Part I: Project Information

GEF ID
10194

Project Type
FSP

Type of Trust Fund
GET

CBIT/NGI
CBIT **Yes**
NGI **No**

Project Title
Capacity-building for establishing an Integrated and Enhanced Transparency Framework for Climate actions and support measures

Countries
India

Agency(ies)
UNDP

Other Executing Partner(s)
Ministry of Environment Forest and Climate Change (MoEFCC)

Executing Partner Type
Government

GEF Focal Area
Climate Change

Sector
Mixed & Others

Taxonomy
Focal Areas, Climate Change, Climate Change Mitigation, United Nations Framework Convention on Climate Change, Capacity Building Initiative for Transparency, Nationally Determined Contribution, Paris Agreement, Enabling Activities, Influencing models, Transform policy and regulatory environments, Strengthen institutional capacity and decision-making, Stakeholders, Type of Engagement, Information Dissemination, Participation, Civil Society, Non-Governmental Organization, Academia, Private Sector, Beneficiaries, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Capacity, Knowledge and Research, Knowledge Generation, Learning, Capacity Development

Rio Markers
Climate Change Mitigation
Principal Objective 2

Climate Change Adaptation
Significant Objective 1

Biodiversity

Land Degradation

Submission Date
12/2/2020

Expected Implementation Start
8/1/2023

Expected Completion Date

7/31/2028

Duration

60In Months

Agency Fee($)

361,000.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
CCM-3-8	Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through capacity buiding initiative for transparency	GET	3,800,000.00	1,000,000.00
		Total Project Cost($)	**3,800,000.00**	**1,000,000.00**

B. Project description summary

Project Objective

This project aims to assist India in strengthening and expanding its current technical capacities regarding methodologies and tools to enhance transparency, as outlined in Article 13 of the Paris Agreement.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
1. Creating an enabling environment for enhanced transparency across all the levels of governance	Technical Assistance	1.1. The nodal ministry (MoEFCC) would be better equipped to lead, plan, coordinate, implement, monitor and evaluate policies, strategies, and programmes to enhance transparency, including communications with states and expert agencies in an effective manner through the implementation of various institutional arrangements and their formalisation as appropriate. 1.2. Bringing all stakeholder together through a web-based **National Institutional Coordination System (NICS)** to enhance efficiency and transparency with climate reporting	1.1.1. Strengthened national mandate and strategies to collect, compile, verify, and report relevant information adhering to the principles of TACCC (Transparency, Accuracy, Completeness, Comparability, Consistency) 1.1.2. Developing Standard Operating Procedures (SOPs) and assigning trained focal point among institutions covering each sector and state/union territory (UT). 1.2.1. Efficient recordkeeping of activity data, socio-economic indicators, emission factors, methodology and assumptions, etc.	GET	775,000.00	380,000.00

			1.2.2. Archiving systems for future referencing and performing recalculations 1.2.3. Aggregation and exchange of relevant information through NICS			
2. Strengthening institutional and technical capacities for Measurement, Reporting and Verification (MRV) of climate information	Technical Assistance	2.1. Ability to report GHG emission inventories as per Intergovernmental Panel on Climate Change (IPCC) 2006 guidelines (or latest applicable) 2.2. Information to facilitate Clarity, Transparency, and Understanding (ICTU) of Nationally Determined Contributions (NDC) associated with climate actions 2.3. State focal points submitting information through NICS 2.4. Developing Capacity retention mechanisms	2.1.1 Tools, templates, and training for agencies/experts involved in the inventory process (cross-cutting) 2.1.2 Improvement in the **energy sector**: Achieving granularity with activity data (example: grade wise coal consumption) and bringing clarity on the unorganised sector operations 2.1.3 Improvement in **Agriculture sector**: State-level validation of activity data (example: dung produced per animal, feeding patterns) 2.1.4. Improvement in Land use, land-use change and forestry the **(LULUCF) sector:**	GET	1,837,000.00	530,000.00

Establishing modelling capacity at the state or institutional level through trained experts and civil-society assistance

2.1.5. Improvement in the Industrial Processes and Product Use **(IPPU) sector** for transparent and accurate coverage

2.1.6. Improvement in the **waste sector**: Improving the system to collect activity data aggregated at centralised level. (example: treatment pathway, emission characteristics, etc.)

2.2.1. Developing capacity of national experts with equitable participation of men and women nominated from academia, research institutes, civil society and public agencies. Implementing the concept of 'train the trainers' to sustain capacities within institutions

2.2.2. Peer-exchange programmes and co-learning activities among states to promote scalability and replication of initiatives in a cost-effective manner.

2.2.3. Tools, templates, and training towards tracking progress of NDC

2.3.1. An IT-enabled system coupled with the mandated process of reporting information on standardised templates.

2.4.1. Establishing baseline of current capacity gaps against best practices and design a strategy to address these gaps.

2.4.2. Ensuring each capacity building element incorporates long term sustainability features in a gender-neutral manner and at all the levels of governance

2.4.3. Study of the best practices of selected countries

			and knowledge exchange			
3. Instituting National Climate Information System (NCIS) to share relevant information in a transparent manner	Technical Assistance	3.1 Dissemination of relevant information on GHG inventories and NDC progress through NCIS. 3.2. Enhanced capacity to mobilise climate finance 3.3 Knowledge management and project-related learnings	3.1.1. Integrating NICS with National Inventory Management System (NIMS) and other online tracking tools to create a centralised National Climate Information System (NCIS) for disseminating information in the public domain 3.1.2. A progress tracker for NDCs, covering inputs from each state and sector towards progress made on mitigation targets and adaptation goals. 3.2.1. Evaluation of support activities and capacity development of relevant institutions to mobilise climate finance 3.2.2. Sectoral/sub-national assessment of financial resource needed to implement the NDCs. Also highlighting specific barriers related to	GET	937,000.00	40,000.00

			technology needs or any other capacity-building support 3.3.1. Showcasing case studies and featuring them through CBIT global coordination platform.			
Monitoring and Evaluation	Technical Assistance	Monitoring and Evaluation		GET	71,000.00	
				Sub Total ($)	**3,620,000.00**	**950,000.00**
Project Management Cost (PMC)						
				GET	180,000.00	50,000.00
				Sub Total($)	**180,000.00**	**50,000.00**
				Total Project Cost($)	**3,800,000.00**	**1,000,000.00**

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	Ministry of Environment, Forest and Climate Change	In-kind	Recurrent expenditures	1,000,000.00
			Total Co-Financing($)	**1,000,000.00**

Describe how any "Investment Mobilized" was identified

N/A

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
UNDP	GET	India	Climate Change	CBIT Set-Aside	3,800,000	361,000	4,161,000.00
				Total Grant Resources($)	**3,800,000.00**	**361,000.00**	**4,161,000.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)	PPG Agency Fee ($)
100,000	9,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
UNDP	GET	India	Climate Change	CBIT Set-Aside	100,000	9,500	**109,500.00**
				Total Project Costs($)	**100,000.00**	**9,500.00**	**109,500.00**

Core Indicators

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	750	600		
Male	750	900		
Total	1500	1500	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Article 13, para 15 of the Paris Agreement says, “support shall also be provided for building of transparency-related capacity of developing country Parties on a continuous basis”. This project aligns with CCM-3 on “Fostering enabling conditions for mainstreaming mitigation concerns into sustainable development strategies”. In this context, the GEF project proposes to build and strengthen the institutional and technical capacities and data/information management system (on GHG inventory, NDC tracking, adaptation actions and support needed and received) to meet the complex and enhanced national reporting requirements under Paris Agreement on a biennial basis. Besides meeting the mandatory requirements of the Paris Agreement, this GEF project will directly benefit an estimated 1,500 professionals over a period of five years by developing and/or strengthening their technical MRV capacities on various aspects of climate actions. The project envisages to directly train about 100 sectoral experts; about 100 experts working on GHG inventory; about 30 mitigation experts; about 50 adaptation and vulnerability experts; about 10 IT experts; about 35 RoEs; about 15 technical staff of Project Management Unit (PMU); and, about 390 technical experts handling policies, measures and programs related to climate change mitigation and adaptation in Government at central and state levels (especially implementing Nationally Determined Contributions (NDCs), National Action Plan on Climate Change (NAPCCs) and State Action Plans on Climate Change (SAPCCs). In addition, through training and sensitisation programmes across the country, especially among university graduates and civil society, the project proposes to influence about 800 early to mid-career professionals. The Government of India encourages a gender balanced approach at all levels of decision-making and thus, the project aspires for an ideal ratio of 1:1 between trained men and women while maintaining a minimum ratio of 3:2.

Part II. Project Justification

1a. Project Description

Information updated and/or further detailed compared to original PIF

· India Human Development Index (HDI) score of 0.586 and ranking 135th position in terms of development reported in the PIF, has been updated to HDI score 0.640 and ranking 130th position from 2018 ranking.

· Information about Intended Nationally Determined Contribution (INDC) which constitutes the Initial NDC submitted by India on 1st October 2015 in response to UNFCCC COP decisions 1/CP.19 and 1/CP.20. Keeping in view of its development agenda, particularly the eradication of poverty coupled with its commitment to following the low carbon path and being sanguine about the unencumbered availability of clean technologies and financial resources, India communicated eight strategies for the period 2021 to 2030 which are as follows:

1. To put forward and further propagate a healthy and sustainable way of living based on traditions and values of conservation and moderation

2. To adopt a climate friendly and a cleaner path than the one followed hitherto by others at corresponding level of economic development

3. To reduce emissions intensity of its GDP by 33 to 35 percent by 2030 from 2005 level.

4. To achieve about 40 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030 with the help of transfer of technology and low-cost international finance including from Green Climate Fund (GCF).

5. To create an additional carbon sink of 2.5 to 3 billion tonnes of CO_2-eq through additional forest and tree cover by 2030.

6. To better adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change, particularly agriculture, water resources, Himalayan region, coastal regions, health and disaster management.

7. To mobilize domestic and new & additional funds from developed countries to implement the above mitigation and adaptation actions in view of the resource required and the resource gap.

8. To build capacities, create domestic framework and international architecture for quick diffusion of cutting-edge climate technology in India and for joint collaborative R&D for such future technologies.

· Additional information on national circumstances and references to data sources were provided.

· Information related to reporting requirements on adaptation actions under Article 4 of Paris Agreement and reference involved have been updated to reflect the exact information included in the paragraph 78, Decision 18/CMA1.

· Current status of national reporting to UNFCCC and future requirements under ETF of Paris Agreement have been elaborated and presented to strengthen the project context.

· During PPG phase, capacity gaps were \assessed and updated using four additional sources of information:

o Stakeholders consultations from 11 - 15 November 2019 and from March 2020 to July 2020.

o A working paper on Institutional Readiness to Implement the Enhanced Transparency Framework: Is India Ready?[1] published in August 2019 which interprets the Transparency Framework under the Paris Agreement and its Implications for India.

o A Capacity Building Assessment Matrix for Enhanced Transparency in Climate Reporting: A Comprehensive Evaluation of Indian Efforts published in September 2019 by the CEEW[2] which analyses India's capacity building efforts related to climate transparency.

o An assessment undertaken to assess the capacity-building needs and requirements to strengthen national reporting of India under ETF in February 2020 under the PPG preparation.

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[1] Rijhwani, Vani (2019). *Institutional Readiness to Implement the Enhanced Transparency Framework: Is India Ready?*. TERI, Working Paper (New Delhi: The Energy and Resources Institute).

[2] Prasad, Sumit, and Vaibhav Gupta. 2019. *A Capacity Building Assessment Matrix for Enhanced Transparency in Climate Reporting: A Comprehensive Evaluation of Indian Efforts.* New Delhi: Council on Energy, Environment and Water.

The proposed components of the project are as follows:

Component 1: Creating an enabling environment for enhanced transparency across all the levels of governance.

Component 2: Strengthening institutional and technical capacities for Measurement, Reporting and Verification (MRV) of climate information.

Component 3: Instituting National Climate Information System (NCIS) to share relevant information in a transparent manner.

A detailed description of outputs and activities associated with the above outcomes is provided in Section III of the accompanying UNDP project document.

Clarity has been provided to highlight the difference between the CBIT project and the Fourth Biennial Update Report - Fourth National Communication and the First Biennial Transparency Report project in order to remove any potential misunderstanding and duplication.

Specific additions on institutionalisation were included:

1. The informal but evolving Indian Network of Climate Change Assessment (INCCA) involved in the monitoring and validation of national reports previously submitted to the UNFCCC may be reactivated and the project will help to formalize its set up.

2. The project activities will be mainly implemented by reputed institutes in India in order to institutionalise some of the trainings.

3. One of these institutes may also host the software that will be developed in the CBIT project.

1.a.1. The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (system description).

Global environmental and adaptation problems

Climate change – widely recognised as the biggest threat to the global economy according to both India's Economic Survey reports[1] and the World Economic Forum's risk reports[2] – needs immediate and collective action to address its impacts and vulnerabilities and prevent further damage through mitigation efforts. It impacts the poorest countries hardest and often poses unpredictable risk and vulnerabilities through extreme events of flood and droughts.

India is among the most vulnerable economies. India supports the world's second largest population with a Human Development Index (HDI)[3] score of just 0.647 ranking it at 129th position in terms of development in 2019 (UNDP, 2019). India accounts for 2.4% of the world surface area, 4% of world's freshwater resources, 8 % of global biodiversity and 17% of global cattle population. However, India supports around 17.5% of world population (NDC, 2016). It houses the largest proportion of global poor (30%, 363 million people), around 24% of the global population without access to electricity (304 million), about 30% of the global population rely on solid biomass for cooking and 92 million lack access to safe drinking water[4] (NDC, 2016). These geographical and other socio-economic factors make India highly vulnerable to climate change impacts. Thus, climate change mitigation and adaptation efforts are not only a response to economic threats, but essentially became a human rights issue intrinsically linked to sustainability of livelihood.

The World Bank report on Impact of Climate Change on South Asia predicts that the rising temperature and changing monsoon rainfall patterns could cost India 2.8% of GDP and depress living standards of nearly half of the country's population by 2050[5].

The United Nations Framework Convention on Climate Change (UNFCCC) provides the foundation for multilateral action to combat climate change and its impacts on humanity and ecosystems. The ultimate objective of the Convention and any related legal instruments adopted by the Conference of the Parties (COP) is to achieve stabilization of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

Towards achieving the ultimate objective, the Convention makes provision for a comprehensive, reliable and transparent national reporting through national communications by all the Parties taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances. Article 4.1 of UNFCCC says that "all Parties shall develop, periodically update, publish and make available to the COP, in accordance with Article 12, national inventories of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol, using comparable methodologies to be agreed upon by the COP". In addition, Article 12 of the Convention further requires the Parties to report on the mitigation and adaptation actions as well as support provided and received in terms of finance, technology transfer and capacity-building.

The concept of measurement, reporting and verification (MRV) framework was formally introduced and agreed by Parties as part of the Bali Action Plan during COP-13 (2007) and was elaborated in decisions adopted at subsequent COPs. As part of Cancun Agreements (decision 1/CP.16, para 40 to 67) the concept of MRV arrangements in national reporting was detailed out for both developed and developing country Parties. Para 40 (a) says that "the developed countries

should submit annual greenhouse gas inventories and inventory reports and biennial reports (along with the National Communications as per Article 12 of UNFCCC) on their progress in achieving emission reductions, including information on mitigation actions to be achieve their quantified economy-wide emission targets and emission reductions achieved, projected emissions and the provision of financial, technology and capacity-building support to developing country Parties". The guidelines for reporting were enhanced which included common reporting formats and methodology for finance (para 41). A process for international assessment of emissions and removals under Subsidiary Body for Implementation (SBI) was established. Developed countries were also asked to develop low-carbon development strategies or plans (para 45). Para 60 (c) also mandates "developing countries, consistent with their capabilities and the level of support provided for reporting, should also submit biennial update reports (BURs) containing updates of national greenhouse gas inventories, including inventory report and information on mitigation actions, needs and support received". The process of international consultations and analysis of BURs under SBI was established which is non-intrusive, non-punitive and respectful of national sovereignty (Para 63). Developing countries were also encouraged to develop low-carbon development strategies in context of sustainable development (para 65). To further promote transparency in national reporting among Parties, new elements for MRV (decision 2/CP.17, 19/CP.18, 20 and 23/CP.19) were developed and adopted leading to a comprehensive UNFCCC framework for MRV.

The national reporting guidelines have been gradually enhanced for both developed and developing country Parties with the aim of strengthening informed global response towards achieving the ultimate objective of UNFCCC i.e. stabilization of GHGs. However, the keeling curve (showing evolution of CO2 emissions since 1958) continued to climb, indicating that global emissions continue to rise due to inadequate climate actions undertaken especially by the developed country Parties.

In 2015, the Paris Agreement was adopted to enhance the implementation of the Convention by a) holding the increase in global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels; b) increasing ability to adapt; and c) making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. In this context, the Paris Agreement requires each country Party to outline and communicate their post-2020 climate actions, known as their Nationally Determined Contributions (NDCs). The Agreement also provides for enhanced transparency for action and support through a more robust transparency framework (Article 13) to build trust and confidence about Parties contribution to the global effort. COP-24 at Katowice (2018) detailed out a set of modalities, procedures and guidelines (MPGs) to make enhanced transparency framework (ETF) operational. The MPGs are under negotiation and still to be adopted by COP. The MPGs are based on set of guiding principles and define the reporting information to be provided, the technical expert review, transitional arrangements, and a facilitative multilateral consideration of progress.

The ETF dilutes the difference between the reporting requirements of developed and developing countries while providing built-in flexibility to those developing countries that need it in light of their capacities.

As per decision 18/CMA.1 – as part of transition to ETF, the following provisions are expected to be superseded:

- Reporting of BR/BUR under UNFCCC will be superseded by Biennial Transparency Report (BTR) for Parties to the Paris Agreement;
- Review of BR and technical analysis of BUR will be superseded by technical expert review for Parties to the Paris Agreement; and,
- Multilateral assessment (MA) and facilitative sharing of views (FSV) will be superseded by a facilitative multilateral consideration of progress (FMCP) for Parties to the Paris Agreement.

As per decision 18/CMA.1, as part of transition to ETF, the reporting elements which will not be superseded by MPG provisions are as follows:

- National communications must continue to be submitted by Annex I and non-Annex I Parties;
- Annual GHG inventory must continue to be submitted by Annex I Parties. In years in which BTR is due, GHG inventory can be submitted as stand-alone report or as a section of BTR. If submitted as stand-alone report, a summary of Party's GHG emissions/ removals must be included in BTR (19/CMA.1); and,

- Technical annex on REDD+ to be reported by Parties seeking results-based payment (14/CP.19, para 7) as annex to BTR and is reviewed during review of BTR (1/CP.24, para 45-46).

Some of the important timelines for the proposed transition to ETF are as follows:

- Final BRs to be submitted as early as due date for annual GHG inventory in 2022 (15 April 2022) and no later than 31 Dec 2022 (1/CP.24, para 38). Final BRs will include GHG inventory data for 2020 thus allowing assessment of whether Party met its 2020 economy-wide emission reduction targets;
- Final BURs to be submitted no later than 31 Dec 2024 (1/CP.24, para 38);
- First BTR must be submitted by all Parties no later than 31 Dec 2024 (18/CMA.1, para 3).

Flexibility under ETF is self-determined by those developing countries who elect to apply it. For each flexibility provided, the Party is required to explain capacity constraint that does not allow them to apply the full provision and is required to provide its anticipated timeframe for improvements. Technical expert review team can neither review the Party's determination to apply for a flexibility provision, including estimated time frame for improvement, nor can it assess whether the Party has the capacity to implement the provision without flexibility.

Building additional capacity is a necessity for implementing the MPGs of the ETF, especially in a huge country like India with multiple data sources and users. India needs to strengthen national and sub-national institutions for transparency-related activities. The transparency of India's climate-related actions can be enhanced over time if adequate capacity to implement such systems is created.

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[1] The last report published in July 2019 "Economic Survey 2018-19" by Government of India, Ministry of Finance, Department of Economic Affairs, Economic Division, is available here: https://www.indiabudget.gov.in/economicsurvey/

[2] The last report of the World Economic Forum, The Global Risks Report 2020, is available here: https://www.weforum.org/reports/the-global-risks-report-2020.

[3] The Human Development Index (HDI) is a statistical tool used to measure a country's overall achievement in its social and economic dimensions. The social and economic dimensions of a country are based on the health of people, their level of education attainment and their standard of living. Every year the United Nations Development Programme (UNDP) ranks countries based on the HDI report released in their annual report. HDI is one of the best tools to keep track of the level of development of a country, as it combines all major social and economic indicators that are responsible for economic development. The HDI was first launched in 1990 and has been released annually ever since, with the exception of 2012. The last report was made available in 2019 and the raking is published here: http://hdr.undp.org/en/content/2019-human-development-index-ranking.

[4] According to national circumstances described in India's Intended Nationally Determined Contribution (NDC) and first NDC submitted to UNFCCC in 2016 and available here: https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/India%20First/INDIA%20INDC%20TO%20UNFCCC.pdf

[5] The report "South Asia's Hospots (2018) is available here: https://www.worldbank.org/en/region/sar/publication/south-asias-hotspots

Root causes

Current institutional framework with a very large number of stakeholders involved in climate action activities, uncoordinated policy initiatives and mandates, multiple and on an ad-hoc basis implemented MRV frameworks and limited technical capacity are the root causes of the country in meeting the requirements for national reporting under the enhanced transparency framework:

- Studies are launched on a project-by-project basis to elaborate the national communications and the biennial update reports. If efforts and reporting have been improving over time, they are hindered by this ad hoc approach, which makes it difficult to nurture and develop capacity for transparency initiatives in a sustainable way.
- For instance, more than 100 sector experts, 16 institutions and 21 studies guided the preparation of the second BUR. Additionally, some distinguished experts from institutions, both in and outside Government, including academic and research institutions, civil society organizations and the private sector peer-reviewed the report. The institutional and technical project by project format needs to be implemented on a continuous basis.
- Also more than 23 Ministries/ Departments of Government of India provide data/ information for India's national communication to UNFCCC. These concerned thematic Ministries/ Departments generate and publish extensive data for their respective sectors, as per their requirements and mandates which are not necessarily compatible with the requirements of national reporting. These Ministries/ Departments are not mandated by law to provide data/information on a regular basis for national reporting to UNFCCC. This is also reflective of the fact that there is a limited mainstreaming of climate change concerns into major developmental sectors of the country.
- The preparation of national reports including national GHG inventory is currently done through task-specific short-term contracted projects/ studies thus, lacking a streamlined institutional framework which could cater to the requirements under ETF. The Ministry is in the process of setting up the National GHG inventory management system wherein the expert national institutions, as per current practice, will continue prepare sector-specific inventory with a lead agency to coordinate the inventory preparation process along with QA/QC plan implementation. The institutional and technical capacities of the current institutions and experts working on national GHG inventory will need to be strengthened to meet the enhanced reporting requirements, the shorter timeline, the introduction of new gases, sub-sectors and sources, ride tier ladder, develop country-specific emission factors, reduce uncertainty, and adopt recent IPCC guidelines.
- There is a limited integrated and consolidated MRV system for carbon emission reduction of various schemes, programmes and measures of Government of India.
- There is a need to develop indicators for all the NDCs communicated by India to UNFCCC (including the non-mitigation related contributions) as well as a strategy for data collection on their respective implementation.
- There is limited projection capacity to track and report NDC progress on a regular basis.
- There is limited involvement and technical knowledge at the States level on NDCs and related aspects of climate change.
- India is a large, diverse developing country with a large number of state and non-state actors involved in climate action which further enhance the burden of gathering, compiling and reporting relevant data in a time-bound manner.

- There is limited capacity and framework to measure and report climate finance flows through various external funding sources.
- There is a need to develop a data and information management system for all climate change related data in India (for instance containing emission profiles, mitigation profiles, adaptation profiles, international and domestic support needed and received, NDC tracking and all national reports prepared for the UNFCCC submissions).
- A comprehensive archiving system requires to be developed to bring granularity on data management – methodology used, numbers used for GHG inventory calculations, tracking mitigation and adaptation actions, progress of NDCs.

To ensure robust and continuous participation in the implementation of Article 13 of the Paris Agreement, the country requires support to develop its long-term institutional and technical capacity.

Barriers

To develop specific (consolidated) monitoring, reporting and verification process for GHG inventory and tracking NDC, additional finance and capacity building would be required. An integrated MRV system requires streamlined data management systems, technical capacity, improved analytical capabilities, and most importantly, active coordination among all stakeholders and the various nodal agencies within the government across regions, sectors and time which are the main current barriers of India in meeting the requirements of the ETF.

There is a need to establish and implement an integrated domestic MRV system for GHG mitigation actions, including integrating it with the current National Inventory Management System, institutional arrangements, building capacity of government ministries, states and other agencies to provide information and other inputs for reporting on a continuous basis.

India's efforts to implement the ETF, therefore, require the formalisation of arrangements, IT infrastructure as well as technical manpower on a regular basis. Enhanced collaboration and networking with all stakeholders are required to collect, monitor and report information and track the NDC.

In addition, this project will help in developing a dynamic training plan for existing, new, and upcoming technical experts involved in the reporting process, in identifying the most appropriate methodologies to develop progress indicators to facilitate reporting the progress of mitigation action implementation, including emission reductions and NDC tracking and enabling better coordination among relevant regions and institutions to design, implement and measure, report and verify the information included in the BTRs.

SUMMARY TABLE OF MAIN CAPACITY GAPS TO IMPLEMENT THE ENHANCED TRANSPARENCY FRAMEWORK OF THE PARIS AGREEMENT IN INDIA

Lack of clear regulatory mandates for transparency activities
This barrier impacts inter-agency and inter-sectoral coordination, funding, and streamlining of responsibilities and roles in data collection, analysis, reporting and verification.
Limited coordination and communication channels between the national institutions and the states on climate action for integration of actions and contribution at the state level to the NDC targets
There is a national action plan on climate change (NAPCC) and the NDC. The States prepared their state action plan on climate change (SAPCCs) and are currently revising them under the guidance, support and approval of MoEFCC who manages NAPCC and NDCs. However currently there is no reporting from the States to MoEFCC on monitoring and implementation of SAPCCs for assessment of their contribution to the global targets of NAPCC and the NDCs.
Limited technical knowledge of the states on climate action and the ETF
There is also a big technical capacity gap at the state level on climate action in all fields and on the UNFCCC reporting commitments (e.g. on measuring and reporting on GHG inventories, mitigation, NDC, adaptation and support needed and received).
Lack of in-house technical experts needed to undertake comprehensive planning, measuring, tracking, reporting and verifying activities
Due to the lack of in-house technical experts the reports are elaborated by external expert institutions on an ad hoc (project by project) basis. This lack of in-house capacity has created strong dependency on external consultants and institutions, which impacts the sustainability of the entire national system.
Limited methodological standard tools and protocols necessary to carry out reporting activities effectively and on a continuous basis
There is limited capacity to make transparent, accurate, complete, consistent and internationally comparable assessments which evidences due to lack of standard operational procedures, methodologies, guidelines and tools for coordination, data collection, exchange, analysis, reporting and verification.
Lack of integrated information systems to carry out reporting activities effectively and on a continuous basis and to allow appropriate and timely tracking of the NDC
India is a large and diverse country with high number of stakeholders involved in transparency activities, there is a lack of integration of MRV activities (most of them undertaken at project level) as well as of infrastructure (hardware and software) for a consolidated, coordinated and integrated MRV system that allows centralising and storing the information required for the enhanced transparency framework on a continuous basis.
Need of capacity retention and update mechanisms and institutional memory
There is a need to extend and retain the current capacity put in place for the reporting of NCs and BURs and to have appropriate platforms and systems to store all the information collected and elaborated for these reports. There is also a lack of a regular capacity updating system to update skills and knowledge after certain time intervals in the enhanced transparency framework domain.
Low participation rate of women in the climate change decision-making process
Women's issues hardly figure in decisions on climate change action. Social implications of threats to women due to their political and economic disadvantages affect their ability to respond effectively to the challenges emerging from climate change. These challenges weaken the priorities in climate change action and policy making.

Lack of clear regulatory mandates for transparency activities

In general, lack of stable and permanent institutional arrangements at the national level is one of the largest barriers towards defining regulatory and technical frameworks for progressive reporting.[8] In India, the Ministry of Environment, Forest and Climate Change (MoEFCC) is the nodal ministry responsible for domestic strategy addressing climate change. MoEFCC has commissioned several studies and implemented a few initiatives in the last few years, such as: climate change action programme (CCAP); National Carbonaceous Aerosols Programme (NCAP); and long-term GHG modelling studies on GHG emissions of Indian economy, with a clear objective of strengthening scientific and analytical capacity towards climate reporting. MoEFCC is also coordinating the National Action Plan on Climate Change (NAPCC) approved by the Government of India. This political and regulatory architecture supports a wider network of institutions, public agencies, sectoral and state departments to collect and provide information for climate reporting. Despite all the above listed efforts, capacity is limited and mandates to provide information and track mitigation and other objectives are not formalized. A unified and integrated monitoring, reporting and verification (MRV)/transparency system with the required institutional, regulatory and procedural arrangements would lead to a more inclusive and accountable process and will overcome the barrier of the lack of stable and permanent institutional arrangements.

Limited coordination and communication channels between the national institutions and the states on climate action for integration of actions and contribution at the state level to the NDC targets

The current reporting process adopted by India for its NCs and BUR demonstrates an extensive and participatory approach. It involves a wide range of stakeholders, broadly categorized as: Nodal Ministry as the Ministry of Environment, Forest and Climate Change (MoEFCC), who coordinates and supervises the entire process among the participating institutions and experts; National Steering Committee (NSC), which is an inter-ministerial body chaired by the MoEFCC, composed by all relevant ministries and departments in charge of the supervision and review of final findings; State Level climate change coordinating committees formed under the provision of SAPCC which coordinate between state agencies and the centre during the preparation and/or revision of SAPCC; Resource institutions representing key ministries, public departments and agencies, research institutes, academic universities, industrial unit and associations, local communities, and any other department/stakeholder involved in generating and compiling data; Expert institutions representing a network of institutions (public, private, civil society, industry association) who assist MoEFCC in compiling GHG inventories, mitigation actions, capacity gaps, the progress of MRV, etc., with one coordination institution appointed as the lead for each reporting sector or theme; and Subject experts from various organisations review final reporting independently and provide technical advice on further improvements.

The existing institutional arrangement proves to be challenging as it lacks timely and efficient coordination among involved agencies. Besides, access to relevant information are difficult due to either lack of mandates to publish/share or due to raw information structure. In India, representation of states (sub-national level) in the climate policy planning is still in its early stage. Each state has its own development priorities which may or may not align well with climate policies. Hence, integration of climate narrative across all state and sectoral policies is a challenging task without featuring a common value proposition. Certain policies and programmes at the national or state level discover a very strong MRV process, whereas it becomes difficult to replicate or scale-up such processes for other schemes due to lack of common understanding. The MPGs of ETF expects a comprehensive reporting on mitigation achievements at each policy level, which would be a burdensome task without establishing a swift communication channel.

Additionally, if India must map its baseline capacity, a coordinated approach between sectors, national and states agencies is needed to assess finer details around current capacity.

As India strives towards a low-emission economy, it faces several challenges. At national and state levels, institutional capacities are not fully aligned to best implement policies, which are crucial for achieving the low-emission transition without undermining the country's economic growth. Natural disasters and climate change pose significant risks to rapidly growing cities and their communities, and vulnerable rural populations. Attention to waste, ozone depleting substances and chemicals requires urgent management to meet important targets and reporting obligations under the United Nations Framework Convention on Climate Change (UNFCCC).

Limited technical knowledge of the states on climate action and the ETF

There is a need to strengthen the process of mainstreaming climate change concerns with various State governments by developing technical capacities at different levels to understand the role, impact and options available to address the challenge of climate change and to enhance coordination for their contribution to the NDC implementation. There is a need to integrate and join the dots and to plan and execute developmental interventions in a holistic manner. There is also a need to develop the capacity of local communities to understand climate variability, its impact on the local economy, ecology and livelihoods and the viable options available for climate proofing and for contributing to NDC implementation as well as appropriate reporting.

Lack of in-house technical experts needed to undertake comprehensive planning, measuring, tracking, reporting and verifying activities

India has the advantage of a massive network of institutions formally recognised for providing expert assistance and support to Government as required. In addition, other expert institutions and coalitions are emerging in academia and outside to support government efforts towards transparency, however, with the evolving process of climate reporting, the limited capacity of each institution needs to be strengthened and sustained on a continuous basis.

A transparent, consistent, complete, comparable, robust and accurate GHG inventory is the entry point for a well-designed policy planning system. Overall India's second BUR highlights data (availability, quality, collection, validation, coherence) as a big constraint across all sectors. Technical improvements are needed in all sectors including the Energy, Industrial Processes and Product Use (IPPU), Agriculture, Forestry and Waste. Enhancing the GHG inventory to higher-tier levels in all sectors using key category analysis and developing country-specific data for key categories, collecting and mapping data on individual processes across the sectors, establishing a national inventory system for forestry, estimating GHG emissions from municipal solid waste and industrial wastewater, refining energy sector data for reference and sectoral approaches are the capacity gaps which need to be addressed.

Katowice guidelines recommends a detailed description of methodology, assumptions and accounting process in the biennial transparency reporting requirements for both the developing and developed countries. As per the current rules governing inventory reporting for Non-Annex I Parties (decision 17/CP.7; para 15 and 16), they are encouraged (and not mandated) to report on emissions of precursor gases i.e. carbon monoxide (CO), nitrogen oxides (NOx) and non-methane volatile organic compounds (NMVOCs), as well as sulphur oxides (SOx). Katowice guidelines shall provide information necessary to track the progress of implementation and achievement of domestic policies and measures implemented and the NDC.

There is a need to provide extensive training to in-house experts to apply Katowice guidelines and meet the reporting requirements of the ETF.

The staff of the leading entity will still need to update their knowledge and skills in managing and preparing the upcoming reports under the ETF. At the same time, capacity building will be needed in other organs/ministries/agencies of the government and corporate sector from where the data is to be sourced: their ability and skills in providing requisite data and information needs to be enhanced, especially if they are key data providers. Capacity is also needed for better inter- and intra-team communication to facilitate mutual and reciprocal requirements during the preparation of the reports. Sector- and stakeholder-specific

training activities need to be organized. This will help in training the staff designated for providing relevant data and information in different ministries/institutions/ industries. This will also build capacities of the staff and ensure accuracy and proper use of the information presented in the reports for decision making.

Limited methodological standard tools and protocols necessary to carry out reporting activities effectively and on a continuous basis

Facilitating coordination among the SAPCC and with the NAPCC and developing performance indicators around the NAPCC missions and the NDC commitments should make such task easier. Guidance and tools are needed to undertake assessments.

Currently, coordination at the state level is channelled through their respective SAPCC coordination committees. However, due to the limited scope of SAPCC and lack of integral and binding structures with NDC reporting and GHG inventory preparation, state agencies are often disconnected from necessary protocols and regulatory mandates. The absence of IT platforms also causes communication delays.

Effective monitoring and evaluation of climate change adaptation measures will also be required for the implementation of the adaptation component of the NDCs. National adaptation actions will also be linked to the disaster risk reduction plans. In this way, such synergy will reduce vulnerability and increase the resilience of population and communities. Such synergy will also provide a starting point for a more effective and coordinated approach to local climate change and disaster risk reduction assessments and planning. The CBIT support will be used to create an effective monitoring and evaluation mechanism (as integral component of the MRV system) for adaptation actions in key sectors that are also identified as priorities under the NAPCC and the NDC.

In the Paris Agreement context and its mandate for efforts to show a progression, there is also a need for a continuous process of development of emissions projections as a tool to support long-term planning. For this purpose, there is a need to build technical and institutional capacities to provide GHG emissions projections and associated socio-economic analyses. Robust projections would constitute an important tool for anticipating progress of mitigation efforts and planning of mitigation policies. Further, they could be used to assist in the identification of support needs for implementing mitigation efforts. Therefore, CBIT support will also focus on building capacities of government entities and stakeholders regarding emissions projections and long-term planning as tools for GHG emissions reduction.

No effective tracking system exists for financing the implementation of the proposed climate change mitigation and adaptation measures. For this reason, it is almost impossible to determine the exact gap in financing and it makes it even more difficult to estimate financial needs and plan financial support. Therefore, the effective integrated MRV system for NDC will have to include a component for tracking overall or sectoral costs in addressing climate change, and more concretely NDC implementation, to assess the situation and to increase the target. Also, such tracking system will improve data quality and information collected for the purpose of UNFCCC reporting, as well as increased transparency giving additional confidence to potential donors.

Guidelines and methodologies for finance flow assessments and financial gaps should be developed for different sectors and competent institutions at all levels of governance (central and local). This would facilitate different cost-benefit analyses, damage and loss estimates caused by climate change impacts as well as estimates on financial support needed and received and will provide inputs for defining future NDCs and related climate change mitigation and adaptation measures.

The CBIT project will help all concerned stakeholders in central government as well as in States and UTs in striving to achieve national goals by providing them with the knowledge, methodologies and protocols needed in all fields of the ETF (GHG inventory compilation, NDC tracking and climate finance).

Lack of integrated information systems to carry out reporting activities effectively and on a continuous basis and to allow appropriate and timely tracking of the NDC.

At present, there is little to no coordination among public agencies as evident from the SAPCC submitted by 32 states/UTs. A real-time web-based communication system would be very helpful to speed-up coordination among relevant agencies, thereby minimising delays and keeping a record of exchanged information.

The CBIT project builds upon existing capacities and ongoing initiatives to enhance the MRV process in an integrated manner. In addition, it considers recent developments across the developing countries towards capacity-building for enhanced transparency. Subsequently, it envisions an IT-enabled system (NICS) to govern interaction between relevant stakeholders in a coordinated and timely manner. These stakeholders involve state and sectoral focal points, national experts, public agencies, verification bodies, etc. NICS will find appropriate integration with the National Inventory Management System (NIMS) proposed under the third NC to streamline GHG inventory reporting. Thus, any minimal potential to duplicate efforts should be minimised. This project will adhere to the principles of enhanced transparency through standardised reporting templates; promoting relevant tools to measure and report information; and providing suitable training, etc. to identified stakeholders. A standard system to report and maintain information would be one of the key features of this project.

With increasing focus on accountability and transparency through modernization and digitization, public institutions are poised to become harbingers of change. India's national programmes and missions reflect these characteristics.

Need of capacity retention and update mechanisms and institutional memory

The current capacities of the staff and expert institutions (part of the existing institutional structure of NATCOM) may be retained to eliminate the need to start from scratch. So far, there is no staff retention policy that may be seen as an institutional capacity challenge.

Capacity retention has always been challenging in India, especially based on networks, as can be seen from INCCA, where the mandate was only one-time preparation of inventory and vulnerability assessment. It has failed to publish any publication since 2010 due to a lack of formalised mandate, training, resources and funding.

Along with capacity mechanisms, there is a lack of a system for the regular update of required capacity. Such a system exists for the officers of Indian Civil Services, Forest Services wherein they go through a mandatory training (which includes updating their skills and knowledge) after certain time intervals which is a useful case for the stakeholders involved in the enhanced transparency framework.

Consequently, a continuous interface between a pool of national well-trained experts in UNFCCC process and state/sectoral focal points could ensure sustained capacity and retention mechanism to a larger extent.

Low participation rate of women in the climate change decision-making process

Another significant barrier in achieving inclusive climate reporting is the integration of gender issues and participation of women in the climate change decision-making process. In developing countries (including India) – women face relatively high vulnerability, unequal access to resources, and limited mobility. Since women interact with their immediate environment more than men, they have better knowledge and understanding on the need to adapt to the changing climate and come up with practical solutions. Involvement of women in climate change decision-making process helps in gender-balanced reporting of mitigation and adaptation measures, reflecting a better understanding of socio-economic realities. A gender action plan will be implemented to increase women participation in transparency activities and ensure that the country will benefit from the knowledge and capacity of women in the battle against climate change.

Studies were launched on a project-by-project basis to elaborate the national communications and the biennial update reports. If efforts and reporting have been improving over time, they are hindered by this ad hoc approach, which makes it difficult to nurture and develop capacity for transparency initiatives in a sustainable way.

More than 100 sector experts, 16 institutions and 21 studies guided the preparation of the second BUR. Additionally, some distinguished experts from institutions, both in and outside Government, including academic and research institutions, civil society organizations and the private sector peer-reviewed the report. The institutional and technical project by project format needs to be implemented on a continuous basis.

To ensure robust and continuous participation in the implementation of Article 13 of the Paris Agreement, the country requires support to develop its long-term institutional and technical capacity.

To develop specific (consolidated) monitoring, reporting and verification process for GHG inventory and tracking NDC, additional finance and capacity building would be required. An integrated MRV system requires streamlined data management systems, technical capacity, improved analytical capabilities, and most importantly, active coordination among all stakeholders and the various nodal agencies within the government across regions, sectors and time.

There is a need to establish and implement an integrated domestic MRV system for GHG mitigation actions, including integrating it with NIMS, institutional arrangements, building capacity of government ministries, states and other agencies to provide information and other inputs for reporting on a continuous basis.

India's efforts to implement the ETF, therefore, require the formalisation of arrangements, IT infrastructure as well as technical manpower on a regular basis. Enhanced collaboration and networking with all stakeholders are required to collect, monitor and report information and track the NDC.

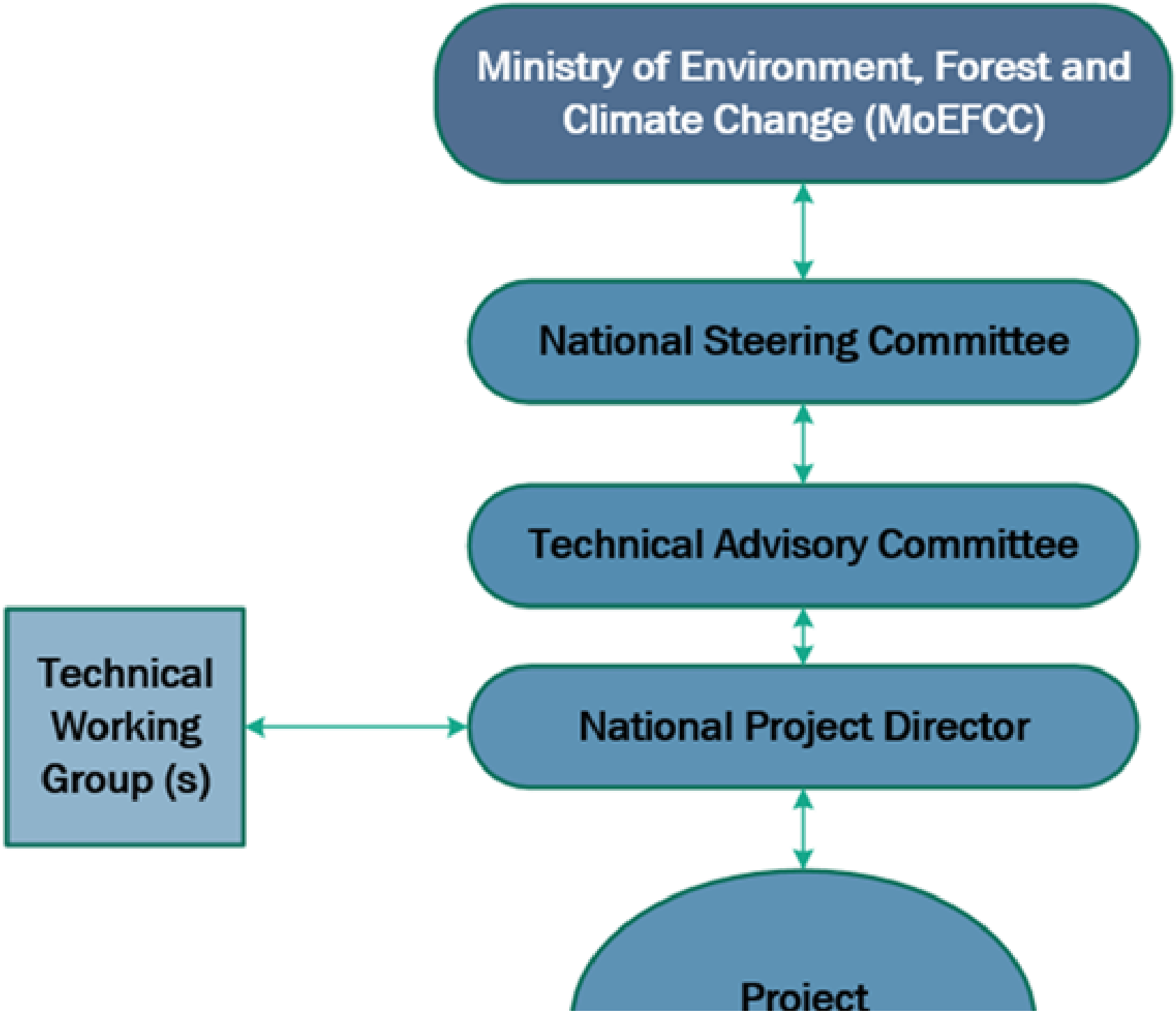
In addition, this project will help in developing a dynamic training plan for existing, new, and upcoming technical experts involved in the reporting process, in identifying the most appropriate methodologies to develop progress indicators to facilitate reporting the progress of mitigation action implementation, including emission reductions and NDC tracking and enabling better coordination among relevant regions and institutions to design, implement and measure, report and verify the information included in the BTRs.

1.a.2. The baseline scenario and any associated baseline projects

Institutional framework

The Ministry of Environment, Forest and Climate Change (MoEFCC) is the nodal ministry within Government of India for coordination and management of actions related to UNFCCC and Intergovernmental Panel on Climate Change (IPCC) as well as matters related to National Reporting under UNFCCC. In this context, MoEFCC is the implementing and executing entity of the current transparency framework and assigns several studies, conducts activities including workshops and national consultations for the preparation of the national communications and BURs. The issues related to climate action cuts across different sectors and are thus managed through a whole systems approach supported by key Ministries/ Departments of Government of India. MoEFCC has also set up an inter-Ministerial Committee as well as a Technical Advisory Committee of sector experts for implementing matters related to the national reporting to the Convention.

Institutional arrangements set up for the elaboration of NCs/BURs on a project by project basis


Ministry of Environment, Forest and Climate Change (MoEFCC)
National Steering Committee
Technical Advisory Committee
Technical Working Group (s)
National Project Director
Project

National Steering Committee (NSC): Inter-Ministerial Committee chaired by Secretary (EF&CC) with members drawn from concerned Ministries/ Departments of Government of India. Special Invitees could be invited to the meetings on need basis. NSC meets once in six months to guide and oversee the project performance. The composition of the NSC is as follows:

1. Additional Secretary (in-charge of climate change matters), MoEFCC
2. CEO, Niti Aayog or representative
3. Secretary, Ministry of Power or representative
4. Secretary, Department of Agriculture and Farmer's Welfare or representative
5. Secretary, Department of Agricultural Research and Education or representative
6. Secretary, Department of Economic Affairs or representative
7. Secretary, Ministry of New and Renewable Energy or representative
8. Secretary, Ministry of Science and Technology or representative
9. Secretary, Ministry of Coal or representative
10. Chairman, Railway Board or representative
11. Secretary, Ministry of Civil Aviation or representative
12. Secretary, Ministry of Road Transport & Highways or representative
13. Secretary, Ministry of Shipping or representative

14. Secretary, Ministry of Petroleum & Natural Gas or representative
15. Secretary, Ministry of Jal Shakti or representative
16. Secretary, Ministry of Health & Family Welfare or representative
17. Secretary, Ministry of Earth Sciences or representative
18. Secretary, Ministry of Housing & Urban Affairs or representative
19. Secretary, Ministry of Rural Development or representative
20. Secretary, Ministry of Statistics & Programme Implementation or representative
21. Secretary, DPIIT, Ministry of Steel
22. Secretary, Ministry of Heavy Industries and BEE
23. Director General, India Meteorological Department or representative
24. Director General, Bureau of Energy Efficiency or representative
25. Joint Secretary, Ministry of External Affairs or representative
26. Joint Secretary (Climate Change), MoEFCC
27. Advisor (Climate Change), MoEFCC (as member convenor)

Experts (as identified during project inception/ implementation phase on need basis and as special invitees)

Technical Advisory Committee (TAC): The TAC provides technical guidance for the preparation of the reports. This committee has members from the government, academia, private sector and civil society organizations.

Technical Working Groups (TWG): Theme-based Technical Working Groups (TWG) drawing subject experts from different sectors are set up to provide expert advice and guidance for the effective implementation of the project. The TWGs meet on a quarterly basis or on need basis. The Chair and members of TWGs are decided at the project inception or during project implementation phase. Some of these TWGs are as follows:

1. GHG inventory
2. Mitigation
3. Adaptation
4. Financial, Technological and Capacity-building support needed and received

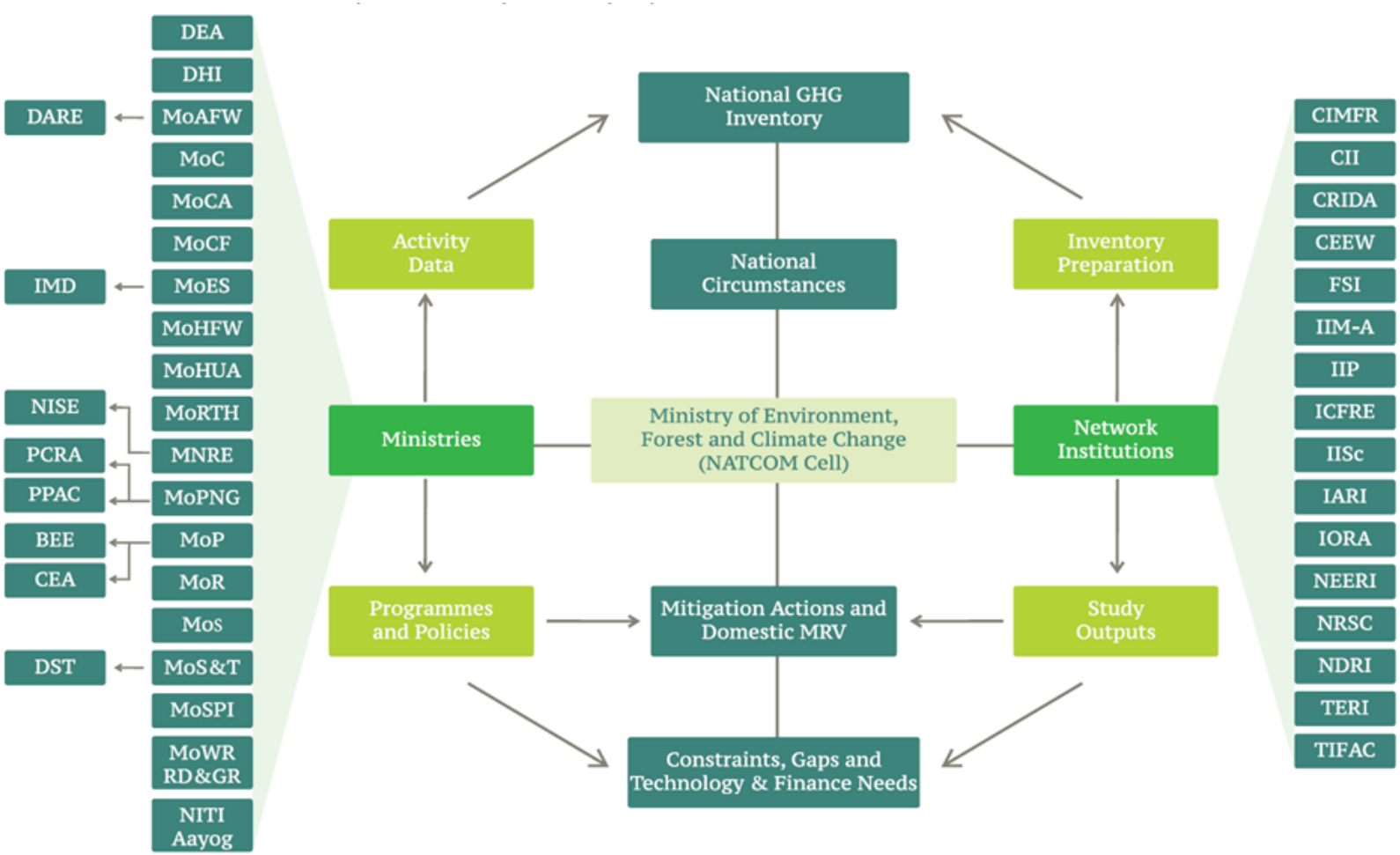
National Project Director is a senior level government officer from MoEFCC in-charge of climate change matters.

The institutional arrangements for preparing these reports include a purpose-driven, provisional National Steering Committee (NSC) including an expert-led Technical Advisory Committee (TAC). The NSC under the chairmanship of the Secretary, MoEFCC oversees the preparation and implementation of the work programme of these reports. Various ministries and government departments concerned with different elements of information have NSC representation. These ministries and departments also provide input for the reports. The TAC provides technical guidance for report preparation. This committee includes members from the government, academia, private sector, and civil society organizations.

The data/information presented in India's NCs and BURs incorporate several studies launched and conducted by institutions having sector-specific expertise. Reports are reviewed by a range of academic and government experts prior to the TAC and NSC meetings.

Expert institutions including Government institutions, academic and research institutions, industrial association, and civil society organizations are shown in the figure below.

Network of institutions involved in the elaboration of the BUR.



Expert Institutions

CEEW: Council on Energy, Environment and Water, New Delhi

IIP: Indian Institute of Petroleum, Dehradun

CIMFR: Central Institute of Mining and Fuel Research, Dhanbad

IISc: Indian Institute of Science, Bengaluru

CRIDA: Central Research Institute for Dryland Agriculture, Hyderabad

IORA: IORA Ecological Solutions, New Delhi

CII: Confederation of Indian Industry, New Delhi

NDRI: National Dairy Research Institute, Karnal

FSI: Forest Survey of India, Dehradun

NEERI: National Environmental Engineering Research Institute, Nagpur

IARI: Indian Agricultural Research Institute, New Delhi

NRSC: National Remote Sensing Centre, Hyderabad

ICFRE: Indian Council of Forestry Research and Education, Dehradun

TERI: The Energy and Resources Institute, New Delhi

IIM-A: Indian Institute of Management, Ahmedabad

TIFAC: Technology Information, Forecasting and Assessment Council, New Delhi

Ministries/Departments

BEE: Bureau of Energy Efficiency

MoHUA: Ministry of Housing and Urban Affairs

CEA: Central Electricity Authority

MoP: Ministry of Power

DARE: Department of Agricultural Research and Education

MoPNG: Ministry of Petroleum and Natural Gas

DEA: Department of Economic Affairs

MoR: Ministry of Railways

DHI: Department of Heavy Industry

MoRTH: Ministry of Road Transport and Highways

DST: Department of Science and Technology

MoS: Ministry of Steel

IMD: India Meteorological Department

MoSPI: Ministry of Statistics and Programme Implementation

MoAFW: Ministry of Agriculture and Farmers Welfare

MoST: Ministry of Science and Technology

MoC: Ministry of Coal

MoWR, Ministry of Water Resources

RD&GR: River Development & Ganga Rejuvenation

MoCF: Ministry of Chemicals and Fertilizers

MNRE: Ministry of New and Renewable Energy

MoCA: Ministry of Civil Aviation

NISE: National Institute of Solar Energy

MoES: Ministry of Earth Sciences

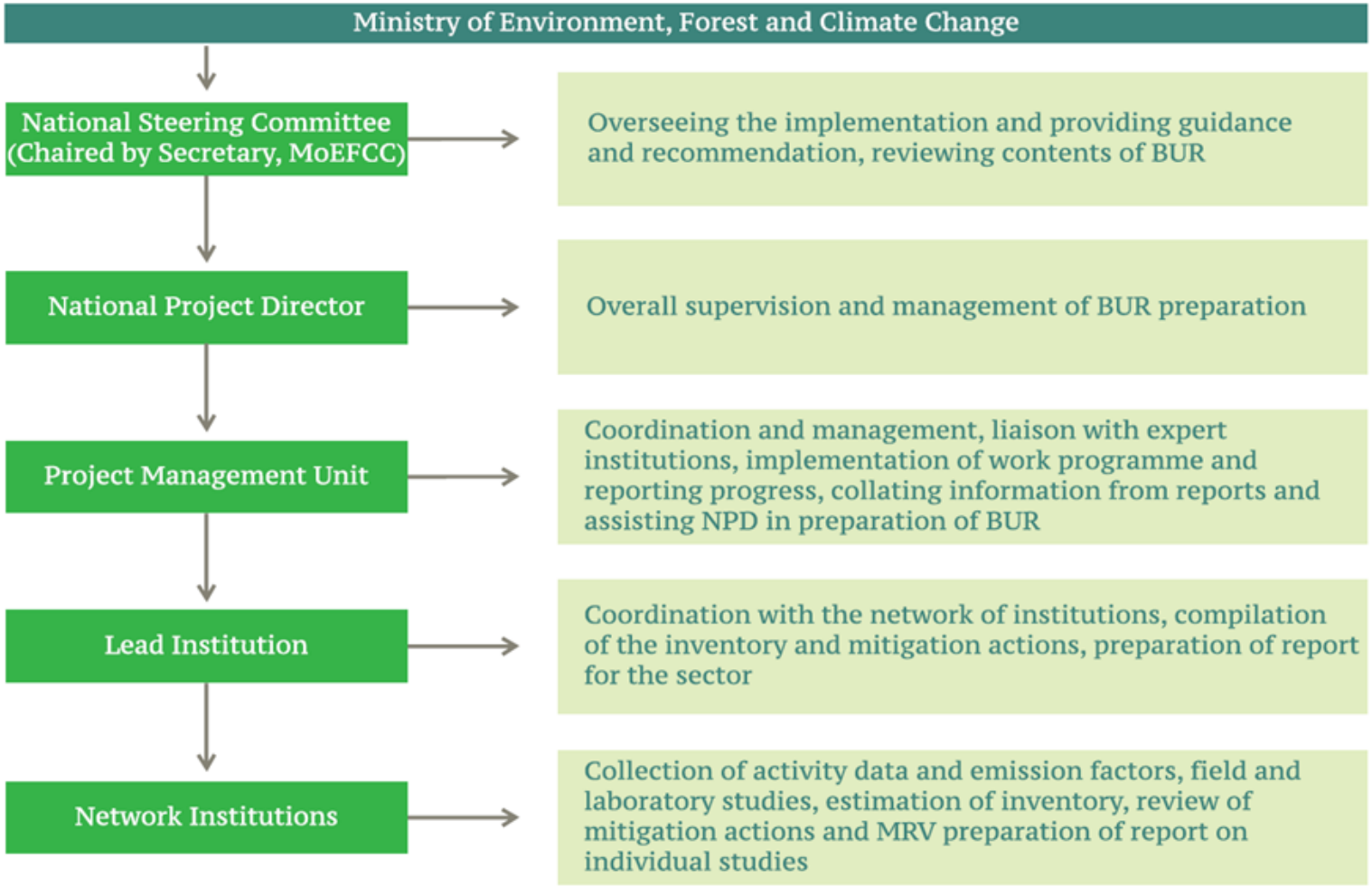
NITI Aayog: National Institution for Transforming India Aayog

MoHFW: Ministry of Health and Family Welfare

PCRA: Petroleum Conservation Research Association

PPAC: Petroleum Planning and Analysis Cell

Responsibilities and roles of the institutions



The Ministries/ Departments of the Government of India provides sector-specific information which is then processed by the sector specific national experts (to whom studies are awarded) for national reporting use. Thereafter, the processed information is vetted and approved by the concerned Ministries/ Departments through several rounds of consultations before it is included in BURs/NATCOMs, officially. The national reports also go through an independent peer review process involving sector experts drawn from academia, research institutions, civil society and members of industrial associations. After the peer review process, the national report undergoes the approval process which includes approval by the Technical Committee (chaired by Additional Secretary, Climate Change in MoEFCC and comprising of technical experts), National Steering Committee (chaired by Secretary (EF&CC) and comprising of Government of India Ministries / Departments). Thereafter, the national report is placed under consideration for approval by the Minister of Environment, Forest and Climate Change. After the Minister´s approval, the national report goes through the Union Cabinet (Government of India) approval process. Once the report is approved by Union Cabinet, it is officially submitted by MoEFCC on behalf of the Government of India to UNFCCC. It is a strategic, rigorous, and focused process that heavily incorporates system-wide internal communication, while raising awareness.

Sector specific information for BUR-2 and BUR-3 and Third NC have been provided, vetted and approved by the following Ministries/ Departments/ Institutions of the Government of India:

1. Department of Economic Affairs, Ministry of Finance
2. Department of Heavy Industries, Ministry of Heavy Industries and Public Enterprises
3. Ministry of Agriculture and Farmer's Welfare
4. Ministry of Coal
5. Ministry of Power
6. Bureau of Energy Efficiency, Ministry of Power
7. Central Electricity Authority, Ministry of Power
8. Ministry of External Affairs
9. Ministry of New and Renewable Energy
10. National Institute of Solar Energy, Ministry of New and Renewable Energy
11. Ministry of Earth Sciences
12. India Meteorological Department, Ministry of Earth Sciences
13. Ministry of Chemicals and Fertilizers
14. Ministry of Civil Aviation
15. Ministry of Railways
16. Ministry of Road Transport and Highways
17. Ministry of Health and Family Welfare
18. Ministry of Housing and Urban Affairs
19. Ministry of Petroleum and Natural Gas
20. Petroleum Planning and Analysis Cell, Ministry of Petroleum and Natural Gas
21. Petroleum Conservation Research Association, Ministry of Petroleum and Natural Gas
22. Department of Science and Technology, Ministry of Science and Technology
23. Ministry of Statistics and Programme Implementation

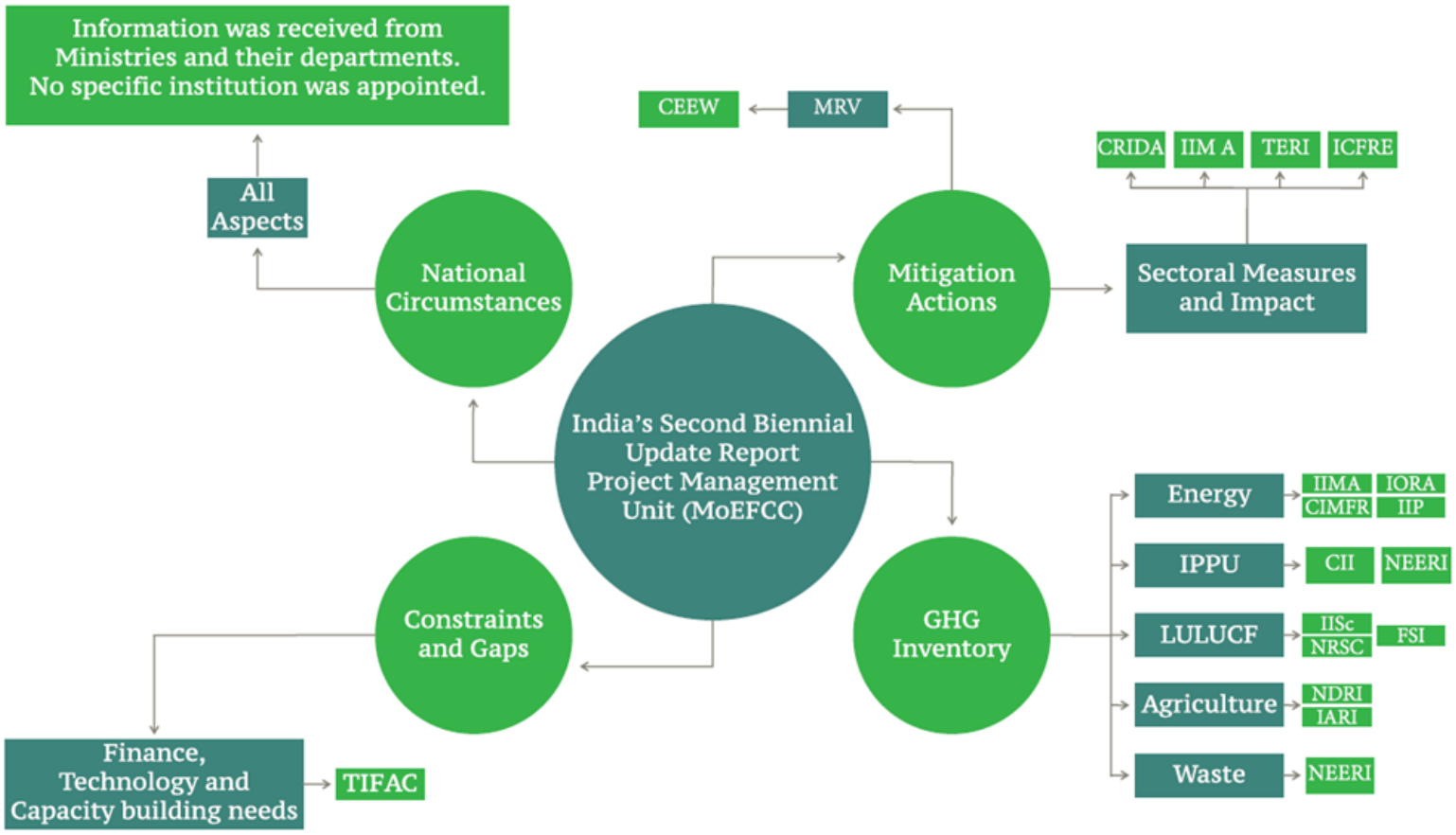
24. Ministry of Jal Shakti

25. Niti Aayog

State Governments normally provide information on their respective climate change measures duly reported in relevant chapters.

As per the current arrangements for the preparation of NATCOM and BUR, approximately 150 people are involved with the national reporting process with an approximate woman to man ratio of 40:60.

Activity and information flow in the current transparency framework of India



The main roles involved for each thematic component of the reports are as follows:

· Ministry of Environment, Forest and Climate Change: The Ministry coordinates, supervises, and processes for approval and submission of the reports to UNFCCC. A National Steering Committee chaired by the Secretary, MoEFCC is in place with Adviser/Scientist-G, MoEFCC in his capacity as National Project Director (NPD) as Member Secretary. The members are representatives from all relevant ministries and departments. BUR is endorsed by the Minister and approved by the Cabinet, Government of India.

· Expert Institutions: These institutions are engaged in compiling the GHG inventory, mitigation actions and other components. One coordinating institution is generally appointed for each sector. A network of institutions works for each sector.

· Resource Institutions: These institutions provide data and information for each component. These include ministries and their departments/ agencies/ institutions, research institutions and universities, industrial units, Public Sector Undertakings and Industry associations and other departments involved in generating and compiling data.

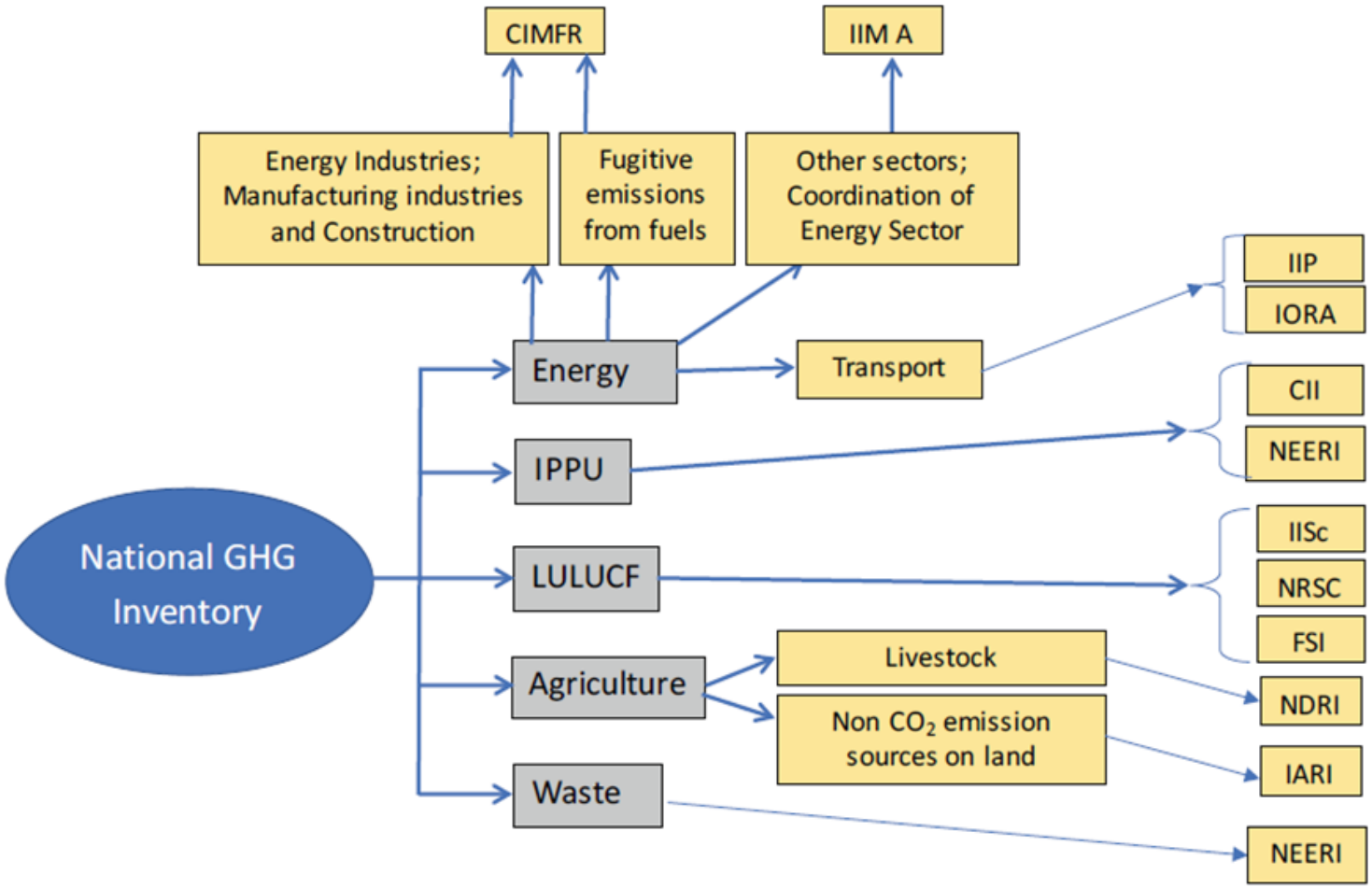
Reviewers: The reports are peer-reviewed by independent experts (experts other than those participating in the preparation of the document) followed by the Technical Advisory Committee and ministries/concerned departments.

MRV framework

India in its efforts to support coherent and integrated systems is currently in the process of developing a National Inventory Management System (NIMS). NIMS will coordinate supporting institutions with strategic capacity for the preparation of National Communications and BUR/BTRs on a continuous basis. Of course, formalizing such an institutional arrangement requires financial, technological, and capacity building support.

Eleven Indian institutions implemented the inventory preparation exercise in their area of expertise. Many of these institutions/experts have been part of the inventory preparation exercise since India's Initial National Communication. Various Ministries and Government Departments, Public sector undertakings provided inputs for preparation of the national inventory as illustrated in the figure below.

National Inventory Management System (NIMS)



A dedicated domestic MRV arrangement at the national level is yet to take shape in India.

In India, measurement and review of mitigation actions are confined to various financial and physical parameters that are embedded in the project design and are not meant particularly for GHG emission mitigation. Several Government programmes and schemes have developed a measurement, reporting and verification system for various financial and physical parameters within the past two years. A few of these have a strong relation with GHG emission mitigation (e.g. PAT scheme presented in the section on main relevant policies), but they do not conduct MRV for GHG emissions mitigation directly.

Current climate change mitigation policies and programmes vary in scope and administrative level at which implementation is managed (state, regional, national, sectoral, and voluntary at individual unit level). Any available estimate at the national level comes from a bottom-up aggregation of actions reported at the project level. Projects under the Clean Development Mechanism (CDM) and the National Action Plan on Climate Change (NAPCC) have an established measurement and review mechanism associated with them. MRV of mitigation actions in India are implemented at project level as summarised in the table below.

Summary of sector-wise MRV status in India

Sector	Schemes and Processes	M-R-V status	Agencies Involved
Energy	Daily electricity generation from various fuel sources	Inbuilt MRV	CEA
	Sectoral breakup of energy use across economic activities		MoSPI
	Clean coal technologies		CEA, CERC, SERC
	Monitoring of trends and analysis of consumption, production and import of petroleum and natural gas		PPAC
Renewables	Renewable Purchasing Obligation	Inbuilt MRV	SERC, DISCOMs, POSOCO, CAG
Buildings	Buildings Star Rating System, GRIHA, LEEDs	Inbuilt MRV	BEE, IGBC, GRIHA
	Domestic Efficient Lighting Program	Inbuilt MRV	EESL, DISCOMs
	Street Lighting National Program	Inbuilt MRV	EESL, DISCOMs
Industry	Baseline data for estimating emissions from industrial coal consumption	Inbuilt MRV	Coal Controller's Organization
	Industry energy use		NSSO
	Perform Achieve and Trade – I,II III		BEE, Designated Consumers (Industries), Empaneled energy Auditor
	Zero Defect Zero Effect		Department of Industrial Policy and Promotion, MSME, QCI
Transportation	Electrification of Railway routes	M & R Identified	Indian Railways
	Dedicated Freight Corridors of Indian Railways	M & R Identified	Dedicated Freight Corridor Corporation of India, CPCB, SPCB
	Blending	M & R Identified	Oil marketing companies, MNRE
	Aviation	M & R Identified	Directorate General of Civil Aviation
Forestry	Afforestation	MRV identified	FSI, CAMPA, CAG
	Estimating carbon stock at national and state level using inventory and mapping data		FSI
	Survey of forest and tree cover biennially		FSI
	Land use and land cover changes		ISRO-Bhuvan Geospatial portal
Agriculture	Twenty Point Programme		MoSPI
	System of Rice Intensification (SRI), Crop Diversification, Cool Farm Tool model	Inbuilt MRV	DAC&FW, DARE
	Livestock census, amount of fertilizers and crop varieties		DAC&FW
	Monitors 12 parameters (nitrogen, phosphorous and potassium, micro-nutrient status, pH) in the soil across the States		DAC&FW

	All India crop production situation database		DAC&FW
Waste	Solid Waste Management Programmes, Wastewater Recycling and Waste to Energy	MRV identified	CPCB, SPCB
	Total waste generated, processed, ODF villages		MoHUA

Source: A compilation by Council on Energy, Environment and Water and GoI websites

There are no indicators or a M&E framework for adaptation in place and limited coordination exists between the National Action Plan on Climate Change (NAPCC) and the State Action Plans on Climate Change (SAPCCs).

Support needed and received for climate action is not measured due to a lack of national methodologies and mandates for measuring these flows.

Main relevant policies

Environmental protection is one of the central pillars of India's governance framework. The Government of India had enacted the 42nd Amendment to the Constitution in 1976 and added Article 48A to the Directive Principles of State Policy stating that "the State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country." The same Amendment added Article 51 A (g) making environmental protection a fundamental duty of every citizen: "to protect and improve the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creatures." A wholesome environment is a fundamental right protected under Article 21 of the Constitution of India. In addition, India has enacted several laws and policies pertaining to the protection of environment, water, air, wildlife, forests and for management of wastes.

The Environment (Protection) Act, 1986 authorizes the central government to protect and improve environmental quality, control and reduce pollution from all sources, and prohibit or restrict the setting and /or operation of any industrial facility on environmental grounds. The Environment (Protection) Act was enacted in 1986 with the objective of providing for the protection and improvement of the environment.

The hazard and vulnerability profile of India of diverse magnitude is now well known. India's vulnerability to multiple disasters caused by natural and human induced factors aggravated by climate change impacts pose many threats and challenges for communities and agencies involved in management of disasters. With the enactment of Disaster Management (DM) Act 2005 and adoption of National Policy on Disaster Management 2009, the Government of India has established improved institutional arrangements and disaster risk reduction (DRR) mechanisms to deal with any threatening disaster situation or disaster. As mandated by DM Act, the Government of India created a multi-tiered institutional system consisting of the National Disaster Management Authority (NDMA), the State Disaster Management Authorities (SDMA) and the District Disaster Management Authorities (DDMA). The National Disaster Management Plan (NDMP) provides a framework and direction to the government agencies for all phases of disaster management cycle.

The Ministry of Environment, Forest and Climate Change is the nodal agency for environmental protection. Many other ministries including the Ministry of New and Renewable Energy, Ministry of Power and Ministry of Science and Technology undertake climate related activities. Most ministries and departments have been working collaboratively to implement and achieve goals established in the National Action Plan on Climate Change (NAPCC) which was launched in 2008 with eight National Missions. The eight missions under the NAPCC are on solar, energy efficiency, habitat, water, agriculture, forestry, Himalayan ecosystem and knowledge management. The government is also considering the addition of three new missions under NAPCC: coastal system and resources, human health, and waste to energy. Each mission includes a coordinating and implementing ministry. It is a multifaceted plan that covers the essential sectors

regarding climate change. The plan emphasizes mitigation, adaptation, vulnerability, sustainability, as well as promotes stakeholder engagement in climate change action. Along the lines of the NAPCC, a majority of states and union territories (UTs) have prepared their State Action Plan on Climate Change (SAPCC) with an aim of contributing to national goals and meeting state priorities. The SAPCCs revision process by States/UTs is underway.

Government of India programmes invariably contain a component on capacity building/ training/ awareness creation, and most programmes have started accounting for climate variabilities in their respective sectors to ensure economic growth and sustainable development.
Furthermore, one of the NAPCC's mission is on 'Strategic Knowledge for Climate Change' which is being coordinated by the Department of Science and Technology, Government of India. The main objectives of this mission are as follows:

· Formation of knowledge networks among existing knowledge institutions engaged in research and development relating to climate science, and facilitate data sharing and exchange through a suitable policy framework and institutional support.

· Establishment of global technology watch groups with institutional capacities to carry out research on risk minimized technology selection for developmental choices.

· Development of national capacity for modelling the regional impact of climate change on different ecological zones within the country for different seasons and living standards.

· Establishing research networks and encouraging research in the areas of climate change impacts on important socioeconomic sectors like agriculture, health, natural ecosystem, biodiversity, coastal zones, etc.

· Providing an improved understanding and awareness of the key climate processes and the resultant climate risks and associated consequences.

· Building alliances and partnerships through global collaboration in research & technology development on climate change under international and bilateral S&T cooperation arrangements.

In 2015, India became a party to three landmark international agreements:

i. Sendai Framework for Disaster Risk Reduction (SFDRR) in March 2015;

ii. Sustainable Development Goals (SDGs) (2015-30) in September 2015; and

iii. Paris Agreement on Climate Change at the 21st Conference of Parties (COP 21), under the United Nations Framework Convention on Climate Change in December 2015.

Subsequently in 2015, India submitted its first Intended Nationally Determined Contribution (INDC) document (now, NDC). India's mitigation targets are very ambitious. India plans to reduce emissions intensity of its GDP by 33 - 35% between 2005 and 2030. However, its actions towards climate change mitigation have a strong development impact. India is thus focusing on achieving about 40 per cent cumulative electric power installed capacity from non- fossil fuel-based energy resources by 2030. By 2030, India also intends to increase its carbon sinks by creating an additional capacity equivalent to 2.5 to 3 billion tonnes of CO_2 through significant afforestation efforts.

Additionally, adaptation measures feature prominently in India's framework for climate change action and form part of Indian lifestyle. India's heritage embraces nature, and environmental consciousness is deeply rooted in its traditions. India has made sustainable and climate friendly lifestyle an integral part of its solution to climate change. Furthermore, India is among a few nations implementing measures to adapt to climate change on a large scale. India comprises 29 states and seven union territories (UTs). Already, 32 of India's 29 states and seven union territories have submitted respective State Action Plans on Climate Change (SAPCC), which complement India's National Action Plan on Climate Change (NAPCC). In its NAPCC, the nation has focused four of its eight missions on adaptation efforts, including: a) sustainable habitats; b) optimising water use efficiency; c) creating ecologically sustainable climate resilient agricultural production systems; and d) safeguarding the Himalayan glaciers and mountain ecosystem. India's adaptation efforts include initiatives in agriculture, water, health, coastal region & islands, disaster management, biodiversity and ecosystem protection, and securing rural livelihoods. India is implementing national schemes to promote organic farming, efficient irrigation systems, watershed management, improving soil health and climate resilient agriculture. India has set up the National Adaptation Fund and has invested over Rs.830 crore in various adaptation related activities.

As per the Energy Conservation (Amendment) Act 2010, energy-intensive industries must undergo an energy audit conducted by an accredited energy auditor in such manner and intervals of time as may be specified by regulations. The Energy Audit includes the verification, monitoring and analysis of use of energy including submission of technical reports containing recommendations for improving energy efficiency with cost-benefit analysis and an action plan to reduce energy consumption.

The Perform Achieve and Trade (PAT) Scheme has been developed as per the legal requirement under the Energy Conservation Act and as one of the mechanisms under the national mission on energy efficiency of the NAPCC. In the first cycle of PAT (2012 to 2015), 478 industrial units in eight sectors (Aluminium, Cement, Chlor-Alkali, Fertilizer, Iron & Steel, Paper & Pulp, Thermal power, Textile) were mandated to reduce their specific energy consumption (SEC), i.e., energy used per unit of production. Energy saving targets for these 478 designated consumers (DCs) were notified in March 2012. The target reduction for each industrial unit was based on their current levels of energy efficiency, so that energy efficient units will have a low target of percentage reduction, as compared to less energy efficient units.

Overall, the SEC reduction targets are aimed at securing 4.05% reduction in the total energy consumption of these industries corresponding to an energy saving of 6.686 Mtoe. Units capable of achieving SEC levels lower than their targets, can receive energy savings certificates (ESCerts) for their excess savings. Out of the 478 designated consumers notified for PAT Cycle-I, 448 were operational. Based on monitoring and verification reports submitted by 427 designated consumers, achievement in terms of energy savings was 8.67 Mtoe against the target of 6.686 Mtoe assigned for 478 designated consumers. A total of 309 DCs exceeded their targets, adding a total of 3.825 million positive ESCerts. For PAT-I, out of 110 DCs failing to achieve their target, 96 complied by purchasing ESCerts. PAT cycle II was expanded with an objective of increasing the number of DCs under PAT. For deepening, 89 DCs that were identified from the existing sectors have been notified under PAT Cycle-II (2016- 17 to 2018-19). Under widening, three new sectors that are Railways, Refineries, and Electricity DISCOMs have been notified and published in the Gazette on 29th December 2015. From these newly identified sectors 84 DCs have been included under PAT Cycle-II. The second cycle aims to achieve an overall energy consumption reduction of 8.869 Mtoe for which reduction targets have been given to DCs under 11 notified sectors. The cycle started in April 2016 under which 621 DCs (448 existing operational units and 173 new units) have been notified.

PAT Cycle–III & IV will be operational from 2017-18 to 2019-20 and was notified on 31st March 2017. It became effective in April 2017 with the inclusion of 116 new DCs from six sectors viz. Thermal Power Plant, Cement, Aluminium, Pulp & Paper, Iron & Steel and Textiles. These 116 DCs which consume energy of about 35 Mtoe, have been assigned energy saving target of 1.06 Mtoe at the end of the cycle in 2019-20.

As the PAT scheme is now being implemented on a rolling cycle basis, new DCs will be notified every year. The fourth cycle of PAT was notified on 28th March 2018. The baseline year used was 2016-17 and the target year is 2020-21. A total of 109 DCs have been assigned a total reduction target of 0.6998 Mtoe. At present, 846 designated consumers from 13 sectors with a total targeted energy savings of 19 Mtoe under PAT Cycle–II, III and IV are undergoing implementation of energy efficiency projects.

Ensuring energy security, improving access and affordability of modern energy resources for all Indians, diversifying energy resources, resource use efficiency enhancement, reducing aggregate technical and commercial losses in power transmission, and enhancing renewable energy are pillars of Indian energy policy planning.

The Steel Scrap Recycling Policy (2019) aims to reduce imports, conserve resources and save energy. Since scrap-based steel making technologies have been envisaged as one of the important options to reduce GHG emission intensity, this is an important initiative of the steel sector to minimize GHG emissions.

As per the National Policy for Skill Development and Entrepreneurship 2015, it is estimated that by 2020 the average age will be 29 years in India compared to 40 years in the USA, 46 years in Europe, and 47 years in Japan. In the next 20 years, the labour force in the industrialized world is expected to decline by 4%, while in India it will increase by 32% creating a need and opportunity to provide its workforce with required skills and knowledge enabling them to contribute substantially to economic growth. The Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India has formulated an initiative for skill development in the environment and forest sector to enable India's youth to get gainful employment and/ or self-employment by launching a Green Skill Development Programme (GSDP). The course is conducted through a decentralized network of 66 Environment Information System (ENVIS) centres providing scientific, technical and semi-technical training on various environmental issues.

The focus of ENVIS since inception in 1982 has been on providing environmental information to decision makers, policy planners, scientists and engineers, research workers, etc. all over the country.

Current transparency framework in India

India's

Initial National Communication to the United Nations Framework Convention on Climate Change

Government of India

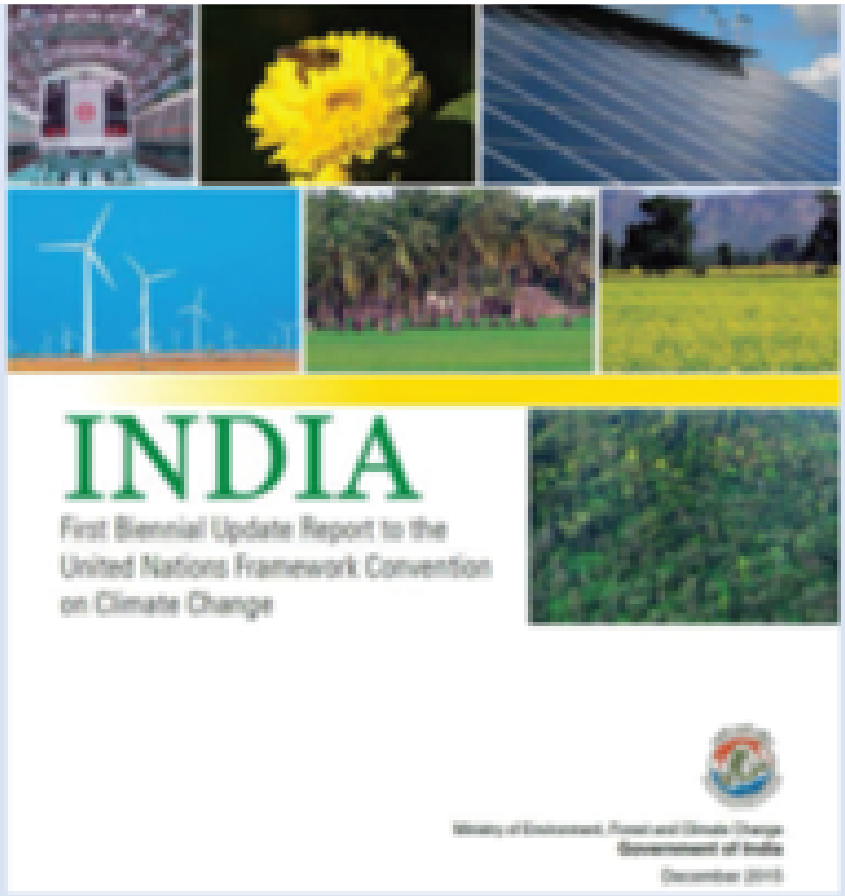
India

Second National Communication to the United Nations Framework Convention on Climate Change

Ministry of Environment & Forests
Government of India
2012

India

Second Biennial Update Report to the United Nations Framework Convention on Climate Change



The current transparency framework is mainly related to the preparation of the national communications and biennial update reports to the UNFCCC.

Reports submitted to the UNFCCC by India until 2021

India ratified UNFCCC on 1st November 1993 and the Kyoto Protocol on 26th August 2002, accepted Doha Amendment to the Kyoto Protocol on 8th August 2017 and ratified the Paris Agreement on 2nd October 2016.

India as a Party to the UNFCCC is required to periodically communicate relevant information on the implementation of the Convention. Accordingly, India submitted to the UNFCCC its initial National Communication in 2004, second National Communication in 2012, first Biennial Update Report (BUR) in 2016, second BUR in 2018 and third BUR in 2021.

During the processes of approval and implementation of this CBIT project, it is expected that India will prepare reports to be submitted to the UNFCCC under the current and the future transparency frameworks.

The CBIT project will be implemented in parallel to the elaboration of these reports, identifying the areas and needs for flexibility, strengthening the relevant institutions for transparency-related activities in line with national priorities; providing relevant tools, training, and assistance for meeting the provisions stipulated in Article 13 of the Paris Agreement and assisting in improvement of accountability and transparency of all these reports progressively over time.

Baseline initiatives and On-going activities

The assistance provided through the CBIT project for development of India's transparency framework under the Paris Agreement will complement the support that the country has received and is currently receiving through other projects.

The CBIT project will be implemented in parallel to the elaboration of these reports, strengthening the relevant institutions for transparency-related activities in line with national priorities; providing relevant tools, training, and assistance for meeting the provisions stipulated in Article 13 of the Paris Agreement and assisting in improvement of accountability and transparency of all these reports progressively over time.

The project will be implemented in close coordination with the project on the preparation of India's First Biennial Transparency Report (BTR1) and 4NC/BUR4 project. The following table presents how the three projects will exploit synergies and complement each other.

4NC/4BUR PROJECT	CBIT PROJECT	HOW BTR1 PROJECT IS LINKED WITH THE 4NC/BUR4 AND THE C BIT PROJECT
	GHG INVENTORY	
Outputs:	CBIT Outcome 2.1: Ability to report GHG emission inventories as per I ntergovernmental Panel on Climat e Change (IPCC) 2006 guidelines o r latest applicable.	Outcome 1.1. National inventory r eport of anthropogenic emissions by sources and removals by sinks of greenhouse gases (GHGs) pre pared for the period 2000 – 2022.
Output 2.1.1: Documented inve ntory of GHG emissions as per 2006 IPCC guidelines for (a) En ergy (b) Transport (c) Industry (d) Agriculture (e) Land Use, La nd Use Change and Forestry, an d (f) Waste sectors, for 2021 (B UR4) and 2024/25 (4NC).	The following CBIT outputs will as sess the gaps of the GHG inventor y elaborated under the TNC, 4NC a nd BUR4 and BTR1 projects in ord er to elaborate and refine the adap ted tools and templates for the Na tional Institutional Coordination Sy stem (NICS) as well as a tailored tr aining plan and programme to fill t he gaps:	The BTR project will refine and up date the inventory of anthropogen ic emissions and removals of GH G prepared within the BUR4 and e xtend its period for the 2000-202 2 using the 2006 IPCC Guidelines for all sectors and with the adopti on of higher tier estimations deve loped under the 4NC-BUR4 projec t. For the GHG Inventory of BTR1, India will prioritize its efforts on meeting the “shall” type requirem ents of the MPGs subject to exerc ising flexibility options wherever p rovided and needed in light of the capacities with respect the said p rovisions. Justification of flexibilit y options adopted will be a new f eature to add in the BTR compare d to the inventory chapter of the 4 BUR.
Output 2.1.2: Completed Nation al Activity Data, and developme nt and refinement of country sp ecific Emission Factors and info rmation for key category sector s.	2.1.1. Tools, templates, and trainin g for agencies/experts involved in the inventory process (cross-cuttin g).	
Output 2.1.3: Documented natio nal and other methodologies ad opted for the GHG inventory an d analysis of application of the 2006 IPCC Guidelines in the GH G Inventory.	2.1.2. Improvement in the energy s ector: Achieving granularity with a ctivity data (example: grade wise c oal consumption) and bringing clar ity on the unorganised sector oper ations.	
Output 2.1.4: Developed instituti onal capacity for using 2006 IP CC guidelines and adoption of h igher tier estimation as identifie d during ICA of previous BURs.	2.1.3. Improvement in Agriculture sector: State-level validation of act ivity data (example: dung produce d per animal, feeding patterns.	GHG inventory improvement is a continuous process, and the BTR 1 project will build on the partial r esults of the CBIT project (as its ti meframe exceeds the timeframe of this project) including the capa city enhancement achieved and a pplication of tools developed und er its respective Outcome (2.1) to produce the following outputs an d to further improve the national GHG inventory of the country:
This output will result in the dev eloped institutional capacity acr oss institutions involved in the i nventory preparation for full tra nsition and adoption of the 200 6 IPCC guidelines, including cap acity for subsequent revision. T his output will benefit from the capacity enhanced by the CBIT project and will develop GHG e mission inventory for BUR 4 and 4NC as per the IPCC 2006 guide lines or subsequent revisions.	2.1.4. Improvement in the LULUCF sector: Establishing modelling cap acity at the state or institutional le vel through trained experts and civ il-society assistance.	Output 1.1.1. Completed national Activity Data (AD), and developm ent and refinement of country spe cific Emission Factors (EF) and in
	2.1.5. Improvement in the IPPU se ctor for transparent and accurate c overage.	
	2.1.6. Improvement in the waste s	

Output 2.1.5: Quantitative estimates for all source and sink categories including uncertainty assessment as per the IPCC Good Practice Guidance and other appropriate methodologies adopted along with international comparisons.

Output 2.1.6: Improved time series consistency and recalculations based on the revised country specific emission factors and better-quality activity level data, wherever revised.

Output 2.1.7: Uncertainty management and Quality Control and Quality Assurance Procedures in accordance with IPCC guidelines for key categories and individual categories in which significant methodological changes have occurred, established and applied on the information and data used.

Output 2.1.8: Strengthened activity data flow systems to report on "F" and precursor gases additional to CO2, CH4 and N2O.

This output will result in strengthened activity data collection to report these F-gases and precursor gases in addition to CO2, CH4 and N2O.

2.1.6. Improvement in the waste sector: Improving the system to collect activity data aggregated at centralised level (example: treatment pathway, emission characteristics, etc.).

cific Emission Factors (EF) and information for key source categories will be based on and further refine 2.1.2. and 2.1.8. outputs of the 4NC-4BUR project.

Output 1.1.2. Improvement of GHG inventory through the use of tier-II and III methodologies for key category sectors and streamlined national institutional structure for long term and sustainable National GHG inventory will be based on 2.1.6. output of the 4NC-4BUR project.

This output will also benefit from the capacity enhanced by the CBIT project and output 2.1.4. of the 4NC-4BUR project.

Output 1.1.3. Documented inventory of GHG emissions as per 2006 IPCC guidelines or subsequent refinement as may be applicable will be based on and refined the GHG Inventory prepared for the BUR4 under 2.1.1. output of the 4NC-4BUR project.

Output 1.1.4. Key category analysis and uncertainty assessment for all source and sink categories, including inventory totals will be based on 2.1.5. and 2.1.7. outputs of the 4NC-BUR4 project.

Output 1.1.5. Strengthening of QA/QC process for inventory will extend and enhance 2.1.7. output of the 4NC-BUR4 project.

NDC TRACKING AND MITIGATION ACTIONS

Outputs:

Output 5.1.1: Documentation of national climate change mitigation actions, policies and measure, including those with mitigation co-benefits resulting from ada

The CBIT project will directly support the coordination and increase of technical and institutional capacities needed to effectively track the progress in implementing NDCs through various outcomes and outputs including:

Outcome 1.2. Information necessary to track progress made in implementing and achieving NDCs under Article 4 of the Paris Agreement compiled and the progress in the achievement of the NDC presented.

ptation actions and economic d iversification plans.
Output 5.1.2: (a) Improved futur e GHG emission scenarios for I ndia using up-to-date informatio n as well as the progress towar ds NDC targets assessed. (b) Cl imate finance received with spe cific reference to NDC targets th at have been set conditional to t he availability of finance, techno logy and capacity-building supp ort.

Output 5.1.3: Sector wise progr ess assessments and mitigatio n scenarios to model possible tr ajectory of greenhouse gas emi ssions by key sectors (such as energy, waste and industrial pro cesses) up to 2050 developed.

Output 5.1.4: Mitigation potenti al for energy assessed in key de velopment sectors and land-use change, and costs of action and non-GHG mitigation benefits.

Output 5.1.5: Report on GHG e mission projections and remova ls, wherever possible and applic able.

Output 5.2.1: Strengthening nati onal human and institutional ca pacities to establish a domestic MRV system of emissions and mitigation and means of imple mentation identified in coordina tion with similar initiatives
Output 5.2.2: Updated protocol (s) for defining baseline and MR V of GHG specific mitigation act ions.

Output 5.2.3: Capacity enhance d for assessing and quantifying mitigation actions at the state l evel as recommended by ICA of previous BURs.

Outcome 2.2. Information to facilit ate Clarity, Transparency, and Unde rstanding (ICTU) of NDC associate d with climate actions.

Output 2.2.3. Tools, templates, and training towards tracking progress of NDC with mitigation and adapta tion goals will be based on the dev elopments made under the 4NC an d 4BUR project under Output 5.1.1. Documentation of national climate change mitigation actions, policies and measure, including those with mitigation co-benefits resulting fro m adaptation actions and economi c diversification plans; 5.1.2. Impro ved future GHG emission scenario s for India using up-to-date inform ation as well as the progress towar ds NDC targets assessed. (b) Clim ate finance received with specific r eference to NDC targets that have been set conditional to the availabi lity of finance, technology and cap acity-building support; 5.1.3. Secto r wise progress assessments and mitigation scenarios to model pos sible trajectory of greenhouse gas emissions by key sectors (such as energy, waste and industrial proce sses) up to 2050 developed; 5.1.4. Mitigation potential for energy and land-use change, and costs of acti on and non-GHG mitigation benefit s; 5.1.5. Report on GHG emission p rojections and removals, wherever possible and applicable.

2.3.1. An IT-enabled system couple d with the mandated process of re porting information on standardise d templates. (under Outcome 2.3. State focal points submitting infor mation through NICS) to enable th e provision of information from the States.

The BTR1 project will further sup port tracking the progress of NDC s comparing current or projected and reference emissions, and info rmation that facilitates the under standing of the NDC target, scope and coverage of the progress will be tracked both on quantitative a nd qualitative basis. It will strengt hen India's capacities to generate the information related to the mo nitoring of the NDC progress, that has not been included in the natio nal reports submitted to the UNF CCC and create mechanisms to i nform it appropriately and contin uously. It will build on the knowle dge and capacity enhancement o btained from the 4NC and 4BUR p roject and CBIT project and will re sult in the following outputs:

Output 1.2.1. Information related to the monitoring of the NDC prog ress including description of NDC and institutional arrangements in place for NDC tracking in accorda nce with extant CMA decisions.

Output 1.2.2. Accounting approac h, indicators and progress made i n implementing and achieving the NDC reported.

Output 1.2.3. Information related to national circumstances relevan t to progress made in implementi ng and achieving the NDC.

Output 1.2.4. Description of the m itigation policies and measures, a ctions, and plans.

Output 1.2.5. Projections of the G HG emissions, impact of mitigati on policies and measures on futu re trends in GHG emissions.

3.1.2. A progress tracker for NDCs, covering inputs from each state and sector towards progress made on mitigation targets and adaptation goals.

CLIMATE CHANGE IMPACTS AND ADAPTATION

Outputs:

Output 3.1.1: Documented projections and results of impact assessments of climate change, based on multiple Climate Change Models (CCMs) for different sectors in India.

Output 3.1.3: Vulnerability profiles based on i) currently established vulnerability indicators at the district spatial scale, ii) vulnerability indices that are decomposable across agro-climatic zones, populations groups by income strata, gender, rural or urban location, and administrative location up to district or sub-district level, both to be undertaken for overall vulnerability, and for different sectors.

Output 3.1.4: Documented ranking of (climatic parameter wise) most vulnerable natural ecosystems and organisms, crops, and water resources at district level for India.

Output 3.1.6: Adaptation framework describing over-arching requirements and institutional mechanisms, including formulation of adaptation plans for five-year time periods, or as may be appropriate.

Output 3.2.1. Individual, Institutional and Systemic capacity strengthened for documenting clim

The CBIT Output 2.2.2 Peer-exchange programmes and co-learning activities among states to promote scalability and replication of initiatives in a cost-effective manner. will use 4NC and 4BUR outputs Output 3.1.3: Vulnerability profiles based on i) currently established vulnerability indicators at the district spatial scale, ii) vulnerability indices that are decomposable across agro-climatic zones, populations groups by income strata, gender, rural or urban location, and administrative location up to district or sub-district level, both to be undertaken for overall vulnerability, and for different sectors, and Output 3.1.4: Documented ranking of (climatic parameter wise) most vulnerable natural ecosystems and organisms, crops, and water resources at district level for India.

The CBIT Output 2.2.3. Tools, templates, and training towards tracking progress of NDC–will be based on the developments made under the 4NC and 4BUR project under the outputs: Output 3.2.1. Individual, Institutional and Systemic capacity strengthened for documenting climate scenarios (short, medium-, and long-term) based on Multiple Global climate models (GCM) / Regional Climate Models (RCMs) and climate change parameters at RCM grid level; Output 3.1.3: Vulnerability profiles based on i) currently established vulnerability indicators at the district spatial scale, ii) vulnerabi

Outcome 1.3. Information related to climate change impacts and adaptation under Article 7 of the Paris Agreement compiled and presented.

The BTR1 project will build on the knowledge and outputs obtained from the 4NC and 4BUR project and CBIT project related to climate impacts and adaptation measures at both national and state level. The assessment and improvement of the information obtained and the capacity developed under both projects will result in the following outputs:

Output 1.3.1. Climate change impacts on the most vulnerable sectors decomposed across agro-climatic zones, populations groups by income strata, gender, rural or urban location, and administrative location and areas assessed.

Output 1.3.2. Priority adaptation measures and policies, progress towards implementing adaptation at national and state level, and progress towards reaching adaptation goals of the NDC reported.

Output 1.3.3. Information on monitoring and evaluation of adaptation actions and processes and good practices, experiences and lessons learned.

Output 1.3.4. Information on loss and damage.

ate scenarios (short, medium-, and long-term) based on Multipl e Global climate models (GCM) / Regional Climate Models (RC Ms) and climate change param eters at RCM grid level.

c district spatial scale, ii) vulnerabi lity indices that are decomposable across agro-climatic zones, popula tions groups by income strata, gen der, rural or urban location, and ad ministrative location up to district or sub-district level, both to be und ertaken for overall vulnerability, an d for different sectors; **Output 3.1. 4:** Documented ranking of (climati c parameter wise) most vulnerable natural ecosystems and organism s, crops, and water resources at di strict level for India; **Output 3.1.6:** Adaptation framework describing over-arching requirements and inst itutional mechanisms, including fo rmulation of adaptation plans for fi ve-year time periods, or as may be appropriate.

SUPPORT NEEDED AND RECEIVED

Outputs:
Output 4.1.1: Report on the gap analysis and constraints pertain ing to (a) technological innovati on(s) and technology transfer, (b) financial assistance needed and received including scale, sc ope and speed of climate financ e (c) finance requirements for mitigation measures based on t he national and state climate ch ange action plans, and (d) finan ce requirements for adaptation.

Output 4.1.2: Completed techno logy needs assessment (TNA) f or different sectors.

Output 4.1.3: Documentation on the detailed information of key mitigation-adaptation technolog y needs, availability of those tec hnologies in the country, nation al R&D programs, implementati on & monitoring of activities, te chnology transfer needs, and fin ancial support received and nee ded along with limitations.

Outcome 2.4: Developing capacity-retention mechanisms.

Outcome 3.2: Enhanced capacity t o Mobilise climate finance.

The CBIT project outputs **2.4.1.** Est ablishing baseline of current capa city gaps against best practices an d design a strategy to address the se gaps and **2.4.2**. Ensuring each c apacity building element incorpora tes long term sustainability feature s in a gender-neutral manner and a t all the levels of governance will b e based on the results of the asses sment of gaps, needs and prioritie s for training important for stakeh olders' involvement in the preparat ion of national reports as well of t echnical, capacity, research, and fi nancial needs and constraints for t he implementation of SAPCC by th e states; the gap analysis and con straints pertaining to (a) technolog ical innovations and technology tra nsfer (b) financial assistance need

Outcome 1.4. Information on fina ncial, technology development an d transfer and capacity building s upport needed and received com piled and presented.

The BTR1 project will use the info rmation on gaps and needs asses sed for the 4NC-4BUR and provid ed as inputs to the CBIT project f or capacity building.

The BTR1 project will thus build o n and further improve the CBIT an d 4NC-4BUR outputs related to inf ormation on financial, technology development and capacity-buildin g support needed and received in line with the MPG requirements in cluding further assessment of the institutional arrangements and co untry-driven strategies relevant to support needed and received., wh ich will result in the following out puts:

Output 1.4.1. Information on finan

Output 7.1.1. Assessment of gaps, needs and priorities for education, training and public awareness important for stakeholders' involvement in the preparation of national reports, including the information on education and public awareness activities.

Output 7.1.4: Enhanced framework for implementation of State Action Plan on Climate Change (SAPCC) through assessment of various needs/constraints such as technical, capacity, research, and financial constraints.

ed and received including scale, scope and speed of climate finance (c) finance requirements for mitigation measures based on the national and state climate change action plans; (d) finance requirements for adaptation; TNA and mitigation-adaptation technology needs, availability of those technologies in the country, national R&D programs, implementation & monitoring of activities, technology transfer needs, and financial support needed along with limitations obtained in the 4NC and 4BUR project.

Gaps and barriers identified and assessed will provide inputs to the following CBIT project outputs as well: 3.2.1 Evaluation of support activities and capacity development of relevant institutions to mobilise climate finance; 3.2.2. Sectoral/sub-national assessment of financial resource needed to implement the NDCs.

cial, technology transfer and capacity-building support needed and received under Articles 9, 10 and 11 and for the implementation of Article 13 of the Paris Agreement.

Output 1.4.2. Information on technology needs assessment studies covering both mitigation and adaptation.

Output 1.4.3. Information on the system and processes used to identify, estimate, monitor and report on the support needed and received (including international and domestic support) for implementation of the NDC goals.

Output 1.4.4. Information on climate finance flows, including description of programmes and projects supported by different financial mechanisms.

INSTITUTIONAL AND CAPACITY STRENGTHENING FOR CONTINUOUS AND SUSTAINABLE REPORTING UNDER THE ETF

Outputs:

Output 1.2.1: Gender balanced institutional system established and capacity strengthened for conducting research/ systematic observation and collecting, collating and analysing data for preparation of BUR4 and 4NC.

Output 7.1.3: Strengthened institutional and policy support framework for undertaking climate change actions and capacity building at various levels including publications for wider dissemination and discussion at national and state levels.

The institutional and policy framework of climate action at bot

CBIT Outcome 1.1: The nodal ministry (MoEFCC) would be better equipped to lead, plan, coordinate, implement, monitor and evaluate policies, strategies, and programmes to enhance transparency, including communications with States and expert agencies in an effective manner through the implementation of various institutional arrangements and their formalisation as appropriate.

CBIT Outcome 2.1: Ability to report GHG emission inventories as per Intergovernmental Panel on Climate Change (IPCC) 2006 guidelines (or latest applicable).

NIMS will be integrated in the NICS

Institutional capacities and data management system at national level will be developed under the CBIT project and tested for the first time under the 4NC/BUR4 project as part of the preparation of the BUR4. It is thus assumed that BTR project will be able to use the developed capacities and IT data management system for the elaboration of the BTR on a continuous basis.

In addition, the BTR project will ensure the opinions of different stakeholders, particularly research organizations and Government Ministries, are considered throughout the process, bringing them together during meetings and workshops to enhance transparency and en

h national and subnational level will be described in both the 4B UR and the 4NC. This output wil l describe the strengthening of t he institutional and policy supp ort framework for climate chan ge actions in India. It will additio nally improve the capacity buildi ng at various levels through the coordination with the CBIT proje ct.

Output 2.1.9: Continued strengt hening of sectoral and network of supporting research institutio ns to allow continued collection of GHG data.

Under the Third National Comm unication project, a platform to collect data from industries, esp ecially medium-small and micro enterprises, has been develope d for the IPPU sector. A pilot pla tform has already been launche d and is active. The 4NC and BU R4 project will build on the exist ing platform for widening the co verage and bringing all sectors under the ambit of NIMS. This o utput will therefore result in the strengthening of the NIMS throu gh sectoral institutions and net work of supporting research ins titutions.

NIMS will be integrated in the NICS which will cover not only the GHG i nventory but also the information and institutions at national and su bnational level involved in mitigati on and adaptation actions and the NDC and climate finance tracking.

The inter-institutional work plan an d architecture developed for condu cting the GHG inventories will serv e as the basis to identify the mand ates and develop the standard ope rating procedures (who does what, when and how) for the sectoral foc al points involved in the GHG inven tory elaboration under the followin g CBIT outputs: 1.1.1. Strengthene d national mandate and strategies to collect, compile, verify, and repo rt relevant information adhering to the principles of TACCC (Transpar ency, Accuracy, Completeness, Co mparability, Consistency) and 1.1. 2. Developing Standard Operating Procedures (SOPs) and assigning t rained focal point among institutio ns covering each sector and state/ union territory (UT).

The institutions of NIMS will use th e GHG inventory elaborated to test the GHG inventory information mo dule of NICS by testing and validati ng the pilot developments under th e following CBIT outputs: 1.2.1. Eff icient recordkeeping of activity d ata, socio-economic indicators, em ission factors, methodology and a ssumptions, etc; 1.2.2 Archiving sy stems for future referencing and p erforming recalculations and 1.2.3 Aggregation and exchange of relev ant information through NICS.

CBIT Outcome 2.3: State focal poi nts submitting information throug h NICS

The CBIT project output 2.3.1. An I

s to enhance transparency and en sure alignment through the follow ing outputs:

Output 2.1.1. Project meetings an d Stakeholder Consultation works hops organized.

T-enabled system coupled with the mandated process of reporting information on standardised templates will need to organize training workshops for senior and working level of State government officials; identify a nodal academic/ research institution in States in consultation with state governments to provide technical support to states on a regular basis while developing the capacity of the identified institutes on the subject as well as encouraging states to develop centre of excellence on the subject to provide them with long-term support; devise simple (with direct questions) reporting formats for states to report with instructions to fill the templates (which could be filled up by the officials without assistance of consultants and instruction sheet will help in informing future officials especially in the context when government officials are transferred at a frequent interval); work out procedures and processes for states to report and provide space (secured login) to upload information/ stories on national portal. This output will thus need the template design used in the IT system and the training of focal points to submit the states contributions to the NDC. They should also be able to monitor and asses s the implementation of their respective SAPCC and to update their action plans accordingly. This institutional and policy framework strengthened with the CBIT project will be described in the 4NC and 4BUR.

PUBLIC AWARENESS AND KNOWLEDGE MANAGEMENT

Output 6.1.2: Publication and dissemination of BUR4, development and dissemination of key policy papers relevant for decision making, technical reports and b

CBIT Outcome 3.1: Dissemination of relevant information on GHG inventories and NDC progress through NCIS.

Awareness and a National Climate Information System (NCIS) for dissemination of information will be developed under the CBIT project and tested under the 4NC/BU

rief summaries of the key clima te changes issues and findings for various stakeholders such a s general public, civil society or ganisations and private sector.

The CBIT project will provide the o utputs 3.1.1. Integrating NICS with National Inventory Management S ystem (NIMS) and other online tra cking tools to create a centralised National Climate Information Syst em (NCIS) for disseminating infor mation in the public domain and 3. 1.2. Progress tracker for NDCs, co vering inputs from each state and sector towards progress made on mitigation targets and adaptation goals.

It will also contain the 4NC, the 4B UR, the BTR1 and the technical rep orts used for their preparation suc h as the GHG inventories, V&A ass essments and NDC tracking at the sectoral level, brief summaries of k ey policy issues relevant for decisi on making, and brief summaries of the key climate changes issues an d findings at the district level.

R4 project and BTR project. It is t hus assumed that BTR project wil l be able to use the NCIS to disse minate the outputs.

In addition, the BTR project will en sure that all the outputs of the pr oject are disseminated targeting t he relevant stakeholders dependi ng on the different outcomes and including the public in general. T he project will apply periodic asse ssments, monitoring and evaluati on approaches to identify, analyz e and share lessons learned, whic h will result in the following outpu ts:

Output 2.1.2. Developed and diss eminated technical reports, such as the GHG inventories, V&A adap tation assessments at the sector al level, brief summaries of key p olicy issues relevant for decision making, and brief summaries of t he key climate change issues and findings.

Output 2.1.3. BTR1 compiled, app roved, and prepared by December 2024 at the latest.

Output 2.2.1 Project regularly mo nitored, inception workshop orga nized, lessons learned compiled a nd disseminated.

At the national level though there are limited initiatives on enhanced transparency, the project will be implemented in coordination with several ongoing GEF projects, already approved or in the process of approval that would provide valuable information/outputs to the CBIT process in terms of climate change actions, more specifically the upcoming 4NC-4BUR and first BTR. The project will seek linkages to the extensive national climate change portfolio including the GCF projects in the region. The Project will complement the NDC implementation process as well as state level efforts of preparation and implementation of climate change mitigation and adaptation programmes (such as SAPCCs). The project will also build on outcomes of the study completed under the Third National Communication on MRV.

A few climate change initiatives are currently underway by various donor agencies in partnership with the national and state governments. Specifically, ICAT, GIZ, SDC, DFID, EU and UNDP are supporting national and state governments to address national climate change priorities.

ICAT is supporting the implementation of India's domestic MRV/transparency system in the Buildings Sector, Transport Sector and Renewable Energy Sector. Phase 1 of the ICAT project aimed to undertake an assessment of the existing monitoring and reporting systems, assess the gaps, develop appropriate options and approaches for MRV of mitigation policies and actions in the context of the NDC. TERI in partnership with UNEP DTU Partnership (UDP) undertook a research study with an objective to undertake an assessment of the existing monitoring and reporting systems, assess the gaps, develop appropriate options and approaches for MRV of mitigation policies and actions, specifically aimed at strengthening reporting on NDCs, as well as institutional arrangements for domestic MRV system. The following sectoral MRV frameworks were developed: MRV Framework for Passenger Road Transport Policies and Actions, MRV Framework for Utility-Scale Solar Policies and Actions and MRV Framework for Energy Conservation Building Code for Large Commercial Buildings.

Donors like GIZ, SDC and DFID are working with states for long-term implementation assistance. For instance, SDC and UNDP are providing support to integrate climate change actions in sub-national planning and to strengthen capacities of state level departments and relevant institutions to plan and undertake specific interventions in climate sensitive sectors impacting large sections of vulnerable communities in these states.

Outcome 1.1. will develop the MRV system of India and should include the MRV frameworks developed by ICAT as well as implement coordination mechanisms with the states building on the projects developed on climate change.

USA and Canada have recently been providing support to improve the GHG inventory. The proposed project will complement this support by providing long-term assistance for the implementation of plans and investing in knowledge and cross-learning with other donors active in the region.

Output 3.3.1. will support knowledge management to capture, document, and share the broad variety of data, information, and knowledge generated by project activities. It will also enable India to contribute and be an active partner of the CBIT Global Coordination Platform, by exchanging information with other countries and the sharing of lessons learned and experiences through the global platform, which will ensure that the CBIT project coordinates with other national, regional, and global transparency initiatives. Therefore, the CBIT Project Management Unit staff (PMU) will participate in regional peer-to-peer exchanges and continuously identify relevant aspects of the work of the CBIT project and sharing it on the CBIT Global Coordination Platform. Also, inversely, this activity includes identifying the relevant lessons learnt from the information available on the platform and making it applicable for India.

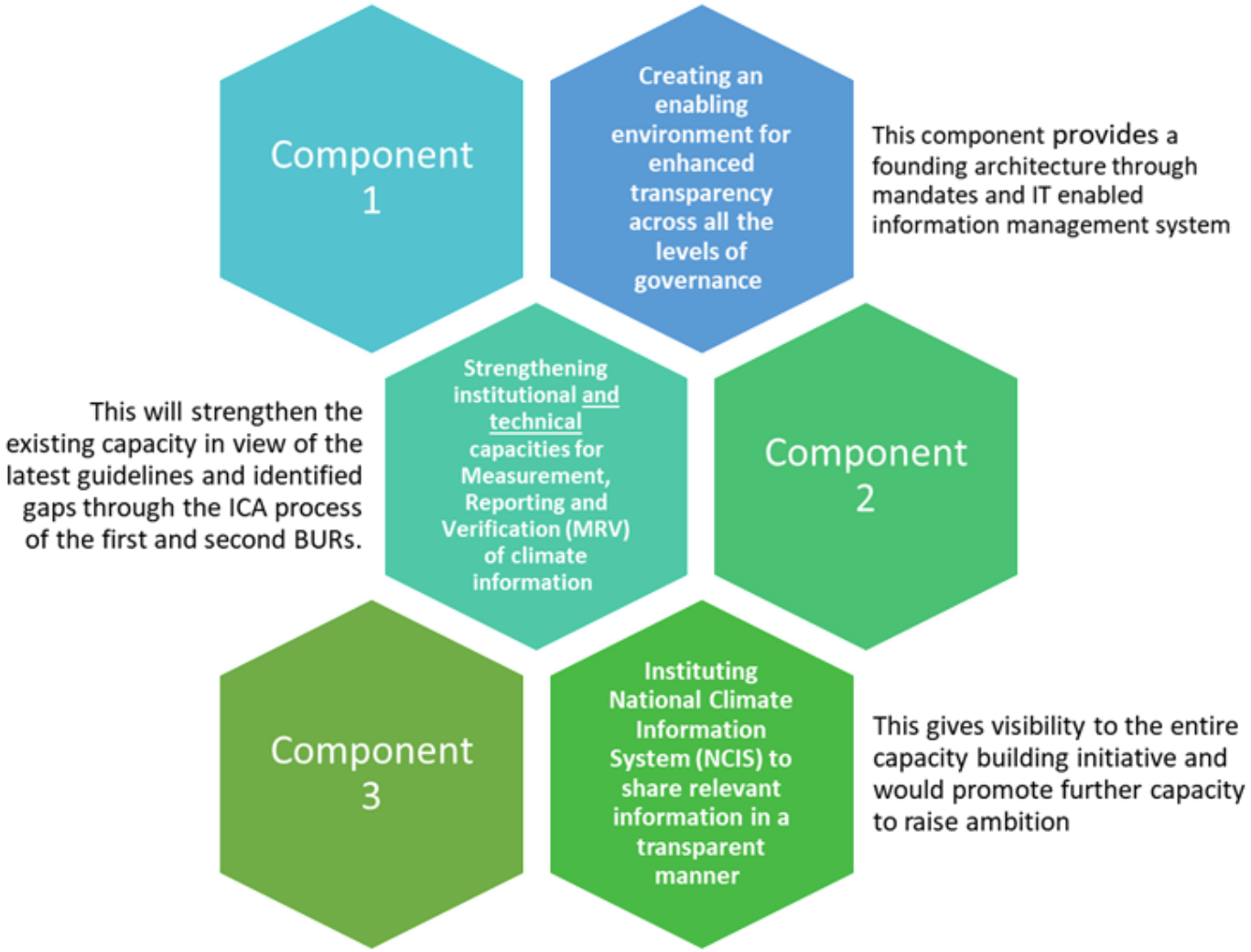
1.a.3. The proposed alternative scenario with a brief description of expected outcomes and components of the project

This project is guided by the principles of Article 13 of the Paris agreement and subsequent decision adopted at COP24 (Katowice) on enhanced transparency. It aims at strengthening existing institutional capacity and enabling them to monitor, verify, and report relevant information pertaining to climate reporting, viz: GHG emissions; tracking progress with climate actions under NDCs; capacity-needs, gaps, constraints; and corresponding support received and required. Hence, it identifies an efficient and cost-effective way of optimising the present and ongoing process. In addition, it requires building capacity around technical expertise, data management, analytics and modelling, etc. Nevertheless, securing adequate mandates to facilitate exchange of information is extremely crucial and one of the prime outputs from this project.

With CBIT support, India will work towards strengthening and expanding its current technical capacities regarding methodologies and tools to enhance transparency, as outlined in Article 13 of the Paris Agreement. India will strive to develop a consolidated and integrated MRV system, which will help in improving its ability to effectively define and implement climate change related policies and measures while incorporating a gender-sensitive approach.

Additionally, the MRV system is expected to enable more accurate information, monitoring and assessment of the instruments and actions that the country selects to face climate change. The country is hopeful that the future MRV system, web-based and/or using other approaches, will assist India, as well as improve its institutional capacities, awareness, and knowledge of different stakeholders and general population in a way that will allow it to achieve these targets. The CBIT project will also integrate states and UTs level of governance into the national climate action process more effectively, as well as assist in climate change action plans preparation, implementation and tracking. This integration will eventually lead to planning and decision-making based on real needs and results, as well as lead towards a participatory approach.

Main components of India's CBIT project



To build and strengthen capacities in national and regional institutions to enhance transparency, the project is structured in three components, which have related outcomes to reach the objectives of the CBIT project:

1. Creating an enabling environment for enhanced transparency across all the levels of governance.
2. Strengthening institutional and technical capacities for Measurement, Reporting and Verification (MRV) of climate information.
3. Instituting National Climate Information System (NCIS) to share relevant information in a transparent manner.

Capacity building activities towards enhanced transparency largely complements the ongoing efforts of India towards establishing a robust, timely and transparent reporting system. The first component provides a founding architecture supported by an IT enabled information management system. In the absence of such activities, frequency of reporting will be severely impacted. The second component of CBIT will strengthen existing capacity in view of latest guidelines and gaps identified during the ICA process of the first, second and third BURs. This directly will improve the transparency, accuracy, consistency, completeness and comparability of the GHG inventory and enable tracking of mitigation targets and adaptation goals in a quantified and qualified manner. Experts and peer-learning arrangements will ensure sustained capacity, which is presently a big challenge due to paucity of funds and resources. Finally, the third component of the project gives visibility to the entire capacity-building initiative and would promote further capacity to raise ambition.

All three project components are focused on developing tools, training and assistance for meeting the provisions stipulated in Article 13 of the Paris Agreement. Components will contribute to the design and establishment of a domestic MRV system for climate change mitigation and adaptation measures, financing, capacity building and transfer of technologies.

All components will build upon the MRV related achievements and outputs of completed and ongoing funded projects and will consider capacity building needs identified by India in the summary report of the technical analysis of the second BUR. The web-based platform will focus on building a comprehensive system for information exchange, storing, reporting, evaluation and verification of climate change information, as well as providing inputs into short, medium and long-term planning and decision making.

The proposed framework acknowledges the capacity building needs identified during the International Consultation and Analysis (ICA) process for the first BUR as reiterated in the second BUR and third as well. It duly considers the needs and objectives identified under the third BUR and NC reporting. As it involves states and sectoral representatives, it is expected to be robust and comprehensive in nature to address emerging needs under the Convention.

CBIT activities will provide capacity building support to fulfil the reporting obligations under the United Nations Framework Convention on Climate Change (UNFCCC) and to successfully implement the Paris Agreement and its key pillars of transparency and accountability. This will be achieved through the implementation of trainings and development and use of tools but not through the elaboration of the reports themselves.

The overall project goal is for India to be prepared for appropriate implementation of the enhanced transparency framework, fulfilling its reporting commitments to the UNFCCC in an efficient way.

The specific project objectives are:

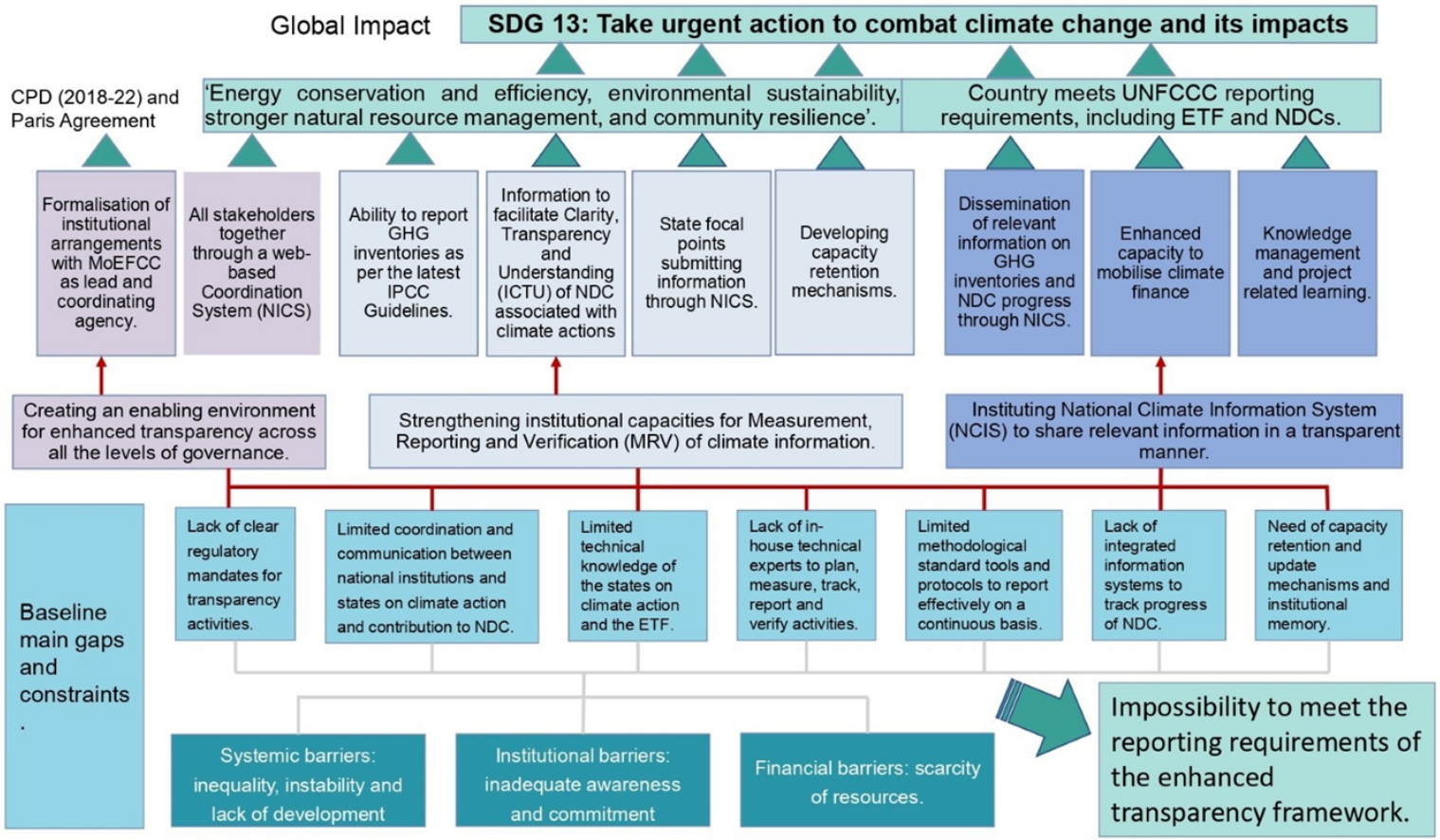
- Improving institutional arrangements through implementation of appropriate legislative and regulatory frameworks,
- Improving the clarity, understanding, transparency, accuracy, completeness, consistency and international comparability of the information provided with the use of standard operational procedures, templates and methodological tools and indicators,
- Improving the National GHG Inventories through capacity building activities and standardised procedures and tools,
- Improving institutional and technical capacities for tracking the NDCs,

- Improving institutional and technical capacities at central and local levels for transparency in mitigation in relevant sectors, including locally appropriate activity factors and climbing the Tier ladder,
- Improving institutional and technical capacities at central and local levels for transparency in adaptation in relevant sectors,
- Improving the capacities to monitor and assess support needed and support received,
- Improving institutional memory, stakeholder's engagement and the participatory process, information exchange and storage, including through appropriate IT infrastructure,
- Ensuring that good practices and lessons learned are communicated nationally and internationally.

This will be achieved through three components to create an enabling environment, enhance institutional and technical capabilities and design a National Climate Information System (NCIS) to store and share relevant information in a transparent manner.

Detailed Theory of Change of the project is presented below:

Theory of change of India's CBIT project



CBIT project will be achieved through the following components:

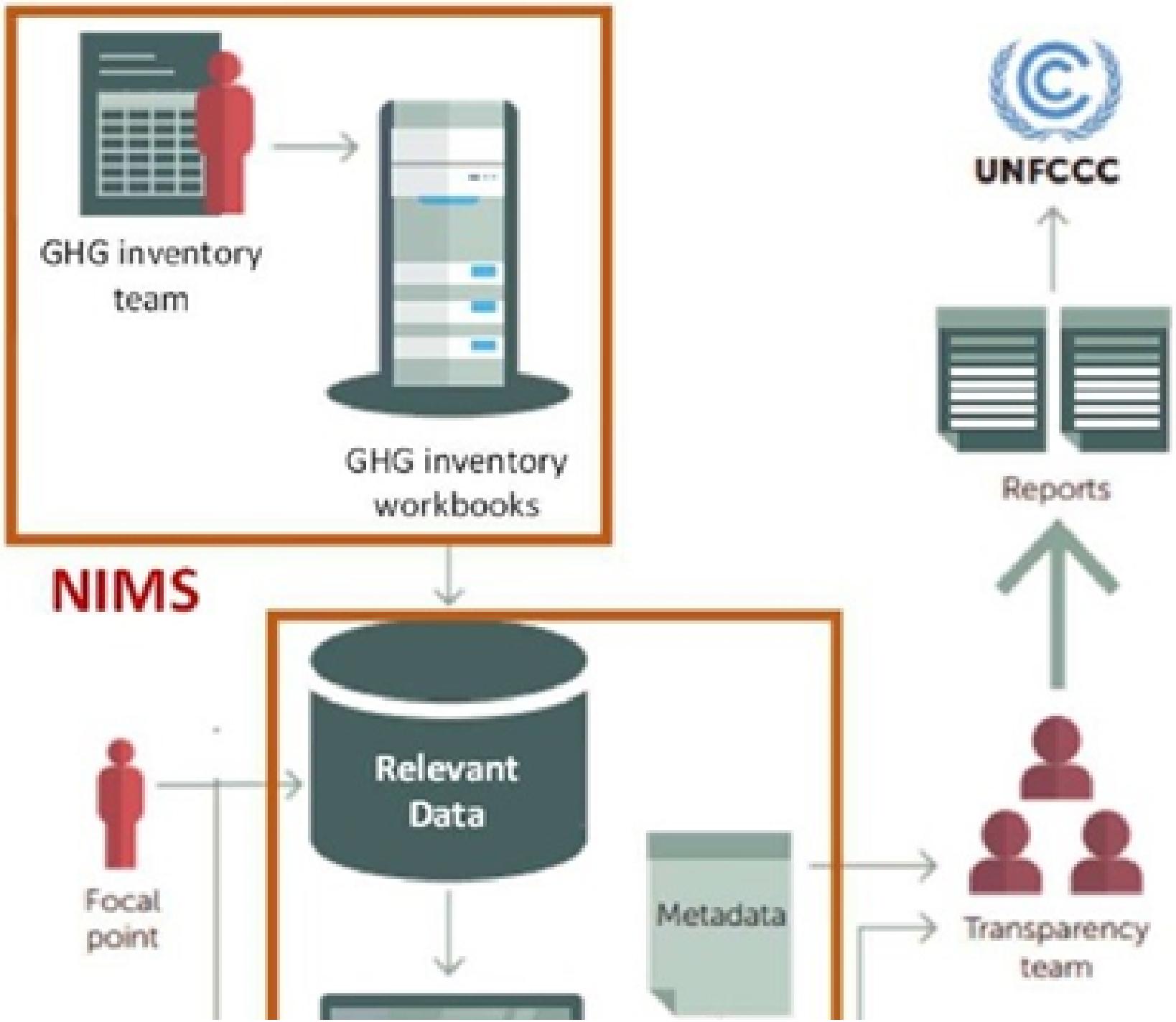
Component 1: Creating an enabling environment for enhanced transparency across all the levels of governance

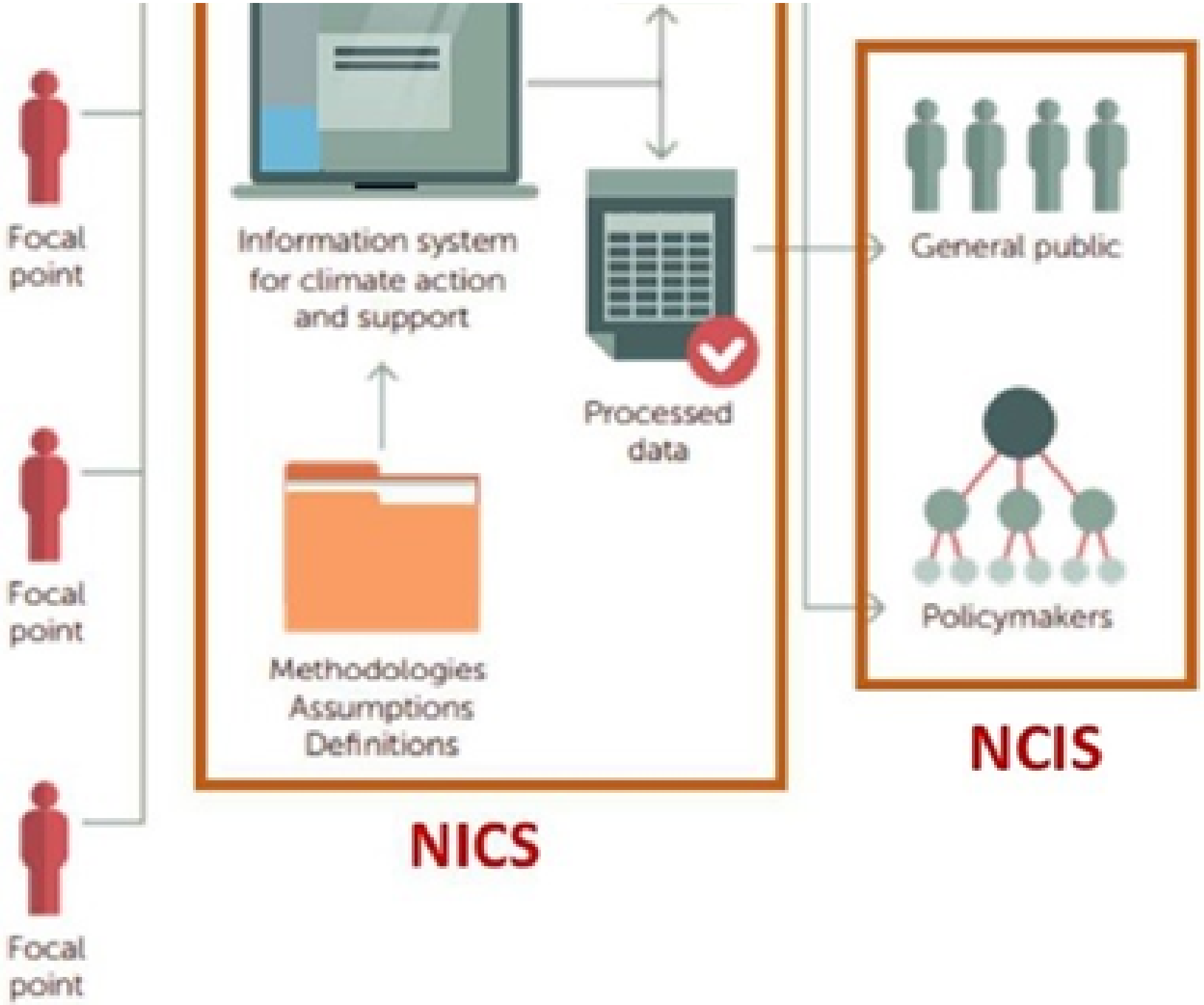
This component establishes a strong foundation for the enhanced transparency arrangement in India by supplementing the enabling environment across levels of governance. It aims to introduce a web-based **National Institutional Coordination System (NICS)** which would assimilate the existing and emerging processes through an IT-enabled system.

This component will formalise mandates and roles which will determine the users of NICS and will develop standard operating procedures with definitions, methodologies, data templates and reporting formats which will define the content of NICS. The software of NICS will then be developed according to the desired functionalities, available resources and operating conditions and will integrate the current institutional arrangements and estimates/workbooks of the national GHG inventory (NIMS) but will be extended to cover mitigation actions and adaptation measures of the NDC as well as climate finance information. NICS will allow multiple users with different roles and types of permissions to insert data into the system, to analyse the data using different well-established parameters and to extract the data for different customized reports. NICS will ensure an open-source data, data integrity, automatic quality checks, data consistency, data accessibility and proper security and storage, while avoiding data redundancy and preventing and signalling accidental data errors. The standard operating procedures will enable the standardization of data submissions, automated sense checks on data entry and the cross-checking of different datasets, contributing to better data quality and data integrity. The core functions of NICS will be to collect, store, share, process and present data on GHG inventory, NDC progress and climate finance. Private and public sector stakeholders and academia will insert the raw relevant primary data on their

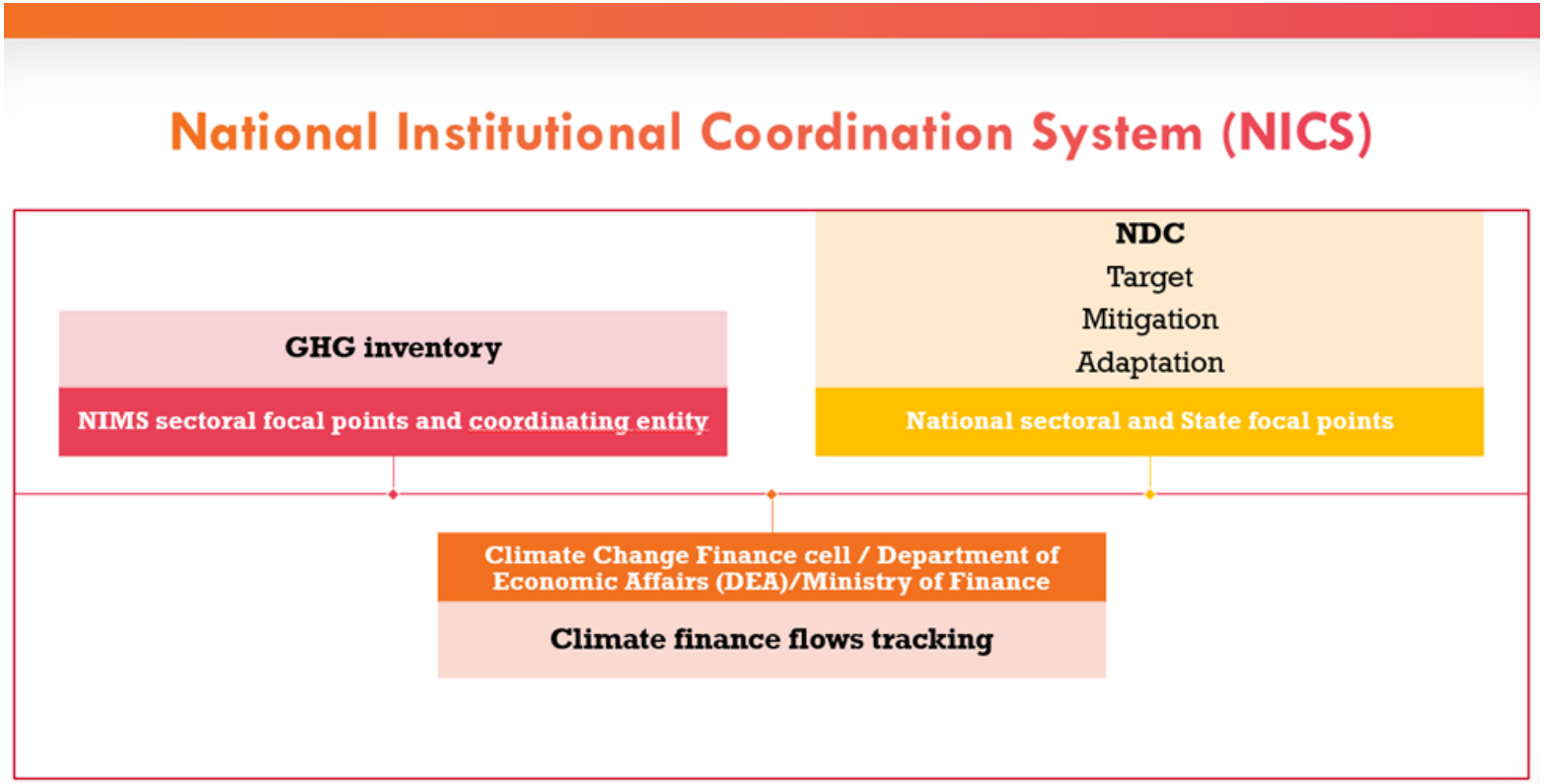
respective sectors and States (for the appropriate sectors) into NICS which will be under the control of the MoEFCC for this role. NICS will include the methodologies to process the raw data and the assumptions, data definitions and software that processes raw data (including automated quality control operations). Data will thus be processed, aggregated at the national level and provide information in the form of customized reports to the national government team responsible for preparing national reports that are submitted to the UNFCCC. NICS will be linked to the NCIS for use by both national and states public actors responsible for monitoring and updating their climate action plans as well as to the general public which wants to know about the country's efforts on climate action.

The relationship between the NIMS, NICS and NCIS is illustrated in the figure below:


GHG inventory team
GHG inventory workbooks
UNFCCC
Reports
NIMS
Relevant Data
Focal point
Metadata
Transparency team


Focal point
Focal point
Focal point
Information system for climate action and support
Processed data
Methodologies
Assumptions
Definitions
NICS
General public
Policymakers
NCIS

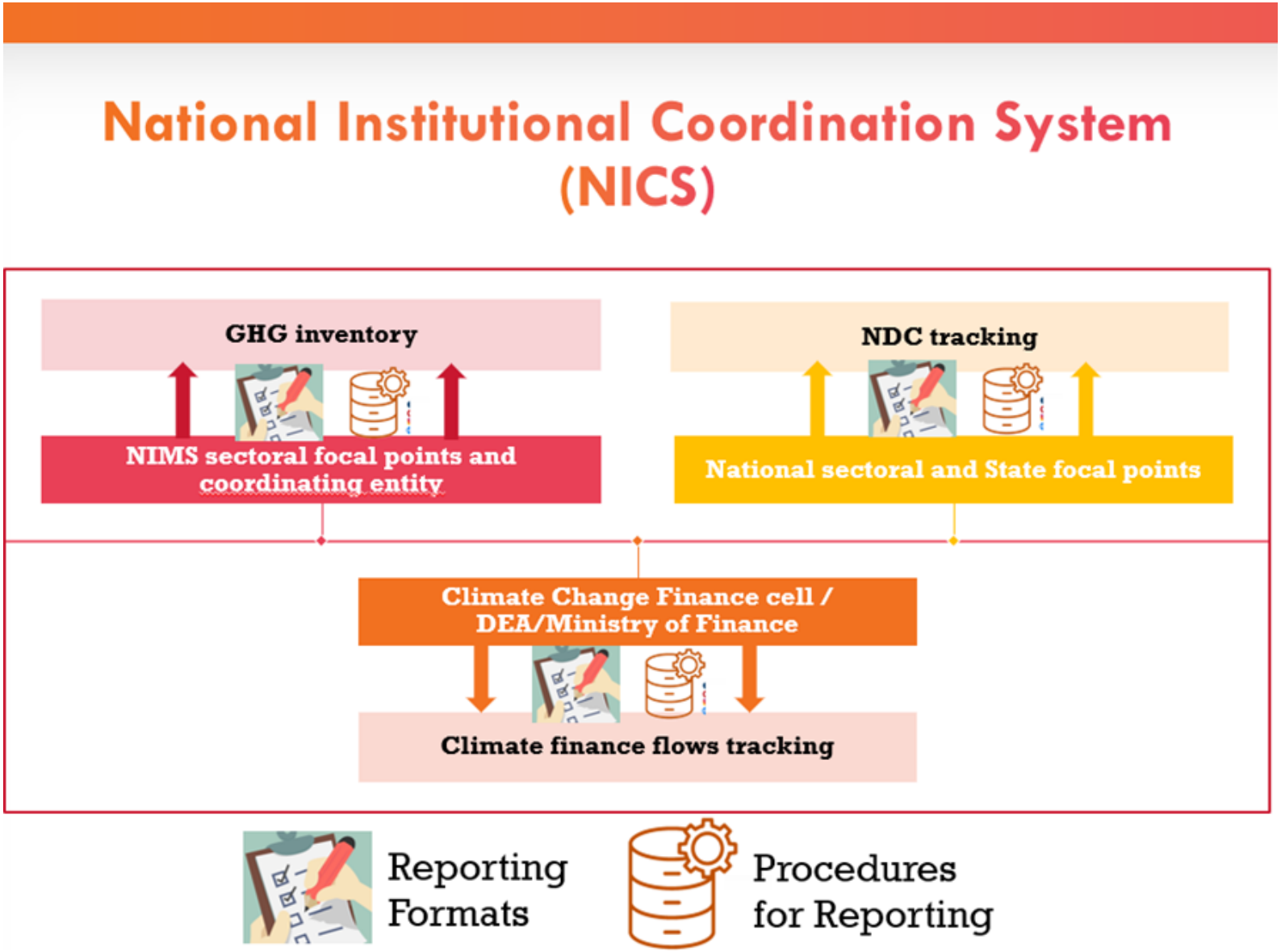
This component will thus result in development of an e-tool for information exchange and for reporting of sectoral institutions and states/UTs (as relevant) on activities relevant for achievement of the NDC, the sectoral focal points and the coordinating entity of the GHG inventory which currently represent the National Inventory Management System (NIMS) on the GHG inventory and the Climate Change Finance cell of the Department of Economic Affairs (DEA) of the Ministry of Finance on climate finance flows. This tool will be incorporated into the overall comprehensive national MRV system for improved transparency. This tool will be incorporated into the overall comprehensive national MRV system for improved transparency. Particular attention will be dedicated to the states as they have not been previously included either in planning or in monitoring of implementation of climate change mitigation and adaptation measures and activities. Their participation in planning of measures and monitoring their contribution and implementation, would result in a significant contribution to the overall national mitigation and adaptation targets.



MoEFCC might involve one of the reputed institutes in India to host the e-tool that will be developed.

This tool will also integrate existing MRV systems for GHG inventory and mitigation projects and will consolidate them in a national integrated one. For instance – GHG inventory inputs through NIMS; policy and programme level MRVs to register their impact, etc. In addition, it will bind together all the reporting nodes (at the state and the centre) to identify the aggregated impact of NDC measures at the sectoral, state and the economy level. The existing climate reporting process shows that India has a wide network of institutions and experts involved. A system to develop coordination among them using standard templates, tools and training has already been put in place in the period of the submission of the First and Second National Communication, as well as the First, Second and Third Biennial Update Reports. This may be strengthened keeping in view though that the differential status of development in different

sectors will continue, and that will impact the process of data collection for reporting GHG inventories. The widespread presence of the informal sector in all the GHG inventory sectors is also a considerable challenge that can be overcome only with time. In addition to NICS, this component also intends to strengthen the process of data management (compilation, treatment, verification, validation and reporting) through the development of standard operating procedures (SOPs) and guidance documents to data providers across state and sectoral nodal agencies. This shall be achieved through the help of experts nominated by MoEFCC and who are well trained in UNFCCC process who will become the trainers of trainees and develop the appropriate templates and procedures for reporting the information through NICS. These templates and procedures shall pay specific attention to meeting the challenges of reporting from the informal sector keeping in view their needs on the basis of equity and the provision of means of implementation for enhancing their reporting.



The key outcomes to be delivered under this component are a web based well-coordinated and standardised process of reporting (NICS), the formalisation of institutional arrangements and the training of all stakeholders involved about operational procedures for each participant under the enhanced transparency framework and in particular for the lead agencies and the designated focal points of NICS.

Outcome 1.1: The nodal ministry (MoEFCC) would be better equipped to lead, plan, coordinate, implement, monitor and evaluate policies, strategies, and programmes to enhance transparency, including communications with States and expert agencies in an effective manner through the implementation of various institutional arrangements and their formalisation as appropriate.

One of the cross-cutting outcomes from this component is improved capacity of MoEFCC to lead, plan, coordinate, implement and evaluate policies, strategies and programmes towards transparency. MoEFCC will find greater control over the process and mandates across States and sectors to establish transparency, accuracy, completeness, comparability, and consistency of the reported information.

Output 1.1.1 Strengthened national mandate and strategies to collect, compile, verify, and report relevant information adhering to the principles of TACCC (Transparency, Accuracy, Completeness, Comparability, Consistency)

Under output 1.1.1 MoEFCC will work on strengthening necessary mandates to facilitate periodic and regular sharing of information between data providers and the assigned lead agencies.

Lead agencies are the sectoral and State focal points who will be designated according to current regulatory framework, roles and responsibilities. They will coordinate their corresponding activities and will be involved in NICS. Data providers are the holders of activity data relevant for GHG inventory compilation and institutions/agencies involved in implementation and monitoring of mitigation and adaptation policies and measures at both national and subnational levels. They will be designated and their participation in transparency activities formalized under output 1.1.1.

Capacity building is an ongoing requirement of India due to the evolving nature of climate reporting. The project may consider establishing a formal permanent platform, comprising of a network structure with specific roles and responsibilities. The project will strengthen the national agencies to generate, collect, treat, compile, verify, validate and report desired information. This needs to be undertaken for establishing appropriate systems to streamline information exchange. Institutional arrangements will thus be enhanced and formalised. Hence, this output will naturally complement the rest of the activities planned.

Proposed activities

- Analysis of the existing regulatory framework, competences, staffing and budgets as they relate to climate MRV of the key entities involved in the MRV system, including all entities identified in the stakeholder engagement plan of the CBIT project. This analysis will aim at defining detailed roles and responsibilities of all entities involved/to be involved in the national MRV system based on their current competences.
- Mapping of key data providers and proposals on lead agencies at sectoral and states level for GHG inventory preparation, NDC policies and measures reporting and monitoring and financial support tracking.
- Develop case studies of successful implementation of climate change MRV systems by similar countries. These case studies shall identify the roles and responsibilities of national stakeholders involved in the MRV and the regulatory framework in place to enable the functioning of the MRV system as well as best practices in MRV systems.

- Based on the case studies and the analysis of competences, develop a proposal for an enhanced institutional architecture for a MRV with MoEFCC as the coordinator, which will need to respond to the information requirements of the enhanced transparency framework (GHG emission inventories, mitigation, support and NDC tracking). The institutional architecture shall clearly define the mandates with the specific roles and responsibilities of each entity involved in the MRV system.
- Develop a roadmap for the implementation of the enhanced institutional architecture, if appropriate.
- Formalise the mandates of the coordinator and dedicated focal points for each State and sectoral activities as well as the strategy through the appropriate regulatory frameworks.

Output 1.1.2. Developing Standard Operating Procedures[10] (SOPs) and assigning trained focal point among institutions covering each sector and state/union territory (UT).

Output 1.1.2 brings another cross-cutting structured reform to the proposed transparency framework by identifying and recognising dedicated focal point(s) for each state and sectoral activities. These focal points will be represented by key institutions responsible for collecting or producing information in their respective domains. These focal points will also be responsible to ensure the participatory approach when needed (for instance, by undertaking consultation and validation events involving all relevant stakeholders including civil society, academia, etc). To streamline the entire process, development and training on standard operating procedures (SOPs) will be provided to the lead representation from each focal point. The SOPs will adhere to the best practices prescribed by the UNFCCC. SOPs will provide instructions to the lead agencies (sectoral and states focal points) on how to compile, check, treat and report the information in NICS. This output will be a result of proactive participation of India in such process, where a set of experts (in a gender balanced manner) finds nomination from the country focal point; each gets trained in UNFCCC processes and thereupon mentor the lead agencies, state focal points, sectoral ministries, etc. (refer output 2.2.1 for more details).

Proposed activities

- Prepare a detailed baseline on data, data collection processes and gaps for data provision on GHG inventory, mitigation and adaptation actions as well as on support received and needed covering all key sectors and states.
- Analyse the existent procedures and data available/needed in each data provider database system.
- Develop standard operational procedures for data sharing and management (compilation, treatment, validation, verification, archiving and reporting) that allow a timely preparation of the GHG inventory and assessments for NDC tracking, support needed and support received.

Outcome 1.2: Bringing all stakeholders together through a web-based National Institutional Coordination System (NICS) to enhance efficiency and transparency with climate reporting

Recommendations from COP 24 held in Katowice through the decision 18/CMA.1 on modalities, procedures, and guidelines (MPGs) for the transparency framework for action and support clearly indicate a stringent process of reporting on GHG emissions, climate action and support. India plans to cultivate enhanced capacities through leveraging existing institutional strength and IT-enabled systems. This outcome is a web-based NICS which largely consolidates and scales-up the existing systems into a well-coordinated and standardised process of reporting. This involves all key stakeholders illustrated in Figure 7, each having a specific role. MoEFCC plays a principle role in administering the entire coordination process and bringing suitable mandates to state agencies and sectoral data providers. Harmonizing the respective Government of India (GoI) and State scheme/ programs MRV system from climate change perspective (with formats, tools, self-instruction guidelines for filling formats etc) and train personal will be a pre-requisite for the successful implementation of this outcome.

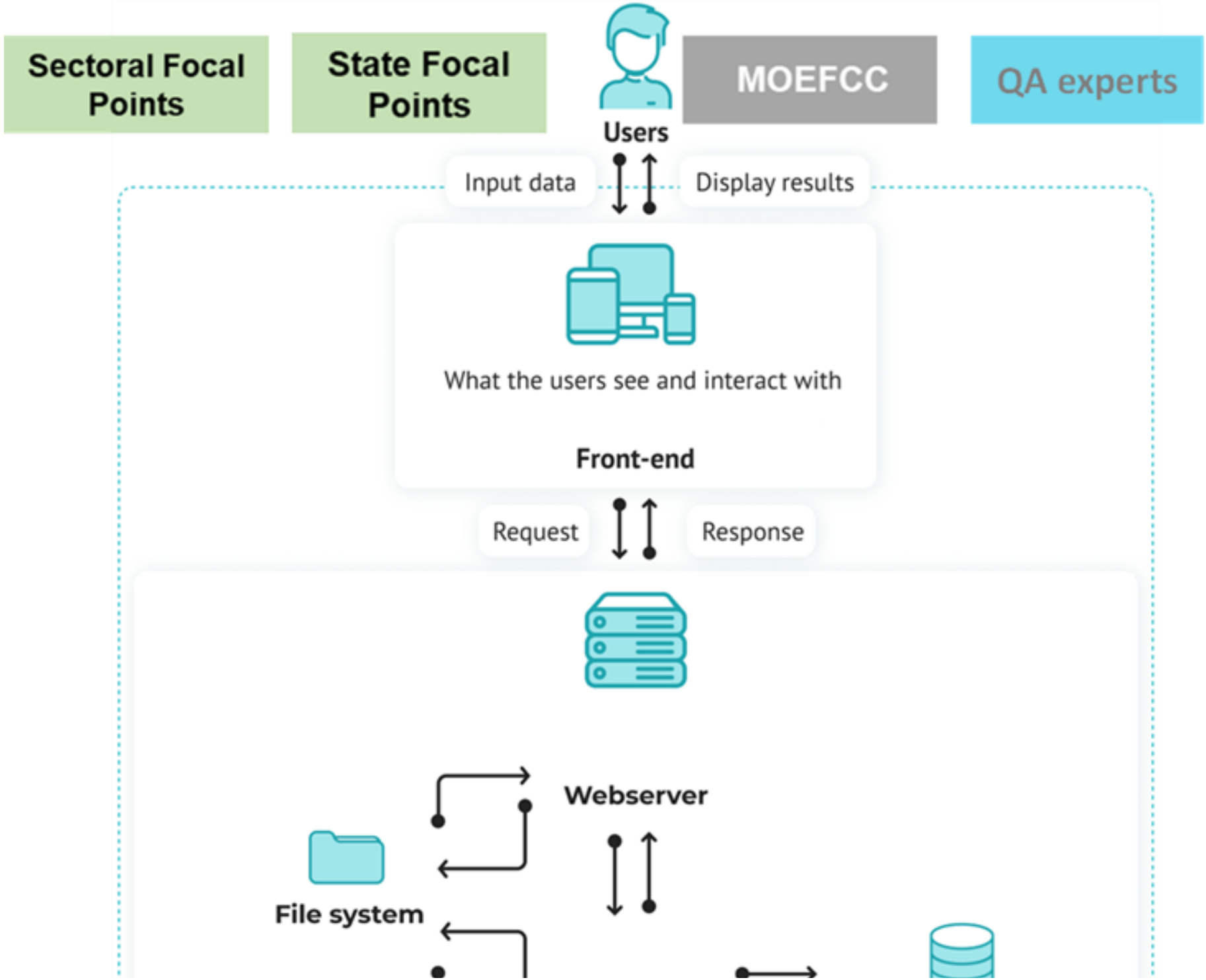
Lead agencies will bring an expert team, each having a sectoral command to bring meaningful information out of raw information. Each sector and state department will nominate a focal point who will assume the responsibility of getting trained in the reporting process, which shall be further imparted to state and sectoral functionaries. This will further expand the cadre of trained experts at the grassroots level.

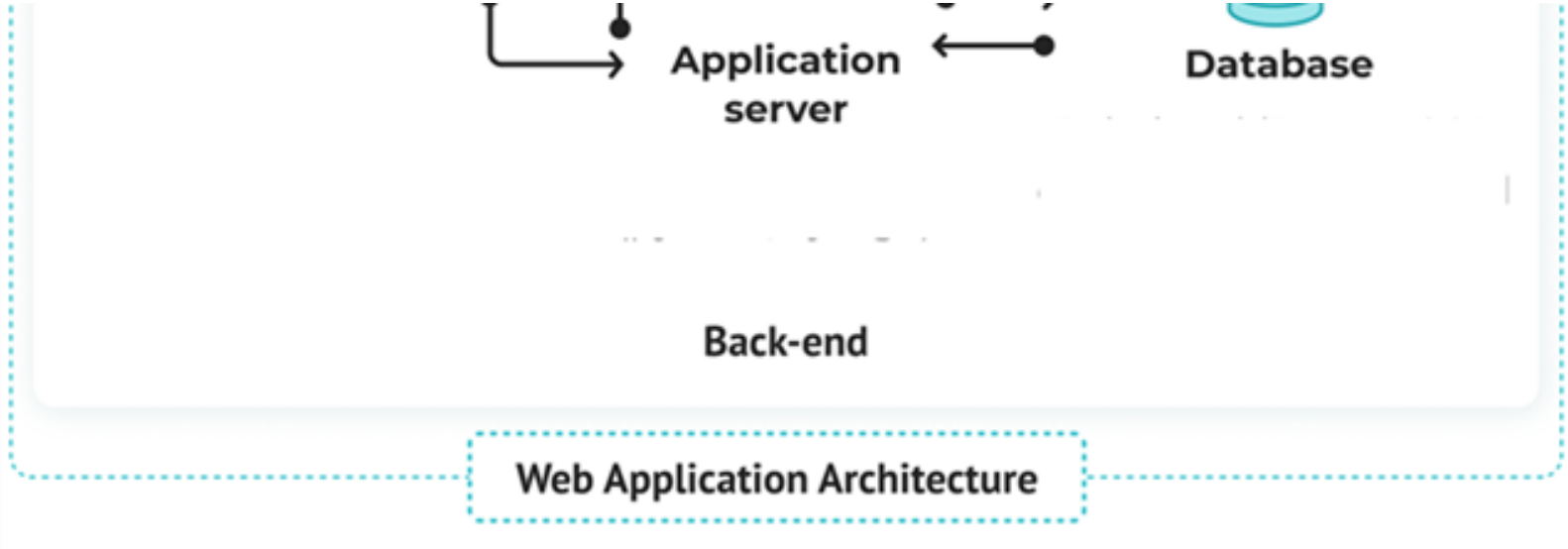
Advanced training programmes (at all levels) will ensure a gender-ratio to assure equal participation of women in both technical activities and the decision-making process. Data providers (sectoral and state level) will follow the prescribed reporting process and submit their information to the respective focal points within the IT system and then the focal points to the coordinating lead agency.

NICS will provide a login-based closed system of registering data. The design and structure will integrate a National Inventory Management System (NIMS) to assimilate GHG inventory reporting without duplicating efforts as well as with individual/sectoral NDC related adaptation and mitigation projects, policies and programmes MRVs. Such a structure will offer a bottom-up aggregation of information on a standardised template, which will allow to collect and frame a trend over time.

This outcome will be NICS with all IT components as outputs such as the front office, the back office and the consultation interfaces as needed.

The front-end is what users (sectoral and states focal points) see and interact with (user interface). The back-end is part of the application that is hidden from the user but is responsible for data processing, storing the data, and mathematical operations as illustrated in the figure below.


Sectoral Focal Points
State Focal Points
Users
MOEFCC
QA experts
Input data
Display results
What the users see and interact with
Front-end
Request
Response
Webserver
File system



Output 1.2.1. Efficient recordkeeping of activity data, socioeconomic indicators, emission factors, methodology and assumptions, etc.

Output 1.2.1 will be NICS front office. It would result in efficient recordkeeping of standardised input information (activity data, emission factors, socio-economic indicators, etc.) necessarily required for the preparation of GHG inventories, mitigation impact assessment, measure of the performance of adaptation measures and measure of climate finance flows, through the appropriate templates and procedures. Each layer of relevant information will be maintained on a time-series basis with appropriate disclosure on methodology, gaps and assumptions for further improvements and expansion.

Proposed activities

- Analyse the current NIMS and the possibility of developing an application programming interface (API) that allows the output tables of the data providers databases to be seamlessly imported into NICS.
- Identify the gaps and needs of the existent workbooks and develop a work plan for improving the existent workbooks, creating new files when needed for each sector and for the states.
- Coordinate with the sectoral and states focal points to ensure the formats, templates and procedures to develop are adjusted to the circumstances and expectations of both data providers and NICS.
- Develop a set of workbooks validated by stakeholders for data sharing between data providers and NICS for its use in the national GHG emission inventory and the NDC tracking system.
- Elaborate a user manual to share data in the system adapted to each stakeholder.
- Train the data providers to the use of the front office.

Output 1.2.2 Archiving systems for future referencing and performing recalculations

The back office will consist in output information for reporting to the UNFCCC. NICS information templates will also administer the methodology and assumption behind information generation, which will further enable the lead agencies to bring meaningful policy insights and perform calculations (whenever needed). Such a system would be extremely helpful in tracking mitigation and adaptation improvements over time.

Proposed activities

- Analyse the current reporting requirements on GHG inventory, mitigation, adaptation, NDC and support.
- Identify the gaps and needs of the back-office.
- Develop the back office and elaborate a user manual.
- Train those in charge of the management of the IT tool and the reporting to the UNFCCC.

Output 1.2.3 Aggregation and exchange of relevant information through NICS

The interfaces will be designed to perform the aggregation and exchange of relevant information. They will allow to perform quality control and quality assurance, and any assessments that arise from activity data and methodological assumptions associated with climate reporting. Availability of underlying information around GHG inventories, mitigation and adaptation indicators in a comprehensive manner would ensure consistency, completeness, integrity and reliability of reported information with appropriate disclaimers. This would support transparency immensely and help in the technical expert review process of the biennial transparency report (BTR) from 2024 onwards. Such a system will also minimise the administrative burden of MoEFCC as information will always remain available in a ready and easy to use format.

Proposed activities

- Design and test the interfaces.
- Elaborate a user manual.
- Train the institution in charge of the management of the IT tool and the reporting to the UNFCCC.
- Include automatic QC checks.

Component 2: Strengthening institutional and technical capacities for Measurement, Reporting and Verification (MRV) of climate information

This component introduces the expansion of existing 'roster of experts' under the provision created by the UNFCCC and leveraging their proficiency and expertise to further build a cadre of trained experts at the subnational and sectoral levels. As partly discussed under component 1, the experts shall find nominations of subject experts from academic institutions, existing networks, civil society organisations, and potential lead agencies. They will find a relevant upgrade through the UNFCCC training and review mechanism. In turn, they are expected to strengthen state and sectoral agencies through periodic training, devising SOPs, guidelines, templates, etc. Their function will be critical to build capacities of each institution towards generating information necessary to facilitate clarity, transparency and understanding of climate actions, specifically tracking the progress of NDCs alongside a robust inventory management system and an integrated and consolidated MRV. This will also enable state focal points to follow a standardised process and enable information exchange through the proposed NICS (as discussed in component 1).

The training plan will include capacity building in GHG inventory preparation and NDC tracking and will address the capacity building needs identified during the ICA process of the first and second BUR by India with the technical team of experts.

This training plan will also include training related to understanding the outcomes of COPs, the differences between BURs and BTRs, interpreting and implementing correctly the MPGs and elaborating the BTRs, training on GHG inventories, mitigation assessments, vulnerabilities assessments, and NDC tracking.

For the in-house trainings, MoEFCC might involve external reputed institute/s in India in order to intake their training services and institutionalise some of the trainings pertaining to the elaboration of the GHG inventories and the use of the 2019 IPCC Refinement and the 2006 IPCC Guidelines, including all cross-cutting issues such as methods to ensure time-series consistency, QA/QC procedures, key category analysis, uncertainty assessments, the reporting through the future UNFCCC GHG inventories reporting tool.

A continuous interface between the experts and state/sectoral focal points will ensure sustained capacity and retention mechanism.

Such a training plan and approach will act as a steppingstone towards creating sustained capacities within national agencies and institutions. It becomes challenging to deal with new provisions and/or high turnover of trained individuals within empanelled institutions.

It also underscores the importance of establishing a baseline of current capacity. India conducted a GEF supported comprehensive 'National Capacity Self-assessment (NCSA)' almost a decade ago. An assessment of the current reporting compared to the requirements of the MPGs has been undertaken during the CBIT proposal preparation and included in Annex 12b. An update of a similar exercise will be useful to assess capacity in implementing applicable modalities, procedures and guidelines proposed through the Paris Agreement rule book and develop focused capacity building activities and a training plan accordingly.

This component will address the capacity gaps in GHG inventory, NDC tracking, contribution of States to the NDC and the capacity retention mechanism.

Outcome 2.1: Ability to report GHG emission inventories as per Intergovernmental Panel on Climate Change (IPCC) 2006 guidelines (or latest applicable)

The proposed CBIT project will strengthen the process of monitoring, verifying, and reporting GHG inventories as per the IPCC 2006 (or latest applicable) guidelines. It will competently prepare resource institutions, expert institutions, sectoral and state level focal points through necessary tools, training, and templates for reporting.

Integration of NIMS with the proposed CBIT project will minimise efforts and significantly improve the inventory preparation process through an increase in technical capacity as well as its standardisation and automatization.

India together with the technical team of experts during the ICA process of India's first and second BUR have identified areas of improvement in both the GHG inventory process and the actual GHG inventory that this project addresses.

India reported national GHG inventories for 1994, 2000, 2007 and 2010, disaggregated by sector. An update to GHG inventories, using the same methodologies as those used in BUR-1, was reported for the period 2000-2014. A consistent time series, back to 1994 was not reported as the years 1994 to 1999 were missing. Preparing consistent time series is resource intensive exercise and the 1994 inventory is not comparable with the inventories for later years owing to the incompatibility of data, methodologies and categorization.

In addition, GHG inventory has been elaborated mixing different IPCC Guidelines (both the 2000 and the 2003 IPCC Good Practice Guidance (GPG), the revised 1996 IPCC Guidelines and the 2006 IPCC Guidelines) leading to a lack of transparency, accuracy, consistency and comparability because it is not good practice to mix different Guidelines (Parties should use the revised 1996 IPCC Guidelines with the 2000 GPG and 2003 GPG or the 2006 IPCC Guidelines and, voluntarily, with the 2013 Supplement on Wetlands).

These priorities and gaps require necessary tools (databases, modelling), templates (data management formats for new requirements), and training (know-how) to upgrade the existing inventory process and sectoral estimates. Hence, success with outcome 2.1 is very vital.

Output 2.1.1 Tools, templates, and training for agencies/experts involved in the inventory process (cross-cutting)

Output 2.1.1 will ensure design and availability of customised templates, tools and training following the methodologies from the 2006 IPCC Guidelines or the latest applicable to ensure adherence with the TACCC principles for various agencies to collect, compile, review and analyse information pertinent to GHG inventories.

Proposed activities

- Analyse the GHG inventory and the NIMS, identify gaps and future requirements under the ETF for the GHG inventory.
- Implement improvements to standardise the templates and tools used in the GHG inventory including the new requirements.
- Elaborate a focused training plan on cross-cutting issues. This training plan will also include training related to understanding the outcomes of COPs (such as the COP24 and the subsequent ones), the differences between current and future reporting (such as differences between BURs and BTRs), interpreting and implementing correctly the MPGs and elaborating the GHG inventories and the use of the 2019 IPCC Refinement and the 2006 IPCC Guidelines, including all cross-cutting issues such as methods to ensure time-series consistency, QA/QC procedures, key category analysis, uncertainty assessments, the reporting through the future UNFCCC GHG inventories reporting tool.

Output 2.1.2 Improvement in the energy sector: Achieving granularity with activity data (example: grade wise coal consumption) and bringing clarity on the unorganised sector operations

Output 2.1.2 gives extensive focus on the energy sector in India, as this sector contributed 73% of total national GHG emissions (excluding LULUCF) in the last inventory year. Fossil fuel combustion activities comprising energy industries, manufacturing industries, transport and other sub-sectors were the predominant source of energy sector emissions accounting for 98%. Fugitive emissions contributed 2% of the total GHG emissions from the energy sector. The energy sector also represents the sector with the highest mitigation potential. Informal/unorganised sector poses significant challenges towards transparency of reporting so capacity building activities and studies could be undertaken to fill this gap. The breakdown of emissions by consuming sector needs improvement to report according to the 2006 IPCC GHG inventory guidelines. The information and the mechanism as developed under the Bureau or Energy Efficiency's PAT scheme could facilitate in filling this gap but remains currently unexplored. This output will also encourage data providers and lead agencies to follow detailed and granular data reporting for at least crucial and complex source categories. While activity data for coal mining and handling oil and natural gas systems is available, the data on emission estimation is not easily available. Coverage domain and assumptions in different Government and sectoral annual reports/ publications may often differ due to various reasons. Therefore, selection of data becomes crucial and it needs back up knowledge, and further detailing followed by validation through secondary data. Grade wise coal utilization is much more difficult to obtain. Often, the data is not in a proper format for segregation and use for sectoral inventory preparation. Country-specific values of Net Calorific Values (NCVs) and Carbon Emission Factors (CEFs) for liquid and gaseous fuel used in the energy sector are under development. Detailed quality parameters of coal imported from different sources are not available. Source wise NCVs and CEFs are not available for coal supplies to India. Another key issue is the incorporation of uncertainty assessment. This output will strengthen the current technical capacity to reduce the uncertainty of the estimates of this sector and increase the accuracy. It will finally capacitate the key stakeholders to provide more detailed information relevant for mitigation actions planning.

Proposed activities

- Identify data gaps and new data and data collection processes requirements to prepare a training plan adapted to the energy sector.
- Develop the templates, tools and guidelines for the data flows needed for the improved reporting of the energy sector.
- Train the key stakeholders such as the data providers and the energy inventory compilers to improve the quality of the energy sector and reduce the uncertainties. The training will include how to use detailed existing energy data in industrial databases such as the one used under the PAT scheme to improve the estimates and reduce the uncertainty.

The key stakeholders of the energy sector are the following:

- The Bureau of Energy Efficiency (BEE) of Ministry of Power (MoP) which may contribute to the GHG inventory by providing information collected through the PAT Scheme or verifying information on emissions by industry of the energy sector.
- Central Electricity Authority (CEA) with valuable information on electricity generation, coal stock position (for Thermal Power Stations) and renewable energy generation.
- Ministry of Coal (MoC) Provide official information on the production and supplies of coal across the end-use sectors primarily at the national level.
- Ministry of Petroleum and Natural Gas (MoPNG) with official information on the production and supplies of liquid and gaseous fuels across the end-use sectors primarily at the national level. The Ministry has a number of undertakings and organizations, including Petroleum Conservation Research Association, Petroleum Planning and Analysis Cell among others.
- Ministry of Power, Ministry of Road Transport and Highways, Ministry of Civil Aviation, Ministry of Railways, Ministry of Shipping, Ministry of Statistics and Programme Implementation, Central Institute of Mining and Fuel Research (CIMFR) and CSIR-Indian Institute of Petroleum (IIP), IORA Ecologic Solutions (IORA) and Indian Institute of Management-Ahmedabad (IIM-A) will provide valuable information on the energy sector.
- Ministry of New and Renewable Energy (MNRE) which may contribute with verification activities of the resulting estimates.

Output 2.1.3 Improvement in Agriculture sector: State-level validation of activity data (example: dung produced per animal, feeding patterns

Output 2.1.3 focuses on the agriculture sector primarily in view of capacitating the concerned stakeholders for the provision of relevant activity data at the subnational level due to different practices and uncertainties associated with the same. For the agriculture sector, in the last inventory year, of the five subsectors, enteric fermentation is the highest GHG emitting source (54.45%) followed by agricultural soils (19.3%) and rice cultivation (17.46%). Tier 2 methods combined with country-specific EFs were applied for the estimation of emissions from enteric fermentation of cattle, buffaloes and goats, rice cultivation and agricultural soils. For the remaining categories a combination of tier 1 methods and default EFs from the revised 1996 IPCC Guidelines and the 2006 IPCC guidelines were used. An area for improvement is collecting agricultural data for the establishment of country specific EF for fruit tree systems, for allometric equations and biomass expansion factors for horticultural species, and for enhancing and refining data on livestock dung production and collection. In India, indigenous cattle of high yielding variety and low yielding breeds are not separated, which would be desirable, as the feeding pattern of these animals differ leading to variations in methane emissions. Total methane, dung methane as well as N_2O emission vary depending upon feeding habits. Thus, actual values of enteric methane emission are not available. Dry Matter Intake (DMI) was calculated based on the values in the literature. However, DMI by lactating animals in studies conducted during inventory preparation for BUR have shown lower values. These values are suitable for animals which are under average production and kept in normal conditions. The values taken for calculations are, however, on the higher side and may be appropriate for high producers which are kept in urban and peri-urban dairies. Hence, if populations could be segregated into urban and rural categories and into high and low producers, methane emission figures are expected to be lower than those reported. For estimation of dung produced, digestibility coefficients of feed were taken for this study. However, reports from some of the states providing information on total dung produced per animal and their disposal require further validation. This output will capacitate the relevant stakeholders for the provision of the data and parameters needed to reduce the uncertainty of the estimates of this sector and increase the accuracy. It will finally capacitate the key stakeholders to provide more detailed information relevant for mitigation actions planning.

Proposed activities

- Identify data gaps and new data and data collection processes requirements to prepare a training plan adapted to the agriculture sector.
- Develop the templates, tools and guidelines for the data flows needed for the improved reporting of the agriculture sector.

- Train the key stakeholders such as the data providers and the agriculture inventory compilers to improve the quality of the agriculture sector and reduce the uncertainties. The training will include capacitating the concerned stakeholders for the provision of relevant activity data (example: dung produced by animals, feeding pattern, etc.) at the subnational level due to different practices.

The key stakeholders of the agriculture sector are the following:

- States,
- Ministry of Agriculture and Farmers Welfare (Department of Agricultural Research and Extension, Indian Council of Agricultural Research network),
- Ministry of Rural Development,
- Ministry of Statistics and Programme Implementation,
- Central Research Institute for Dryland Agriculture (CRIDA),
- Indian Agriculture Research Institute (IARI),
- National Diary Research Institute (NDRI)

Output 2.1.4 Improvement in the LULUCF sector: Establishing modelling capacity at the state or institutional level through trained experts and civil-society assistance

Land Use, Land Use Change and Forestry (LULUCF) sector was a net sink in 2014, with an increase in removals of about 19% as compared with removals in 2010, which were reported in the first BUR. GHG emissions for the sector are estimated using tier 2 approach from the 2003 IPCC Good Practice Guidance (GPG) and elements of the 2006 IPCC Guidelines with country-specific EFs for the five land categories. Wetlands and other lands are not included in GHG inventory because changes in carbon stocks were not expected for other lands under current reporting regime. LULUCF and REDD experts have demonstrated the capacity to improve the LULUCF sector emissions reporting on the data side, but modelling capacity is still needed to improve the estimates further and bring additional accuracy. India has the institutional and technical capacity to adopt Tier 3 methods and Approach 3 for land use measurement and analysis. However, modelling capacity is required for adopting models such as FullCAM, CBMCFS3, CENTURY and ROTH-C. Capacity building is required to utilise the georeferenced data from National Remote Sensing Centre with the application of the EF data. Additional support is required to build capacity for the adoption of suitable carbon measurement models and for generating EFs (such as stocks and fluxes of five carbon pools) in different land categories.

Proposed activities

- Identify data gaps and new data and data collection processes requirements to prepare a training plan adapted to the LULUCF sector.
- Develop the templates, tools and guidelines for the data flows needed for improved reporting of the LULUCF sector.
- Train the key stakeholders such as the data providers and the inventory compilers to improve the quality of the LULUCF sector and reduce the uncertainties. The training will address improvements by capacitating experts to adopt the IPCC Approach 3 for activity data on areas under different land categories and conversions, georeferencing areas under different land categories and areas subjected to change for the GHG inventory by using remote sensing and global information systems, modelling for tier 3 estimation of carbon stock changes in forests, plantations and land area subjected to mitigation actions, estimating carbon stocks and collecting data on changes in baseline carbon stocks for the estimation of mitigation potential, identifying carbon sequestration rates for different forest types and plantations, strengthening local capacity to collect LULUCF data at the regional level, performing capacity-building for data collection from primary sources in the forestry sector, coordinating the dispersed technical and

institutional capacity for REDD+, enhancing capacity in forest resource assessment and improving the process at the state and local levels and enhancing resolution of forest data generated through satellite imagery. Capacitation of stakeholders will add indigenous indicators to global models to ensure adhering to global quality while ensuring true local representation.

- Capacity-building at all levels (including state and district level forest departments, research organizations and non-governmental organizations) to enable the design, implementation and MRV to implement the REDD+ mechanism.

The key stakeholders of LULUCF sector are the following:

- Ministry of Science and Technology (National Remote Sensing Centre),
- Indian Institute of Science (IISc),
- FSI: Forest Survey of India, Dehradun
- REDD + experts.

Output 2.1.5 Improvement in the IPPU sector for transparent and accurate coverage
India has developed and used plant and country specific CO_2 and N_2O EFs for the dominant categories of the IPPU sector, that is mineral industries, chemical industries and metal industries. There is a challenge of reporting on activity data (AD) due to the enormity of data sets for those sectors.

In addition, emissions of fluorinated gases (F-gases) from consumption activities are not estimated. However, there is some data available in the Ozone Unit dealing with substances of the Montreal Protocol which has not been explored for estimating F-gas emissions from consumption activities of this sector.

The use of higher tiers through data collected directly from plants should also be maximised. Involvement of industrial associations as data providers and for quality assurance purposes could be enhanced including electronic reporting from companies to the industrial associations and from industrial associations to the designated focal points for IPPU in NIMS integrated in NICS. Under the current Third National Communication project, a platform to collect data from industries especially Medium Small and Micro Enterprises has been developed for IPPU sector. A pilot platform has already been launched and is active. The existing platform will widen the coverage by bringing all emitters under the ambit of NIMS. Capacity building will be provided for the compilation and use of the required data to improve the accuracy of the estimates of the IPPU sector.

Proposed activities

- Identify data gaps and new data and data collection processes requirements to prepare a training plan adapted to the IPPU sector.
- Develop the templates, tools and guidelines for the data flows needed for improved reporting of IPPU sector.
- Train the key stakeholders such as the data providers and inventory compilers to improve the quality of the estimates and reduce the uncertainties. The training will include capacitating the relevant experts to explore and use additional or alternative data sources required for the elaboration of estimates on fluorinated gases emissions such as HFC emissions from air conditioning and refrigeration, HFC and PFC emissions from the electronics industry or SF_6 emissions from electrical equipment.

- Capacity building to involve industrial associations as data providers and for quality assurance purposes including training on electronic reporting from industrial associations to the designated focal points for IPPU in NIMS integrated in NICS.

The key stakeholders of IPPU sector are the following:

- Ministry of Statistics and Programme Implementation,
- Ministry of Science and Technology (Department of Science and Technology, Council of Scientific and Industrial Research network),
- Department of Heavy Industries,
- National Environmental Engineering Research Institute (NEERI),
- Industrial associations such as CII, FICCI, PhD Chamber of Commerce, ASSOCHAM and others.

Output 2.1.6 Improvement in the waste sector: Improving the system to collect activity data aggregated at centralised level (example: treatment pathway, emission characteristics, etc.).

Output 2.1.6 promotes improvement in the waste sector inventory estimates. For the waste sector, CH_4 emissions from solid waste disposal sites (19% of total GHG emissions for the sector) and from wastewater handling (81%) are the key categories. India applied the tier 2 (first order decay) method from the revised 1996 IPCC guidelines for estimating emissions from solid waste disposal sites and tier 1 and 2 approach from the revised 1996 guidelines, incorporating country-specific EFs and data, for the estimation of domestic, commercial and industrial wastewater. In BUR-2, India did not report on country-specific EFs and other parameters for domestic and commercial wastewater. This output focuses on establishing a system along with tools to collect activity data and other information such as treatment pathway, emission factors, wastewater characteristics, etc, and capacitate the relevant experts in the use of these data to improve the accuracy of the estimates of the waste sector. For instance, aggregation of such data into a centralised database would be very useful.

Under this output the CBIT project will allow to reduce the uncertainty of the estimates of this sector and increase the accuracy. It will also provide trainings to obtain more detailed information relevant for mitigation actions planning.

Proposed activities

- Identify data gaps and new data and data collection processes requirements to prepare a training plan adapted to the waste sector.
- Develop the templates, tools and guidelines for the data flows needed for the improved reporting of the waste sector.
- Create a centralized database to periodically inventory data and emissions from each wastewater treatment pathway (septic tanks, latrines, sewers, other treatment (Centralised Wastewater Treatment) and no treatment) to be linked to NIMS and NICS. This database should allow to compile consistent annual industrial production data of all methane and nitrous oxides emissions generation sectors like textile, food and beverage and food processing; estimate industrial and domestic wastewater produced and country specific parameters as well as the amount of CH_4 recovered annually for power production or flared from sewage treatment plants.
- Train the key stakeholders such as the data providers and inventory compilers to improve the quality of the waste sector and reduce the uncertainties. The training will capacitate on how to improve protein consumption data as it varies largely in India and has a strong correlation with income criteria and standard of living. The training will also include how to use new information from the database to improve the estimates and

reduce the uncertainty.

The key stakeholders of the waste sector are the following:

- States,
- Ministry of Housing and Urban Affairs,
- Ministry of Rural Development,
- Ministry of Statistics and Programme Implementation,
- National Environmental Engineering Research Institute (NEERI).

Outcome 2.2: Information to facilitate Clarity, Transparency, and Understanding (ICTU) of NDC associated with climate actions.

Enhancing and extending the capacity on NDC preparation, tracking of achievement and upgrade will be of utmost importance. This will be achieved through participation of experts in international training programmes, implementation of a national training plan by these trained experts and peer-exchange for cross-learning.

The NDC submissions from all countries, being a country-driven process, often varies in targets and qualifying criteria. India has primarily indicated an emission-intensity reduction-based target, which is supplemented by other targets around creating sinks, an increase in the share of non-fossil fuel energy, and adaptation priorities.

Adaptation is a major concern of India and is taken into account in the NDC. Technical assessments, development of both quantitative and qualitative indicators as well as capacity building to track and report on adaptation, especially loss and damage, are important elements under this outcome for India.

Similarly, gender-sensitivity is improving but will also be addressed under this component according to the proposed action plan.

The decision 18/CMA.1 that emerged from COP 24 deliberations at Katowice provides better understanding on the reporting information towards clarity, transparency and understanding of NDC contributions.

Considering results from outcome 2.1 and the enabling environment developed through component 1, activities under each output listed below would substantiate ICTU of achievements under India's NDC.

Output 2.2.1 Developing capacity of national experts with equitable participation of men and women nominated from academia, research institutes, civil society and public agencies. Implementing the concept of 'train the trainers' to sustain capacities within institutions

This output will help in developing the capacity of interested stakeholders on a regular longer-term basis through the development of training modules and its institutionalisation in the identified state level IITs/IIMs. It will also help in improving the skill sets of the existing technical population – helping in just transition towards climate-friendly solutions. Also, like Bureau of Energy Efficiency has a program where they certify energy auditors, MoEFCC or States could certify GHG auditors.

A reputed institution may be designated to host the training and capacity building activities with UNFCCC trained experts. Exams and certificates could be delivered for the additional trained experts. This should facilitate their participation in transparency activities (GHG inventory compilation, assessments…) directly or as reviewers/QA experts of GHG inventory and BTRs before submission to the UNFCCC. They will also be allowed to participate in the delivery of trainings and capacity building activities.

Output 2.2.1 eliminates the barrier of understanding international guidelines and associated procedures with each agency involved in domestic information flow management. As discussed earlier, an expanded *List of Experts* (LoE) shall be nominated by MoEFCC to bring international expertise and create a cadre of domestic experts within the country in a sustained manner.

Currently, India has nominated only two active members to the UNFCCC roster, which could further be expanded to accommodate progressively more active members. Ideally, this should be at least 8-10 times higher than present as can be seen from experts nominated by other countries such as the United States of America (104), Australia (38), China (33), South Africa (26), etc. This practice would encourage the concept of 'train the trainers,' in the country. The LoE are also expected to develop standard operating procedures (SOPs), design templates and establish country-specific reporting guidelines towards existing and emerging reporting provisions under the Convention and component 1 of this CBIT project. Linkage with the UNFCCC system will ensure they remain updated. National trained experts in the UNFCCC process will also be responsible in coordinating with additional experts to finalise SOPs, templates, training, etc.

Proposed activities:

- Nomination of experts to the roster of the UNFCCC, and/or through an expression of interest from public agencies and civil society representation to implement the concept of train the trainers.
- Developing and implementing a work plan for assisting regulatory authorities and IT company in the implementation of component 1 of the CBIT project by the list of experts.
- Developing a capacitation plan, which will include a set of capacity building workshops by the list of experts.
- Delivering capacity building workshops for the implementation of component 2 by the list of experts. Different workshops will be developed, grouping the institutions and states considering their common characteristics.
- Developing didactic training materials and e-learning courses.
- Implementing a certification scheme for the different thematic areas of BTRs (GHG inventory; mitigation assessments including projections; impacts, vulnerability and adaptation analysis; NDC tracking; climate finance tracking; MRV).

Output 2.2.2 Peer-exchange programmes and co-learning activities among states to promote scalability and replication of initiatives in a cost-effective manner.
Tracking progress with NDC would require policy and action level mapping, which certainly demands close coordination with implementation agencies at the sectoral and state level to avoid any overlap.

Proposed activities:

- Mapping climate policy and action at the states and sectoral levels.
- Training of officials and implementation agencies by the list of experts on tracking climate action.
- Development of cross-learning arrangements in the form of peer-to-peer learning among state and sectoral experts to develop individual capacities and create a cadre of country experts to contribute to the NDC tracking.

Output 2.2.3 Tools, templates, and training towards tracking progress of NDC.
Tracking of NDC goals in a transparent and reportable manner is challenging in many ways due to additional capacity required to comply with the agreed international provisions. Requirements towards facilitating clarity, transparency and understanding of NDCs shall be achieved with the help of suitable tools, templates, and training at the institutional level. Mandates to do so (output 1.1.1) will support such measures. Mitigation activities are relatively easier to quantify into performance metrics, but adaptation goals without any measurable targets poses clear challenges for tracking progress. Carefully designed tools, templates and trainings, customised to the needs and priorities of the state authorities would prove to be a very useful exercise under this output.

All aspects of NDC will be covered (both mitigation and adaptation). Indicators will depend on the mitigation and adaptation actions implemented or planned by the country and may be used as impact indicators. INCCA will continue to be an entity to provide capacities as needed and experts to assist in reports preparation, monitoring and QA.

Proposed activities:

- Analyse the baseline on NDC and all sectoral and states contribution to the NDC targets and qualitative objectives.
- Review the bibliography of existing proposals of indicators and associated information such as projections to track impacts at policy level.
- Review of best practices and lessons learned from the creation of NDC indicators of active member countries in the region of the CBIT Global Coordination Platform, taking good care of differentiating the generation of mitigation and vulnerability/resilience indicators and considering a wide variety of experiences at the states level in the country.
- Propose key actors for the definition and follow up of indicators.
- Identify preliminary recommendation of indicators of mitigation and adaptation (including considerations of gender) and clearly differentiating mitigation from vulnerability/resilience indicators.
- Assess likelihood of inclusion of SDG indicators for India related with climate change in a wider sense (i.e. not only those associated with SDG #13) within the initial proposal of indicators included in this activity.
- Prioritize indicators for their relevance in tracking the NDC and define the methodologies for their elaboration.
- Organize workshops for the presentation and discussion of indicators with the key sectoral and states actors.
- Provide final recommendations of indicators, characteristics, periodicity for gathering information, and the actors and institutions in charge of measuring, updating and monitoring them.
- Prepare the templates for integration of the information from sectoral institutions and states into the IT tool.
- Develop guidelines and recommendations on tracking contributions and progress individually and globally by sectoral and states institutions.
- Develop guidelines to assess co-benefits.
- Organise workshops on tracking progress on the NDC.
- Training on climate projections, vulnerability analysis, emissions projections and updating the NDC.

Outcome 2.3: State focal points submitting information through NICS

Coordination at the state level is channelled through their respective SAPCC coordination committees. However, due to the limited scope of SAPCC and lack of integral and binding structure with NDC reporting and GHG inventory preparation, state agencies are often disconnected from necessary protocols and regulatory mandates. The absence of IT platforms also causes communication delays. Component 1 would be able to close that coordination gap, whereas this outcome will equip state agencies to prepare and submit information on standardised templates. Adequate training to focal points through the proposed list of experts would further foster this capacity-building element.

Output 2.3.1 An IT-enabled system coupled with the mandated process of reporting information on standardised templates.

This output will need to:

- organize training workshops for senior and working level of State government officials;
- identify a nodal academic/ research institution in States in consultation with state governments to provide technical support to states on a regular basis while developing the capacity of the identified institutes on the subject as well as encouraging states to develop centre of excellence on the subject to provide them with long-term support;

- devise simple (with direct questions) reporting formats for states to report with instructions to fill the templates (which could be filled up by the officials without assistance of consultants and instruction sheet will help in informing future officials especially in the context when government officials are transferred at a frequent interval);
- work out procedures and processes for states to report;
- provide space (secured login) to upload information/ stories on national portal.

This output will thus need the template design used in the IT system and the training of focal points to submit the states contributions to the NDC. They should also be able to monitor and assess the implementation of their respective SAPCC and to update their action plans accordingly.

Output 2.3.1 would thus prove to be effective if aligned well with project outcome 1.2.

Proposed activities:

- Develop manuals for reporting by the states using the template design used in the IT system.
- Capacitate the focal points of the state agencies to prepare and submit information on standardised templates through the proposed list of experts.
- Training of focal points to 1) implement MRV of SAPCC through appropriate data collection systems and 2) assess the implementation of their respective SAPCC and to update their action plans accordingly.
- Help the states to develop centres of excellence on climate action tracking and reporting to provide them with long-term support.

Outcome 2.4: Developing capacity-retention mechanisms

In India, despite years of efforts towards capacity-building activities, gaps between the current and the desired level of reporting is significantly high due to a lack of self-sustaining systems. This issue has been emphasised in the 'third comprehensive review report of the implementation of capacity building framework' for the developing countries and is very relevant for India. Most of the capacity-needs reported by India in its second NC are still relevant as new needs continue to emerge and systems must evolve accordingly. In India, most of the existing systems are designed on a temporary basis due to a paucity of supporting resources, including the project management unit (PMU) for the NCs housed under MoEFCC and called the NATCOM cell. This CBIT project not only strengthens institutional capacities in view of emerging reporting requirements, but it also provides a coordination mechanism to sustain capacities within these institutions considering limited resources and manpower.

This outcome will assess current capacity in order to build a strategy for capacity building ensuring gender balance and will implement activities and processes based on case studies that successfully retain the capacity built.

The CBIT project will start with the establishment of the capacity baseline, current gaps and review of case studies to identify best practices, success stories and lessons learned in order to design a strategy to address the gaps as well as tailor and use lessons learned and best practices for India's specific situation to successfully implement a capacity retention mechanism.

Output 2.4.1 Establishing baseline of current capacity gaps against best practices and design a strategy to address these gaps

Output 2.4.1 establishes a baseline assessment of existing capacity and designs a strategy to address capacity gaps, as a critical step to optimise efforts and institutionalise capacity-retention elements. India conducted a comprehensive 'National Capacity Self-Assessment (NCSA)' exercise almost a decade ago through GEF support. This proposal offers an extension of that exercise by starting the project with an assessment of existing gaps in order to design a capacity building strategy for institutions to adapt according to their priority and needs. The results from output 2.4.1 would also promote a cross-learning experience between the states using NICS and the creation of centres of excellence with national 'experts' implementing the training programmes.

Proposed activities:

- Baseline assessment of existing capacity.

- Develop and implement a strategy to address capacity gaps and institutionalise capacity-retention elements.

Output 2.4.2 Ensuring each capacity building element incorporates long term sustainability features in a gender-neutral manner and at all the levels of governance

The CBIT project represents an opportunity to mainstream gender issues into participation in project activities, the kinds of data and information that are collected, and the way in which they are used.

This output will allow for a coordinated overview of gender mainstreaming in all project activities and will ensure commensurate participation of women in the decision-making process at each level even after project finalisation.

Proposed activities:

- Provide recommendations on institutional arrangements and the MRV information system that will maximize the consideration of gender in transparency activities.
- Provide training and ongoing capacity strengthening for sectoral and states focal points, data providers and nominated and trained experts on gender considerations in data collection and analysis.
- Develop and implement a plan that will support equal opportunities for women in project training and capacity strengthening activities.
- Elaborate and monitor gender-performance indicators covering each element related to training and appointment of experts in the capacity-building process.
- Include gender-disaggregated data as part of the MRV system.
- Develop specific tools and guidance on how to collect and communicate gender-disaggregated data.
- Summarize findings on gender and climate reporting in a publication and make that information available on the on-line portal developed.

Output 2.4.3 Study of the best practices of select countries and knowledge exchange

Output 2.4.3 will assess the capacity retained for the implementation of the ETF in other countries in order to select a limited number of relevant countries to capture and share best practices and lessons learned. Examples of processes and activities that yield success in capacity retention will be compiled in order to facilitate learning from experience and avoid repeating mistakes or reinventing the wheel. The study will collect a maximum range of possibilities that India could eventually consider, tailor, and use for its specific situations to successfully retain the capacity acquired.

This study will explore the processes through which institutions in other countries with similar national circumstances obtain, strengthen and maintain their capabilities to set and achieve their own transparency objectives and good quality reporting over time and will assess its potential for replicability in India.

Proposed activities:

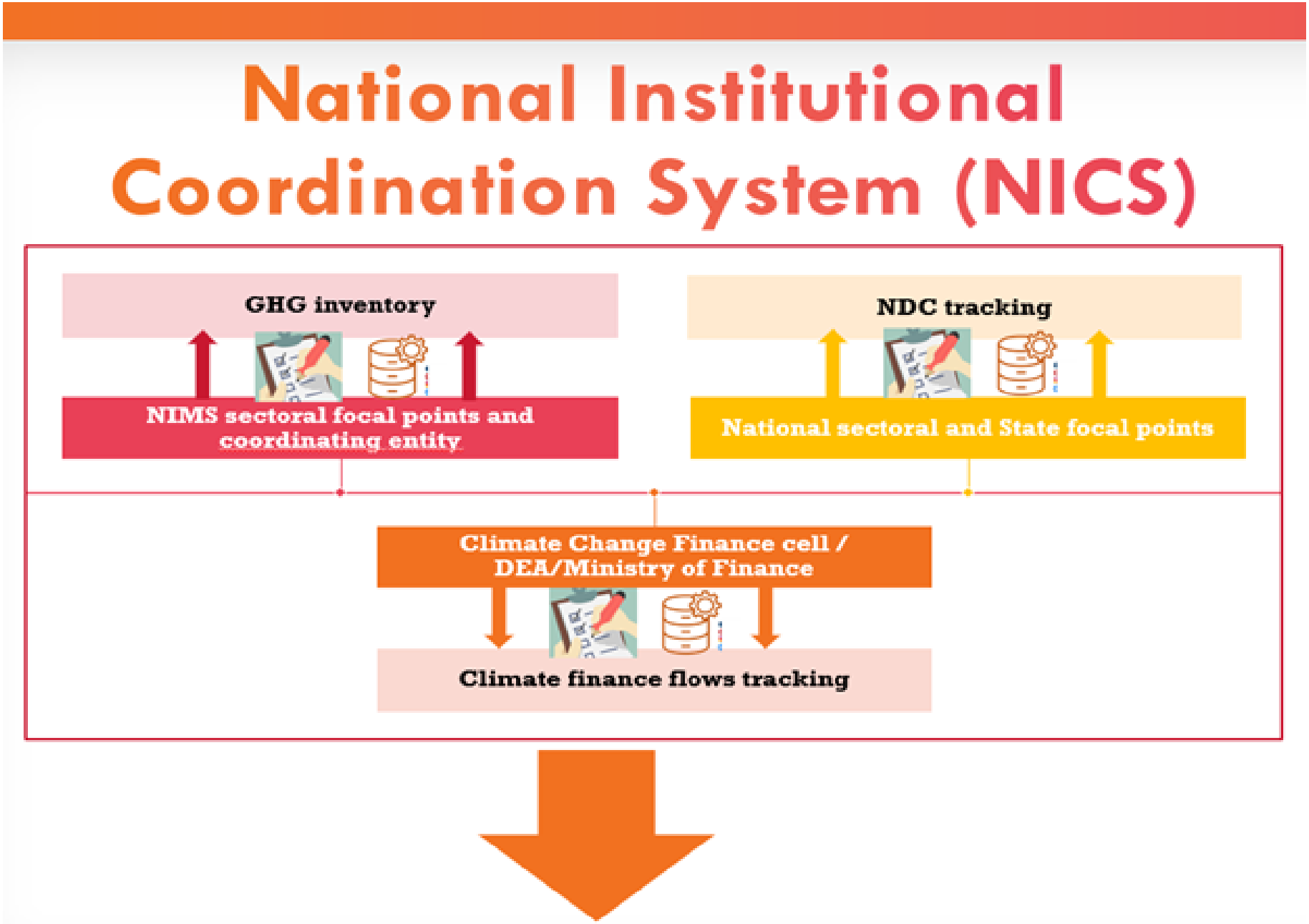
- Mapping, select and perform case studies on capacity retained for the implementation of the ETF in other countries.

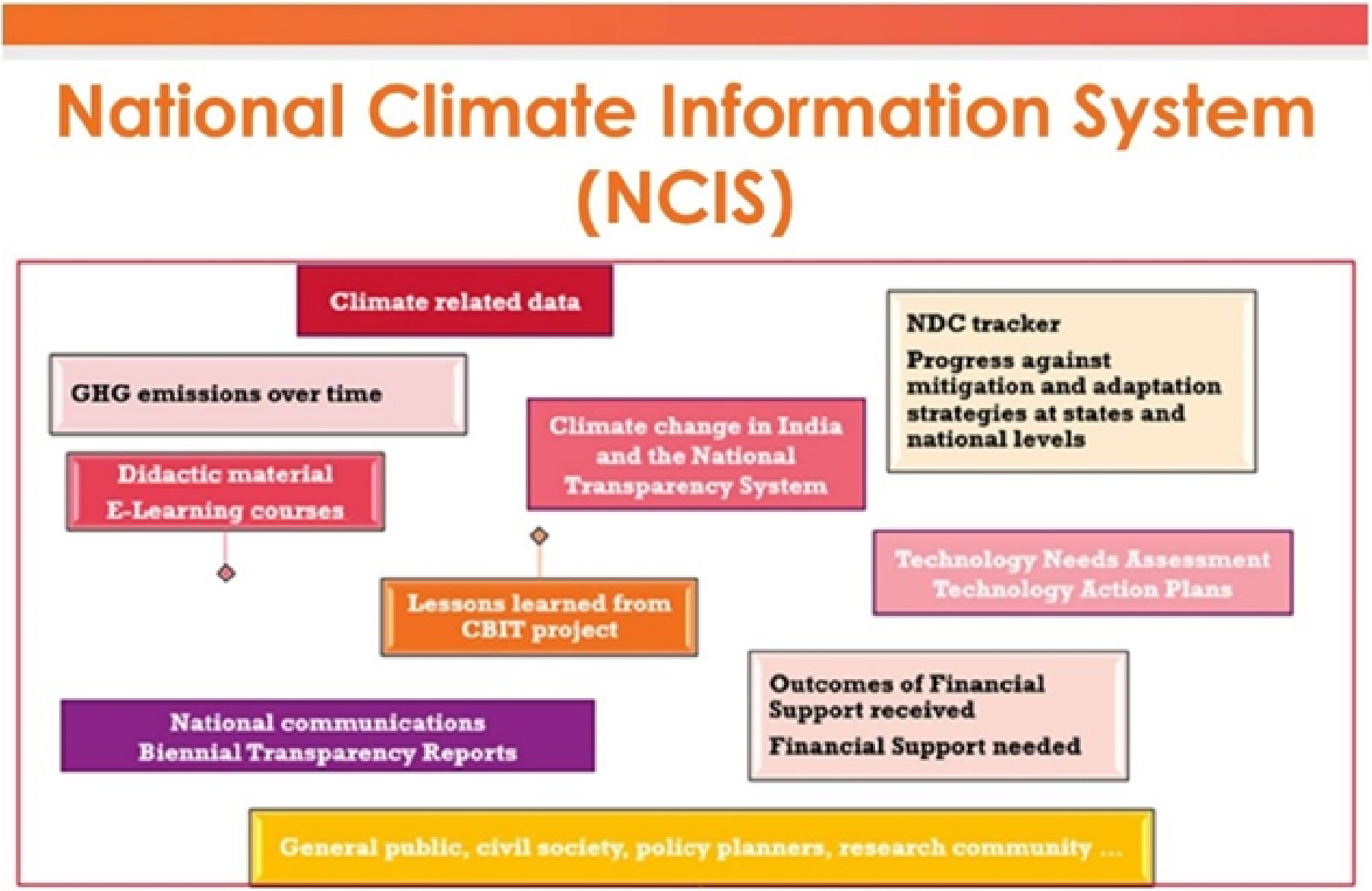
Tailor and use lessons learned and best practices from the case studies for India's specific situation to successfully retain the capacity acquired.

Component 3: Instituting National Climate Information System (NCIS) to share relevant information in a transparent manner

Open data and enlightened stakeholders are one of the key success indicators of a transparent system. A direct interface between public, civil society and policy planners promotes accountability and trust. The purpose of NCIS is to achieve overall transparency and bring meaningful information into the public domain. Structured information on GHG emissions over time, and progress against mitigation and adaptation strategies would further encourage the research community to identify and explore additional opportunities towards NDC enhancements. Enhanced transparency also aids in mobilising need based financial

support from philanthropy and overseas assistance. This component will ensure the dissemination of relevant information on GHG inventory and NDC and will provide knowledge management products as well as project-related learning. It will also enhance the capacity to mobilise climate finance (outputs are here proposed to optimise the tracking of climate finance flows in the country).





Outcome 3.1: Dissemination of relevant information on GHG inventories and NDC progress through NCIS.

Dissemination of climate relevant information will be the principle feature of NCIS. In addition, it will exhibit extensive information across states and key economic activities, which would be very critical to measure the performance of NDC goals and identifying future opportunities.

Output 3.1.1 Integrating NICS with National Inventory Management System (NIMS) and other online tracking tools to create a centralised National Climate Information System (NCIS) for disseminating information in the public domain

Output 3.1.1 represents a comprehensive and centralised National Climate Information System (NCIS) available online in the public domain which would be a first of its kind attempt made towards demonstrating transparency with climate reporting in India. It will integrate all existing and planned information dissemination and tracking systems, such as PAT, NIMS, etc. It will be the front-end interface of information collected, analysed and processed through the proposed NICS. It will be housed at MoEFCC or a reputed institution and will be maintained and supervised by an IT expert, guided by the 'experts.'

Proposed activities:

- Design of format and content of information to be disseminated.
- Creation of an online National Climate Information System (NCIS) with information from NICS and NIMS including other relevant databases such as PAT.
- Process and provide information needed to track the achievement and implementation of India's NDC.

Output 3.1.2. A progress tracker for NDCs, covering inputs from each state and sector towards progress made on mitigation targets and adaptation goals

NCIS (output 3.1.1.) aims to process and provide information needed to track the achievement and implementation of India's NDC.

Output 3.1.2 will showcase relevant indicators and associated information to track impact at policy level. It will also showcase GHG emission trends and intensities over time at the sectoral and state levels, thereby illustrating the impact of targeted policy decisions. It will illustrate all outcomes achieved in a structured and comprehensive manner. It can also include qualitative information: such as, climate variability maps and models at sub-national level, climate scenarios through global and regional models, vulnerability profiles, ranking of most vulnerable ecosystems, adaptation frameworks featuring action plans, implementation strategies and progress achieved, technology needs assessment for adaptation goals, etc. The objective of such a system is to feature policy-relevant information in the public domain, thereby nudging policy-planners and the public in general to arrive at meaningful conclusions for further improvements. It will also provide disclosure on methodology and assumptions to ensure that the shared information is transparent, reproducible and facilitates domestic and technical expert review.

Proposed activities:

- Design of an online climate policy relevant information for the public including a NDC tracking tool.
- Showcase the information to include in a user-friendly way (indicators to track impacts, GHG emission trends and intensities over time at the sectoral and state levels, vulnerability profiles, etc).

Outcome 3.2: Enhanced capacity to Mobilise climate finance

Transparency in the support needed and received/used for the achievement of planned outputs promotes more compliance and mobilises finance from existing and additional channels as it brings higher confidence. This outcome aims to provide an assessment of possible actions to be undertaken, for which support is sought/needed and methodologies and assumptions used to identify these figures. This information is a "should" requirement in decision 18/CMA1 of any Party reporting on support needed and received. Both the outputs envisaged under this outcome aim to promote such prospects for India.

As indicated in the main conclusions from the consultation process and stakeholders' engagement plan presented in Annex 7, Department of Economic Affairs (DEA) is one of the three Departments of Ministry of Finance which tenders expert advice on important issues of economic policy. The Division monitors economic developments, domestic and external and advises on policy measures relating to macro management including agriculture, industry and infrastructure sectors of the economy. The Department has a Climate Change Finance cell. DEA has good quality information and knowledge on climate finance from multilateral funds such as GCF and adaptation fund. This cell, as appropriate in accordance with guidelines issued by the Govt of India, may play a central role in the reporting process of the support needed and received by collection or aggregating, as appropriate, all information from all relevant institutions and providing or participating in their capacitation on how to track climate finance flows.

There is capacity at the Ministry of Finance to monitor all climate finance flows in the country in the future but there are capacity building needs at the Ministries and States on identifying and reporting climate change expenditure to the climate finance cell. Implementing a climate finance inter-institutional architecture with standard operational procedures and strategy as well as methods to measure the support needed may be very useful for India., India can better position itself to rapidly mobilize and scale up climate finance by various means including the development of a climate finance strategy as needed. Inter-institutional climate finance coordination may be needed to identify and classify the climate finance flows in the country. The goal of this outcome is to assist in effective access to and mobilization of climate finance to contribute to achieving climate goals, including finance for key institutions participating in the ETF. The CBIT project engagement and specific roles of DEA under this outcome are to track climate finance support to India from international sources (multilateral, bilateral, regional and hybrid) – responsible for climate finance; MRV component of NICS; lead the development of definitions and methodologies on climate finance and provide data/ information related to climate finance support for national reporting process. Output 3.2.1 will develop an inter-institutional coordination on climate finance and the procedures for its operation as well as a roadmap for its implementation with the related capacity building activities of all institutions/ agencies receiving and using climate finance in India.

Output 3.2.1 Evaluation of support activities and capacity development of relevant institutions to mobilise climate finance

The proposed NCIS will disclose information on current and future actions with domestic resources used and made available, support needed and received, and outputs achieved/planned. A climate finance strategy and an inter-institutional climate finance architecture together with a country programme for NDC implementation will be needed to build capacity of relevant institutions to mobilise climate finance.

Proposed activities:

- Mapping institutions that can be implementing and executing actors of climate finance and elaborating an inter-institutional climate finance architecture.
- Develop procedures for the operationalization of the architecture and instruments for its formalization.
- Develop a climate finance strategy and a roadmap for its implementation.
- Develop methodologies for tracking climate finance flows.
- Provide capacity building on climate finance architecture and strategy.

Output 3.2.2 Sectoral/sub-national assessment of financial resource needed to implement the NDCs. Also highlighting specific barriers related to technology needs or any other capacity-building support

Finally, along the lines of Technology Needs Assessment (TNA) and Technology Action Plans (TAPs), NCIS will feature a business case, a country programme and/or value proposition with mitigation and adaptation needs to attract interested agencies willing to offer adequate support. Such steps would promote mobilisation of climate finance and help in optimisation of available resources to maximise gains.

Proposed activities:

- Design the climate finance component of the NCIS.
- Showcase, monitor and update detailed support needed (by state, sector, objective, end-use…) in the NCIS.

Outcome 3.3: Knowledge management and project-related learning

Output 3.3.1 Showcasing case studies and featuring them through CBIT global coordination platform

The proposed NCIS will integrate with the CBIT global coordination platform to feature India specific case-studies and promote cross-learning opportunities between countries. Such efforts would also be helpful at the regional and national level in terms of encouraging participatory approaches and collaboration among different geographies sharing similar challenges.

The project will support implementation of Paris Agreement on climate change which is based on an enhanced transparency framework for tracking and reporting the progress of existing and future country commitments to address climate change impacts and actions. With enhanced transparency, the project will strengthen institutional and analytical capacities at a decentralized level for reporting to the UNFCCC.

This project directly supports ongoing efforts towards strengthening India's MRV/transparency with climate reporting. It complements India's NCs, BURs, NIMS and MRVs of mitigation projects by integrating their outputs without duplicating efforts.

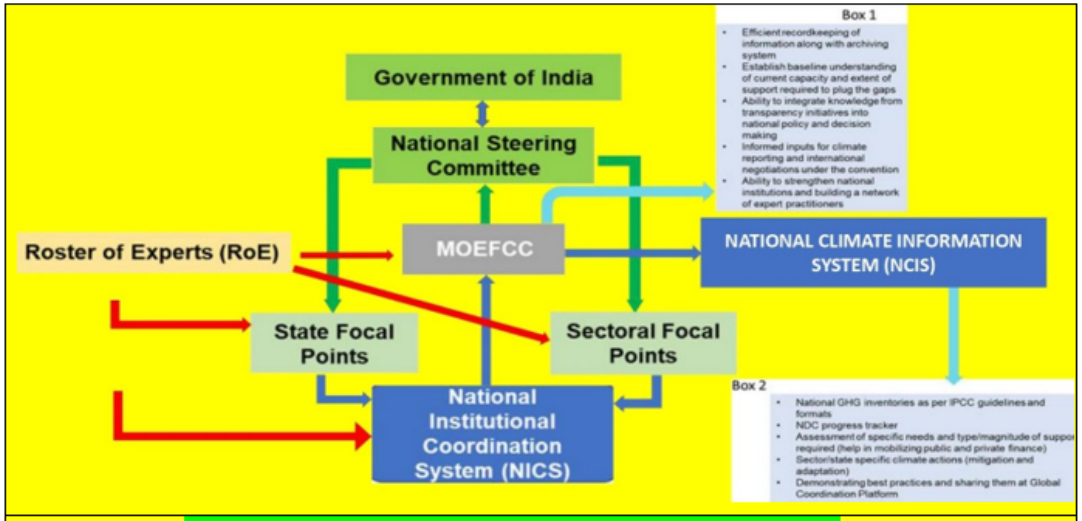
Project design elements duly consider the form and progress-tracking options with India's NDC. It has duly considered all the takeaways and applicable modalities highlighted at COP24 through the decision text 18/CMA.1 on Article 13 of the Paris Agreement. NICS will strengthen the existing institutional architecture, whereas NCIS will demonstrate high level transparency with sharing of information in a well-articulated manner.

Proposed activities:

- Deliver capacity building and training activities
- Share the online NCIS platform with other Parties through the Global Coordination Platform and other regional and global cooperation networks.
- Create dedicated section to share templates, lessons learned and best practices.
- Participate in selected CBIT regional and global workshops.

Coordination and management of the national transparency system

The Figure illustrates the proposed framework towards enhanced transparency that CBIT project will implement.



Box 1: MoEFCC's ability to store data and information, identify capacity building needs, lead, plan, coordinate, implement, monitor and evaluate policies, strategies, and programs to enhance transparency

Box 2: Outputs from the National Climate Information System

: Tools, templates, and training to be provided by trained experts appointed/nominated by the institutions

: National Steering Committee (comprised of representation from relevant ministries and government agencies) coordinating with nodal ministries and MoEFCC for bringing necessary mandates on information management and institutional coordination

: Flow of information from one agency to another. States focal points mainly provide information on progress with SAPCC; Sector focal points provide information related to inventories, implementation of national climate action plans and financial support received. Collectively, entire information helps in tracking of NDC progress.

Source: Adapted from the Council on Energy, Environment and Water

The Government of India, the MoEFCC and the wide range of stakeholders are very motivated to support and implement the project, as climate change issues are becoming more prominent in various sectors. The Project will be managed by the MoEFCC through a Project Management Unit (PMU) and guided by the National Steering Committee, consisting of key national governmental and non-governmental agencies, and appropriate state level representatives.

Through its Project Implementation Unit, the MoEFCC will perform a leadership and coordination role acting in coordination with other key stakeholders, which include relevant sectorial Ministries and Agencies, research and scientific institutions, institutes, industrial associations, companies, civil society organizations and other stakeholders that may be included in the Project through the Project's participatory approach.

The MoEFCC, which is also the institutional UNFCCC focal point, will have the main coordination role regarding implementation of the project, leading stakeholder consultations and making sure that adequate resources are delegated and results are verified and approved.

The National Steering Committee will improve coordination and monitor the elaboration of the National Communications and BURs/BTRs, will be the main national advisory forum for key decision-making processes of relevance to the project implementation, facilitating stakeholder consultations process, resolving any outstanding issues of concern and final verification of project results.

Committee members include high-level representatives of all relevant ministries and governmental institutions, as well as universities and scientific institutions. It will also ensure strong and high-level commitment of key institutions to the web-based MRV system implemented under the project under the coordination of the MoEFCC and a reputed institution in charge of management, operation and maintenance of the IT tool.

The integration of the different sectors has the effect of strengthening country ownership of the project and supporting the consolidation of the institutional and technical capacity of a broad range of stakeholders, while the National Steering Committee serves as an advisory council to the Government.

The project team will ensure extraction and dissemination of lessons learned and good practices to enable adaptive management and upscaling or replication at local and global scales. Results will be disseminated to targeted audiences through relevant information sharing fora and networks.

The National Steering Committee will represent an essence of “Institutional platform for transparency” mechanism, while the MoEFCC will be tasked to coordinate the project and implement and manage the web-based transparency system, in the capacity of an ad-hoc secretariat of the National Steering Committee. To establish an effective transparency system, a number of awareness raising, and training materials will be developed with a special focus on capacity building for particular target groups (such as decision makers, CSOs, business community, research-scientific sector, as well as marginalized groups and the wider public). During the design and consolidation of a national transparency system, the project will explore existing information and data tracking/management systems in specific relevant sectors and establish synergies wherever applicable, especially concerning information and data in economy, environment, agriculture, energy, water management, construction, transport etc. Involved sectors will be asked to cooperate in knowledge management by providing relevant information and ensuring accessibility to their employees. Regular updates on project work will be given to all involved public institutions, as well as other relevant stakeholders.

It is anticipated that the training plan proposed and the information and tools generated by the project will increase capacities in ministries and other entities involved to include climate change in public policies and decision-making process in order to achieve, track and upgrade NDC goals. Also, the CBIT project will support the share of experiences and expertise among relevant stakeholders and will improve the capacities of key Government counterparts, as main beneficiaries of the enhanced transparency system, to manage the system as per the Article 13 of the Paris Agreement.

Furthermore, the project will generate relevant tools and materials to include in the transparency system and will conduct a capacity-building and awareness-raising campaign targeted to each specific target group (decision-makers, CSOs, businesses, and the scientific research community).

It is anticipated that India will share its progress and achievements in establishing the transparency framework with other countries under the CBIT global coordination platform and other relevant platforms and networks.

The project seeks capacity-building assistance from GEF through CBIT support mechanism to establish enhanced transparency through tapping full potential of existing institutions, policies and trained manpower.

The project is consistent with national priorities. The project will support implementation of the Paris Agreement on climate change based on an enhanced transparency framework for tracking and reporting the progress of existing and future country commitments to address climate change impacts. With enhanced transparency, the project will strengthen institutional and analytical capacities at a decentralized level for the reporting to UNFCCC through the BTRs.

The project will help the Government build trust and confidence among Parties; foster shared understandings by clarifying the information underlying India's NDC, to facilitate tracking the NDC implementation, to formulate better informed decisions and to improve efficacy of action through enhanced learning and knowledge.

This project directly supports ongoing efforts towards strengthening India's MRV/transparency with climate reporting. It complements and reinforces India's existing capacity and systems by building on them and integrating their inputs and outputs without duplicating efforts. Project design elements duly consider the form and progress-tracking options with India's NDC. It has duly considered all takeaways and applicable modalities highlighted at COP 24 through the decision 18/CMA.1 on Article 13 of the Paris Agreement. NICS will strengthen the existing institutional architecture of India with respect to climate change, whereas NCIS will demonstrate high level transparency with sharing of information in a well-articulated manner. Synergies of the proposed NICS and NCIS with other commitments of Sustainable Development Goals (SDGs) and Disaster Risk Reduction (DRR) to which India is a signatory will also be explored and integrated in the system.

The current system of preparing reports to comply with the UNFCCC requirements in India is highly dependent on international financial support. This project will address this by building the capacity to implement the national transparency system. Firstly, the CBIT project will propose institutional arrangements and a legal framework for data and information sharing and management for the National Transparency System, which will ensure continuity of transparency activities in the long run. The project will also create tools and procedures which are 'one-off' investments such as the development of the centralised IT data management platform for the sectoral and subnational stakeholders involved in the preparation of the reports and a knowledge platform where the current and future public can access the climate data and the reports produced by the country. It will also create the quality control and quality assurance systems to maintain and improve the centralised IT data and knowledge platform, as well as the capacity-building system through a training institution to train sectoral and subnational stakeholders in using them. The capacity-building system will be designed in partnership with a reputed institution and a roster of national experts with whom MoEFCC will enter in an agreement with, to ensure that the capacity building mechanism will be consolidated into the training reputed institution offer and sustainable after CBIT project completion. The enhanced coordination, formalisation of roles and mandates, IT platform and trainings delivered by the roster of experts will extend the pool of experts available in the country and will enable India to implement transparency activities after the project completion. The developed capacity-building material will also be shared on the knowledge platform and available to current and future transparency stakeholders.

Moreover, The CBIT project addresses a future need that is (a) recurring and (b) imposed by Paris Agreement and MPGs reporting requirements – that of a periodically updated national GHG inventory that informs National Communications and BTRs. Not only it will improve the quality of the inventory and the NDC tracking but also will improve the process by which the inventory is compiled and the NDC monitored and updated and by building the capacities of relevant institutions to contribute to the inventory and the NDC and to inform other policy development/implementation needs, the project will ensure that its benefits are sustained into the future.

The financial sustainability of the established national transparency system and institutional arrangements will be ensured, since various ways to finance the integral transparency systems will be explored, including private and public finance sources. This will allow the established system to continue to be operational after the end of this project. The knowledge management activities will increase the awareness and interest of government stakeholders to access NDC and GHG inventory data. These groups will serve as sources of co-finance to ensure project continuity beyond the project close date. The IT national transparency system will help to use climate information in national planning and policy making, helping policymakers to guide decisions to lead to further reductions in GHG emissions, increase of resilience, implement policy options aligned with the NDC commitments and the national priorities and favouring of sustainable development outcomes. This will further serve to convince the government of the value of these systems and securing their long-term financing.

1.a.4. Alignment with GEF focal area and/or Impact Program strategies.

The project is aligned with GEF focal area CCM-3-8, i.e. “Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through capacity building initiative for transparency.”

1.a.5. Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

The incremental cost reasoning of the project has not changed from the PIF stage. In-kind co-financing now totals USD 1,000,000, and Section VII of the accompanying UNDP project document provides a summary of project co-financing by donor, outcome, and type of contribution.

Since 1992, India has significantly gained from the experience of its national reporting to the convention. The GEF has continuously supported India in sustaining, mainstreaming, replicating, scaling-up and transforming markets towards achieving developmental priorities.

This proposal aims to build on the support received from multilateral and bilateral sources to provide capacity building and facilitate reporting. For instance, the United States and Canada have provided inventory support in a number of areas, including forests. Building upon these efforts would be useful moving forward.

Investment under this proposal will address capacity related gaps with inventory improvements and tracking NDC performance through efficient coordination between involved agencies. This project will enable and equip existing institutions with sound understanding of the reporting process and further build their strength towards necessary training, tools, and techniques towards measurement, verification and reporting on climate actions. It will prepare India for Biennial Transparency reporting provisions as discussed and detailed out in 18/CMA.1 decision in Katowice.

As one of the priority areas of India’s first, second and third BURs, the project aims to achieve a complete shift to IPCC 2006 guidelines (or the latest ones, for instance will apply the 2019 refinement together with the 2006 IPCC Guidelines when required) for inventory reporting. Through NCIS, it will also extensively publicise India’s needs, gaps and support required to fulfil the commitments made under NDC.

The CBIT project does not necessitate co-financing from the host country. However, India’s commitments shall be captured through the ongoing capacity-building efforts which complement this system, and an additional domestic co-financing will be provided as highlighted in the table for each expected outcome.

In the absence of GEF funding, India will certainly continue with the development of its existing MRV process which may pose challenges around overlapping information at an aggregated level. Moreover, it would be a time-consuming and costly process with the duplicity of efforts and lack of enough coordination among agencies.

1.a.6. Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF).

The project will contribute to the improvement of local and global environmental conditions through enhancing transparency related to GHG emissions, impacts of climate change, and mitigation and adaptation actions in the country. Strengthened MRV will allow the government to better assess investments in mitigation and adaptation measures, and may result in more efficient expenditures on climate-related activities, which in turn could optimize reductions in GHG emissions. Improved MRV will also allow the government to compare the relative costs and benefits of mitigation and adaptation measures so it will be able to highlight and support cost-effective, high-impact adaptation measures.

This project continues to improve existing capacities and close the gaps and barriers identified by national experts and capacity building needs identified by the International Consultation and Analysis process of the first, second and third BURs. It promotes global best practices and accommodates takeaways from COP24 on modalities, procedures and guidelines for enhanced transparency framework. Effectively, this proposal aims towards a future-ready transparency mechanism in India to build such capacities over time and comply with the timelines adopted under the Paris agreement for NDC revisions, global stocktaking and submitting biennial transparency reports. Moreover, one of its components highlights the dissemination of learnings and takeaways from the proposed system through the global coordination mechanism of CBIT.

This project contributes to the country's commitments under the UNFCCC to enable it to address climate change considerations (mitigation of GHG emissions and reduction of vulnerability to climate change). project activities contribute directly to increasing the extent to which state institutions base their actions on the principals of sustainable development and increasing the capacities of public actors to implement, monitor, and evaluate policies related to environment, climate change and nature protection. The domestic MRV system to be developed under Component 3 is designed to avoid duplication and results in an efficient system that will reduce time burdens and costs to state institutions in data collection and analysis.

The project will also assist in achieving the SDG 13 by supporting the integration of climate change measures into national policies, strategies and planning; building knowledge and improving education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning, and promotion of mechanisms for raising capacity for effective climate change-related planning and management in the country. The project will also contribute to achieving SDG5 by supporting empowerment of women in decision-making, land ownership and through gender-sensitive budgeting.

1.a.7. Innovativeness, sustainability and potential for scaling up.

Innovation

The proposed project intends to build upon existing institutions and capacity to further structure the transparency framework for India. Extensive use of Information technology (IT) enabled systems with NICS and NCIS would be the most innovative feature of this project as it aims to set a sustained coordination among stakeholders in an effortless manner. It also creates a fantastic opportunity for renowned experts as well as aspiring climate enthusiasts to get on board as experts and convey their learnings from the UNFCCC process to a larger group at state and sectoral levels. This is an innovative measure to tackle the challenge with availability of skilled and trainer manpower, as it will create a cadre of experts across states and sectors. Finally, the NCIS will not only showcase inventories and compliance with NDC reporting, but it will also feature country-specific priorities in the area of mitigation, adaptation, technology transfer, technical know-how and associated forms and magnitude of support. This will offer a comprehensive National Climate Information System (NCIS) of climate related information in India which is new and original.

Sustainability

The concept of 'train the trainer' through a network of experts, lead agencies, and state/sectoral focal points would also bring sustainability to the information management process. In addition, NICS would provide necessary technical support in terms of collecting and archiving all the information in standard templates. A uniform system is easy to learn and maintain compared to an ad-hoc process of accounting.

The project design has several features supporting sustainability. First, it builds on existing institutional arrangements and technical capacities, particularly GHG Inventories and previous BURs and NCs. Second, the project has benefitted from a broad consultative process with public, private and civil society actors and from existing consultative relationships that have been developed over time. Institutional sustainability will be ensured by NICS. NCIS will ensure the sustainability of project outputs on a continuous basis.

Scaling up

The MRV system scope and transparency framework is already quite comprehensive at the national level, applying to all sectors and actions related to climate change within all state levels, as well as the SAPCC. However, there may be room to expand the transparency framework into new areas, making links with other indicators and MRV systems that would support a more integrated transparency framework, placing the country on a path to a sustainable, resilient and low-emission economy. In addition, project activities focusing on increased capacity for MRV at the state level have great potential for replication. States face barriers to environmental management in many sectors, and the skills and resources provided by this project can serve as important examples for capacity strengthening in other sectors.

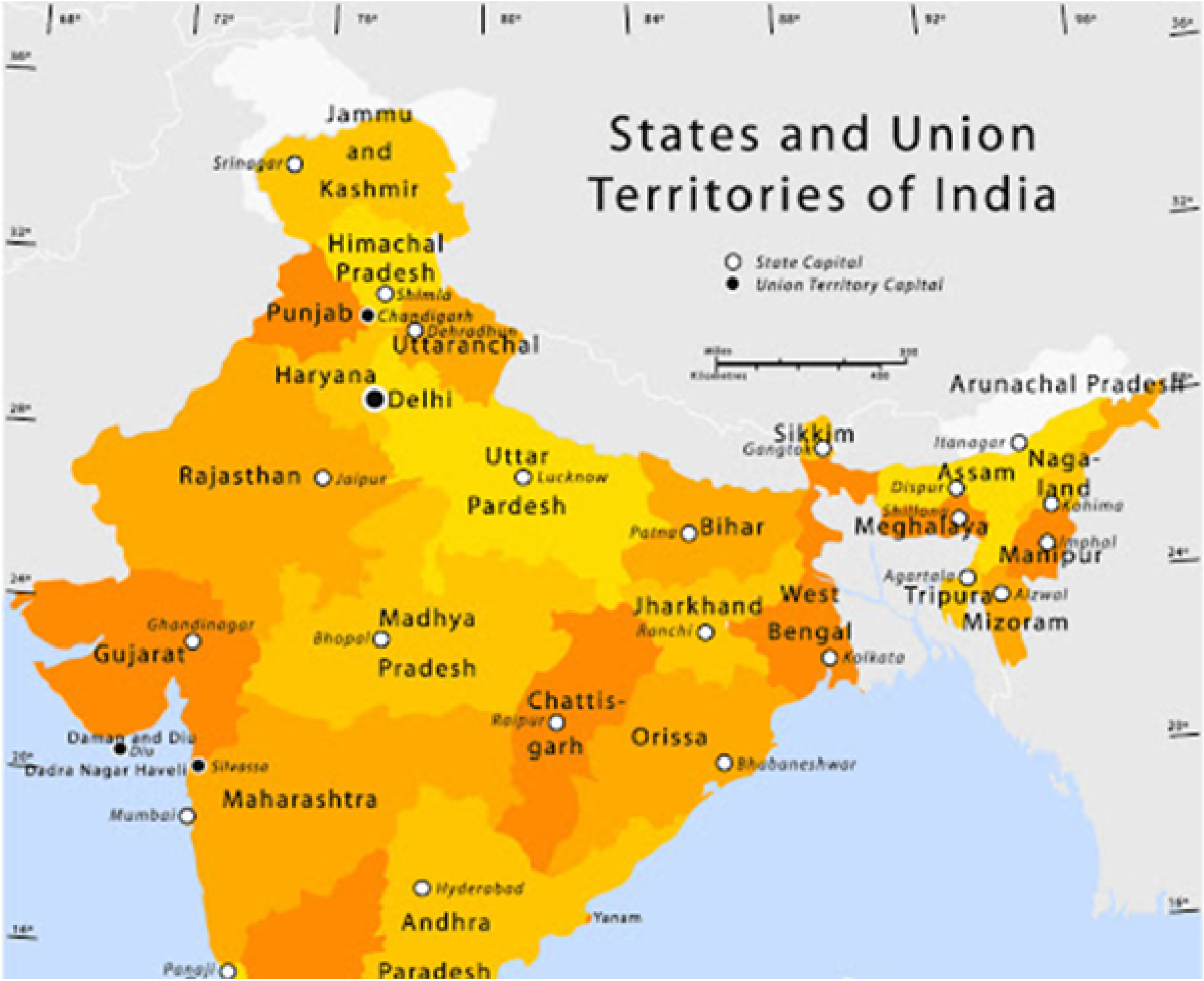
The collective arrangement proposed across the three components can easily be scaled-up to accommodate emerging requirements under the Convention. The effort and time required to scale-up would be significantly less than alternative approaches. In the long-run with additional support, this function can be extended to link-up with tracking of sustainable development goals (SDG) and Disaster Reduction Risks (DRR).

Finally, there is additional potential to scale up and/or replicate project activities through regional peer exchanges and regional capacity-building. The exchange of experiences among countries in this region can bring additional benefits to climate change policy and action planning under the NDCs, supporting more rigorous targets in participating countries.

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

1b. Project Map and Geo-Coordinates. Please provide geo-referenced information and map where the project interventions will take place.


States and Union Territories of India
State Capital
Union Territory Capital
Jammu and Kashmir
Srinagar
Himachal Pradesh
Shimla
Punjab
Chandigarh
Dehradhun
Uttaranchal
Haryana
Delhi
Rajasthan
Jaipur
Uttar Pardesh
Lucknow
Sikkim
Gangtok
Arunachal Pradesh
Itanagar
Assam
Dispur
Naga-land
Kohima
Meghalaya
Shillong
Manipur
Imphal
Tripura
Agartala
Aizwal
Mizoram
Bihar
Patna
Jharkhand
Ranchi
West Bengal
Kolkata
Madhya Pradesh
Bhopal
Gujarat
Ghandinagar
Chattis-garh
Raipur
Orissa
Bhubaneshwar
Daman and Diu
Diu
Dadra Nagar Haveli
Silvassa
Maharashtra
Mumbai
Hyderabad
Andhra Paradesh
Yanam
Pangji

Arabian Sea
Goa
Karnataka
Bangalore
Chennai
Pondicherry
Mahe
Tamil Nadu
Karaikal
Lakshadweep Islands
Kavaratti
Kerala
Thiruvananthapuram
Indian Ocean
Bay of Bengal
Andaman and Nicobar Islands
Port Blair
12°
8°
72°
76°
80°
84°
88°
92°
Wikimedia Foundation
WikiProject Indian Maps

1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

N/A

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Climate change is a cross-sectoral issue involving diverse set of stakeholders at every level. Following an inclusive participatory approach and as per the requirement, during the project period, a series of stakeholders like central Government Ministries, State Governments, sectoral experts and institutions, academic and research institutions, private sector, youth and children, civil society organizations among others will be sensitized/involved/trained for meeting the provisions stipulated in Article 13 of the Paris Agreement.

The stakeholders were consulted extensively during the project preparation phase to identify the capacity needs for implementing ETF in India.

After GEF CEO endorsement, the first opportunity to engage with the concerned stakeholders will be the project inception workshop. This workshop will provide an opportunity to discuss the project outcomes, outputs and activities in detail and firm up the plan of implementation with timelines and responsibilities to meet the objectives envisaged in the project results framework.

A list of stakeholders with their role to project formulation and their planned role in project implementation are summarised below including updated information from the PIF.

Stakeholder	Relevance and Role to Project formulation	Planned role in project implementation
Ministry of Environment, Forest and Climate Change (MoEFCC)	Nodal ministry of Government of India (GoI) for issues related to United Nations Framework Convention on Climate Change (UNFCCC), its Kyoto Protocol and Paris Agreement as well as Intergovernmental Panel on Climate Change. The Ministry also coordinates National Reporting to UNFCCC, Nationally Determined Contributions, National Action Plan on Climate Change and State Action Plans on Climate Change while providing requisite assistance to the Prime Minister Council on Climate Change. MoEFCC is also implementing Green India Mission under NAPCC. The Ministry is also the national focal point for all the multilateral environmental conventions/ agreements to which India is a Party. The Ministry is handling all matters relating to environment, forest, wildlife, control of pollution among other things. The Ministry has a number of undertakings and organizations, including Forest Survey of India, Indian Council of Forestry Research and Education, Central Pollution Control Board among others.	· The Project will be housed in MoEFCC with a senior officer being appointed as National Project Director. · The Ministry will coordinate the preparation of national reports to UNFCCC under Enhanced Transparency Framework, finalize the reports and submit it on behalf of GoI, to UNFCCC periodically, as decided by COP and, in accordance with national requirements, priorities and circumstances. · Coordinate revisions/ updates of national and state action plans on climate change while serving as a repository of progress reports on climate action.
Department of Economic Affairs (DEA)	One of the three Departments of Ministry of Finance which tenders expert advice to the Govt on important issues of economic policy. The Division monitors economic developments, domestic and external and advises on policy measures relating to macro management including agriculture, industry and infrastructure sectors of the economy. The Department has a Climate Change Finance cell.	· Track climate finance flows, domestically and internationally (multilateral, bilateral, regional and hybrid) - responsible for climate finance MRV. · Leading the development of definitions, classification and methodologies on climate finance. · Provide data/ information related to climate finance flows for national reporting process.
Ministry of New and Renewable Energy (MNRE)	Nodal ministry of GoI for all matters relating to new and renewable energy for supplementing the energy requirements of the country. MNRE is also implementing National Solar Mission under NAPCC. The Ministry has expert institutes/ agencies namely, National Institute of Solar Energy, National Institute of Wind Energy, Indian Renewable Energy Development Agency among others.	These Ministries/ Departments will support the implementation of mitigation and adaptation activities related to building capacity towards improved monitoring, reporting, and verification of information and will continue to provide the following: · Activity data for the preparation of national GHG inventory. · Information and data on their respective policies and programmes with impact on climate mitigation and adaptation as well as progress towards achieving NDCs under ETF.
Ministry of Power (MoP)	MoP is mainly responsible for evolving general policy in the field of energy (including electric power sector, hydro-electric power, thermal power and transmission & distribution system network). The Ministry handles all matters relating to Central Electricity Authority, Central Electricity Board and Central Electricity Regulatory Commission, energy conservation and efficiency in Power sector, rural electrification and power schemes/ issues relating to power supply/ development schemes/ programmes/ decentralized and distributed generation in the States and UTs. The Ministry has a number of undertakings and organizations, including Bureau of Energy Efficiency, Central Power Research Institute, Rural Electrification C	

	ity, Central Power Research Institute, Rural Electrification Corporation Limited, National Thermal Power Corporation Limited among others.
Bureau of Energy Efficiency (BEE)	BEE assist in developing policies and strategies with a thrust on self-regulation and market principles with the primary objective of reducing energy intensity of Indian economy within overall framework of Energy Conservation Act, 2001. BEE provides regulatory and promotional support by coordinating with designated consumers, agencies and other organization while recognizing, identifying and utilizing the existing resources and infrastructure in the country for energy efficiency. BEE is also implementing National Mission on Enhanced Energy Efficiency under NAPCC.
Central Electricity Authority (CEA)	CEA provides technical support base to all stakeholders in the power sector, to support MoP for forming policies, to make technical standards and regulations, to carry out project monitoring, to disseminate power sector information, to upgrade skills of human resources in the power sector. CEA brings out daily report on electricity generation, coal stock position (for Thermal Power Stations) and renewable energy generation.
Ministry of Coal (MoC)	Provide official information on the production and supplies of coal across the end-use sectors primarily at the national level.
Ministry of Petroleum and Natural Gas (MoPNG)	Provide official information on the production and supplies of liquid and gaseous fuels across the end-use sectors primarily at the national level. The Ministry has a number of undertakings and organizations, including Petroleum Conservation Research Association, Petroleum Planning and Analysis Cell among others.
Other Sectoral Ministries and Departments	· Ministry of Agriculture and Farmers Welfare (Department of Agricultural Research and Extension, Indian Council of Agricultural Research network) · Ministry of Housing and Urban Affairs · Ministry of Rural Development · Ministry of Jal Shakti · Ministry of Road Transport and Highways · Ministry of Civil Aviation · Ministry of Railways · Ministry of Shipping · Ministry of Earth Sciences (India Meteorological D

	epartment, Indian Institution of Tropical Meteorology) · Ministry of Statistics and Policy Implementation · Ministry of Science and Technology (Department of Science and Technology, Council of Scientific and Industrial Research network, National Remote Sensing Centre) · Department of Heavy Industries · Ministry of Health and Family Welfare (Indian Council of Medical Research)	
National Institution for Transforming India (NITI) Aayog	Is responsible for evolving a shared vision of national development priorities, sectors and strategies with the active involvement of States/ UTs; monitor and evaluate implementation of programmes and initiatives, including identification of needed resources to strengthen delivery; focus on technology upgradation and capacity building for implementation of programmes and initiatives, offer platform for resolution of inter-sectoral and inter-departmental issues to accelerate implementation of development agenda among other responsibilities. NITI Aayog has 23 verticals covering a number of sectors. It is also the nodal coordinating institution in Government of India for overseeing the implementation of the 2030 agenda for Sustainable Development	They will facilitate in evaluating and providing a cross-sectoral policy perspective especially through the lens of sustainable development goals.
State/ Local Governments	India is a federal union comprising of 28 States and 9 Union Territories which are further divided into about 731 districts comprising of Urban Local Bodies (for urban areas) and Panchayati Raj Institutions (for rural areas). · States/local governments are responsible for the design and on-ground implementation of their respective State Action Plan on Climate Change (SAPCC) as well as implementation of various schemes/ programmes related to climate mitigation and adaptation.	They will provide information/ data on the implementation of their respective SAPCCs and climate change-related schemes/ programmes. · They will participate in capacity building activities and trainings on climate change related matters. · They will be encouraged and supported to create centres of excellence to improve capacity retention and ensure sustainability of the outcomes of the project. · Their sensitisation on climate change related matters will improve their involvement, ownership and implementation of climate action as well as monitoring, verification and reporting process on climate action. · They will nominate focal points for t

		· They will nominate focal points for the MRV system.
Academic & Research institutions	Some of the academic and research institutions working on various aspects of national reporting under ETF are as follows: · Central Institute of Mining and Fuel Research (CIMFR) · Central Research Institute for Dryland Agriculture (CRIDA) · Indian Institute of Management-Ahmedabad (IIM-A) · CSIR-Indian Institute of Petroleum (IIP) · Indian Institute of Science (IISc) · Indian Agriculture Research Institute (IARI) · National Environmental Engineering Research Institute (NEERI) · National Remote Sensing Centre (NRSC) · National Diary Research Institute (NDRI) · Technology Information Forecasting and Assessment Council (TIFAC)	· These institutes will contribute data/ information related to national GHG inventory, NDC implementation, adaptation action, finance, technology and capacity-building needs and support received for India's national reporting process under ETF. On need basis, other national expert institutions will also be involved with the national reporting process under ETF. · They will strengthen institutional capacity towards monitoring, reporting, and verifying progress with NDCs and emission tracking. · Updating emission factors and other parameters on a periodic basis · Developing capacity to elaborate the best quality estimates of GHG inventories · They will also peer-review the reports to be submitted to the UNFCCC.
National Informatics Centre (NIC)	Established in 1976, NIC has rich experience in providing ICT and e-Governance support to Government. NIC has emerged as a promoter of digital opportunities for sustainable development. NIC through its ICT network as institutional linkages with all the Ministries/ Departments of the Central Government, State Governments/ UTs and District Administrations of India. Their main responsibilities include setting up of ICT infrastructure, implementation of national and state level e-Governance projects/ products, research & development, capacity building etc.	· They will provide requisite support for the setting up and implementation of web portal proposed under this project at the national and sub-national level.
Civil Society Organizations (CSOs) and Non-governmental Organisations (NGOs)	CSOs in India are active and involved in national reporting process both directly and indirectly. They are also involved in conducting independent assessment of government policies and schemes and suggesting improvement measures. Some of these NGOs are TERI, CEEW (GHG Platform India), CSTEP, WRI, IORA Ecological Solutions, Development Alternatives, IRADe, among others which will be involved on a needed basis.	· They will find representation through proposed *lead agencies* and *experts* · Their involvement through consultation processes will provide valuable inputs as well as more credibility to the transparency framework. · Their capacity would further boost t

		· Their capacity would further boost the climate reporting process
Private sector (Industry and/or Industry associations)	They play a very crucial role in the overall economic, social and environmental ecosystem of the country. They are the ultimate point source of information and bringing innovative reforms towards deep decarbonisation. Some of these industrial associations are CII, FICCI, PhD Chamber of Commerce, ASSOCHAM and others	· They will find adequate coordination with the state focal point, sectoral focal points, lead agencies, the MoEFCC and other relevant stakeholders for information management and assessment of GHG emissions and mitigation potential through technology and process reforms

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

See please the Stakeholder Engagement Plan attached as an annex.

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor; Yes

Co-financier;

Member of project steering committee or equivalent decision-making body;

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

India has one of the lowest female labour force participation rates in the world despite women constituting 48% of the country's total population base. India has been ranked 108th out of 149 countries evaluated by World Economic Forum's gender gap index 2018, which demonstrates poor performance across economic opportunity, political empowerment, educational attainment, health and survival of women. This reinforces the general understanding that women are more vulnerable than men in the adverse climate scenarios as they have less access to resources, limited mobility, and higher exposure to vulnerabilities. The Indian government has noticed this grave concern and has taken up several initiatives towards gender equity, such as: National Rural Livelihood Mission (NRLM) and National Rural Economic Transformation Project (NRETP), collectively these two programmes have mobilised ~57 million women from marginalized groups into self-help groups and their higher-level federation.[1] In addition, through the 'technical assistance grant for ESP and Gender,' India is making efforts towards increased participation of women at local level through skill development and job creation. However, women in India (as in any developing country) are more exposed to the burden of climate vagaries owing to their hardship with household duties and association with traditional sectors such as paddy cultivation, fishing, tea plantation, etc.[2]

Previous work on gender in India

Studies suggest that increased participation of women in the decision-making process results in internalising gender aspects more rationally with development policies. To achieve such objectives, State level action plans on Climate Change (SAPCC) will be more inclusive by harmonising gender aspects in adaptation and vulnerability planning. India´s second BUR and TNC broadly speak about gender issues in terms of promoting equity and equality among all.

The UNFCCC today unequivocally reinforces the importance of achieving gender parity in the constitution of the Secretariat, Party delegations and the work of the Parties. The UNFCCC Gender Action Plan (GAP), created under the Lima work programme on gender (LWPG) that was adopted in 2014 at the COP decision 18/CP.20, commits to gender equality across five areas: (a) Capacity building, knowledge sharing and communication; (b) Gender balance, participation and women's leadership; (c) Coherence across UNFCCC and the UN system; (Gender-responsive implementation and means of implementation); and (e) Monitoring and reporting.

India had welcomed LWPG and submitted a response that included a list of policies and practices that promoted participation of women in "all" fields of activities. These included the schemes framed by the Ministry of Women and Child Development but also other policies like the National Environment Policy 2006 that seeks to inter alia eliminate gender disparities. The submission listed the following steps to enhance participation of women and improve gender balance at national and international platforms. These steps included, for instance, (i) assessment of women's vulnerabilities in a climate-risk scenario; (ii) assessment of gender-specific natural resource use patterns; (iii) recognizing and strengthening specialized skills and capacities of women; (iv) creation of an enabling environment for women's participation in decision-making; (v) periodic monitoring, evaluation and reporting using gender-responsive indicators and involving gender experts; (vi) reviewing mechanisms of climate change responsive programmes to provide constructive feedback to policy making, planning, budgeting and implementation from a gender lens; and (vii) involving all stakeholders, especially women, in the review process of programmes to allow for mid-term correction.

The UNDP is committed to gender equality and works with gender markers and the Gender Equality Strategy 2018-2021 in countries to integrate gender into all of UNDP's work to reduce poverty and build resilience and to help accelerate achievement of SDGs 2030 targets. UNDP has worked with the Government of India to promote gender though several sectors that include health, education, environment, energy and building local resilience. Gender equality is one of the key focus areas of the UN Sustainable Development Framework (UNSDF) which also includes gender indicators. Under the UNSDF-India agreement, one of the key result areas, for instance is to increase women's access to and ownership of economic assets such as land, loans and home.

Mainstreaming of gender in GEF projects is mandatory. As per a new GEF Policy on Gender Equality in 2018, the three gender gaps most relevant to GEF projects are: (a) unequal access to and control of natural resources; (b) unbalanced participation and decision-making in environmental planning and governance at all levels; and (c) uneven access to socio-economic benefits and services. The new GEF policy has a major shift of focus from a gender-aware "do no harm" approach to a more gender-responsive "do good" approach.

The Indian Constitution guarantees gender equality through several provisions and also empowers the government to favor women through measures of positive discrimination. Women have the Equality of Opportunity in relation to employment or appointment to office under the State (Article 16) and equal right to pay for equal work (Article 39(d)). After Independence, India joined the UN Organisation and incorporated many human rights provisions into its Constitution, mandating equality and non-discrimination for both sexes. Women were given voting rights along with men right after Independence.

In climate change plans, India's National Action Plan on Climate Change explicitly recognizes that women are more vulnerable to climate change: "The impacts of climate change could prove particularly severe for women. With climate change, there would be increasing scarcity of water, reduction in yields of forest biomass, and increased risks to human health with children, women and the elderly in a household becoming the most vulnerable. With the possibility of decline in availability of foodgrains, the threat of malnutrition may also increase. All these would add to deprivations that women already encounter and so in each of the Adaptation programmes, special attention should be paid to the aspects of gender." India's first National Communication to the UNFCCC (NATCOM 1, 2004), recognised that the emphasis on empowerment of women in the national plans contributed to in good measure to successes on environmental sustainability in the development process. The Communication also gave credit to civil society groups for creating awareness among women on environmental issues and mobilising them to safeguard ecological resources.[3]

India's NATCOM II in 2012 elaborated the responsibilities that women shoulder as frontline workers with natural resources, from being farmers to ferrying water and not owning economic assets like land and not sitting on decision-making tables. A section on 'gender, water and climate change' shared the results of an analysis on Climate Vulnerability Index for 2025, which showed that vulnerability decreased substantially with higher levels of literacy, life expectancy, incomes and decrease in infant mortality. It led to a "significantly" higher proportion of families having access to safe drinking water sources and improved sanitation facilities in terms of safe toilets.[4] India's First Biennial Update Report to the UNFCCC in 2016 mandated inclusion of women in the implementation of REDD-plus with local communities.

Yet, gender inequality continues to span across social, economic and political sectors leading to gender-based socio-cultural barriers which restrict women's mobility for work and economic barriers which make it difficult for women to take bank loans to invest in small enterprises and home-based work. In the political arena too, besides low representation of women in higher legislative platforms, women's participation in actual decision-making continues to be low even at the village panchayat level where they have a 50% reservation of seats. Their menfolk continue to be real decision-makers.

Thus, mainstreaming of women in climate change solutions through capacity building to understand and make informed decisions as well as build on their own knowledge of the environment is critical. Women's full participation in capacity building activities depends on many factors, including training curriculum, material and methodologies that are conducive to women, a safe environment and a convenient venue. Field experience shows that women are more willing than men to adopt new ways of adaptive measures where these secure more food, water, fodder and energy for their homes, cattle, kitchen gardens and fields. Many of the success stories in climate change reports are about women who took up new initiatives to conserve their village ponds, increase food crops on farms and save trees to grow forests. This means that gender considerations should be integrated into a project at the planning stage, including planning of budgets and investments and progress should also be measured from a gender lens. This is true of interventions made by government agencies as well as private actors and civil society groups.

How CBIT project will support gender?

This project proposal does not directly aim to close the gender-gap within India and its development policies; however, it intends to bring gender-parity with all capacity-building efforts. To that end, this CBIT proposal is designed to conform to 2018 guidance from the GEF on gender equality,[5] and it met the following requirements during the project preparation phase:

· A gender analysis has been conducted as recommended under GEF procedures.

· A gender action plan has been included in the CEO Endorsement Request in order to ensure that differences identified will be addressed.

· The project results framework includes gender-specific activities. The framework also includes targets for women's meaningful participation in project activities, and the project monitoring and evaluation budget will support the collection of gender-disaggregated data where relevant.

Gender equality and women's empowerment will be addressed throughout the project cycle in the following ways:

· The project will consider the *Gender Responsive National Communications Toolkit* developed by the Global Support Programme through UNDP and in collaboration with UNEP and GEF.

· Gender-sensitive targets and activities will be monitored in project reporting, both in annual reports and PIRs and in the mid-term evaluation and the terminal evaluation.

The CBIT project components will ensure an adequate participation of women across major activities by integrating gender elements within the design and reporting of outcomes.

Following aspects will be considered across project components (as applicable):

· Experts will be required to list gender policy specialists in addition to other subject experts, and it will list at least one woman in that area.

· Women's participation as sectoral and state level focal points will be encouraged and promoted.

· M&E of the project will consider adequate representation of women as one of the performance metrics.

· Lack of gender-aggregated data leads to poor consideration of gender equity in development policies. Data templates to be designed under Component 2 will integrate suitable measures to collect gender linked information.

· The National Climate Information System (NCIS) proposed under Component 3 will also feature gender issues related to climate change to further share India's specific experience with the global community.

· Gender based sensitisation programmes will be introduced at the subnational level to promote gender aspects within SAPCCs.

Key areas that need to be complied with in GEF projects include a gender-specific context of the projects; findings from initial stakeholder consultations relevant to gender; details on how gender equality and women's empowerment will add value to the project's planned outcomes; gender-based activities required in the project development phase; relevance of gender to the success and sustainability of the project/programme; list of gender-based activities to be taken up by the project; and the project's contributions to enhancing gender equality and empowerment.

Annex 9 of the ProDoc provides an initial gender analysis of the situation in India in relation to this project. The project is integrating gender into the project design from the planning stage onwards, as part of the implementation plan and in monitoring and evaluation of the project. Annex 9 also provides an initial action plan on gender-based actions and indicators. The following give an overview of gender-based activities and indicators that have been part of the project proposal:

- The project has been prepared in consultation with gender specialists and on gender issues.
- A gender inclusion strategy will be developed in the inception stage of the project.
- The project will contribute to the mandatory UNDP gender markers as per the UNDP's QUANTUM system for gender relevance. Other gender markers will also be identified where relevant.
- Inclusion of gender-based issues and gender-based vulnerabilities and capacities will be monitored across all stakeholder institutions.
- Gender balance in participation in activities will be ensured.
- Gender-disaggregated data will be part of the MRV system with specific tools and guidance on how to collect and communicate this data.
- Specific recommendations will be provided for making gender-responsive capacity building activities and policies.

Proposed Action Plan

Objective	Action	Indicator
Component 1: Creating an enabling environment for enhanced transparency across all the levels of governance		
Participation and active involvement of women at all levels of capacity building - operational, technical and decision-making	Develop a gender inclusion strategy at the project inception stage. Identify and include women-focused institutions from among all stakeholders Plan capacity building curriculum in a participative manner and using a gender lens	Presence of gender inclusion strategy Adherence to the gender inclusion strategy (SWOT analysis) % of women participating in training activities under Component 1 Levels of women representatives in capacity building activities Impacts in terms of gender issues covered as part of Component 1
Component 2: Strengthening institutional and technical capacities for Measurement, Reporting and Verification (MRV) of climate information		
Inclusion of gender issues and gender-disaggregated data at every level	Delineate gender issues at institutional level Collect gender-disaggregated data at every level Identify and include gender-based capacities on climate solutions Monitor inclusion of gender-based vulnerability and gender-based capacities in institutional reports across stakeholders Focus especially on agriculture & allied activities; rapid & slow onset disasters and climate shocks; SMEs and small entrepreneurs Monitor proportion of representation and specific contributions of women in training activities Plan capacity building activities on gender	Number of gender issues included in MRV % of women participating in training activities under Component 2 Range of gender-based vulnerabilities and capacities that form part of capacity building activities % of women trainers in capacity building activities Examples of contributions made by women in capacity building trainings Types of inclusion parameters used, e.g. language, technology platform, etc. Levels of women representatives in capacity building activities

Component 3: Instituting National Climate Information System (NCIS) to share relevant information in a transparent manner		
Inclusion of gender-based indicators, progress benchmarks and pilots that can be scaled-up	Collect and share gender-disaggregated data from the field and from institutions Provide specific recommendations on making capacity building gender responsive Co-create with gender-inclusive stakeholders gender-based indicators and benchmarks for gender responsive capacity building Utilise different communication channels to reach both women and men Enhance user understanding of MRV System and ability to use the system to prepare gender-sensitive policies and measures related to climate change. Plan capacity building activities on gender	Number of documented gender responsive indicators and benchmarks for capacity building present # of gender response scale-up pilots/start-ups/innovations Presence of specific guidelines and tools on how to prepare gender- sensitive climate change policies and measures, based on the data and information produced under the MRV. Characteristics of NCIS that make it gender responsive Levels of women representatives in capacity building activities

[1] The World Bank (2018) “Working for Women in India,” available at https://www.worldbank.org/en/news/feature/2019/03/08/working-for-women-in-india;

[2] Parikh (2007) “Gender and Climate Change Framework for Analysis, Policy & Action,” IRADE: Pp12

[3] NATCOM 1, Page 185 and page 172

[4] NATCOM II Page 146-147

[5] GEF (2018) “GEF Policy on Gender Equality”.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women

Does the project's results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

The private sector plays an important role, especially with data generation and sharing. Industry and their associations are relevant stakeholders as they must understand data reporting systems and provide adequate information in a timely manner. For example: Confederation of Indian Industry (CII), Federation of Indian Chambers of Commerce & Industry (FICCI), Cement Manufacturers Association (CMA), are involved in current reporting to the UNFCCC by providing the data needed for the elaboration of the GHG inventory.

Industrial associations collect information from industrial plants needed for the GHG inventory in electronic format in most cases. There will be synergies to exploit for future electronic reporting in India under the CBIT project.

The private sector will continue providing information to the state focal point, sectoral focal points, lead agencies, the MoEFCC and other relevant stakeholders and Ministries for information management and assessment of GHG emissions, energy efficiency, and mitigation potential through technology and process reforms.

Private sector is also participating in the PAT Scheme. This is a market-based mechanism to enhance the cost effectiveness in improving the Energy Efficiency in Energy Intensive industries (called DCs) through certification of energy saving which can be traded in form of ECerts (Energy Certificates). BEE is the implementing agency for the PAT scheme across the country. PAT is a purely national scheme aimed at increasing the energy efficiency in energy intensive industries/ establishments in India and has no relationship with CDM or any such international scheme to incentivise emission reduction. Under this scheme, industrial plants are engaged in increasing the energy efficiency of their activities and audits are undertaken by entities accredited by the BEE. The BEE manages a database with detailed information by industrial plant very relevant for the energy sector. In the future this information could be very valuable for facilitating the breakdown of energy consumption by category of the GHG inventory. This information can be also very useful for cross-checking purposes of both GHG inventory and NDC progress.

Industrial associations and individual plants play a very crucial role in the overall economic, social and environmental ecosystem of the country. They are the ultimate point source of information and bring potential innovative reforms towards deep decarbonisation. Some of these industrial associations are CII, FICCI, PhD Chamber of Commerce, ASSOCHAM and others.

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

The following tables summarizes anticipated project-related risks.

Type of Risk	Description	Likelihood	Prevention and/or Mitigation Strategy
	Unavailability of desired data/information at state and sectoral level(s).	Medium at the states level	To address this risk the project will make use of current data generation infrastructure and collaborate with a wide range of institutions and stakeholders, most of them already involved in the current transparency framework. In addition, the CBIT project will provide necessary tools, templates, training and know-how around collection, compilation, assessment, verification and reporting of information through a coordinated approach between sectoral/state focal points, lead agencies, and experts. Additional training will be delivered to the states on MRV of SAPCC through the implementation of data collection systems and arrangements and agreements with the key stakeholders and how to implement, involve and manage centers of excellence.
	Lack of mandate to allow sharing of data for certain sectors	Medium	MoEFCC will establish a sound linkage between the data providers, data evaluators and the governing body (including ministries) through the proposed NICS and mandates will be formalized through regulatory instruments.
Data/Information management	Proprietorship of desired information and challenges with disclosure of business sensitive information	Medium	This risk is mainly associated with certain type of industry facing market competition related challenges with disclosure of business/profit related information. In such cases, government will establish suitable data sharing protocols to maintain a balance between their concerns and country's climate commitments. Involvement of industrial associations in the transparency activities will be ensured.
	Poor quality of reported information	Low	Proposed system of information exchange within NICS will ensure data validation and data verifi

		cation. In addition, triangulation of information w ill enhance quality control and quality assurance processes
Timeliness	Medium	In India, typical delay with reporting of energy an d waste sector information is considerably high (3-4 years in certain cases). Digitalization of info rmation and streamlined process of sharing wou ld promote a swift and timely exchange of infor mation. System will fill the gaps wherever data fr equency becomes a challenge. NITI Aayog of Ind ia has already taken up an inter-ministerial task o f 'energy data management' across all sectors. T he MoEFCC, as the coordinating entity, will ensur e the timely obtention of international support an d will develop a biannual work plan with all stake holders involved in transparency activities.

Type of Risk	Description	Likelihood	Prevention and/or Mitigation Strategy
Operational	The mechanisms created by the project would not be sustainable beyond the end of the project implementation period.	Medium	Both the Government of India and the GEF have provided multi-year support for climate-related reporting activities in India. The analytical and information management skills put in place by the project will continue to be utilized beyond the end of the project implementation period. The extensive pool of trainers and the peer cross learning will allow for a wide number of beneficiaries with expert knowledge to continue the reporting to the UNFCCC. A reputed institution will be responsible to host and manage all capacity building and training activities.
	The web-based system might become obsolete or ineffective if transparency reporting requirements change over time	Low	The IT platform will be developed using open source software so that it may be maintained and updated as needed. Specific project activities should address training in the IT aspects of the system, documentation, manuals, archiving and storage.
	Turnover of government staff could reduce the number of trained people in key positions.	Medium	In India, most of the reporting system at the center and state level relies on temporary/ad-hoc consultants. The proposed project activities will create a cadre of experts through adequate training of trainers and knowledge-sharing protocols at the state and sectoral levels through respective focal points. This will certainly minimize such risks. In addition, the project will ensure that training materials are available to new staff as needed; and future staff members are trained by other employees at their agencies or by counterparts at other agencies. Furthermore, the project will develop didactic training materials and e-learning courses and will ensure that training materials are available to new staff as needed; and future staff members are trained by other employees at their agencies or by counterparts at other agencies.
Institutional	Lack of coordination among stakeholders leading to duplicity of efforts or accou	Low	The key feature of the CBIT project is the establishment of a robust coordination system among various actors. NICS would address this concern

nting or hindering data coll
ection and analysis

very well.

The national steering committee ensures comm
unication among the most relevant stakeholders.
Also the mandates that will be formalized during
the project and the training in the use of the tem
plates and tools will ensure that all institutions p
rovide timely data in the required formats.

Type of Risk	Description	Likelihood	Prevention and/or Mitigation Strategy
Political	Lack of skill set, and uneven skill sets in different public entities.	Medium	This will be addressed by developing targeted capacity-building approaches for different sectors and states and for different skill sets. Also, there will be a focus on knowledge transfer and peer to peer learning. In addition, the project will develop didactic training materials and e-learning courses and will ensure that training materials are available to new staff as needed; and future staff members are trained by other employees at their agencies or by counterparts at other agencies.
	The transparency framework would not be considered sufficiently important by the government to ensure adequate participation in and support for project activities; resources and attention	Medium	The project is explicitly designed to link the transparency framework to high-priority issues in India and to implement them through a user friendly IT system in which a high number of stakeholder including designated sectoral and states focal points will participate. This platform and the high number of stakeholders involved will ensure that the project maintains high-level support. In addition, the project will start with the definition and implementation of the required regulatory framework for sustainable mandates and proceduresso that the transparency framework is implemented at the level of the responsibilities and roles of the institutions as a regular task/function and not at the level of specific staff/external contracts.
	Frequent changes of the Government structures might lead to permanent deviations from the project plan.	Medium	The Monitoring and Evaluation Plan for the project and adaptive management is expected to result in improved quality of activities and adjustment of implementation plans to secure achievement of project activities. In addition, the project will start with the definition and implementation of the required regulatory framework for sustainable mandates and procedures so that the transparency framework is implemented at the level of the responsibi

			lities and roles of the institutions as a regular tas k/function and not at the level of specific staff/ex ternal contracts.
	Insufficient attention to clim ate change issues on the par t of the Government due to o ther pressing concerns will h inder project implementation	Medium	The project has been designed to ensure continuo us engagement with government partners and oth er stakeholders via the National Steering Committ ee and other meetings. In addition, the project will start with the definition and implementation of th e required regulatory framework for sustainable mandates and procedures so that the transparenc y framework is implemented at the level of the res ponsibilities and roles of the institutions as a regu lar task/function and not at the level of specific st aff/external contracts.
	If women are underrepresent ed in government positions, t heir participation in project a ctivities may be lower than e xpected.	Medium	The project has been designed to ensure participa tory approaches to project activities that support equal participation of men and women. A gender action plan will guide project implementation duri ng its whole duration.

Type of Risk	Description	Likelihood	Prevention and/or Mitigation Strategy
Financial	Some of the information ma nagement related activities might require additional fund s to support necessary infra structure and manpower	Medium	India will leverage the existing support channels o pen through UNDP, GEF, and various bi/multilatera l collaborations to support such requirements. Th e CBIT project will be implemented in parallel to th e 4NC/4BUR and BTR1 projects so that synergies are maximised.
Climate Risks	Potential climate change im pact beyond the project inter vention period	Low	The main outcome of the CBIT project is the stren gthening of India's enabling environment and cap acity for implementing the Paris Agreement. One of the reporting obligations under the Paris Agree ment are the Nationally Determined Contributions (NDC). The India's NDC also includes adaptation a

		(NDC). The India's NDC also includes adaptation actions and building resilience through adaptation is one of the primary objectives for the country. Improving capacity and transparency in the country will subsequently lead to more climate change adaptation experts working towards building resilience of the country.
The project potentially involves areas that are now or are projected to be subject to natural hazards such as extreme temperatures and changing monsoon rainfall patterns. The effects and fears of these natural hazards can affect the data collection and data storage, it can affect the equipment and movement of people and prevent capacity building activities.	Low	When activities need to be postponed due to warnings, the safety and integrity of the people will always be a priority, and the project will only return in its course when safety can be mentally and physically assured. For the data systems generated by the project, and the storage of this data, the project will design resilient systems able to withstand the threats posed by climate change. The CBIT project will build a cloud web-based IT infrastructure for data collection and storage. For capacity building activities, online options will be preferred when possible, to save resources for travel as a default position in the project. The 5 years' project duration and the e-learning material and courses developed under the CBIT project will allow to implement the training and capacity building activities during project duration. For those capacity building activities which need to take place in person, they will be planned outside the adverse effects seasons.
The project potentially involves local communities vulnerable to the impacts of climate change and disaster risks considering level of exposure and adaptive capacity	Low	The outputs and outcomes of the CBIT project are related to establishing institutional arrangements, strengthening transparency activities, training relevant stakeholders and overall capacity building. Any climate disaster will therefore not affect local communities due to possible failure or collapse of infrastructure and its structural elements.
The project potentially involves or leads to increases of greenhouse gas emissions, black carbon emissions or othe	Low	The CBIT project outcomes and outputs are not related to increasing GHG emissions associated with energy, transport, industry, product use, waste, agriculture, and changes in land use and ecosyste

r drivers of climate change

ms. Neither will the project require significant trav el or freight transport. For the implementation of t he trainings and workshops preference is given to local entities and experts, or the core focal points, which will keep the travel requirements to a minim um. There might be a need for an international co nsultant to provide a training or workshop, but thi s will result in minimal increases of greenhouse g as emissions which means that the potential of th e CBIT project to increase greenhouse gas emissi ons is therefore low. The project will additionally i mprove the GHG inventory process leading to the development of better quality data and train techn ical staff on the 2006 or latest IPCC Guidelines. T his will not directly lead to reductions of GHG emi ssions but will eventually result in more climate c hange experts in the country developing resource-efficient and low carbon development policies an d other measures for mitigating climate change in India.

COVID-19 risk analysis, response measures and opportunities

Risk analysis and response measures

The current Covid-19 pandemic is affecting all regions of the world and has created an unprecedented scenario with measures being enforced to prevent the spread of the virus. This poses a risk to several aspects of the CBIT project design and implementation. The key risks are related to the availability of technical expertise, capacity and changes in timelines, stakeholder engagement processes, enabling environment, and financing. The main risks identified, and the response measure considered in the CBIT are shown in the following table.

Covid-19 related risk		Response measure
	Training and knowledge management activities cannot be held due to restrictions	A combination of remote and digital-based guidance by international experts and utilization of national experts will be used to ensure the implementation of the activities. Activities related to knowledge management and possible exchanges will adhere to UNDP guidance on travel and precautions related to containment of the Covid-19 global pandemic, and the project will develop virtual or on-line activities to support these exchanges where possible. The same modalities will be employed when technical trainings are not possible in person.
Availability of technical expertise, capacity, and changes in timelines	Limited capacity and experience for remote work and online interactions affect the effectiveness of the interventions.	The development of guidelines, templates and manuals for each output developed within the project will ensure the outputs of the project can be used beyond project implementation and will allow the staff to access detailed information on MRV process, ensuring the sustainability of the work and reinforcing the institutional capacity of the institutions involved.
	Delays in project implementation	Most activities and events will be organized and conducted using virtual platforms to ensure that any Covid-19 related limitations will be dealt with in a timely manner. Furthermore, the design of the project has considered delays up to one year in the implementation of the activities by splitting the work during 2023, 2024, 2025, 2026, 2027 and 2028 and allowing most of the activities to be developed in parallel.
	Limited availability of international and national consultants to support project implementation.	National and international consultants might be affected by the travel restrictions of the pandemic or might suddenly endure the virus themselves, deterring them from participating in the project activities. Additionally, the availability in general of possible national and international consultations might be limited. UNDP and the government of India will therefore maintain a database of consultants with expertise in the different project components and proven competences for carrying out home based assignments.
Stakeholder Engagement Process	Mobility of stakeholders and staff is affected	The project design has taken into account steps to minimize these risks such as limiting travel to or from areas where Covid-19 is prevalent, and will also provide training on regular hand washing, social distancing and wearing masks in public for the project staff and stakeholders during the inception phase. These trainings will be repeated throughout the project implementation and reinforced during settings where it is determined to be high risks areas.
	Highly vulnerable actors and typically marginalized groups are not involved in project implementation	
Enabling Environment	Government priorities change because of the pandemic	The high-level involvement and commitment of national stakeholders shown in the PPG reaffirms the interest of the country and ensures the project implementation is country driven. The design of the project activities, prioritizing the use of virtual platforms, will allow stakeholder to cont

		the use of virtual platforms, will allow stakeholder to continue with their involvement in potential lockdown phases.
Financing	Co-financing availability	The contribution from the Ministry of Environment, Forest and Climate Change of India is provided in-kind, in the form of government personnel and public resources. The co-finance for the project is therefore not affected. The involvement of the staff from the PPG phase ensures the engagement of national stakeholders, that will be allowed to continue with project implementation home-based, if appropriate.
	Price increase in procurement	The possibilities for developing the work virtually ensures that the demand for procurement is sufficient to meet the project requirements in a cost-effective way.

Opportunity analysis

Although indirectly, most of the activities to achieve the project results are likely to have a bearing on Covid-19 efforts. The CBIT project will provide result in improved institutional arrangements, strengthened institutional and technical capacities for MRV of climate information, and the implementation of an institution – National Climate Information System (NCIS), which will all consider the Covid-19 pandemic related risks. The improved National GHG Inventories through capacity building activities will also touch upon the risks and assumptions based on the socio-economic impacts of Covid-19.

A positive impact from the Covid-19 pandemic is the opportunity to slowly introduce e-governance (online public service provision and delivery without physical interactions) over time, enabling service provisions in both rural and urban areas.

Given the fact that this project underlying principle is to cut emissions, Covid-19 is likely to have environmental and development benefits at the appropriate scale. Given the long-term need of practicing social distancing, Covid-19 is likely to introduce policy changes to many global meetings and conferences including those of the UNFCCC, GEF, UNCBD, UNCCD to enable innovative and digital modalities to be fully employed, applied and rolled out to countries. This is likely to change the modalities (currently travel heavy and posing risks of exposure through physical contact) of conducting Convention businesses and contribute to the long-term desired outcome of the Convention.

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

This is described in Section VI on Governance and Management Arrangements and in Section IV on results and partnerships of the UNDP Project Document.

The project will be implemented following UNDP's Country Office support to national implementation modality (CO support to NIM), according to the Standard Basic Assistance Agreement between UNDP and the Government of India, and the Country Programme. UNDP will follow its operational policies and procedures established for CO support to NIM implementation and will ensure the necessary oversight of the national implementing partner. UNDP will ensure the project delivers results to the highest standards and in full compliance with UNDP and GEF policies

The assistance provided through the CBIT project for development of India's transparency framework under the Paris Agreement will complement the support that the country has received and is currently receiving through other projects.

At the national level though there are limited initiatives on enhanced transparency, the proposed project will be designed and implemented in coordination with several ongoing GEF projects, already approved or in the process of approval that would provide valuable information/outputs to the CBIT process in terms of climate change actions, more specifically with the projects on preparation of the 4NC, BUR4 and first BTR. The project will seek linkages to the extensive national climate change portfolio including the GCF projects in the region. The Project will complement the Third NC, 4NC/BUR4 and first BTR process, NDC implementation as well as state level efforts of preparation and implementation of climate change mitigation and adaptation programmes (such as SAPCCs). The project will also build on outcomes of the study completed under the Third National Communication on MRV.

A few climate change initiatives are currently underway by various donor agencies in partnership with the national and state governments. Specifically, ICAT, GIZ, SDC, DFID, EU and UNDP are supporting national and state government to address national climate change priorities. USA and Canada have recently been providing support to improve the GHG inventory. The proposed project will complement this support by providing long-term assistance for the implementation of plans and investing in knowledge and cross-learning with other donors active in the region.

A list of GEF and GCF projects in India to coordinate with and/or build on during CBIT project implementation is provided in the table below.

List of GEF and GCF projects

Project Title	Fund	Approval date	Total Cost (in USD m)		Expected coordination with the CBIT project	Agencies
			Grant	Co-financing		
Groundwater Recharge and Solar Micro Irrigation to Ensure Food Security and Enhance Resilience in Vulnerable Tribal Areas of Odisha	GCF	Apr 2017	34.4	132	Coordination is needed to implement the activities for the Output 2.2.3 Tools, templates, and training towards tracking progress of NDC in particular concerning information for the adaptation component of the NDC	NABARD
Line of Credit for Solar rooftop segment for Commercial, Industrial and Residential Housing sectors	GCF	Mar 2018	100 (loan)	150	Coordination is needed to implement the activities for the Output 2.2.3 Tools, templates, and training towards tracking progress of NDC in particular concerning information for the mitigation component of the NDC with data on solar rooftop	NABARD
Enhancing Climate Resilience of India's Coastal Communities	GCF	Oct 2018	43.4	86.9	Coordination is needed to implement the activities for the Output 2.2.3 Tools, templates, and training towards tracking progress of NDC in particular concerning information for the adaptation component of the NDC	UNDP
Transforming Agricultural Systems and Strengthening Local Economies in High Biodiversity Areas of India through Sustainable Landscape Management and Public-Private Finance	GEF	June 2019 (Concept)	6.266	70	Coordination is needed to implement the activities for the Output 2.2.3 Tools, templates, and training towards tracking progress of NDC in particular concerning information for the adaptation component of the NDC	UNEP
Cities-IAP: Sustainable Cities, Integrated Approach Pilot in India	GEF	Feb 2017	12.11	113.953	Coordination is needed to implement the activities for the Output 2.2.3 Tools, templates, and training towards tracking pro	UNIDO

					gress of NDC	
Creating and Sustaining Markets for Energy Efficiency	GEF	Jun 2017	18.855	434.2	Coordination is needed to implement the activities for the Output 2.2.3 Tools, templates, and training towards tracking progress of NDC in particular concerning information for the mitigation component of the NDC with data on energy efficiency	ADB
Grid-Connected Rooftop Solar Program	GEF	Sept 2016	22.935	892	Coordination is needed to implement the activities for the Output 2.2.3 Tools, templates, and training towards tracking progress of NDC in particular concerning information for the mitigation component of the NDC with data on solar rooftop	WB
Green-Ag: Transforming India n Agriculture for Global Environmental Benefits and the Conservation of Critical Biodiversity and Forest Landscapes	GEF	May 2018	33.558	868.39	Coordination is needed to implement the activities for the Output 2.2.3 Tools, templates, and training towards tracking progress of NDC in particular concerning information for the adaptation component of the NDC	FAO
Securing Livelihoods, Conservation, Sustainable Use and Restoration of High Range Himalayan Ecosystems (SECURE)	GEF	June 2017	11.544	60.82	Coordination is needed to implement the activities for the Output 2.2.3 Tools, templates, and training towards tracking progress of NDC in particular concerning information for the adaptation component of the NDC	UNDP
Integrated SLEM Approaches for Reducing Land Degradation and Desertification	GEF	Feb 2015	4.14	17	Coordination is needed to implement the activities for the Output 2.2.3 Tools, templates, and training towards tracking progress of NDC in particular concerning informatio	WB

					n for the adaptation com ponent of the NDC	
Program to Establish Pilots f or Access through Renewable Energy	GEF	Oct 2 016	12.84 4	28.1	Coordination is needed t o implement the activitie s for the Output 2.2.3 To ols, templates, and traini ng towards tracking pro gress of NDC in particul ar concerning informatio n for the mitigation com ponent of the NDC with data on renewable energ y	WB
Market Transformation and R emoval of Barriers for Effecti ve Implementation of the Stat e Level Climate Change Actio n Plans	GEF	Sept 2015	3.744	25	Coordination is needed t o implement the require d capacity building activi ties to successfully impl ement the outcome 2.3. State focal points submi tting information throug h NICS, Output 2.3.1 An I T-enabled system couple d with the mandated pro cess of reporting inform ation on standardized te mplates.	UNDP
Mainstreaming Agrobiodivers ity Conservation and Utilizatio n in Agricultural Sector to Ens ure Ecosystem Services and Reduce Vulnerability	GEF	Jan 2 016	3.046	10.29 4	Coordination is needed t o implement the activitie s for the Output 2.2.3 To ols, templates, and traini ng towards tracking pro gress of NDC in particul ar concerning informatio n for the adaptation com ponent of the NDC	UNEP
Integrated Management of W etland Biodiversity and Ecosy stems Services	GEF	Mar 2 016	4.196	20.21 7	Coordination is needed t o implement the activitie s for the Output 2.2.3 To ols, templates, and traini ng towards tracking pro gress of NDC in particul ar concerning informatio n for the adaptation com ponent of the NDC	UNEP
Organic Waste Streams for In dustrial Renewable Energy Ap plications in India	GEF	Feb 2 015	3.33	18.21	Coordination is needed t o implement the activitie s for the Output 2.2.3 To ols, templates, and traini	UNIDO

					ols, templates, and traini ng towards tracking pro gress of NDC in particul ar concerning informatio n for the mitigation com ponent of the NDC with data on renewable energ y	
India Ecosystems Service Im provement Project	GEF	Jan 2 015	20.5	115	Coordination is needed t o implement the activitie s for the Output 2.2.3 To ols, templates, and traini ng towards tracking pro gress of NDC in particul ar concerning informatio n for the adaptation com ponent of the NDC	WB
Facility for Low Carbon Techn ology Deployment	GEF	Dec 2 015	8.71	59.77	Coordination is needed t o implement the activitie s for the Output 2.2.3 To ols, templates, and traini ng towards tracking pro gress of NDC in particul ar concerning informatio n for the mitigation com ponent of the NDC with data on renewable energ y	UNIDO
Efficient and Sustainable City Bus Services	GEF	Nov 2 014	9.2	113.6 36	Coordination is needed t o implement the activitie s for the Output 2.2.3 To ols, templates, and traini ng towards tracking pro gress of NDC in particul ar concerning informatio n for the mitigation com ponent of the NDC with data on energy efficienc y in transport sector	WB
Partial Risk Sharing Facility fo r Energy Efficiency	GEF	Feb 2 015	18	152	Coordination is needed t o implement the activitie s for the Output 2.2.3 To ols, templates, and traini ng towards tracking pro gress of NDC in particul ar concerning informatio n for the mitigation com	WB

					ponent of the NDC with data on energy efficienc y	
India: Sustainable Livelihoods and Adaptation to Climate Ch ange	GEF	Jul 20 14	8	52.2	Coordination is needed t o implement the activitie s for the Output 2.2.3 To ols, templates, and traini ng towards tracking pro gress of NDC in particul ar concerning informatio n for the adaptation com ponent of the NDC	WB
Scale up of Access to Clean E nergy for Rural Productive an d Domestic Uses	GEF	Dec 2 014	4	19.03 3	Coordination is needed t o implement the activitie s for the Output 2.2.3 To ols, templates, and traini ng towards tracking pro gress of NDC in particul ar concerning informatio n for the mitigation com ponent of the NDC with data on renewable energ y	UNDP
Promoting Market Transform ation for Energy Efficiency in MSME	GEF	Jul 20 15	4.465	26.86	Coordination is needed t o implement the activitie s for the Output 2.2.3 To ols, templates, and traini ng towards tracking pro gress of NDC in particul ar concerning informatio n for the mitigation com ponent of the NDC with data on energy efficienc y	UNIDO
Developing an Effective Multi ple Use Management Frame work for Conserving Biodiver sity in the Mountain Landsca pe of the High Ranges, Weste rn Ghats	GEF	Dec 2 013	6.27	30	Coordination is needed t o implement the activitie s for the Output 2.2.3 To ols, templates, and traini ng towards tracking pro gress of NDC in particul ar concerning informatio n for the adaptation com ponent of the NDC	UNDP
CBIT Global Coordination Plat form (Phase 2)	GEF	2021- 2024			This project provides str eamlined support and ca pacity building at the co untry, regional, and glob	UNEP

al level to enable Non-An nex I countries under the UNFCCC and developing countries under the Pari s Agreements to better r espond to reporting requ irements and to catalyze increased ambition withi n country NDCs.

The Platform facilitates sharing of information, k nowledge, and peer lear ning at the regional and global level. The CBIT pr oject will ensure knowle dge sharing on the Glob al Platform and will draw expertise and informatio n on best practices from it during the implementa tion of the activities for t he Output 3.3.1 Showca sing case studies and fe aturing them through CB IT global coordination pl atform.

In 2010, Indian Network on Climate Change Assessment (INCCA) a network of more than 250 scientists from about 125 institutions working on climate change related issues was set up. This virtual network was mobilized to encourage sound evidence-based assessments on the impact of climate change. INCCA brought a number of India-specific assessments like a study of four climate sensitive regions of the country (viz. Himalayan region, Western Ghats, North-eastern region and Coastal Areas) to assess the possible impacts on the four sectors (viz. agriculture, water, forests and health and associated ecosystem. These national expert institutions are actively involved with the national reporting process to UNFCCC and periodically assist the MoEFCC and other ministries in various capacities, such as: data assessment, modelling, forecasting and impact evaluation of policies and schemes. In addition, India has a vibrant civil society network which collaborates with the government in a constructive manner. For example: GHG Platform India is an initiative of a consortium of renowned civil society organisations providing an independent assessment on country's greenhouse gas emissions and mitigation actions.

This project is based on recommendations and needs that resulted from several consultations made in the run up to the TNC, expert-committee meetings on NDC and mid-century strategies as well as during FSV process of BUR-1, BUR-2 and BUR-3, as documented in the summary of team of technical experts.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assesments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

The main reports and assessments under relevant convention related with the project are:

- Nationally Determined Contribution (NDC) under the UNFCCC
- Biennial Update Report (BUR) under UNFCCC
- Biennial Transparency Report (BTR) under UNFCCC
- National Communications (NC) under UNFCCC
- Technology Needs Assessment (TNA) under UNFCCC
- National Capacity Self-Assessment (NCSA) of implementing CBD, UNFCCC and UNCCD in India

The project is consistent with the objectives stated in the First and Second National Communication and First, Second and Third Biennial Update Report to the UNFCCC encompassing adaptation (increase the community resilience and climate adaptation) and mitigation (contribute to GHG emission reductions in key economic sectors). It will also be aligned with the outcomes of the Third National Communication to the UNFCCC. It is notably aligned with the first NDC and considers creating capacity to track its implementation as well as that of subsequent NDCs.

The identification of needs for improved quality of the emissions data from specific sectors have been principally based on the specialized reports produced under the Second NATCOM, BUR-1, BUR-2, BUR-3 and TNC projects, this analysis has assisted in refining of the emission factors, reducing the uncertainty levels, ridding the tier ladder and improved adoption of IPCC 2006 guidelines across the sectors.

Also, the CBIT project has been initiated as a response to the requirements arising out of the Article 13 of the Paris Agreement and based on the needs for development of a robust transparency framework that will enable national governments to monitor and evaluate implementation of the NDCs and enhance ambitions in subsequent planning of climate change policies and measures in line with the global long-term climate goals. It also ensures that institutional capacities responding to these requirements are in place.

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

One of the core features of this proposal is improvement towards information management and institutional coordination systems at the sectoral and sub-national level. NICS would serve as a coordination medium between data providers, data aggregators, and the policy planners. It will also act as a back-end archiving system maintaining a disaggregated wealth of country level information. Provision of training at the sectoral and state level will ensure that a cadre of trained experts will manage the knowledge sharing process and sustain this in the future. Lead experts will generate meaningful insights from shared information, including learnings from several initiatives and associated evaluation. NCIS will demonstrate complete transparency by placing relevant information in the public domain for further scrutiny and use by civil society organisations. The entire process will be based on a consultative approach to minimise any oversight.

To foster learning, the list of national experts will participate in international trainings and reviews, workshops and meetings. Importantly, exchange on lessons learned will take place in two-directions.

The knowledge management in the framework of this action is expected to be shown through the platforms of knowledge management established not only at the level of NICS but also at the level of the component 3 on Instituting a National Climate Information System (NCIS) to share relevant information in a transparent manner. This knowledge management platform, which will be available for the monitoring system at the public domain for the dissemination of information.

This project will make a significant effort to learn from other relevant experiences. All components of the project will ensure that lessons learned from relevant projects and similar countries inform the implementation of this project. In this sense, the institutional arrangements will ensure that lessons are considered across ministries and sectors, with all relevant stakeholders providing inputs to and learning from the project. At the same time, lessons from this project will be published on-line.

Globally, the project will promote active exchanges of lessons learned with regional peers. The project will therefore define how national CBIT information shall be shared and updated on the global coordination platform. Sharing lessons learnt and experiences under the platform will ensure alignment of India’s CBIT project with other national, regional and global transparency initiatives.

Capacity building and training activities

The proposed framework acknowledges the capacity building needs identified during the International Consultation and Analysis (ICA) process for the first BUR as reiterated in the second and third BUR. It duly considers the needs and objectives targeted under the third NC reporting. As it involves states and sectoral representatives, it is robust and comprehensive in nature to address emerging needs under the Convention, meeting the requirements of the ETF and implementing a sustainable process of reporting.

Output	Content	Targeted stakeholder group
Output 1.1.2 Developing Standard Operating Procedures (SOPs) and assigning trained focal point among institutions covering each sector and state/union territory (UT).	Capacity building for developing SOPs	Coordinating entity (MoEFCC) Reputed institute who will host and manage NICS Designated national sectoral and states focal points (GHG inventory and NDC) Climate Finance Cell of DEA of Ministry of Finance (climate finance flows)
Output 1.2.1. Efficient recordkeeping of activity data, socioeconomic indicators, emission factors, methodology and assumptions, etc.	Train stakeholders to report data and information in NICS	Coordinating entity (MoEFCC) and management of NICS Designated national sectoral and states focal points (GHG inventory and NDC) Climate Finance Cell of DEA of Ministry of Finance (climate finance flows)
Output 1.2.2 Archiving systems for future referencing and performing recalculations, Output 1.2.3 Aggregation and exchange of relevant information through NICS	Training on coordination, management and update of NICS and NCIS	Coordinating entity (MoEFCC) and management of NICS
Output 2.1.1 Tools, templates, and training for agencies/experts involved in the inventory process (cross-cutting)	Training related to understanding the outcomes of COPs, the differences between BURs and BTRs, including flexibility provisions for developing countries, interpreting and implementing correctly the MPGs and elaborating the GHG inventories and the use of the 2019 IPCC Refinement and the 2006 IPCC Guidelines, including all cross-cutting issues such as methods to ensure time-series consiste	National institutions and agencies involved in GHG inventory compilation

	hods to ensure time-series consistency, QA/QC procedures, key category analysis, uncertainty assessments, reporting through the future UNFCCC GHG inventories reporting tool	
Output 2.1.2 Improvement in the energy sector: Achieving granularity with activity data and bringing clarity on the unorganised sector operations	Training to improve quality of the energy sector and reduce uncertainties. The training will include how to use detailed existing energy data in industrial databases such as the one used under the PAT scheme to improve estimates and reduce uncertainty.	Energy inventory compilers and data providers (energy industries, transport and fuel consumption related data institutions) such as The Bureau of Energy Efficiency (BEE) of Ministry of Power (MoP), Central Electricity Authority (CEA), Ministry of Coal (MoC), Ministry of Petroleum and Natural Gas (MoPNG), Petroleum Conservation Research Association, Petroleum Planning and Analysis Cell, Ministry of Power, Ministry of Road Transport and Highways, Ministry of Civil Aviation, Ministry of Railways, Ministry of Shipping, Ministry of Statistics and Programme Implementation, Central Institute of Mining and Fuel Research (CIMFR), CSIR-Indian Institute of Petroleum (IIP), IORA Ecologic Solutions (IORA), Indian Institute of Management-Ahmedabad (IIM-A), Ministry of New and Renewable Energy (MNRE).
Output 2.1.3 Improvement in Agriculture sector: State-level validation of activity data (example: dung produced per animal, feeding patterns	Training to improve the quality of the agriculture sector and reduce uncertainties. The training will include capacitating the concerned stakeholders for the provision of relevant activity data at the subnational level due to different practices.	Agriculture inventory compilers and data providers such as States, Ministry of Agriculture and Farmers Welfare (Department of Agricultural Research and Extension, Indian Council of Agricultural Research network), Ministry of Rural Development, Ministry of Statistics and Programme Implementation, Central Research Institute for Dryland Agriculture (CRIDA), Indian Agriculture Research Institute (IARI) and National Diary Research Institute (NDRI).
Output 2.1.4 Improvement in the LULUCF sector: Establishing modelling capacity at the state or institutional level through trained experts o	Training to improve quality of LULUCF sector and reduce the uncertainties. The training will address improvements by capacitating experts to adopt IPCC Approach 3 for activity dat	LULUCF inventory compilers and data providers as well as analysts, such as Ministry of Science and Technology (National Remote Sensing Centre), Indian Institute of Scien

el through trained experts and civil-society assistance	opt IPCC Approach 3 for activity data on areas under different land categories and conversions, georeferencing areas under different land categories and areas subjected to change for the GHG inventory by using remote sensing and global information systems, modelling for tier 3 estimation of carbon stock changes in forests, plantations and land area subjected to mitigation actions, estimating carbon stocks and collecting data on changes in baseline carbon stocks for the estimation of mitigation potential, identifying carbon sequestration rates for different forest types and plantations, strengthening local capacity to collect LULUCF data at the regional level, performing capacity-building for data collection from primary sources in the forestry sector, coordinating the dispersed technical and institutional capacity for REDD+, enhancing capacity in forest resource assessment and improving the process at the state and local levels and enhancing resolution of forest data generated through satellite imagery. Capacitation will also address to add indigenous indicators to global models ensuring true local representation.	g Centre), Indian Institute of Science (IISc), FSI: Forest Survey of India, Dehradun, M. S. Swaminathan Research Foundation and REDD + experts.
	Capacity-building to enable the design, implementation and MRV to implement REDD+ mechanism.	State and district level forest departments, research organizations and non-governmental organizations.
Output 2.1.5 Improvement in the IPPU sector for transparent and accurate coverage	Training to improve the quality of the estimates and reduce the uncertainties and the completeness of the sector. The training will include capacitating the relevant experts to explore and use additional or alternative data sources required for the elaboration of estimates on fluorinated gases emissions such as HFC emissions from air conditioning and refrigeration, HFC and PFC emissions from the electronics industry or SF_6 emissi	IPPU inventory compilers and data providers such as Ministry of Statistics and Programme Implementation, Ministry of Science and Technology (Department of Science and Technology, Council of Scientific and Industrial Research network), Department of Heavy Industries, National Environmental Engineering Research Institute (NEERI), industrial associations such as CII, FICCI, PHD Chamber of Commerce, ASS

	e electronics industry of SF_6 emissions from electrical equipment. Capacity building to involve industrial associations as data providers and for quality assurance purposes including training on electronic reporting from industrial associations to the designated focal points for IPPU in NIMS integrated in NICS.	FHD Chamber of Commerce, ASSOCHAM and others. Industrial associations
Output 2.1.6 Improvement in the waste sector: Improving the system to collect activity data aggregated at centralised level (example: treatment pathway, and emission characteristics)	Training to improve the quality of the waste sector and reduce uncertainties. The training will also include how to use new information from the database to improve the estimates and reduce the uncertainty.	Waste inventory compilers and data providers such as States, Ministry of Housing and Urban Affairs, Ministry of Rural Development, Ministry of Statistics and Programme Implementation and National Environmental Engineering Research Institute (NEERI).
Output 2.2.2 Peer-exchange programmes and co-learning activities among states to promote scalability and replication of initiatives in a cost-effective manner.	Training on tracking climate action and development of cross-learning arrangements in the form of peer-to-peer learning among state and sectoral experts to develop individual capacities and create a cadre of country experts to contribute to the NDC tracking.	Officials and implementation agencies from the states involved in mitigation actions, vulnerability assessments and adaptation measures
Output 2.2.3 Tools, templates, and training towards tracking progress of NDC.	Workshops for presentation and discussion of indicators Training on measuring, updating and monitoring indicators. Workshops on tracking progress on the NDC. Training on climate projections, vulnerability analysis, emissions projections.	Key sectoral and states actors involved in mitigation and adaptation actions proposed in the NDC.
Output 2.3.1 An IT-enabled system for reporting information on standardised templates.	Capacity building to prepare and submit information on standardized templates to NICS. Training to monitor and assess the implementation of their respective SAPCC and to update their action plans accordingly. Technical support to develop capacities for climate action tracking and reporting.	Focal points of state agencies
Output 2.4.2 Ensuring each capacity building element incorporates long term sustainability features in a gender-neutral manner and at all th	Training on gender considerations in data collection and analysis. Institutional, financial sustainability to be developed and strengthened.	All sectoral and states focal points, data providers and nominated and trained experts involved in transparency activities

e levels of governance		
Output 3.2.1 Evaluation of support activities and capacity development of relevant institutions to mobilise climate finance	Capacity building on climate finance architecture and strategy in sectors indicated by Govt of India for priority needs.	Climate finance cell of DEA of Ministry of Finance and all line Ministries and agencies involved in climate action relevant to the sectors identified.

Knowledge management products and budget

The project will provide three main types of knowledge products:

- Trainings: develop training programmes comprising events, e-learning courses, tools and educational/reference materials.
- Capacity building and validation workshops.
- IT-based data management platform including an online domain information system on transparency activities and products.

The main knowledge management elements in the deliverables add up to USD 2,505,000 as shown in the table below:

Budget note number	Key deliverables	Timeline	Estimated value for Knowledge management (USD)
[1], [2], [4]	Capacity building workshop on gender mainstreaming	Q3 – Q4 year 1	25,000
[2]	Local trainers trained internationally by UNFCCC.	Q3 year 1 – Q4 year 2	15,000
[3], [2], [4]	Training on enhanced transparency framework requirements and corresponding mandates and procedures	Q2 – Q4 year 1	75,000
[3], [2]	Training of the sectoral and states focal points of standard operating procedures	Q3 year 1 - Q1 year 2	150,000
[7], [4]	Capacity building workshop on enhanced transparency framework requirements and corresponding institutional arrangements.	Q3 year 1 – Q3 year 2	25,000
[7], [4]	Capacity building workshop in the use of NICS and their tools.	Q3 year 2 – Q3 year 4	25,000
[9], [10], [11]	Training on GHG inventory: · Elaboration and implementation of a QA/QC system and a national inventory system · Capacity building on improving the TACCC principles of the inventory and implementing improvement plans · Training on 2006 IPCC Guidelines and latest Guidelines · Capacity building workshops on how to implement improvement plans (cross-cutting and by sector) in the GHG inventory · Training to the sectoral focal points on reporting and verifying information for the GHG inventory	Q3 year 1 – Q4 year 3	330,000
	Training on NDC tracking: · Training on projections, indicators and how to measure progress of the NDC	Q4 year 1 – Q4 year 5	490,000

[9], [10], [11]	· Training to the states on NDC tracking and of reporting information on standardized templates, as applicable considering relevant NDCs, and as determined by MoEFCC · Workshops on methodologies for projecting GHG emissions, including focus on equity and national circumstances of developing countries · Workshops on tracking progress of the NDC using the MRV system		
[9], [10], [11]	Capacity building workshops on the reporting in BTRs.	Q1-Q4 year 2	25,000
[9], [11], [13]		Q2 year 3 – Q2 year 4	23,000
[9], [11], [13]	Workshops on GHG inventory and NDC tracking at national level	Q4 year 3	15,000
[9], [11], [13]	Capacity building workshops on how to implement improvement plans (cross-cutting and by sector) in the GHG inventory	Q2 year 1 – Q4 year 1	15,000
[9], [11], [13]	Workshops on methodologies for projecting GHG emissions in keeping with India's NDCs and projected mitigation actions by Govt of India	Q2 year 3 – Q1 year 4	25,000
[9], [11], [13]	Training and pilot studies on Climate Finance flows, Mitigation, Adaptation, Loss and Damage, Technology Innovation and/or transfer etc. in accordance with Govt of India priorities and in various appropriate sectors as identified.	Q2 year 3 – Q1 year 4	20,000
		Q2 year 3 – Q1 year 4	15,000
[15], [16], [17]		Q4 year 1 – Q4 year 3	240,000
[9], [11], [13]	Workshops on tracking progress of the NDC using the MRV system	Q2 year 3 – Q1 year 4	25,000
[9], [11], [13]	Workshops for validation of methodologies to track progress of NDC	Q2 year 3 – Q1 year 4	20,000
[15], [1	Training on climate finance MRV design, imple	Q4 year 1 – Q4 year 3	238,000

6], [17]	mentation and use in relevant sectors as applic able and identified by Govt of India		
[15], [16], [17]	Training on how to measure, report and verify cl imate finance flows at national level in keeping with Govt of India guidelines on definition of cli mate finance flows and in appropriate sectors a s identified.	Q4 year 1 – Q4 year 3	245,000
[15], [19], [17]	Capacity building workshops on climate financ e: · How to measure, report and verify cli mate finance flows in keeping with GoI guidelines on definition of climate finan ce flows · How to measure support and needs; · Climate finance institutional arrange ments and hierarchy; · Climate finance strategy and country programme in sectors as identified by Govt of India	Q4 year 1 – Q4 year 3	25,000
[3], [5]	Web-based National Institutional Coordination System (NICS) - an integrated IT information sy stem, interface for the MRV system and existin g databases, user interface for the MRV system established for compilation of information and reporting and data visualization including Serve rs for supporting the MRV system	Q1 year 2 – Q4 year 3	105,000
[10]	IT-enabled system coupled with the mandated p rocess of reporting information on standardize d templates by the states focal points	Q4 year 2 – Q4 year 3	60,000
[16]	Web based centralised National Climate Inform ation System (NCIS) for disseminating informat ion in the public domain	Q4 year 2 – Q4 year 5	225,000
[14]	Showcasing case studies and featuring them th rough CBIT global coordination platform	Q1 year 1 – Q4 year 5	30,000
[6], [12] [18]	Project information sheets and other outreach material	Q4 year 1 – Q4 year 5	19,000

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Total estimated budget	**2,505,000**

Communication plan

The Project will also emphasize strong communications with a broad range of stakeholders. Key elements of the project's communication strategy are outlined in the table below:

Key element	Relevant group	Means
1. Project governance meetings; PSC meetings; Working Group meetings	All stakeholders that are members of the PSC or its Working Groups or are invited to attend	Meetings
2. Seminars/workshops and training events, including the Inception workshop, and final project workshop	National and sub-national government officials as appropriate to the sector concerned. Private sector; NGOs and CSOs as appropriate to the sectors that are relevant.	Workshop, meeting, seminar, training On-the-job training
3. Project documents, thematic reports and publications; Technical and other reports	Government departments and decision-makers at the national and sub-national level; Development partners	Direct dissemination Access via the website to reports and documents and database and info systems
4. Project knowledge capturing and info dissemination	Government officials Development partners; NGOs and CSOs	Online access; Printed materials Media

The budget for workshops, training and information dissemination (printed materials, etc.) is about USD 181,000 (not including consultancy or contracted services which are in separate budget lines).

9. Monitoring and Evaluation

Describe the budgeted M and E plan

The project will be monitored through the following M&E activities. The M&E budget is presented at the end of this chapter.

Project Start

The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project implementation. The Monitoring Plan included in Annex 3 of the accompanying UNDP ProDoc details the roles, responsibilities, frequency of monitoring project results.

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. The UNDP Country Office is responsible for ensuring full compliance with all UNDP project monitoring, quality assurance, risk management, and evaluation requirements.

A project inception workshop will be held within 2 months from the First Disbursement date, with the aim to:

a. Familiarize key stakeholders with the detailed project strategy and discuss any changes that may have taken place in the overall context since the project idea was initially conceptualized that may influence its strategy and implementation.
b. Discuss the roles and responsibilities of the project team, including reporting lines, stakeholder engagement strategies and conflict resolution mechanisms.
c. Review the results framework and monitoring plan.
d. Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP and other stakeholders in project-level M&E.
e. Update and review responsibilities for monitoring project strategies, including the risk log; Social and Environmental Management Framework and other safeguard requirements; project grievance mechanisms; gender strategy; knowledge management strategy, and other relevant management strategies.
f. Review financial reporting procedures and budget monitoring and other mandatory requirements and agree on the arrangements for the annual audit.
g. Plan and schedule National Steering Committee meetings and finalize the first-year annual work plan.
h. Formally launch the Project.

An Inception Workshop report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting. The inception workshop will also provide an opportunity to cross-check all project indicators to ensure consistency with current GEF guidelines.

Quarterly

Progress made shall be monitored in the UNDP Executive Snapshot.

Based on the initial risk analysis submitted, the risk log shall be regularly updated in QUANTUM. Risks become critical when the impact and probability are high.

Based on the information recorded in QUANTUM, Project Progress Reports (PPRs) can be generated in the Executive Snapshot.

Other QUANTUM logs can be used to monitor issues, lessons learned, etc. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.

Annually

GEF Project Implementation Report (PIR)

The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR. The PIR submitted to the GEF will be shared with the National Steering Committee. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

Periodic Monitoring Through Site Visits

The UNDP CO and the UNDP BPPS/NCEW Regional Team will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first-hand project progress. Other Project Board members may join these visits. A Field Visit Report/ will be prepared by the CO and UNDP BPPS/NCEW Regional Team and will be circulated no less than one month after the visit.

Independent Mid-term Review (MTR)

The terms of reference (TOR), the review process and the final MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center (ERC).

The evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired by UNDP evaluation specialists to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the consultants should not be in a position where there may be the possibility of future contracts regarding the project under review.

The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the evaluation process. Additional quality assurance support is available from the UNDP-NCE Directorate.

The final MTR report and MTR TOR will be publicly available in English and will be posted on the UNDP ERC by 31 January 2026, before the third PIR has been submitted to the GEF. A management response to MTR recommendations will be posted in the ERC within six weeks of the MTR report's completion.

Terminal Evaluation (TE)

An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center.

The evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired by UNDP evaluation specialists to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the consultants should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-NCE Directorate.

The final TE report and TE TOR will be publicly available in English and posted on the UNDP ERC by three months before operational closure. A management response to the TE recommendations will be posted to the ERC within six weeks of the TE report's completion.

Final Report

The project's terminal GEF PIR along with the terminal evaluation (TE) report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the National Steering Committee during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

Table C.1: Project Budget for M&E Activities

Monitoring and Evaluation Plan and Budget:			
GEF M&E requirements	Responsible Parties	Indicative costs (US$)	Time frame
Inception Workshop	Implementing Partner Project Manager	3,000 USD	Within 60 days of the First Disbursement Date
Inception Report	Project Manager	None	Within 90 days of the First Disbursement Date
Monitoring of indicators in project results framework	Project Manager will oversee national institutions/agencies charged with collecting results data.	None	Annually prior to GEF PIR. This will include GEF core indicators.
GEF Project Implementation Report (PIR)	Regional Technical Advisor UNDP Country Office Project Manager	None	Annually typically between June-August
Monitoring all risks (UNDP risk log)	Project Manager	None	On-going.
Monitoring of safeguards requirements	Project Safeguards Officer	None	On-going.
Monitoring of stakeholder engagement plan	Project Stakeholder Engagement Officer	None	On-going.
Monitoring of gender action plan	Project Gender Officer	None	On-going.
National Steering Committee Meetings	Implementing Partner Project Manager	4,000 USD	Annually.
Reports of National Steering Committee Meetings	Implementing Partner Project Manager	None	Annually.
Lessons learned and knowledge generation	Project Manager	None	Annually.
Supervision missions	UNDP Country Office	None	Annually
Oversight missions	UNDP-NCE RTA and UNDP-NCE Directorate	None	Troubleshooting as needed

Mid-term GEF Core indicators and other required Tracking T ools	Project Manager	None	Before mid-term review mission takes place.
Independent Mid-term Review (MTR) and management resp onse	Independent evaluation consultants.	32,000 USD	Between 2nd and 3rd PI R.
Terminal GEF Core indicators *and other required Tracking T ools*	Project Manager	None	Before terminal evaluatio n mission takes place
Independent Terminal Evaluat ion (TE) and management res ponse	Independent evaluation consultants.	32,000 USD	At least three months bef ore operational closure
Translation of MTR and TE re ports into English	UNDP Country Office	N.A.	
TOTAL indicative COST		71,000 USD	

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

The project is aligned with GEF focal area CCM-3-8, i.e. "Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies through capacity building initiative for transparency."

The project will build and strengthen the institutional and technical capacities for national reporting under ETF of Paris Agreement. This entails providing detailed information on a biennial basis on GHG inventory, implementation and achievement of NDCs, adaptation needs and actions, support needed and received. The domestic MRV system to be developed under Component 3 is designed to avoid duplication and result in an efficient system that will reduce time burdens and costs to state institutions in data collection and analysis. Strengthened MRV will provide policy makers with information/ data which could be further used towards making climate-friendly investments and mainstreaming climate concerns with the developmental sectors – resulting in wider overall benefits towards achieving low carbon resilient economy while meeting the basic and aspirational developmental challenges of its growing population. Thus, this project will contribute towards India's efforts to meet the objectives of UNFCCC.

This will also contribute towards India meeting its climate change-related SDGs especially SDG-13 by supporting the integration of climate change measures into national policies, strategies and planning: building knowledge and improving education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning, and promotion of mechanisms for raising capacity for effective climate change-related planning and management in the country. The project will also contribute to achieving SDG5 by supporting empowerment of women in decision-making, land ownership and through gender-sensitive budgeting.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
	Low		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

Please, see attached SESP annex.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
6404_CBIT_India_SESP_17 April 2023_Clean	CEO Endorsement ESS	
Prodoc Annex 4 UNDP Social and Environmental Screening Procedure (SESP)	CEO Endorsement ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

This project will contribute to the following Sustainable Development Goal (s):
SDG 13: Take urgent action to combat climate change and its impacts

This project will contribute to the following country outcome (UNDAF/CPD, RPD, GPD):
Country programme document for India (2023-2027): Output:3.1: Institutional and policy frameworks developed and strengthened to address climate change, enhance green recovery, prevent environmental degradation and promote conservation and circular economy.
Indicator 3.1.1. Number of climate and gender-responsive development strategies (policies, schemes, programmes, and action plans) informed, through technical / advisory support, for achieving national priorities and global commitments under multilateral environmental agreements (global, national, subnational level) [SP IRRF: 3.1.1]
Baseline (2022): 7
Target (2027): 14

UNSDCF (2023-2027) - By 2027, Government of India, state governments, communities' private sector and other actors take informed actions to address climate change, pollution, biodiversity loss and restore ecological integrity through improved knowledge, capacity and mainstreaming of relevant actions across sectoral programmes, policies and plans
Indicator: Reduction in Emission intensity of the GDP
Baseline: 2005 levels
Target (2030): Reduced by 45% by 2030 below 2005 levels

	Objective and Outcome Indicators	Baseline	Mid-term Target Expected level of progress	End of Project Target
Project Objective: To enable domestic policy planners following the enhanced transparency framework guidelines prescribed by the Paris agreement through an efficient coordination mechanism between relevant stakeholders. More specifically, this CBIT project will assist India in meeting enhanced transparency framework (ETF) requirements as defined in Article 13 of Paris Agreement by strengthening institutional and technical capacities at central and states level for measuring, verifying and reporting on GHG emissions, NDC progress achieved, mitigation and adaptation activities and assessments and support needed and received, ensuring continuity in institutional and technical capacity building; and sustaining the ETF with a routine mechanism for climate change monitoring, reporting and verification	Indicator 1: Direct project beneficiaries disaggregated by gender (individual people)	150 (Men: Women): 3:2	800 (Men: Women): 3:2	Around 1500 over a period of 5 years Ideal ratio (Men: Women): 1:1 Minimum to be achieved (Men: Women): 3:2
	Indicator 2 (Indicator 3 of CBIT tracking tool): Quality of MRV Systems	3	5	7
	Indicator 3 (Indicator 4 of CBIT tracking tool): Meeting Convention reporting requirements and including mitigation contributions	Initial NDC, Second National Communication and Third BUR submitted to UNFCCC	Third National Communication submitted to UNFCCC and Fourth BUR endorsed by the Government	First BTR endorsed by the Government, submitted to UNFCCC and reviewed
	Indicator 4 (Indicator 5 of CBIT tracking tool): Qualitative assessment of institutional capacity for transparency-related activities	2	3	3

on.				
Project component 1	**Creating an enabling environment for enhanced transparency across all the levels of governance**			
Project Outcome 1.1 The nodal ministry (MoEFCC) would be better equipped to lead, plan, coordinate, implement, monitor and evaluate policies, strategies, and programmes to enhance transparency, including communications with states and expert agencies in an effective manner through the implementation of various institutional arrangements and their formalisation as appropriate.	Indicator 5: A regulatory framework formalising mandates to collect, compile, verify, and report information on GHG inventories, NDC progress, mitigation and adaptation activities and assessments, financial support needed and received	No regulatory framework with mandates and procedures	A regulatory framework has been established at national and subnational levels together with draft standard operational procedures for the sectoral and states focal points	A regulatory framework has been adopted, validated and formalised through a legal/formal instrument at the national and states/union territories levels together with validated standard operational procedures
Outputs to achieve Outcome 1.1	1.1.1 Strengthened national mandate and strategies to collect, compile, verify, and report relevant information adhering to the principles of TACCC (Transparency, Accuracy, Completeness, Comparability, Consistency) 1.1.2 Developing Standard Operating Procedures (SOPs) and assigning trained focal point among institutions covering each sector and state/union territory (UT).			
Outcome 1.2 Bringing all stakeholder together through a web-based **National Institutional Coordination System (NICS)** to enhance efficiency and transparency with climate reporting	Indicator 6: A web-based National Institutional Coordination System (NICS) fully functional and operational	The system does not exist.	A pilot front office, back office and interfaces elaborated and used for the fourth BUR	Fully functional front office, back office and interfaces used for the first BTR and tracking the NDC
Outputs to achieve Outcome 1.2	1.2.1. Efficient recordkeeping of activity data, socio-economic indicators, emission factors, methodology and assumptions, etc. 1.2.2 Archiving systems for future referencing and performing recalculations 1.2.3 Aggregation and exchange of relevant information through NICS			
Project component 2	**Strengthening institutional and technical capacities for Measurement, Reporting and Verification (MRV) of climate information**			
Outcome 2.1 Ability to report GHG emission inventories as per Intergovernmental Panel on Climate Change (IPCC) 2006 guidelines (or latest applicable)	Indicator 7: Templates and tools developed for implementation of improvement plan presented in the second BUR and summarized for each sector of the GHG inventory	Improvements needed in all sectors to decrease the uncertainty and increase the accuracy of the estimates and improve the transparency, consistency, completeness, and comparability of the current GHG inventory	One sector (IPPU) of GHG inventory and one Air pollutants inventory got the capacity and tools for improvement of the completeness of the GHG inventory covering F-gases and precursors emissions from all activities and of the transparency which is demonstrated by documenting all methodologies and assumptions in a national inventory report	5 sectors got the templates and tools for improvement of the accuracy, completeness and comparability of the GHG Inventory.

	Indicator 8: Designated focal points for each sector are trained and use the templates and tools for reporting relevant information for the GHG inventory	GHG inventory is compiled on a project-by-project basis	The designated focal points for IPPU sectors have been trained on using the templates and tools and one pilot test with the 4NC/BUR4 project GHG inventory for the IPPU sector has been done by using the IT platform (as all templates and tools needed to compile information for the GHG inventory have been elaborated and integrated in the IT system).	The designated focal points for all sectors of the GHG inventory are well trained to report information electronically for GHG inventory compilation on a (bi)annual basis and GHG Inventory of the first BTR is prepared through the IT platform
Outputs to achieve Outcome 2.1	2.1.1. Tools, templates, and training for agencies/experts involved in the inventory process. 2.1.2.Improvement in the energy sector: Achieving granularity with activity data (example: grade wise coal consumption) and bringing clarity on the unorganised sector operations 2.1.3. Improvement in Agriculture sector: State-level validation of activity data (example: dung produced per animal, feeding patterns) 2.1.4. Improvement in the LULUCF sector: Establishing modelling capacity at the state or institutional level through trained experts and civil-society assistance 2.1.5. Improvement in the IPPU sector for transparent and accurate coverage 2.1.6. Improvement in the waste sector: Improving the system to collect activity data aggregated at centralized level (example: treatment pathway, emission characteristics, etc.).			
Outcome 2.2 Information to facilitate Clarity, Transparency, and Understanding (ICTU) of Nationally Determined Contributions (NDC) associated with climate actions	Indicator 9: Number of experts accredited (who passed the exams) to participate actively in the UNFCCC reviews	4	20 Minimum to be achieved (Men: Women): 3:2	35 Minimum to be achieved (Men: Women): 3:2
	Indicator 10: Number of trained experts in the use of tools and templates to provide information relevant to track progress of NDC	0	200 Minimum to be achieved (Men: Women): 3:2	400 Minimum to be achieved (Men: Women): 3:2
Outputs to achieve Outcome 2.2	2.2.1 Developing capacity of national experts with equitable participation of men and women nominated from academia, research institutes, civil society and public agencies. Implementing the concept of 'train the trainers' to sustain capacities within institutions 2.2.2 Peer-exchange programmes and co-learning activities among states to promote scalability and replication of initiatives in a cost-effective manner. 2.2.3 Tools, templates, and training towards tracking progress of NDC			
Outcome 2.3 State focal points submitting information through NICS	Indicator 11: Number of states fully trained on the use of IT standard templates providing information through NICS	0	The 32 states/UTs have been trained on the use IT standard templates and participated in peer-activities on cross-learning	The 20 fully trained states/UTs have reported information through NICS on tracking the NDC for the first BTR.
Outputs to achieve Outcome 2.3	2.3.1 An IT-enabled system coupled with the mandated process of reporting information on standardised templates.			
Outcome 2.4	Indicator 12: Strategy to implement capac	0	Case studies and strateg	Strategy reviewed and u

Developing Capacity retention mechanisms	ity retention mechanisms		y developed and implemented	pdated
Outputs to achieve Outcome 2.4	2.4.1. Establishing baseline of current capacity gaps against best practices and design a strategy to address these gaps 2.4.2 Ensuring each capacity-building element incorporates long term sustainability features in a gender-neutral manner and at all the levels of governance 2.4.3 Study of the best practices of selected countries and knowledge exchange			
Project component 3	**Instituting National Climate Information System (NCIS) to share relevant information in a transparent manner**			
Outcome 3.1 Dissemination of relevant information on GHG inventories and NDC progress through NCIS	Indicator 13: A fully functional and operational web based centralized National Climate Information System (NCIS) for disseminating information in the public domain	Only the GHG Platform disseminates currently information on GHG inventory	Information collected for the fourth BUR processed and accessible on-line on GHG inventory, mitigation, adaptation and support	Information collected for the first BTR processed and accessible on-line on GHG inventory, NDC, adaptation and support
	Indicator 14: A single NDC progress tracker	Not available.	A pilot NDC progress tracker with contributions from sectors and the states disseminated online	A fully operational online NDC progress tracker
Outputs to achieve Outcome 3.1	3.1.1 Integrating NICS with National Inventory Management System (NIMS) and other online tracking tools to create a centralized National Climate Information System (NCIS) for disseminating information in the public domain 3.1.2 A progress tracker for NDCs, covering inputs from each state and sector towards progress made on mitigation targets and adaptation goals.			
Outcome 3.2 Enhanced capacity to mobilise climate finance	Indicator 15: A climate finance MRV for the provision and monitoring of information on current and future actions with regards to the domestic and international resources planned/needed and used/received designed and adopted.	International and domestic climate finance flows are not measured. There are many multilateral and bilateral organizations providing finance for the same type of activities and scattered among the country in a non-coordinated way	A climate finance MRV and a climate finance strategy including a classification is designed at national level.	A climate finance MRV including a classification has been adopted at national level and used by all stakeholders to monitor and measure international and domestic climate finance flows. A country programme including the sectors and states contributions with support needed and received for NDC implementation has been developed.
Outputs to achieve Outcome 3.2	3.2.1 Evaluation of support activities and capacity development of relevant institutions to mobilise climate finance 3.2.2 Sectoral/sub-national assessment of financial resource needed to implement the NDCs. Also highlighting specific barriers related to technology needs or any other capacity-building support			
Outcome 3.3 Knowledge management and project-related learnings	Indicator 16: Dissemination plan implemented	N.A.	Elaboration and dissemination on the NCIS and the lessons learned from this project	NCIS integrated with CBIT global coordination platform to feature India specific case-studies
Outputs to achieve Outcome 3.3	3.3.1 Showcasing case studies and featuring them through CBIT global coordination platform.			

Guidance for indicator 1: Direct beneficiaries from the proposed activities are estimated to be around 1500 professionals over a period of five years. This includes trained experts to handle sector specific focal points (100); mitigation experts (15); adaptation and vulnerability experts (25); IT experts (10); list of experts in the UNFCCC RoE (35); Project Management Unit (PMU) manpower (15); State Action Plan on Climate Change (SAPCC) coordination staff (390), etc. MoEFCC encourages a gender balanced approach and aspire for an ideal ratio of 1:1 between trained men and women at all decision-making levels. However, considering a huge lack of awareness, opportunities and encouragement within women professionals, the project will commit to at least maintain the actual ratio of 3:2 of direct participants in the transparency framework to be achieved across the board as a lowest benchmark. In addition, through training and sensitisation programmes across the country, especially among the university graduates and civil society, the project expects to influence at least 900 early to mid-career professionals which are not accounted for in direct beneficiaries.

Guidance for Ratings for Indicator 2 (Indicator 3 of CBIT tracking tool) (scale 1-10):

1. Very little measurement is done; reporting is partial and irregular and verification is not there

2. Measurement systems are in place but data is of poor quality and/or methodologies are not very robust; reporting is done only on request or to limited audience or partially; verification is not there

3. Measurement systems are in place for a few activities, improved data quality and methodologies, but not cost or time efficient; wider access to reporting is still limited and information is partial; verification is rudimentary/non-standardized

4. Measurement systems are strong in a limited set of activities however; analyses still needs improvement; periodic monitoring and reporting although not yet cost/time efficient; verification is only upon specific request and limited

5. Measurement systems are strong for a limited set of activities and periodically report on key GHG related indicators i.e. mainstreamed into the activity implementation; reporting is improved through few pathways but limited audience and formats; verification limited

6. Measurement systems are strong and cover a greater percentage of activities – feedback loops exist even if they are not fully functioning; reporting is available through multiple pathways and formats but may not be complete/transparent; verification is done through standard methodologies but only partially (i.e. not all data is verifiable)

7. Measurement regarding GHG is broadly done (with widely acceptable methodologies), need for more sophisticated analyses to improve policy; Reporting is periodic with improvements in transparency; verification is done through more sophisticated methods even if partially

8. Strong standardized measurements processes established for key indicators and mainstreamed into institutional policy implementation; reporting is widely available in multiple formats; verification is done for a larger set of information

9. Strong Monitoring and Reporting systems – robust methodologies, cost effective and efficient, periodic; verification done to a significant degree

10. Strong MRV systems that provide quality GHG related information in a transparent, accurate and accessible to a wide audience, with feedback of information from MRV flowing into policy design and implementation

Guidance for Ratings for indicator 4 (Indicator 5 of CBIT tracking tool) (scale 1-4):

1. No designated transparency institution to support and coordinate the planning and implementation of transparency activities under Article 13 of the Paris Agreement exists.

2. Designated transparency institution exists, but with limited staff and capacity to support and coordinate implementation of transparency activities under Article 13 of Paris Agreement. Institution lacks authority or mandate to coordinate transparency activities under Article 13.

3. Designated transparency institution has an organizational unit with standing staff with some capacity to coordinate and implement transparency activities under Article 13 of the Paris Agreement. Institution has authority or mandate to coordinate

transparency activities under Article 13. Activities are not integrated into national planning or budgeting activities.

4. Designated transparency institution(s) has an organizational unit with standing staff with some capacity to coordinate and implement transparency activities. Institution(s) has clear mandate or authority to coordinate activities under Article 13 of the Paris Agreement, and activities are integrated into national planning and budgeting activities

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

Comments have been provided by the Councils from the Parties USA, Canada, and Germany. Responses to the comments from these Councils are summarized below. In the table, the full list of comments is presented including the response to the comments provided in the document.

CBIT India will build upon support provided for GHG inventory and other past and ongoing initiatives. Further activities and details have been included in outputs 3.2.1 Evaluation of support activities and capacity development of relevant institutions to mobilise climate finance and 3.2.2 National classification system of climate finance to be developed and integrated with all policies and schemes across the country and these outputs have been reframed to better show their contribution to helping India build capacity to mobilize climate finance and identify capacity needs that cannot be met domestically (pages 77-72 of this CEO request document and pages 97 of the ProDoc).

References to Decision 18/CMA1 and description on COP24 decision on Adaptation Communications have been updated and their implications more clearly and extensively described (see Annex 12b of the ProDoc).

The need to have better data and modelling capacity on LULUCF sector has been more clearly demonstrated (pages 60 of this CEO request document and pages 85-86 of the ProDoc).

Relationship between National Climate Registry (NCR) and National Institutional Coordination System (NICS) has been further detailed. Synergies with the National Inventory Management System (NIMS), Sustainable Development Goals (SDGs) and Disaster Risk Reduction (DRR) have also been detailed (pages 47-48 of this CEO request document and pages 72 of the ProDoc).

Capacity building on projections as well as the incorporation of lessons learned and best practices from Waste NAMA, NAPA, NAPS have been detailed further in the description of the activities on NDC tracking (pages 63-65 of this CEO request document and pages 89-91 of the ProDoc).

The involvement of all stakeholders (including civil society, academics and NGOs) has been further detailed as well (pages 63-67, 75-76 of this CEO request document and pages 79-83 of the ProDoc).

Author (Parties):	Council members from USA, Canada and Germany	
Page, Paragraph	Comments	Proposed action
	Initial round of comments	
11	Sub heading - "India's current reporting status to the UNFCCC".	Text in red added is okay.
11, 1	Reference provided for WEF report	Okay
11, 1	…..needs immediate and collective action to address its impact and vulnerabilities and prevent further damage through mitigation efforts. It impacts the poorest countries h ardest and often poses unpredictable and unscalable risk and vulnerabilities through extreme events of natural hazards including floods and droughts.	All additions okay except - "and unscalable" – not sure what it implies.
11,2	What is the need to highlight India's poor human index ranking?	HDI score is important to underscore the point th at though India is vulnerable developing with still a large population to be provided with basic amen ities. This data should stay.
11,2	India accounts for 2.4% of the world surface area, 4% of world's freshwater resources, 8 % of global biodiversity, 17% of global cattle population however supports around 1 7.5% of world population	All additions okay
11,2	The World Bank report on Impact of Climate Change on South Asia predicts that the ri sing temperature and changing monsoon rainfall patterns could cost India 2.8% of GD P and depress living standards of nearly half of the country's population by 2050.	This addition needs to be seen as when this repor t from WB came out, the Ministry was not in agre ement with this finding. If to be included, the refer ence of the report may also be added.
11,2	Thus, climate change mitigation and adaptation efforts are not only a response to eco nomic threats, but essentially became a human rights issue intrinsically linked to sust ainability of livelihood.	The text is blue has been deleted and replaced wi th text in red. There is no issue with this change – except that both are correct – CC is risk to liveliho ods as well as HR as per the emerging cases at U NHCR level. So, either ways this is okay.
12, 4	The Ministry of Environment, Forest and Climate Change (MoEFCC) is the nodal minis try within India´s Government for coordination and management of actions related to UNFCCC and Intergovernmental Panel on Climate Change (IPCC). MoEFCC is the impl ementing and executing entity and assigns several studies and conducts activities inc luding workshops and national consultations for preparation of BUR. The issues relate d to climate action cuts across different sectors and are thus managed through a who le systems approach supported by key Ministries/ Departments of Government of Indi a.	This sentence added here is reading abrupt. Alter natively the first sentence of this para could be m odified to read as, " The Ministry of Environment, Forest and Climate Change (MoEFCC) is the noda l ministry within India´s Government for coordinat ion and management of actions related to UNFCC C and Intergovernmental Panel on Climate Chang e (IPCC) as well as matters related to National Re porting under UNFCCC."
14, 2	The expert institutions involved in the preparation of BURs in majority, are concerned with the preparation of GHG inventory and Mitigation Actions.	This sentence added is not required. So, may be d eleted.
17, 2	Questioning the basis of the information provided - Approximately 150 people are invo lved with the national reporting process with an approximate woman to man ratio of 4 0:60.	This estimate is based on the PIs and their suppo rting strength involved with the present NATCOM/ BUR preparations. May be this sentence could be re-framed to read as "As per the current arrangem ents for the preparation of NATCOM and BUR, ap proximately 150 people are involved with the nati onal reporting process with an approximate wom an to man ratio of 40:60."
21, 3	The Environment (Protection) Act, 1986 authorizes the central government to protect and improve environmental quality, control and reduce pollution from all sources, and prohibit or restrict the setting and /or operation of any industrial facility on environme	The addition of this sentence at here is abrupt an d breaks the flow of thought.

	prohibit or restrict the setting and /or operation of any industrial facility on environme ntal grounds. The Environment (Protection) Act was enacted in 1986 with the objectiv e of providing for the protection and improvement of the environment.	Information may be added on EPA while linking it with CC and such a sentence could be placed at a n appropriate place in this section.
21,5	The hazard and vulnerability profile of India although of diverse magnitude is now well known.	Can delete "although" while retaining "of diverse magnitude".
22, 4	The Government of India has set an ambitious target of 175 GW renewable energy ca pacity by 2022, comprising 100 GW from solar power, 60 GW from wind power, 10 GW from bio-energy and 5 GW from small hydropower and also committed to further incre asing it to 450 GW.	This could be rephrased as – "The Government of India has pledged to increas e the share of non-fossil fuel, and by 2022 India's renewable energy capacity would be increased to 175 GW (comprising 100 GW from solar power, 6 0 GW from wind power, 10 GW from bio-energy an d 5 GW from small hydropower), and later till 450 GW."
23, 1	Suggestion to delete this sentence - These international agreements should not be se en in isolation. Sustainable development needs to be disaster resilient and be clean a nd adaptive to climate change impacts.	This sentence may be retained as it kind of concl udes the mentioning of Sendai Framework, SDG a nd Paris Agreement.
24, last para	The focus of ENVIS since inception in 1982 has been on providing environmental infor mation to decision makers, policy planners, scientists and engineers, research worker s, etc. all over the country – this sentence has been added.	This addition is okay.
26	Additions made under promoting waste to wealth conversion, railways, afforestation	These additions are updation of information and are okay.
27		
41, 1	A transparent, consistent, complete, comparable, robust and accurate GHG inventory i s the entry point for a well-designed policy planning system. Overall, India's second BU R highlights data (availability, quality, collection, validation, coherence) as a big constr aint across all sectors. Technical improvements are needed in all sectors including th e Energy, Industrial Processes and Product Use (IPPU), Agriculture and Forestry. If enh ancing the GHG inventory to higher-tier levels in all sectors using key category analysi s is the identified need, collecting and mapping data on individual processes across th e sectors are also very important and needs upliftment. Establishing a national invent ory system for forestry, estimating GHG emissions from municipal solid waste and in dustrial wastewater, country-specific Emission Factors for key categories (level and tr end) for all sectors and gases, refining energy sector data for reference and sectoral a pproaches are the capacity gaps which needs to be addressed.	This addition is okay however not sure why "if" is added in the sentence.
41, 2	Katowice guidelines recommends a detailed description of methodology, assumption s and accounting process in the biennial transparency reporting and reporting require ments separately for both the developing and developed countries. As per the current rules governing inventory reporting for Non Annex I (NAI) Parties (decision 17/CP.7; p ara 15 and 16), they are encouraged (and not mandated) to report on emissions of pre cursor gases i.e. carbon monoxide (CO), nitrogen oxides (NOX) and non-methane vola tile organic compounds (NMVOCs), as well as sulphur oxides (SOX). Katowice guideli nes shall provide information necessary to track the progress of implementation and achievement of domestic policies and measures implemented and the NDC. Facilitati ng coordination among the SAPCC and with the NAPCC and developing performance i ndicators around the NAPCC missions and the NDC commitments should make such task easier. Guidance and tools are needed to undertake assessments.	The need for this addition is not there but its okay however "and reporting" and "separately" is not re quired.
41, 6	Following are the existing gaps which are identified to address under this project – thi	Both these additions are not required.

	s sentence has been added and on next two pages (page 42 and 43) the para have be	
42	en numbered.	
43		
44	Following are the major benefits identified under the CBIT project – this sentence has been added and on next page (page 45) the para have been numbered.	Both these additions are not required.
45		
46	Sub-headings are proposed under baseline section and in the strategy section	This is okay though not required.
47		
57		
58		
59, 1	Additions – “desired” and “planning of mitigation actions” instead of mitigation action s planning.	Both these changes are okay.
59,2	Additions – “that should be estimated” and “existing”.	Both these changes are okay.
60, 1	Additions – “carbon accounting”, “geographic”, “GIS” and “steps for”.	These additions are okay.
60, 1	Addition - “Attempts should also be made to develop and adopt indigenous carbon sto ck models to capture local characteristics”.	This needs to be seen as – is it indigenous indica tors added to global models to ensure adhering to global quality while ensuring true local representa tion.
61, 1	Addition – “record”.	This addition is okay.
61, 6	Addition – “ambit of NDCs”.	This addition is okay.
71, 1	Change of “three” to “3”.	This is okay.
79, 1st row	Change of “around” to “about”.	This is okay.
104, 2	Suggestion to expand “CO level“	This could be done by abbreviating CO in para 1 o n this page after Country Office.
113	Full form of HACT has been added	This is okay.
113	Serial number of GEF Taxonomy has been removed.	This may be seen.
116, 1st colu mn	Deleted “The nodal ministry (MoEFCC) would be better equipped” from Outcome 1	This deletion is not required.
	Second round of comments	
16, 1	Questioning the need for giving information on woman to man ratio	This is required from GEF perspective.
19	Suggestion for sector wise MRV status in India table - "May also look at Steel Scrap R ecycling Policy, 2019 that aims to reduce imports, conserve resources and save energ y. Since scrap based steel making technologies have been envisaged as one of the im portant options to reduce GHG emission intensity. This shall feature as an important i nitiative of the steel sector to minimize GHG emissions."	This could be added under recent policy initiative section. For inclusion under this MRV table – the MRV-related details of this policy may be provide d for appropriate inclusion.
20, last para	ith the enactment of Disaster Management (DM) Act 2005 and adoption of National P olicy on Disaster Management 2009, the Government of India has established improv ed institutional arrangements and disaster risk reduction (DRR) mechanisms to deal with any threatening disaster situation or disaster. As mandated by DM Act, the Gover nment of India created a multi-tiered institutional system consisting of the National Di saster Management Authority (NDMA) headed by the Prime Minister, the State Disast er Management Authorities (SDMA) headed by the respective Chief Ministers and the District Disaster Management Authorities (DDMA) headed by the District Collectors/ D	This addition is okay.

	istrict Magistrate and co-chaired by Chairpersons of the local bodies. The National Dis aster Management Plan (NDMP) provides a framework and direction to the governme nt agencies for all phases of disaster management cycle.	
20	Abbreviations, additions and spellings suggested	This is okay.
21		
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24 - 27	The suggestions made to add to the table 5 of main mitigation strategies proposed in the first NDC	The suggestions are useful as these will provide a n updated information. So, appropriate informatio n may be provided for inclusion in the document.
43, last para	Suggestion made to add - NICS will strengthen the existing institutional architecture o f India w.r.t. climate change, whereas NCR will demonstrate high level transparency wi th sharing of information in a well-articulated manner.	This suggestion is okay but by saying NICS isn't it obvious.
	Third round of comments	
4,2	Towards achieving the ultimate objective, the Convention makes provision for a comp rehensive, reliable and transparent national reporting through the existing national co mmunications by all the Parties taking into account their common but differentiated r esponsibilities and their specific national and regional development priorities, objectiv es and circumstances.	The addition of "the existing" and deletion of "thei r" may not be correct. May see.
5,2	Replaced sentence "the MPGs are under negotiation and still to be adopted by CoP, pr obably in November 2020" with "they are under negotiation and still to be adopted by CoP."	This modification is correct.
16	Addition of "the".	This is okay
21		
20	Deleted sentence "The hazard and vulnerability profile of India is well-known. India's pr oneness..". Replaced "India's proneness" with "India's vulnerability"	The deletion of sentence is probably not required. Replacement of words is okay.
24	Added sentence - "India's Intended Nationally Determined Contribution (INDC) revolve s around policies and programmes on promotion of clean energy, especially renewabl e energy, enhancement of energy efficiency, emphasis on non-fossil-based electricity generation and development of less carbon-intensive centres."	It is NDCs. The construction of the sentence is jumbled betw een RE and EE

		een RE and EE.
		The suggestion is important. Appropriate languag e may be picked up from NDCs – emphasizing th at NDCs focus both on demand and supply side a spects.
24	Modified - “Introduction of ultra-supercritical technology, as and when commercially a vailable is a part of future policy and 2 units of NTPC have already been commissione d. Indigenous research is being pursued for the development of Advanced Ultra Super critical technology with a target efficiency of about 46%. Besides, stringent emission s tandards being contemplated for thermal plants would significantly reduce emissions. ”	The underlined text has been deleted. Both deletion and addition is okay.
25	Added - “Carbon Capture, Storage/Utilisation: CO_2 capture is still at a nascent stage of implementation in India, with a few sectors such as refineries and steel having imple mented small-scale carbon capture projects. Some industries which have initiated the process of setting up CCS facilities. ”	Need to see this addition for accuracy.
26	Added - “It is also intended to achieve along with a certain level of indigenisation of te chnology ensuring India’s global leadership in some vehicle segments. ”	This is okay
	Fourth round of comments	
	Table of contents needs to be updated	Okay.
5, Figure 1	1996 and 2014 in boxes are mentioned in small fonts.	Okay.
9	Sentence restructuring suggested as per following text- “Technical expert review team cannot review the Party’s determination to apply for a flexibility provision, including es timated time frame for improvement, no can it assess whether the Party has the capa city to implement the provision without flexibility.”	Okay. We could rephrase it as - “Technical expert review team can neither review the Party’s determination to apply for a flexibility provision, including estimated time frame for imp rovement, nor can it assess whether the Party ha s the capacity to implement the provision without flexibility.”
Table 3	Number should be subscript in all gases (CO_2, CH_4, N_2O, SF_6 and NF_3)	Okay
Table 3	It would have been better if we maintain consistency in writing % or percent	Okay
16	Formatting required in the names of expert institutions and ministries/department	Okay
25	It would have been better if we can mention total CO_2 saving through UJALA and SLN P schemes in LED section. We can also quote CO_2 saving through T&D loss reduction and Supercritical power plants.	Relevant information may be provided for appropr iate inclusion.
26	Different fonts used in “Enhancing energy efficiency in industries”	Okay
28	Annex number needs to be verified in this line. “The current reporting status of India in view of the new requirements established in the MPG has been evaluated. This evalua tion is included in annex 14 of this ProDoc.”	Okay
Table 4	*Table 4* summarises capacity gaps and current barriers for the implementation should be *Table 9* summarises capacity gaps and current barriers for the implementation	Okay
38, 3	full stop after reference footnote (6).	Okay
47	*Figure 20* illustrates the proposed framework capturing three major capacity-building elements should be *Figure 11* illustrates the proposed framework capturing three maj or capacity-building elements	Okay
48	Figure 11: Some text missing at the end in “Tools, templates, and training to be provid ed by trained experts appointed/nominated by the ___”	Okay

52	from the mentioned bullet points, number 5 and 6 are same.	Okay
59	Number should be subscript in all gases (CO_2, CH_4, N_2O, SF_6 and NF_3)	Okay
70	A stakeholders engagement plan involving all these institutions is presented in *table 7* should be A stakeholders engagement plan involving all these institutions is presente d in *table 12*.	Okay
70	Key functions: Nodal ministry of Government of India (GoI) for issues related to United Nations Framework Convention (UNFCCC) on Climate Change should be Nodal minist ry of Government of India (GoI) for issues related to United Nations Framework Conve ntion on Climate Change (UNFCCC)	Okay
73	Replace CeeW with CEEW	Okay
76	There is no title and table number for the table	Okay
79	Replace 2015 with 2016 in “India’s First Biennial Update Report to the UNFCCC in 201 5”	Okay
80	There should be number for Annexure in 2nd paragraph of Gender mainstreaming in th e Project	Okay
83	There is no title and table number for the table	Okay
89	GEF in the period between the *2nd* PIR and the 3rd PIR should be GEF in the period bet ween the *2nd* PIR and the 3rd PIR	Okay
95	Specific Project Board responsibilities include should be Specific Project Board respo nsibilities include	Okay
	Fifth round of comments	
4	Minor corrections, subscripting, editorial	Okay
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5, Figure 1	Also add: 2002: Guidelines to prepare National Communication of Non-Annex I Parties (Decisio n 17/CP.8).	This suggestion for addition to the title of figure 1 may be seen.
6, Figure 2	Reference to be added	Okay
6, 1	Addition of “MRV arrangements”	Addition is okay.

	Replace “proposed” with “upcoming”	Replacement is not clear as normally proposed is used.
6, Table 1	Addition in table title	Addition in table title is okay.
	Additions in table	While editing, the original table has been altered f rom the one which is in the original document an d thus, the suggestions made are not clear.
7, Table 2	Replaced “Who” with “Requirements”	Either ways this is okay
	And, “What” with “Details”.	Addition is okay
	Added “inventory”	
8, Table 2	Rephrased the sentence from “For those developing country Parties that need it in the light of their capacities, specific flexibility provisions may be applied” to “Specific flexi bility provisions may be applied for those developing country Parties that need it in th e light of their capacities”.	Either ways this is okay
9, Table 3	Modified “categories that are not key” to “non-key categories”.	This is correct
12 & 14	1st para on page 14 has been shifted as last para of page 12	Either ways this is okay.
13	Addition of DPIIT, Ministry of Steel	Addition okay.
	Deleted M/o Fisheries, Dairying and Animal Husbandry, BEE, M/o Heavy Industries	May retain M/o Heavy Industries and BEE.
14	Clarification sought on Technical Working Groups (TWG)	This is a proposed under CBIT.
14, last para	These figures (in figure 5) are specific to BURs and lack the NC institutions, hence it is better to qualify this.	This is correct.
15	Modification in title of figure 6 suggested	Okay
16 - 17	List of Ministries and Departments providing information for BUR/NATCOM has been deleted as repetitive information	May like to see
19, 1	Added – “The NIMS will coordinate supporting institutions with strategic capacity for the preparation of National Communications and BURs/BTRs on a continuous basis.”	Its either BUR or BTR. Also, BTR is still under disc ussion / negotiation. So, may be adding BTR here may be avoided.
19,2	Added “BUR…….”.	Okay
23, 1	India’s mitigation targets are very ambitious. India plans to reduce its emissions inten sity of its GDP by 33 - 35% between 2005 and 2030. However, its actions towards clim ate change mitigation have a strong development impact. India is thus focusing on ac hieving about 40 per cent cumulative electric power installed capacity from non- fossil fuel based energy resources by 2030 on accelerating the use of clean and renewable energy by 40% by 2030, and on promoting efficient use of energy. By 2030, India also i ntends to increase its carbon sinks by creating an additional capacity equivalent to 2. 5 to 3 billion tonnes of CO_2 through significant afforestation efforts.	Text in blue has been deleted and red has been a dded. This is okay.
23, 2	Modified – “India has made lifestyle as an integral part of its solution to climate chan ge” to “India has made sustainable and climate friendly lifestyle an integral part of its solution to climate change”	Okay.
28	Modified – “The analysis of the BUR2 under the ICA process” to “The ICA process of B UR-1 and BUR-2”.	Okay
	Replaced “complete” with “separate”.	
	Added “Revised 1996 and……”	

	Added "Revised 1996 and……"	
29	A change is proposed in the level of priority – Added "Shall" Replaced "Shall with some degree of flexibility" with "Shall with flexibility". Deleted "Shall without flexibility".	Shall and Shall without flexibility – are the same. And, Shall with some degree of flexibility is not in correct. So, may be this change is not required at this stage. May see this and how it affects the analysis on MPGs which is annexed to the pro doc.
30	Replaced "recommended" with "needs".	Okay.
33	Added "latest" in last para for the sentence to read as "First BTR has to be submitted latest by 31st December 2024…..".	Okay.
43, Figure 9	Clarification and suggestion – "Are we aiming at n-3 for reporting inventory or n-2. If it is n-3, we would need robust justification."	This question is not clear.
49	Figure 11: Some text missing at the end in "Tools, templates, and training to be provided by trained experts appointed/nominated by the ___"	Okay
53	Suggestion – "creating systems should be primary objective".	This comment has already been taken into account by the project design.
54	Suggestion - "Can we institutionalize/formalize INCCA under this project wherein the participating research institutions are included as its members. It will be an a formal but evolving network. The membership will be based on the recommendation of NSC. PIU can act as INCCA Secretariat. This way INCCA will be revived and will be able to sustain itself. INCCA may be headed by a Chair and two co-chairs on rotation / election basis."	This is a useful suggestion and could be included in the project document.
86 Also, on page 129	Query on indicator 11 - "How was this number confirmed? There are 10 experts nominated by India to RoE so far. Some of them have passed the exams. This number is definitely more than 2."	This needs to be checked and corrected, if required.
112	India's international borders on the northern and north-eastern side have been shown with porous lines. This map needs to be changed to a correct map.	Yes. Also, the correct map also shows 2 UTs recently constituted.
149	Suggestion - Please confirm if this is Mr Vaibhav Gupta. He left CEEW more than a year back. Is it Dr Vaibhav Chaturvedi?	Correct.
	Sixth round of comments	
1	The dates for submission to GEF and CEO endorsement on page 1 of the document may be seen as we are in July now.	Okay
Table 2 and/or 3	It will be useful to add one column on obligations for India.	Okay
11, last para	We generally include figures on global poor etc. from NDC which was almost 5 – 6 years before, thereafter, present Govt has undertaken many initiatives and these figures might have changed and the same could be reflected, if possible/ feasible.	Okay
13	It will be useful to include M/o Skill Development and Entrepreneurship in NSC.	Okay
Figure 6	Mentions BUR only. Here, along with BUR, full National Reports could also be added. Also, TAC could be added as one of the box in the figure. Also, am not sure if there is a lead institution (except for inventory) for compiling sector specific reports and the need to mention it as a separate box – does it not get covered in network of institutions (or network of expert national institutions) box. Please see.	Okay
16	It would be useful to first put the M/o and D/o in the list and then their associated inst	Okay

	itutions – as presently, it's all mixed.	
Table 5	Could be updated as we are submitting this document in 2020.	Okay
73	Is there is a need to add a graphic on GHG platform in this document. GHG platform is a civil society initiative which is working well at present and it could be mentioned but why highlight it by putting a graphic (from future perspective).	Okay
	Overall, referencing and editorial corrections can be ensured.	Okay

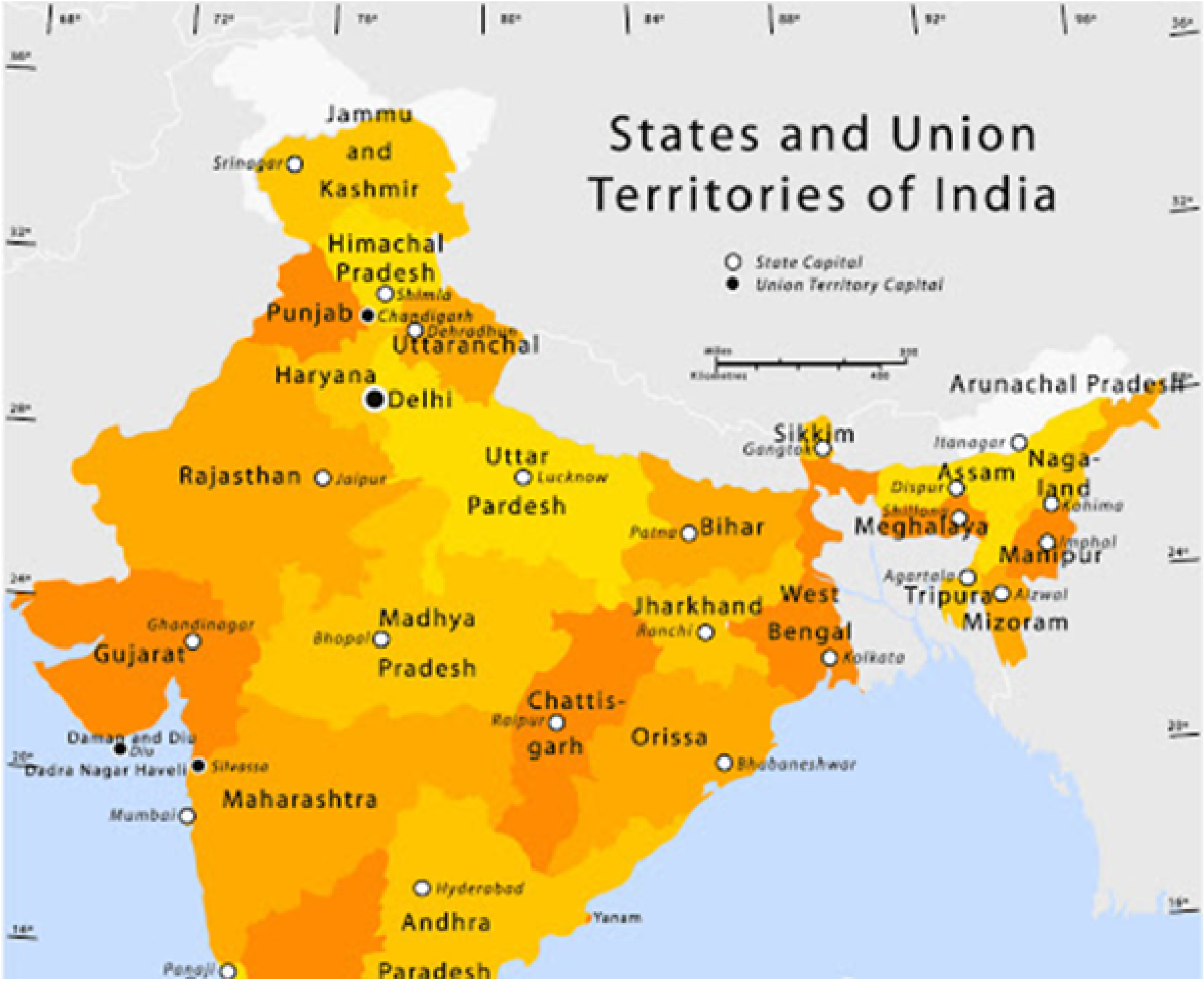
ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake exclusively preparation activities up to one year of CEO Endorsement/approval date. No later than one year from CEO endorsement/approval date. Agencies should report closing of PPG to Trustee in its Quarterly Report.

PPG Grant Approved at PIF: **US$ 100,000**			
Project Preparation Activities Implemented	*GEF Amount ($)*		
	Budgeted amount	*Amount spent to date*	*Amount committed*
Technical assistance (design technical elements as well as all the required financial and administrative components of the project)	63,630	63,630	0
Conducting missions to the project sites	0	0	0
Stakeholder consultation and validation workshop	36,370	36,370	0
Total	**100,000**	**100,000**	**0**

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.


States and Union Territories of India
State Capital
Union Territory Capital
Jammu and Kashmir
Srinagar
Himachal Pradesh
Shimla
Punjab
Chandigarh
Dehradhun
Uttaranchal
Haryana
Delhi
Rajasthan
Jaipur
Uttar Pardesh
Lucknow
Sikkim
Gangtok
Arunachal Pradesh
Itanagar
Assam
Dispur
Naga-land
Kohima
Meghalaya
Shillong
Manipur
Imphal
Tripura
Agartala
Aizwal
Mizoram
Bihar
Patna
Jharkhand
Ranchi
West Bengal
Kolkata
Madhya Pradesh
Bhopal
Gujarat
Ghandinagar
Chattis-garh
Raipur
Orissa
Bhubaneshwar
Daman and Diu
Diu
Dadra Nagar Haveli
Silvassa
Maharashtra
Mumbai
Hyderabad
Andhra Paradesh
Yanam
Pangji

ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Category	Detailed Description	Component (USDeq.)						Total (USDeq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)[1]
		Component 1	*Component 2*	*Component 3*	*Sub-Total*	*M&E*	*PMC*		
Goods	Communication and AV equipment in support of trainings and meetings	25,000			25,000			25,000	UNDP [2]
Goods	Servers for supporting the MRV system	15,000			15,000			15,000	UNDP [2]
Goods	Communication and AV equipment in support of the trainings and background materials		35,000		35,000			35,000	UNDP [2]
Goods	Communication and AV equipment in support of trainings and meetings and to disseminate relevant project information			15,000	15,000			15,000	UNDP [2]
Contractual Services – Individual	Technical experts / assistants to provide technical expertise and support to project management						115,000	115,000	UNDP [2]
Contractual Services – Company	* Contracts for MRV specialists to provide capacity building on enhanced transparency framework requirements and corresponding mandates and procedures (300 days)* Contracts for MRV specialists to develop standard operating procedures for the NICS and train the sectoral and states focal points (900 days)* Contract for the design of an integrated	545,000			545,000			545,000	MoEFCC

	MRV including the National Institutional Coordination System (NICS), the National Climate Registry, the NDC tracking and all elements of the BTRs (GHG inventories, NDC, mitigation, adaptation and support needed and received) – MRV specialists (150 days)* Contract for the development of the web-based National Institutional Coordination System (NICS) - an integrated IT information system, interface for the MRV system and existing databases, user interface for the MRV system established for compilation of information and reporting and data visualization - IT specialists (300 days)								
Contractual Services – Company	Contracts for capacity building on GHG inventory (1600 expert. days): · GHG emissions cross-cutting specialist for providing technical support in the elaboration and implementation of the QA/QC system and the national inventory system · GHG emission inventory sectoral specialists for technical support and capacity building on improving the TACCC principles of the inventory and implementing the imp		1,575,000		1,575,000			1,575,000	MoEFCC

	rovement plans · GHG emissions inv entory sectoral exper ts to provide technic al support and trainin g on 2006 IPCC Guid elines and latest Gui delines · MRV specialists to provide capacity buil ding workshops on h ow to implement the improvement plans (cross-cutting and by sector) in the GHG in ventory · Training to the sect oral focal points on r eporting and verifyin g information for the GHG inventory. Contracts for capacit y building on NDC tra cking (2400 expert.d ays): · NDC specialists to provide technical sup port and training on projections, scenario s, indicators, revision and update of the ND C and how to measur e progress of the ND C · NDC experts to prov ide training to the sta tes on NDC tracking and of reporting infor mation on standardis ed templates · Workshops on meth odologies for project ing GHG emissions a nd scenarios · Workshops on how to gather information for the update of the NDC · Workshops on track									

	· Workshops on tracking progress of the NDC using the MRV system · Training to the states on how to monitor and report information on on contribution to the NDC Capacity building workshops on the reporting in BTRs (100 expert.days). Contract for IT-enabled system coupled with the mandated process of reporting information on standardised templates by the states focal points (200 expert.days)								
Contractual Services – Company	Contract for climate finance tracking services (1.350 expert.days) · Development of guidelines and data collection templates · Capacity building on climate finance MRV design, implementation and use · Development of a climate finance MRV, definitions and classifications, inter-institutional architecture and a climate finance strategy including a country programme · Technical support and training on how to measure support and needs · Training on how to measure, report and verify climate finance flows at both natio			849,000	849,000			849,000	MoEFCC

	nal and states levels. Contract for development of a web based centralised national climate registry (500 expert.days) · Development of a pilot NDC progress tracker with contributions from sectors and the states – NDC specialists · Integration of the NDC progress tracker with contributions from sectors and the states online – IT specialists · Development of a web based centralised national climate registry (NCR) for disseminating information in the public domain – IT specialists								
International Consultants (MTR/TE)	International independent consultant for mid and terminal evaluations				-	50,000		50,000	UNDP
Local Consultants	MRV specialist for developing a proposal of the National Institutional Coordination System (NICS) (software and hardware, templates, interfaces) (150 days; USD 200/day) Legal specialist to analyze the existing regulatory framework and suggest modifications (60 days; USD 200/day) Legal specialist to draft formal arrangements between stakeho	100,000			100,000			100,000	UNDP [2]

	lders and develop dr aft instruments to for malise mandates to collect, compile, verif y, and report informa tion on GHG inventor ies, NDC progress, m itigation and adaptati on activities and ass essments, financial s upport needed and r eceived (100 days; U SD 200/day) MRV specialist to de velop ToRs for the w orking groups (50 da ys; USD 200/day) Information system consultants to suppo rt MoEFCC in develo ping tendering docu mentation for the de sign and implementa tion of the web-base d National Institution al Coordination Syst em (NICS) with the fr ont office, back offic e and interfaces (40 days; USD 200/day). Gender specialist to provide recommenda tions and capacity b uilding on gender ma instreaming (100 day s; USD 200/day)								
Local Consultant s	* MRV experts to upd ate the baseline of c urrent capacity gaps against best practice s and design of a str ategy to address the se gaps (80 days ; U SD 200/day). * MRV experts to propose mechanisms and too ls and a strategy to e nsure capacity retent ion (100 days ; USD 2		70,000		70,000			70,000	UNDP [2]

	00/day).* Gender specialist to ensure that capacity elements incorporate long term sustainability features in a gender-neutral manner and at all the levels of governance (90 days ; USD 200/day).* MRV experts to study best practices in other countries and propose an strategy for knowledge exchange (80 days ; USD 200/day).								
Local Consultants	National consultants to showcasing case studies and featuring them through GEF global coordination platform (150 days; USD 200/day)			30,000	30,000			30,000	UNDP [2]
Local Consultants (MTR/TE)	National expert on monitoring and evaluation to support the international consultant for mid and terminal evaluations (20 days; USD 200)				-	4,000		4,000	UNDP
Trainings, Workshops, Meetings	* Stakeholder engagement meetings and events.* Meetings for discussing the proposal of NICS. * Workshop for validation of the proposal of NICS. * Capacity building workshop on enhanced transparency framework requirements and corresponding institutional arrangements.* Capacity building workshops in the use of the NICS and their tools.	60,000			60,000			60,000	UNDP [2]
Trainings, Workshops,	* Workshops on GHG inventory and NDC tr		98,000		98,000			98,000	UNDP [2]

Meetings	acking at national lev el* Capacity building workshops on how t o implement the imp rovement plans (cros s-cutting and by sect or) in the GHG invent ory* Workshops on methodologies for pr ojecting GHG emissi ons and scenarios* Workshops on how t o gather information for the update of the NDC* Workshops for the validation of the update of the NDC* Workshops on tracki ng progress of the N DC using the MRV sy stem* Workshops for validation of method ologies to track prog ress of NDC* Capacit y building workshops on the reporting in B TRs								
Trainings, Workshops, Meetings	* Capacity building w orkshops on climate finance and how to measure, report and verify climate financ e flows* Capacity bui lding workshops on how to measure sup port and needs* Cap acity building worksh ops on climate finan ce institutional arran gements and hierarc hy* Capacity building workshops on climat e finance strategy an d country programm e			15,000	15,000			15,000	UNDP [2]
Trainings, Workshops, Meetings	Project inception wor kshop, National Stee ring Committee meet ings, and mid-term a nd terminal validatio				-	8,000		8,000	UNDP [2]

	nd terminal validatio n workshops								
Travel	Travel expenses to at tend relevant worksh ops. Travel and DSA of local trainers to ge t trained internationa lly.	25,000			25,000			25,000	UNDP [2]
Travel	Travel expenses to at tend relevant worksh ops. Travel and DSA of local trainers to ge t trained internationa lly.		50,000		50,000			50,000	UNDP [2]
Travel	Travel expenses to at tend relevant worksh ops. Travel and DSA of local trainers to ge t trained internationa lly.			23,000	23,000			23,000	UNDP [2]
Travel	Travel and DSA for in ception workshop an d mid-term and termi nal evaluation				-	6,000		6,000	UNDP [2]
Travel	Travel related costs under PMC (Total: 1 2,000USD)				-		12,000	12,000	UNDP [2]
Office Supp lies	Purchasing of office supplies such as cart ridges, printing paper s, etc.				-		3,000	3,000	UNDP [2]
Direct Proje ct Costs	Direct Project Cost f or provision of suppo rt services to Ministr y DPC costs - Direct Pr oject Costs: for servi ces rendered by UND P to the project, acco rding to the Letter of Agreement (Annex 8 of the project docum ent) are the costs of administrative servic es (such as those rel ated to human resou rces, procurement, fi nance, and other fun ctions) provided by U				-		40,000	40,000	UNDP

	NDP in relation to the project.								
Other Operating Costs	Production of printed Project information sheets and other outreach material	5,000			5,000			5,000	UNDP [2]
Other Operating Costs	Production of printed Project information sheets and other outreach material		9,000		9,000			9,000	UNDP [2]
Other Operating Costs	Production of printed Project information sheets and other outreach material			5,000	5,000			5,000	UNDP [2]
Other Operating Costs	Communication and audiovisual equipment in support of the workshops				-	3,000		3,000	UNDP [2]
Other Operating Costs (project audit)	Financial audits as per UNDP and GEF requirements				-		10,000	10,000	UNDP
Grand Total		**775,000**	**1,837,000**	**937,000**	**3,549,000**	**71,000**	**180,000**	**3,800,000**	

[2] Footnote explanation added to related UNDP lines under Column 'Responsible Entity' : UNDP will be providing execution support to the Executing Entity (Ministry of Environment, Forest and Climate Change) for these activities, as requested by the GEF Operational Focal Point of India. UNDP will use its own operational rules and guidelines for these activities. The Executing Entity will maintain ultimate responsibility and accountability for the use of GEF resources and the successful achievement of project outputs, in alignment with the approved annual work plans.

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencys is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies' capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).