department of Official Language and those received from attached offices were reviewed regularly. The Hindi Section translated various documents, like the Annual Report, Demands for Grants, material related to the Parliamentary Standing Committees, Cabinet Notes, Parliament Questions, Notifications, MoUs, forms and drafts, letters, etc.

Implementation of Section 3(3) of Official Language Act

In pursuance of the Official Language Policy, all documents covered under Section 3(3) of the Official Language Act, 1963, are issued both in English and Hindi. The annual programme and other orders/instructions issued by the Department of Official Language were forwarded to all the Sections of NITI Aayog and its attached offices for information and directives.



Official Language Implementation Committee

The Official Language Implementation Committee (OLIC) functions under the Chairmanship of Adviser (Official Language). This committee periodically reviews the progress made in connection with the use of Hindi and gives appropriate suggestions and recommends measures to be taken for the effective implementation of the Official Language Policy. The meetings of this committee are held regularly and the offices under the control of NITI Aayog are also instructed for convening OLIC meetings regularly.

Incentive Scheme for Original Noting and Drafting Work in Hindi

The incentive scheme for noting and drafting in Hindi introduced by the Department of Official Language was continued in 2021–22. The scheme carries two first prizes of Rs 5000 each, three second prizes of Rs 3000 each, and five third prizes of Rs 2000 each.

Cash Prize Scheme for Dictation in Hindi

An incentive scheme for officers for dictating in Hindi is in operation. Under this scheme, there is a provision of two cash prizes of Rs 5000 each (one for Hindi speaking and the other for non-Hindi-speaking staff).

Hindi Fortnight

During the Hindi fortnight, organized from 1–15 September 2021, various competitions such as Hindi essay writing, translation, noting/drafting, extempore speech, poetry recitation, and knowledge of the official language were held. A Hindi dictation competition was also organized for the multi-tasking staff of NITI.

Hindi Workshops

During the year, two Hindi workshops were organized on 15 July 2021 to encourage officials to undertake more work in Hindi. As many as 19 officers and employees participated in these workshops.

Inspections Regarding Progressive Use of Hindi

To oversee the implementation of the Official Language Policy, seven Divisions, Sections, Verticals of NITI Aayog, DMEO and NILERD were inspected by the Hindi Section.

LIBRARY AND DOCUMENTATION CENTRE

NITI Aayog's Library and Documentation Centre provides access to a wide selection of books, journals and reports to all officials of the institution. In-house consultation facility is also extended to officials of other Departments as well as research scholars enrolled with various institutions/universities. The Library provides access to different databases through the intranet of NITI Aayog.

The Library Committee, appointed by the CEO, exercises general direction, control, supervision, and guidance over the affairs of the library. Currently, the committee is headed by Dr Yogesh Suri, Senior Adviser, NITI Aayog.

The library has over 1.40 lakh books, reports, bound volumes and audio-visual items. It subscribes to 123 journals/magazines, newspapers and e-publications in both English and Hindi.

From 1 January 2020 to 29 December 2021, 791 books were added to the library's collection. The library also responded to approximately 3200 reference queries and attended to the specific needs of its users. About 2450 readers visited the library for purpose of consultation and reference work.

Readers can access the content of the library online as well through a mobile app, available on Android as well iPhone.

OM&C SECTION

The OM&C Section organized the Seventh International Yoga Day on 21 June 2021 on the theme '**Yoga for Health: Yoga at Home**'.

On 29 October 2021, the Section organized the Rashtriya Ekta Pledge, which was taken by the Vice Chairman and all other officers of NITI Aayog.

The Section uploaded the annual consolidated data on the representation of SCs, STs, OBCs and PWDs on 1 January 2021 on DoPT's monitoring system, rrcps.nic.in. The Section also circulated the Citizen's Charter on niti.gov.in.

A special campaign was organized by the OM&C Section between 2–31 October 2021 to dispose of public grievances, references from MPs and State Governments, etc.



RTI CELL

The RTI Cell responds to all RTI queries received online on <https://rtionline.gov.in> and physically by posts.

During the years 2020–21 and 2021–22, the Cell was engaged in the following activities:

Annual Year (2020–21): From 19 November 2020 to 31 December 2020

1. 173 RTI applications were received, which were all disposed of by 31 December 2020.
2. Four appeals were received, which were also disposed of by 31 December 2020.
3. No CIC hearing was attended during this period.

Annual Year (2021–22): From 1 January 2021 to 31 October 2021

1. 1012 RTI applications were received, of which 1005 were disposed of and seven are pending within time duration (as of 31 October 2021).
2. 127 appeals were received, of which 124 were disposed of and three are pending within time duration (as of 31 October 2021).
3. Five CIC hearings were attended during this period.

VIGILANCE SECTION

Between January and October 2021, around 350 vigilance clearances were issued to officials of DMEO and NITI Aayog. Several RTIs/whistle-blower complaints were dealt with and disposed of. Disciplinary proceedings against some officials were undertaken as per the due procedures/law.



Preventive Vigilance

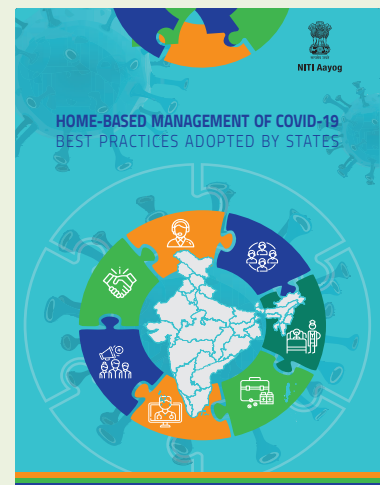
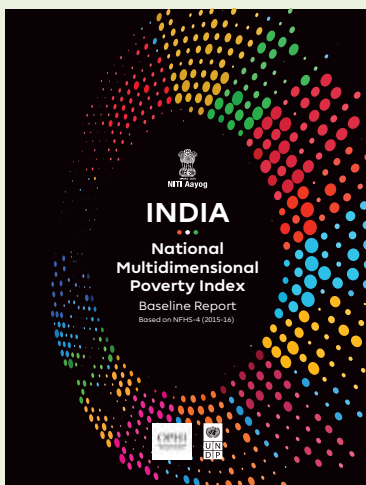
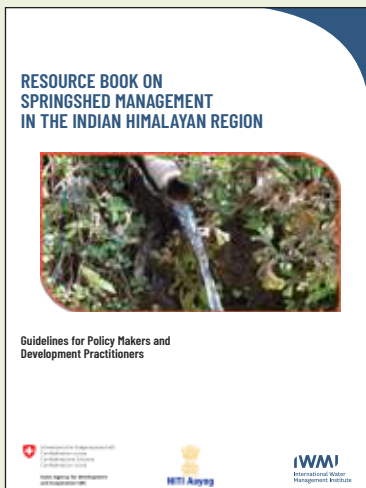
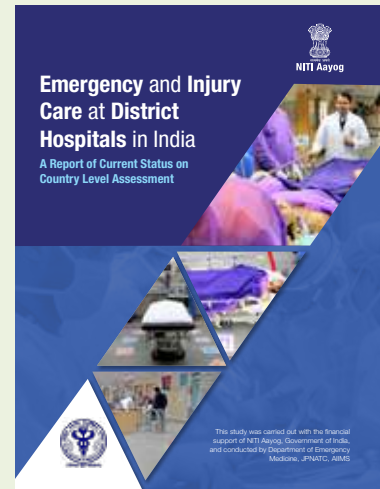
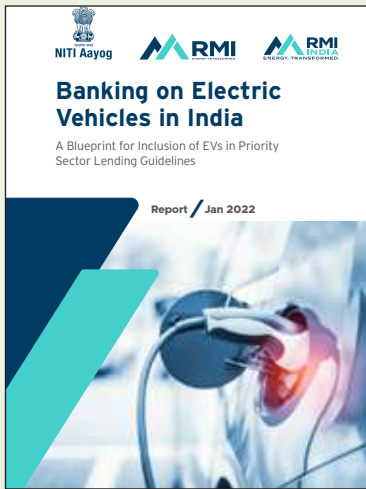
NITI observed the Vigilance Awareness Week between 26 October–1 November 2021. This year's theme was 'Independent India @ 75: Self Reliance with Integrity'.

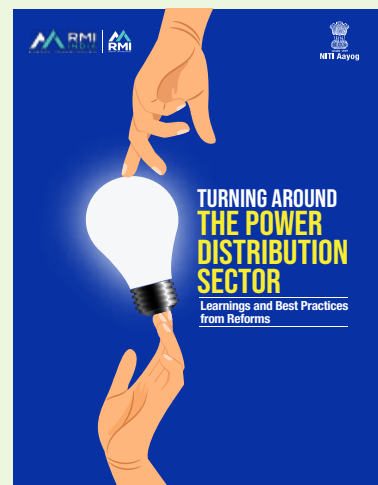
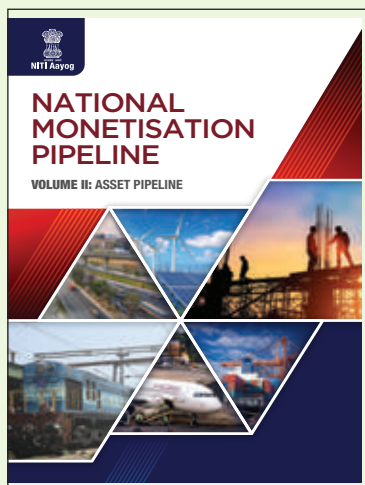
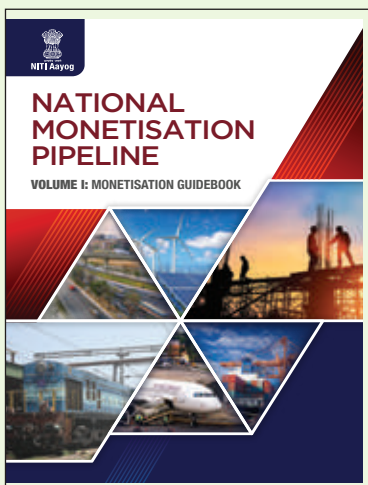
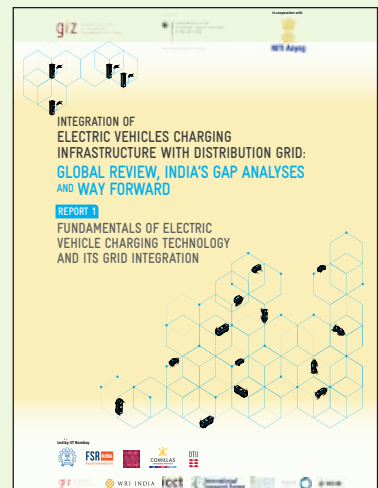
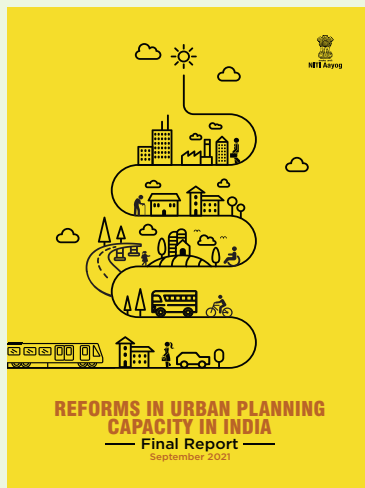
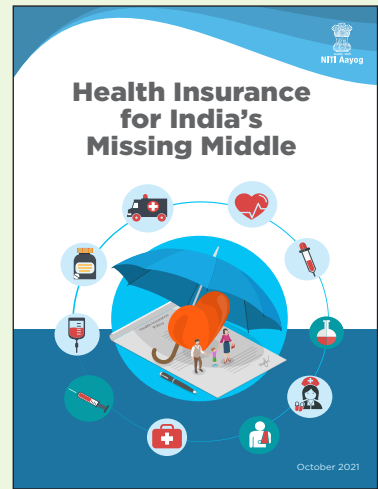
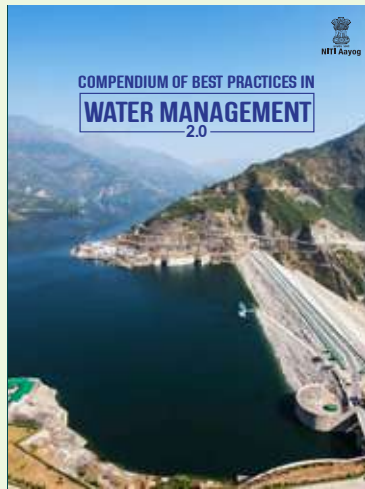
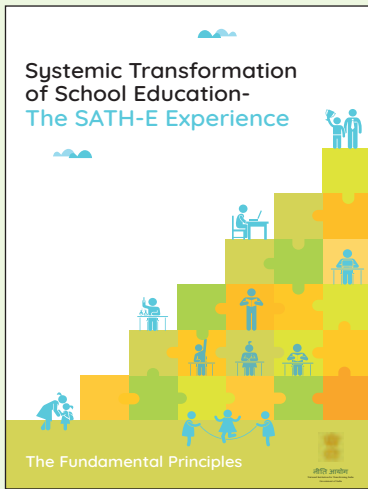
On the occasion, an integrity pledge was taken by all employees of NITI Aayog. This year, the vigilance week focused on spreading awareness on public interest disclosure and the protection of informers.

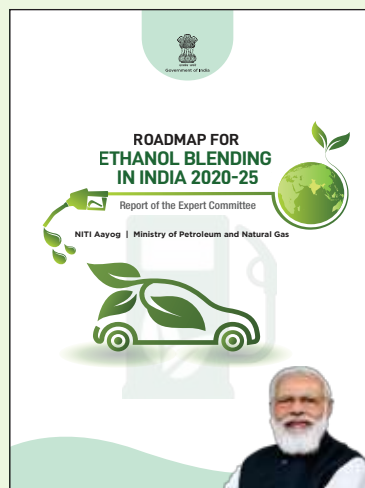
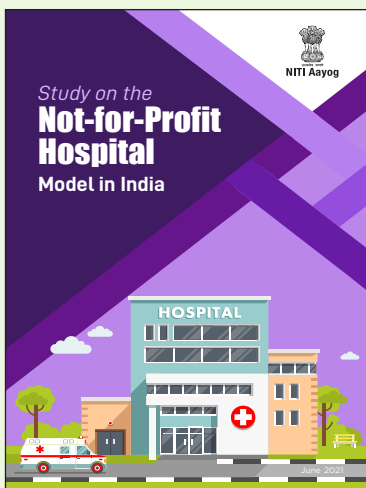
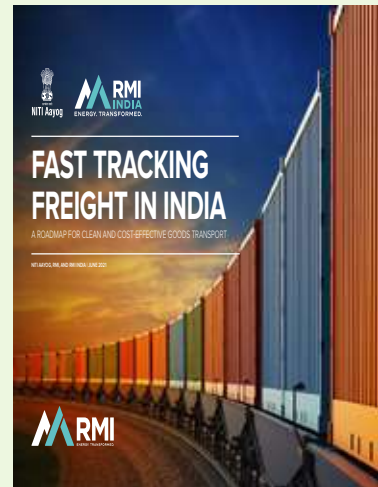
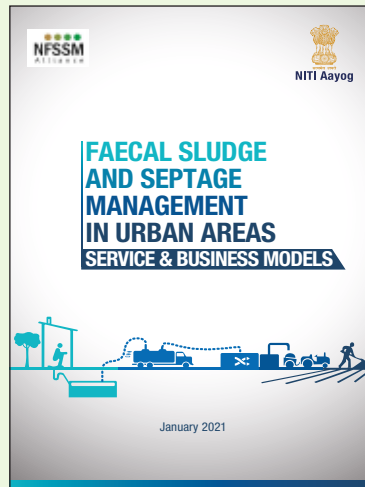
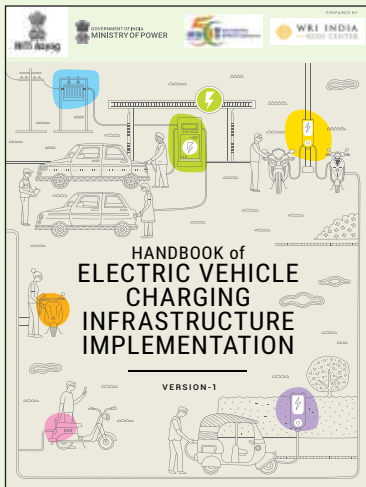
SECTION-X

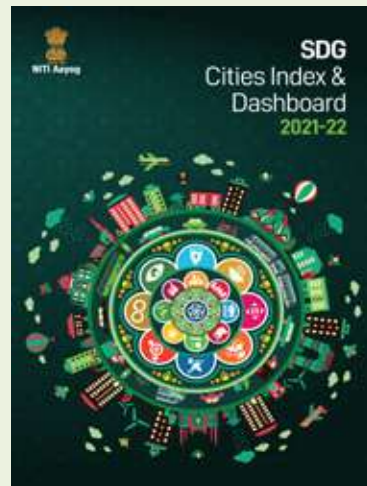
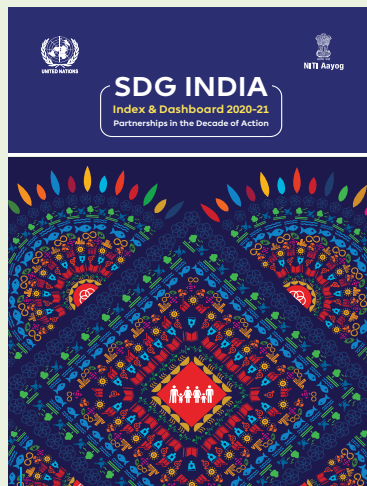
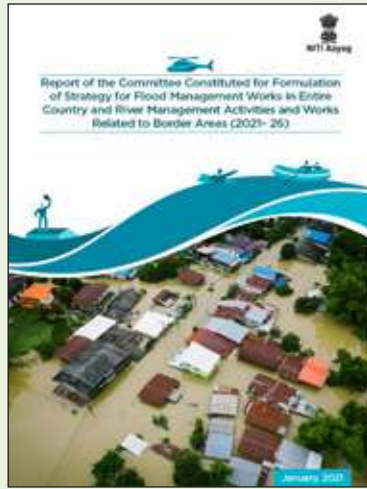


REPORTS AND PUBLICATIONS











ANNEXURE

ANNEXURE

Table 1.1: Lists of Research Studies Approved, Studies Completed, Seminars Approved and Logo Support Provided, Governance and Research Vertical

S. No.	Title	Institution/Researcher
1	Research study on barriers towards timely recruitment and onboarding of faculty in medical colleges	Saha Manthran Private Limited, Gurugram
2	Research study on development of a model healthcare network based on integrated medical devices for screening, monitoring, continuity of care and machine-learning-based predictive modelling of non-communicable diseases	All India Institute of Medical Science (AIIMS), New Delhi
3	CCUS policy framework and its deployment mechanism in India	M.N. Dastur and Company Pvt. Ltd
4	India Vision 2036–37: A Macro Econometric Approach	EGROW Foundation for Economic Growth and Welfare, Noida
5	India Vision 2046–47: A Macro Econometric Approach	EGROW Foundation for Economic Growth and Welfare, Noida
6	Prohibition of Child Marriage (Karnataka Amendment) Act 2016	National Law School, Bangalore
7	Preparation of a strategic action plan on circular economy	Environmental Centre, Mumbai
8	Handbook for responsible facial recognition technologies in India, with recommendations for the Digi Yatra Platform	Vidhi Centre for Legal Policy, New Delhi
9	Social Audit Pilot	Indian Statistical Institute, Kolkata
10	Report on the Composite Water Index for Indian states 2021	Dalberg, New Delhi
11	Development of MRO industries for the aviation sector in India	BRIEF, New Delhi
12	Analysis of historical ambient air quality data across India for developing a decision support system	NEERI
13	Research study on the impact of Covid-19 on the education of students of vulnerable communities, especially from Scheduled Tribes and Scheduled Castes: A Study in Bihar and Jharkhand	IHD, New Delhi
14	Promoting women entrepreneurship: a review of select schemes	Microsave Consulting

Table 1.2: Studies Completed during 2020–21 (31 December 2021)

S. No.	Title	Institution/Researcher
1	Development of water resources in Little Andaman and Great Nicobar Islands	WAPCOS, Gurugram
2	Reclamation of land in Little Andaman and Great Nicobar Islands	WAPCOS, Gurugram
3	Efficiency and competitiveness of Indian Railways and policy-level strategies to improve the modal share of the Railways in Indian freight	BRIEF, New Delhi
4	Development of an enhanced energy data portal for India	PRAYAS, Pune
5	Sample survey and study under Section 12 (1) (c) of the RTE Act, 2009	Development and Research Services Pvt. Ltd, New Delhi
6	Land use/land-cover mapping of Great Nicobar Island on a large scale using very high-resolution satellite data for development planning with emphasis on forests conservation	Forest Survey of India
7	Land use/land-cover mapping of little Andaman Island on large scale using very high-resolution satellite data for development planning with the emphasis on forest conservation	Forest Survey of India
8	Policy interest rates, market rates, inflation and economic growth	EGROW Foundation, New Delhi
9	Developing a carbon-neutral resources-efficient strategy for Ladakh	TERI, New Delhi
10	Challenges faced in heritage management in India and policy imperatives	DRONAH, Gurugram
11	Design and delivery of capacity-building for civil servants to implement the 2030 Agenda	ASIC, Hyderabad
12	Asset Monetisation Pipeline	CRISIL Risk & Infrastructure Solutions Limited
13	Mainstreaming Online Dispute Resolution in India	Vidhi Centre for Legal Policy, New Delhi

Table 1.3: List of Logo Support Approved during 2020–21 (31 December 2021)

S. No.	Event	Organizer
1	Third edition of virtual retail supply chain Excon	PHD Chamber of Commerce and Industry, New Delhi
2	Ninth edition of BFSI tech show	TRESCON Global Business solution Pvt. Ltd, Bengaluru
3	National campaign on reading and digital reading	PN Panicker Foundation, Thiruvananthapuram
4	Hydrogen India Conclave	India Energy Storage Alliance, Pune
5	Twelfth World Renewable Energy Technology Congress 2021	Energy and Environment Foundation, New Delhi
6	Delhi Dialogues	Policy Circle
7	Accelerating EV Adoption towards high demand and manufacturing	TERI, New Delhi
8	World Energy Storage	India Energy Storage Alliance, Pune
9	10th Edition of World Cloud Show	Trescon Global Business Solution Pvt. Ltd, Bengaluru
10	Second Global Artificial Intelligence Summit Awards 21	All India Council for Robotics and Automation, New Delhi
11	Ports, Maritime and Multimodal Logistics	PHD Chamber of Commerce and Industry, New Delhi
12	Inclusive Finance Summit 2021	Access Development Services, New Delhi
13	Nutricereals: Multi Stakeholder Convention 2021	ICAR, Telangana
14	FICCI Heal 2021: Transforming Healthcare beyond Covid	FICCI, New Delhi
15	E-mobility India Forum	Messe Frankfurt Trade Fairs India Pvt Ltd, New Delhi
16	Livelihood India Summit 2021	Access Development Services, New Delhi
17	World SD-WAN and SASE Summit	Trescon Global Solution Pvt Ltd, Bengaluru
18	Fifth National Summit 2021 on Prevention and Mitigation of Cancer in Women	CSR Research Foundation, New Delhi
19	World Hydrogen Energy Summit	Energy and Environment Foundation, New Delhi
20	CII Seventh International Water Innovation Summit	CII, New Delhi
21	EV India 2021 Expo-International Electric Motor Vehicle Show	Green Society of India, Noida, UP
22	Higher Education Conclave	Indian School of Business, Telangana

S. No.	Event	Organizer
23	India Satcom 2021	Broadband India Forum, New Delhi
24	India Energy Storage Week	India Energy Storage Alliance, Pune
25	Third Ayushman Bharat Conclave and seventh edition of the India Health and Wellness Summit	Integrated Health and Wellbeing Council, New Delhi
26	29th Global Symposium dedicated to the third World Project Management Forum (WPMF) Meet	Centre for Excellence in Project Management, Noida
27	Rajasthan City Mayor's Conference	Consumer Unity and Trust Society (CUTS International), Jaipur
28	Managing climate risks in support of economic growth and societal development	Embassy of Switzerland, New Delhi
29	Genesys 3D Maps Launch 2021	Genesys International Corporation Limited, Mumbai
30	Satellite Ground Segment in India: Way Forward	Satcom Industry Association, New Delhi
31	India Digital Summit 2022	Internet and Mobile Association of India, Mumbai



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