



Part I: Project Information

GEF ID

10773

Project Type

MSP

Type of Trust Fund

GET

CBIT/NGI

CBIT No

NGI No

Project Title

Mainstreaming of Biosafety and Institutional Capacity Building to strengthen effective implementation of Cartagena Protocol on Biosafety

Countries

India

Agency(ies)

UNEP

Other Executing Partner(s)

Ministry of Environment, Forest and Climate Change (MoEFCC)

Executing Partner Type

Government

GEF Focal Area

Biodiversity

Sector

Taxonomy

Focal Areas, Biodiversity, Influencing models, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Convene multi-stakeholder alliances, Demonstrate innovative approaches, Deploy innovative financial instruments, Stakeholders, Beneficiaries, Civil Society, Academia, Trade Unions and Workers Unions, Non-Governmental Organization, Community Based Organization, Gender Equality, Gender results areas, Participation and leadership, Knowledge Generation and Exchange, Capacity Development, Awareness Raising, Access and control over natural resources, Gender Mainstreaming, Sex-disaggregated indicators, Women groups, Gender-sensitive indicators, Capacity, Knowledge and Research, Innovation

Rio Markers

Climate Change Mitigation

No Contribution 0

Climate Change Adaptation

No Contribution 0

Biodiversity

Principal Objective 2

Land Degradation

No Contribution 0

Submission Date

Expected Implementation Start

1/31/2024

Expected Completion Date

12/31/2027

Duration

48In Months

Agency Fee(\$)

190,000.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
BD-3-8		GET	2,000,000.00	6,700,000.00
Total Project Cost(\$)			2,000,000.00	6,700,000.00

B. Project description summary

Project Objective

Institutional Strengthening and Mainstreaming Biosafety for effective implementation of the Cartagena Protocol on Biosafety

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
1: Stocktaking assessment and mainstreaming biosafety framework	Technical Assistance	1.1: Stocktaking assessment	1.1.1 Assessment of extant biosafety policies/ regulations and mapping of the stakeholders.	GET	195,000.00	500,000.00
		1.2: Biosafety policies and involvement of stakeholders mainstreamed	1.2.1 Mainstreaming of biosafety policies. 1.2.2 Online database for institutes/ agencies associated with LMOs and their roles generated			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
2: Strengthening institutional capacity at central and state levels	Technical Assistance	<p>2.1 Operational systems strengthened at Centre and State level for implementation of national biosafety regulatory framework.</p> <p>2.2 Pre-release and post-release mechanisms strengthened in line with Indian biosafety regulatory framework and CPB.</p>	<p>2.1.1 Strengthening and synchronization of Biosafety Secretariat at Central/State Governments.</p> <p>2.2.1 Documenting and disseminating best practices for monitoring of pre-release and post-release activities documented.</p>	GET	995,000.00	4,000,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
3: Strengthening key elements of national biosafety framework	Technical Assistance	3.1: Risk Assessment and Risk Management Regulatory Framework updated and streamlined to support biosafety decision making on new LMOs and related technologies.	3.1.1 Risk assessment and risk management (RARM) procedures and guidelines are prepared/updated for (a) select categories of LMOs and (b) emerging technologies are published and used for trainings.	GET	520,000.00	1,200,000.00
			3.1.2 Training for regulators and scientists for conducting RARM for new LMOs and emerging technologies.			
			3.2.1 Technical resources are prepared for implementation of NKLSLP.			
		3.2: National systems strengthened for the implementation of the NKSLP				
		3.3 Implement	3.3.1 Development			

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
		mechanisms for information sharing for enhancing public outreach and awareness	of online resources/ tools to increase biosafety related awareness among public.			
4. Project monitoring	Technical Assistance	4.1 Project effectively monitored, lessons codified and mainstreamed in national biosafety system	4.1 Establishing Project Steering Committee (PSC), meetings, Project Management Unit (PMU). 4.2 Prepare reports and sharing with stakeholders 4.3 Monitoring and evaluation	GET	110,000.00	250,000.00
Sub Total (\$)					1,820,000.00	5,950,000.00
Project Management Cost (PMC)						
	GET		180,000.00			750,000.00
Sub Total(\$)			180,000.00			750,000.00
Total Project Cost(\$)			2,000,000.00			6,700,000.00

Please provide justification

Institutional Strengthening and Mainstreaming Biosafety for effective implementation of the Cartagena Protocol on Biosafety

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; State Governments and Others	In-kind	Recurrent expenditures	6,700,000.00
Total Co-Financing(\$)				6,700,000.00

Describe how any "Investment Mobilized" was identified

Not Applicable

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(\$)
UNEP	GET	India	Biodiversity	BD STAR Allocation	2,000,000	190,000	2,190,000.00
Total Grant Resources(\$)					2,000,000.00	190,000.00	2,190,000.00

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 (\$)

50,000

PPG Agency Fee (\$)

4,750

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	India	Biodiversity	BD STAR Allocation	50,000	4,750	54,750.00
Total Project Costs(\$)					50,000.00	4,750.00	54,750.00

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	2,000	15,000		
Male	4,000	10,000		
Total	6000	25000	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

The proposed project interventions will contribute to the Implementation of the Cartagena Protocol on Biosafety as outlined under Focal Area Programming Direction BD 3-8. This will ensure tools, interventions and capacity is installed to support science-based decision making in the sustainable utilization of biodiversity through modern biotechnology. Deliverables shall contribute to Target 17 of Post 2020 Biodiversity Framework through safeguarding biodiversity, managing genetic resources and related benefits through sound science risk assessment, pre- and post-approval monitoring measures and engagement with the end users of genetic resources at the Central and State Levels.

Part II. Project Justification

1a. Project Description

1.1 *Background and context*

India is a megadiverse country with only 2.4% of the world's land area, accounts for 7-8% of all recorded species, including species of plants and species of animals. India has rich agrobiodiversity and is considered to be one of the important centers of origin of food crops, oil seed crops, horticulture crops, spices and medicinal plants. Around 51% of the countries geographical area is under crops as compared to the world average of 11% [1].

1

[1] <https://icar.org.in/files/state-specific/chapter/3.htm#:~:text=Around%2051%25%20of%20India%EF%BF%BD,the%20total%20net%20sown%20area.>

India being predominantly an agrarian economy, the conservation and sustainable use of biological diversity is of special significance as there is high dependency on agricultural biodiversity. The agriculture and allied sectors provide for food and nutritional security for more than 1.3 billion people and contribute to about 54.6% of the total workforce. The total food grain production in 2022 is estimated at 150 million tonnes which is higher than the previous five years, with agriculture sector contributing to about 21% of the national GDP. The agriculture sector's contribution to the Indian economy is much higher than the world's average (6.4%) [2].

Key challenges being faced globally and specifically in India over the past three decades include the fast-shrinking natural resource base of agriculture which provides for sustainable production, due to chemical intensified agricultural farming, soil degradation, fragmentation, excessive tillage, inappropriate crop rotation, water scarcity, post-harvest losses, natural disasters and climate change impacts. Thus, contributing to extensive loss of agrobiodiversity and increased agrarian distress, affecting livelihoods of people, impacting food and nutritional security.

Modern biotechnology holds the key to foundation of agriculture, food and nutritional security through conserving the crop genetic resources and ecosystem structures by developing more nutritious varieties that are also tolerant to biotic and abiotic stresses and well adaptable to climate changes[3]3. It is identified as a promising technology with immense potential via newer techniques viz. genetic engineering, gene editing, synthetic biology etc. not only for agriculture but other sectors such as biofuels, bioprocessing, bioremediation besides healthcare.

While novel technological developments including modern technology can help deal with the abovementioned challenges, the application and use of such technologies have to be done in a safe and sustainable manner. Protection of agrobiodiversity, is a part of the country's cultural heritage, is therefore a national priority for which the required regulations and institutional frameworks are in place.

India has been an early mover in the development of biosafety regulations. Rules for the manufacture, use, import, export and storage of hazardous microorganisms, genetically engineered organisms or cells, were notified in 1989 under the Environment (Protection) Act (1986), commonly called Rules, 1989. The Ministry of Environment, Forest and Climate Change (MoEFCC) is the nodal Ministry for implementation of the National Biosafety Regulatory Framework (NBF) regulations for living modified organisms (LMOs) derived from modern biotechnology in India.

India is a Party to the Cartagena Protocol on Biosafety (CPB), an international treaty governing the safe transfer, handling and use of LMOs resulting from modern biotechnology that may have an adverse effect on biodiversity, taking into account human health, with a specific focus on transboundary movements. CPB was adopted on January 29, 2000 as a protocol under the aegis of the Convention on Biological Diversity (CBD). India has also ratified Nagoya Kuala-Lumpur Supplementary Protocol on Liability and Redress (NKLSP) in the context of CPB, which came into force in March 2018.

MoEFCC is the nodal ministry for the implementation of CBD, CPB and supplementary protocol in India.

As a signatory to the CBD and its Protocols and also the NKLSP, India is obligated to take action for the conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of the benefits arising out of the utilization of genetic resources, to ensure an adequate level of protection

for the safe transfer, handling and use of LMOs resulting from modern biotechnology and also addressing liability and redressal issues.

Recognizing the importance of establishing credible and effective safeguards for LMOs to maximize the benefits and legitimacy of modern biotechnology by minimizing its potential risks and increasing capacities, Government of India (GoI) has previously implemented two projects supported by GEF, i.e., World Bank/GEF Project from 2004-2007 and UNEP/GEF Project from 2012-2016. While the first project focused on strengthening implementation of biosafety regulatory framework in general, the second project focused on four key thrust areas, viz., Risk Assessment and Risk Management, Handling Transport, Packaging and Identification, Socio-economic Considerations and Public Awareness limited to Agriculture Biotechnology. These areas were aligned with the Strategic Plan for CPB for the period 2011-2020.

Additionally, MoEFCC, Department of Biotechnology (DBT), Ministry of Science and Technology and Ministry of Agriculture and Farmers Welfare (MoAFW) have been organizing series of biosafety awareness and training workshops for concerned stakeholders from time to time to commensurate with developments in biotechnology and biosafety.

Despite the above efforts the fast pace of advancements of biotechnology and its applications in multiple areas in the country, there is still a need for mainstreaming of biosafety across various sectors and also for further building institutional biosafety capacities to strengthen biosafety regulations. The role of the State Governments is very critical for effective implementation, monitoring and enforcement of biosafety regulations and their needs capacity building. These needs and reaching out to multiple stakeholders in line with the advances in modern biotechnology for development of LMOs at national and global levels has also been strongly emphasized in the Terminal Evaluation Report of the UNEP-GEF Project - ?Capacity Building for Implementation of the Cartagena Protocol on Biosafety in India / Phase II?.

Therefore, MoEFCC with support from UNEP/GEF is committed to implement a capacity building the project titled ?Mainstreaming of Biosafety and Institutional Capacity Building to strengthen effective implementation of CPB?, with a focus on institutional strengthening and mainstreaming biosafety with specific role of the States in monitoring and enforcement of regulations. The project has four technical components as follows:

- 1) Stocktaking assessment and mainstreaming biosafety framework
- 2) Strengthening institutional capacity at central and state levels

- 3) Strengthening key elements of national biosafety framework
- 4) Project monitoring and Evaluation

In addition, there are dedicated resources for project management.

The total project cost is US\$ 2.19 million which includes US\$ 2 million for project finance and US\$ 0.19 million towards agency fee. The project includes in kind co-finance of US\$ 10 million.

1.2 Threats, Root causes and barrier analysis -

There are complex challenges for a country like India which is rich in biodiversity and is increasingly adopting technological interventions. Biotechnology applications are subject to step-by-step regulation and monitoring at various levels in different jurisdictions. It requires a supportive legal and regulatory environment so that both public and private sector organizations can actively participate. Thus, Institutional strengthening and human resource capacities for the same are being emphasized.

The overall influence of biosafety implementation is depicted by the national policies translated to acts and laws that are in place. Trade and economic development are integral to policy development and this drives and directs how regulatory structures are used and how they are implemented. So even though India has an operational National Biosafety Regulatory Framework supported with national policies, acts and laws and some capacities in place for safe transfer, handling and use of LMOs, these need further mainstreaming, revision and enhanced capacities for the same.

Some of the identified threats, root causes and barrier analysis are indicated below:

- ? Limited capacities and tools for risk benefit analysis for ? newer categories and applications of LMOs.
- ? Issues of coordinated management of biosafety measures and decision-making processes especially in relation to environmental releases need to be translated and mainstreamed from the Union to State Level which usually are the receiving environments.
- ? Knowledge and capacity deficit in states, who are responsible for monitoring and enforcement as per Rules, 1989.
- ? Clearly defined operational workflow, with entry points for monitoring and enforcement at the state and district levels through the State Biotechnology Coordination Committees and the District Level Coordination Committees as per the Rules of 1989
- ? Understanding and clarity for operationalizing NKLS is needed among concerned stakeholders.

- ? Limited public awareness, education and participation

1.3 Institutional, Sectoral and Policy context –

As biosafety is a multi-sectoral issue wherein applications span across various sectors like agriculture, fisheries, healthcare, process industry, environmental management, etc., accordingly different ministries and concerned departments are involved in the regulation of products and processes of modern biotechnology. Regulatory frameworks aim to ensure that safety of products of modern biotechnology is as comparable to safety of products developed through conventional techniques.

In India, the biosafety regulatory framework spans across regulation of all activities related to genetically engineered organisms/living modified organisms and products thereof.



Series of guidelines have been prepared for ensuring safety at various stages of development and biosafety evaluation of GMOs. These guidelines are also updated from time to time based on advancements in research and consensus approaches internationally. Some of the guidelines relevant to the scope of the project are as follows:

- ? Recombinant DNA Safety Guidelines, 1990
- ? Guidelines for the Safety Assessment of Foods Derived from GE Plants, 2008
- ? Guidelines and Standard Operating Procedures (SOPs) for CFT of Regulated GE Plants, 2008
- ? Guideline for the Monitoring of CFTs, GE, 2008
- ? Protocols for Food and Feed Safety Assessment of GE crops, 2008
- ? Guidelines and Handbook for Institutional Biosafety Committees (IBSCs), 2020
- ? Regulations & Guidelines for Recombinant DNA Research and Biocontainment, 2017

Additionally, there are several other Acts, Rules and Policies that are also applicable to LMOs and facilitate regulation of various aspects of plant protection and the environment, as listed in Table 1 below:

Table: 1. Summary of applicable acts, rules and policies having a bearing on the regulation of LMOs/GMOs

	Name	Overview	Responsible agency
2	Plant Quarantine (Regulation of Import into India) Order, 2003	<p>For the purpose of prohibiting and regulating the import into India of agricultural articles mentioned herein the order was passed as per exercise of the powers conferred by sub-section (1) of Section 3 of the Destructive Insects and Pests Act, 1914 (2 of 1914).</p> <p>The National Bureau of Plant Genetic Resources (NBPGR) is the nodal competent authority to issue import permits for import of seeds by public and private sector agencies for research purposes after getting permission from DBT and MoEFCC as the case may be under Rules 1989</p>	Ministry of Agriculture
3	Food Safety and Standards Act, 2006	<p>An Act to consolidate the laws relating to food and to establish the Food Safety and Standards Authority of India for laying down science-based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import, to ensure availability of safe and wholesome food for human consumption and for matters connected therewith or incidental thereto.</p> <p>It takes into account recommendations of Codex Alimentarius Commission related to food safety norms.</p>	Food Safety and Standards Authority of India (FSSAI), Ministry of Health & Family Welfare
4	National Seeds Policy, 2002	<p>For purpose of determining the agronomic value for at least two seasons under the All India Coordinated Project Trials of Indian Council of Agricultural Research (ICAR) for transgenic crops/varieties and in coordination with the tests for environment and bio-safety clearance as per the EPA before any variety is commercially released in the market. Also regulates the import of transgenic seeds.</p>	Ministry of Agriculture
5	National Environment Policy, 2006	<p>For purpose of regulatory processes to be reviewed as per relevant scientific knowledge ensuring the conservation of biodiversity and human health when dealing with LMOs in transboundary movement for compliance to CPB and taking into account ecological, health and economic concerns to be adequately addressed.</p>	MoEFCC

	Name	Overview	Responsible agency
6	National Policy for Farmers, 2007	For purpose of emphasizing on need for genetic modification to incorporate genes which can help impart resistance to drought, salinity and other stresses in various crops	Ministry of Agriculture
7	Foreign Trade Policy, 2006-2009	It concerns the import of GM food, feed, GMOs/LMOs for purpose of (i) Research and development (ii) Food (iii) Feed (iv) Processing in Bulk and (v) for environmental release as governed under Rules, 1989.	Director General of Foreign Trade, Ministry of Commerce and Industry
8	National Biotechnology Development Strategy, 2021-2025	To achieve target of Biotechnology contributing to a knowledge and innovation driven Bioeconomy. Includes policy enablers related to biosafety viz. Indian Bio-safety Knowledge Portal (IBKP) for ease of doing business. Harmonisation of Regulatory guidelines such as Updation of Risk Group, Formulation of stacked event guidelines, Environmental Risk Assessment (ERA) of Genetically Engineered Microorganism, Updation of recombinant DNA guidelines etc.	Department of Biotechnology, Ministry of Science and Technology

Detailed information on applicable acts, rules, policies and guidelines are available at <https://geacindia.gov.in>, <https://dbtindia.gov.in/guidelines-biosafety> and <https://biosafety.icar.gov.in/>

1.4 The baseline scenario and associated baseline projects

India has been at the forefront in adopting state-of-the-art science and technology across various sectors in meeting its socio-economic and environmental challenges. Modern Biotechnology is one of the key thrust areas identified by the Government of India, for promoting research, development and its innovative applications. There is a dedicated Department of Biotechnology (DBT) in the Ministry of Science and Technology, working towards accelerated development of biotechnology in the country. Significant efforts have been made to create infrastructure for research and development of new technologies/products both in public and private sector. More than 500 organizations are actively engaged in activities involving modern biotechnology. While several products have been approved for commercial use in healthcare, Bt cotton is the only Living Modified (LM) crop approved so far for environmental release in the country. Bt cotton has been widely accepted and covers more than 90% area under cotton cultivation. Several other crops are under research and confined field trials; more than 80 crops were reported to be under research as per a survey conducted by the Ministry of Environment, Forest and Climate Change (MoEFCC) in 2014. The National Biotechnology Development Strategy (2021-2025) has identified the biotechnology sector as a frontline area of science with immense potential to address sustainable socio-economic transformation.

Several healthcare products using recombinant DNA technology are manufactured and approved for use in India. India's regulatory experience with commercialization of GM crops started with Bt cotton approval in 2002. Five events of Bt cotton and hundred of hybrids have been approved and are in

cultivation. Recently, in 2022, GM mustard has been approved for environmental release. Indian Public-Sector plant biotechnology R&D is very rich, and innovations are being used to develop plant products that are relevant to Indian agriculture today. Confined field trials of corn, cotton, banana, rubber, pigeon pea and potato are currently underway or in pipeline.

There is significant research on traits that are relevant to mitigating the impacts of climate change on agriculture, which will be important to ensuring that agricultural productivity is maintained and ultimately improved. Productivity constraints in crops (including yield, pest resistance and herbicide tolerance) that are particularly relevant to smallholder farmers (e.g., pulses, millets) are also receiving significant attention, with important implications for improved food and nutrition security. In addition, research efforts are underway for development of novel microorganisms, yeast, algae etc. in public and private sector. This information emphasizes that the biosafety regulatory system must be responsive to all types of biotechnology research, be it for knowledge generation or product development. Anticipated private sector R&D for commercial product release also highlights the prospective gaps in biosafety risk assessment and regulation needs which needs to be updated, India is also beginning to look at new and emerging issues on Synthetic Biology, Gene Drives, Genome Editing and new Plant breeding Techniques which calls for a review of the current regulatory system and the development of new and specific interventions to ensure products from such interventions can be assessed and managed to ensure safe use and transfer of the developed modern biotechnologies.

During the development of any new product, the role of State Governments is very critical for ensuring strict compliance and effective monitoring of biosafety considerations. However, India being a diverse country pose several challenges in effective coordination and dissemination of information regarding appropriate guidelines to officials of State Governments and accordingly enhancing capacities of State officials is a pre-requisite for addressing challenges for safe conduct and transfer of Living Modified Organisms (LMOs).

Capacity building in biosafety in India has been commensurate with developments in biotechnology and biosafety through both national and international resources. Series of awareness and training workshops for concerned stakeholders have been organized by MoEFCC, DBT and Ministry of Agriculture and Farmers Welfare. India has implemented two projects supported by GEF, i.e., World Bank/GEF Project from 2004-2007, and UNEP/GEF Project from 2012-2016. While the first project focused on strengthening implementation of biosafety regulatory framework in general, the Phase II project focused on four key thrust areas, viz., Risk Assessment and Risk Management, Handling Transport, Packaging and Identification, Socioeconomic Considerations and Public Awareness limited to Agriculture Biotechnology. These areas were aligned with the Strategic Plan for CPB for the period 2011-2020.

With all the above efforts, India now has the basic capacity to comply with obligations under CPB. However, there is a felt need for building on these efforts and reaching out to multiple stakeholders in line with the advances in modern biotechnology for development of LMOs at national and global levels. This position was strongly emphasized by the Terminal Evaluation of the UNEP-GEF Project - **Capacity Building for Implementation of the Cartagena Protocol on Biosafety in India / Phase II?**. The Evaluation recommended that the Competent National Authority (MoEFCC) devotes efforts to build robust follow-up systems in order to measure effects and steer action in relation to: a) Human Resources capacity development; b) Information and Public awareness and this is achievable when the

biosafety system is translated from the Union to the State levels through the mandated and targeted institutions. The urgent need to strengthen the regulatory procedures and enforcement mechanisms regarding the transboundary movement of LMOs, in view of advancements in crop biotechnology at the national and global level was emphasised and this forms one of the key thrusts of the proposed project. India already has several LMOs which are close to commercialization and the country is expected to be soon both an exporter and an importer of LMOs. A stronger monitoring and enforcement role at the State Level will be extremely important and a key area of leverage to build on the installed biosafety capacity.

SECTION 2: PROPOSED ALTERNATIVE SCENARIO

Proposed alternative scenario

India being a vast country with large population and active biotechnology research centers, needs to utilize a variety of means towards strengthening the implementation of biosafety regulations, and promoting outreach. Research has been initiated in several organizations in new and emerging technologies and accordingly, rules and guidelines need to be reviewed and updated guided by current science and new standard operating procedures and provide clarity about approval process if required, for both in-country use and transboundary movement of LMOs. Strengthening implementation of rules and regulations at the level of States and local bodies is a priority area as monitoring and enforcement of environmental releases is under State Control. India has been an active participant in the meetings of Conference of Parties (COP) to the CBD and COP serving as **Meeting of Parties (COP-MOP)** to the two protocols. At the global level, efforts are being made to integrate deliberations related to CBD and its Protocols. Accordingly, several cross-cutting issues such as use of synthetic biology, digital sequences, etc. need to be looked at vis-?-vis the existing national biosafety regulatory frameworks, through active involvement of concerned stakeholders.

The institutional Policy and regulatory context, is extremely critical to a science-based approach to the management of modern biotechnology. The key requirements which is the basis of the alternative scenario is to ensure science based and coordinated decision making system supported by the designated strengthened institutions with mandates as spelt below.

The core institutional stakeholders are defined in the Environment (Protection) Act, 1986. Rules, 1989 and policies, attributing clear mandate to Ministries / Departments and six Competent Authorities; namely:

A- Ministries:

-

1. Ministry of Environment, Forest and Climate Change

- a. Primarily responsible for conservation and protection of environment, ensuring environmental and human health safety before release of GMOs/LMOs
- b. Nodal agency for implementing Rules, 1989 and the CPB

2. Department of Biotechnology (Ministry of Science & Technology)

- a. Nodal department for promoting biotechnology programs
- b. Provides scientific support in implementation of biosafety regulations
- c. Provide services in areas of research, infrastructure, generation of human resource

3. Ministry of Agriculture

- a. Policies aimed at agriculture growth.
- b. ICAR responsible for monitoring agronomic benefits of GM technology.
- c. Monitoring post-release performance of GM crops.

4. Ministry of Health and Family Welfare

- a. Policies aimed at protecting and monitoring human health.
- b. FSSAI responsible for regulating GE foods.

5. Ministry of Commerce and Industries

- a. Enhance trade with other countries through export/import policies.
- b. Nodal agency for implementing DGFT[4]4 notification on GMOs

6. Central Board of Excise and Customs, Department of Revenue, Ministry of Finance

- a. Enforcement of regulation pertaining to transboundary movement of GMOs/LMOs at point of entry.

-

B- Competent Authorities: Rules, 1989 are implemented by Ministry of Environment Forest & Climate Change, Department of Biotechnology, Ministry of Science & Technology and State Governments through the following six committees:

The Recombinant DNA Advisory Committee (RDAC)

Institutional Biosafety Committees (IBSCs)

Review Committee on Genetic Manipulation (RCGM)

Genetic Engineering Appraisal Committee (GEAC)

State Biotechnology Coordination Committee (SBCC)

District Level Committee (DLC)

While the RDAC is advisory in function, the IBSC, RCGM, and GEAC are responsible for regulating function. SBCC and DLC are for monitoring purposes.

The proposed project components and envisaged outcomes as outlined below will support the regulatory mandates and strengthen the institutions outlined above in meeting their mandates in the management of LMOs through the interplay of Union and State Level supportive systems in decision making.

2.1 Project Objective

Institutional Strengthening and Mainstreaming Biosafety for effective implementation of the Cartagena Protocol on Biosafety.

2.2 Project Components and Expected Outcomes

Component 1: Stocktaking Assessment and Mainstreaming biosafety framework

Stocktaking assessment of extant policies and regulations related to implementation of key elements of the biosafety regulatory framework in India will be undertaken for planning activities and work out stakeholder engagement in the concerned sectors as well as at State level to ensure mainstreaming in a sustainable manner. As the focus of the project is on mainstreaming at both central and state level, the stocktaking process will also including mapping of the stakeholders and **various institutes/ agencies (academic, research, industrial, etc.) concerning with LMOs in the country will be identified along with documenting their respective roles.** The proposed interventions are expected to lead to outcomes including State and Sector Specific Biosafety policies with clearly defined agenda. It is also expected that biosafety issues will be integrated into the planning processes not only at the Centre but also the State Level. There are 29 States and 6 Union territories in India with varying level of biotechnology and

biosafety activities and priorities. The Stocktaking assessment will be used to review and finalize selected States based on a set of criteria where the developed tools will be tested and customized to meet their needs. A key criterion is existing field trials or potential to be a receiving environment for approved and potential illegal boundaries of LMOs.

The key envisaged outcomes will be biosafety mainstreaming through review of extant policies/regulations and mapping of stakeholders, and developing guidance for centre and state towards further strengthening the biosafety regulatory framework in India. An online real time information sharing system will also be established for various institution?/s/agencies to update information at resource and promote awareness.

Component 2: Strengthening institutional capacity at central and state levels

Whilst there has been some installed regulatory capacity at the Union level, monitoring of field trials and releases in the environment happens are under State Control. It is proposed to strengthen institutional capacities in the apex regulatory body i.e. GEAC by expanding the Secretariat, trainings, preparation of required formats for evaluation, and decision making and coordination with other regulatory bodies including at state level. Institutional capacity in monitoring and enforcement and handling of LMOs will be strengthened through legally designated state level committees along with supporting stakeholders such as agriculture departments/universities, state biodiversity boards, testing labs etc. It is envisaged that by 2025, well defined operational systems will be in place at the centre and state level for implementing obligations under Indian biosafety regulatory framework and CPB. This will ensure that each intentional introduction into the environment is guided by science-based decision supporting units with supportive follow up monitoring and enforcement systems at the Union and State Levels. Region wise established coordination units with trained staff in select States is envisaged as a key outcome to help ?tie? in the loose ends of the Indian Biosafety Regulatory Framework. In addition, pre-release and post-release miniating mechanisms with be strengthened by deveining roles and responsibilities of Centre/state agencies and accordingly developing appropriate guidance towards strengthening mechanisms of monitoring and enforcement.

Component 3: Strengthening key elements of national biosafety framework

Whilst there is a Biosafety Regulatory Framework in India, post project reviews, the Terminal Evaluation of the last Biosafety Project and ongoing developments indicate the need for a review of the regulatory framework with entry points, tools and Standard Operating Procedures to enable India to manage the new LMOs and emerging technologies So far, the major areas for biosafety regulations relates to biopharmaceuticals, particularly biosimilars[5]5 and GM crops. Extensive research efforts are underway in India and also at global level for new LMOs such as trees, algae, mosquitoes etc. Dedicated support in terms of both funding and technical assistance is being provided for research interventions for varied LMOs at national level. New LMOs are being approved at global level and also likely to be traded internationally.

The proposed project interventions are expected to identify and shortlist categories of LMOs and emerging technologies to facilitate the updation of the Risk Assessment and Risk Management Regulatory Framework of India with supportive, guidelines, standard procedures and expertise. This set up will streamline the biosafety decision process for the new LMOs and related technologies. Training at national and international levels will help in familiarizing a pool of experts from multiple disciplines with best practices being followed globally and too be in line with the requirements under the CPB particularly related to RA/RM.

This component will focus on interventions to strengthen the national systems for the implementation of the Nagoya Kuala Lumpur Supplementary Protocol on Liability and Redress (NKSLP). The interventions are expected to facilitate the development of technical resources providing information on essential elements of NKSLP.

The third outcome envisaged under this component will be the review and development of mechanisms for information sharing for enhancing public outreach and awareness.

Component 4: Project Monitoring and Evaluation

The component will focus on developing project monitoring tools that will help capture key lessons and best practices to support the Indian Biosafety process.

Measures will be put in place to allow for capturing of evidence-based information on project ensuring these results are adaptively managed to assist in delivery. Data collection methods and tools will be adapted to assess project's diversified impact on different stakeholders taking into account gender equality. Through the monitoring process, the stakeholder experience will be guided to ensure adequate participation and uptake of project deliverable.

In addition, Project Management activities will be undertaken for establishing an effective system for the coordination and management of the overall project activities in an efficient and timely manner. A dedicated Project Management Unit consisting of technical professionals, administrative and financial personnel and IT executives will collectively work for successful and timely execution of project activities. The PMU will work under the guidance and supervision of National Project Director with day to day reporting to National Project Coordinator.

In view of the above, the MoEFCC proposes to access funds from GEF during GEF 7 cycle for a project on biosafety, with a view to strengthening implementation of biosafety management system in India, continuing with UNEP as the GEF Implementation agency with a view to mainstreaming biosafety considerations in policies and programmes at both central and state level and strengthening biosafety monitoring and enforcement measures. The proposed areas to be covered under the project *inter alia* include the following:

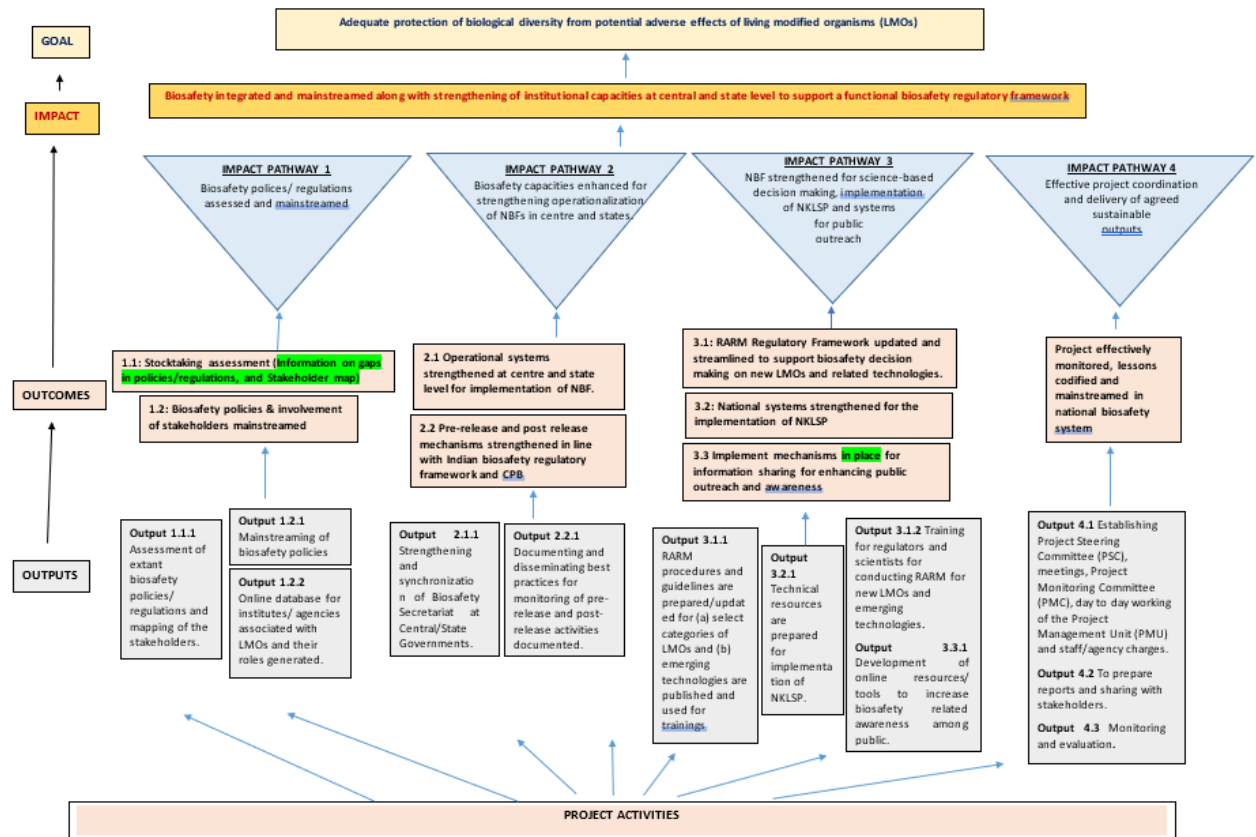
1. To mainstream biosafety considerations in sectoral policies and procedures, in line with Sustainable Development Goals (SDGs), National Biodiversity Targets (NBDs) and National Biodiversity Strategy and Action Plan (NBSAP).

2. To further strengthen implementation of biosafety regulations and enhance institutional capacity for effective implementation of the national biosafety system in line with the obligations under the CPB.
3. To further develop and support implementation of scientific tools and approaches for risk assessment and risk management, particularly for new LMOs and emerging technologies
4. To enhance institutional capacity building at State level for a cohesive approach with a view to promoting effective monitoring mechanisms.
5. To review measures for a liability and redress regime for LMOs, in the Indian biosafety regulations keeping in view its international obligations under the supplementary protocol.
6. To continue to raise awareness promote participation through structured communication strategies and information exchange mechanisms concerning safe use of LMOs.

The proposed project activities as per the **detailed project workplan with benchmarks and deliverables** is placed as **Annexure L**.

The focus of the proposed project activities is as per the **Theory of Change** as shown in Figure 1 below:

Figure 1: Proposed Theory of Change



[1] <https://icar.org.in/files/state-specific/chapter/3.htm#:~:text=Around%2051%25%20of%20India%EF%BF%BD,the%20total%20net%20sown%20area.>

[2] <https://statisticetimes.com/economy/country/india-gdp-sectorwise.php#:~:text=Sector%2Dwise%20GDP%20of%20India&text=The%20services%20sector%20accounts%20for,and%20allied%20sector%20share%2020.19%25.>

[3] https://www.millets.res.in/books/chapter/Indian_crop_diversity.pdf

[4] Directorate General of Foreign Trade

[5] <https://creakyjoints.org/treatment/what-are-biosimilars/>

2.1 Alignment with GEF focal area and Impact Program strategies

The global community through the Cancun Declaration 'Mainstreaming the Conservation and Sustainable Use of Biodiversity for Well-Being' adopted by COP 13 in Decision XIII/3 has endorsed its commitment to mainstream biodiversity across all sectors. In Decision XIII /3-14 Urges Parties, when implementing the 2030 Agenda for Sustainable Development, to mainstream biodiversity in the implementation of all relevant Sustainable Development Goals, thus promoting linkages between efforts to implement national biodiversity strategies and action plans and Sustainable Development Goal strategies and plans. Further, Decision XIII/21 invites the Global Environment Facility and other donor and financial institutions to provide financial assistance for country-driven projects that address cross-sectoral mainstreaming when requested by developing country Parties, in particular the least developed among them and small island developing States, and countries with economies in transition.

Decision BS VIII/3, Urges Parties and other Governments to integrate biosafety in their national biodiversity strategies and actions plans and broader national development strategies to implement the 2030 Agenda for Sustainable Development and its Sustainable Development Goals. Decision BSVII/5, Urges Parties and invites other Governments to integrate and prioritize biosafety within their national biodiversity strategies and action plans and national development plans and programs, as appropriate. The role and relevance of the Cartagena Protocol on Biosafety and the Nagoya Protocol on Access and Benefit Sharing, as well as the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), in contributing to sustainable food systems and agriculture has also been recognized by COP.

In more recent time, the Target 17 of the Kunming-Montreal Global Biodiversity Framework (GBF) calls to *'Establish, strengthen capacity for, and implement in all countries, biosafety measures as set out in Article 8(g) of the Convention on Biological Diversity and measures for the handling of biotechnology and distribution of its benefits as set out in Article 19 of the Convention'* by the Parties.

The proposed project is aligned to the GEF Biodiversity Focal Area and relates directly to the program BD-3-8 'Further development of biodiversity policy and institutional frameworks through the Implementation of the Cartagena Protocol on Biosafety'. The proposed interventions will develop updated and revised regulatory tools and thematic or issue specific actions to support implementation of

the Cartagena Protocol on Biosafety at the Union and State Levels in India especially interventions on risk assessment, of new LMOs and monitoring and enforcement in addition to tools for implementation of the new supplementary protocol on Liability and Redress. The envisaged project activities are expected to contribute to global benefits and impact transboundary movements in South Asia specifically and Asia as well.

The interventions will contribute regulations, tools, guidelines and operating procedures to add on to existing biosafety interventions in managing biosafety at the State Level. A stronger monitoring and enforcement regime will be in place to ensure that each intentional introduction of LMOs in the environment is made based on scientific risk assessment with supportive monitoring and enforcement measures. The mandate for monitoring and enforcement per the Biosafety Rules is assigned to the States through State Biotechnology Coordination Committees.

2.1 Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

Indian biosafety regulations have provisions for involvement of concerned ministries of Central governments, State governments, and other key stakeholders. Though mechanisms are in place for their involvement, there is an urgent need to enhance capacities for effective implementation. Preliminary efforts initiated in previous projects need to be institutionalized to ensure sustainability. The external assistance is a catalyst in strengthening capacity in biosafety management, which may be overlooked. A Global Environment Facility (GEF) intervention would complement baseline activities in India by ensuring that key required capacities for implementation of the CPB continue to be developed. This project is perfectly in line with the GEF strategy on biosafety.

The incremental reasoning is buttressed on the principle of translation of knowledge, experience and further developments from the Federal or Union Level through the State and District levels. In addition, the previous interventions focused more on contained and confined field trials mainly in the area of agricultural biotechnology.

The proposed project will further broaden the scope and build capacity in the area of environmental/commercial release not only in agriculture biotechnology but capacity to cover the management of all Living Modified organisms developed or received into India. It will also allow for supportive and institutional linkages between the GEAC in relation to Environmental releases and the State Coordination Committee which have a legal responsibility to do post approval monitoring and enforcement of permit conditions on the ground or State level. It will also allow for internalization and mainstreaming of the biosafety regulatory instruments and additional deliverables to enable India have a more dedicated and streamlined biosafety decision making and follow up processes from federal to the end users at the State Level

The proposed incremental cost analysis is below:

Baseline scenario (B)	Alternative scenario (A)	Incremental benefits (A-B) from the project
<p><u>PROJECT OBJECTIVE:</u></p> <p>Institutional Strengthening and Mainstreaming Biosafety for Effective Implementation of the CPB</p>		

<p>MoEFCC being the nodal agency for complying to the obligations under CPB and its supplementary protocol, has from time to time built biosafety capacities and conducted several awareness workshops.</p> <p>Accordingly, two capacity building projects with support from GEF from 2004-2007 and 2012-2016 have also been implemented and successfully completed by MoEFCC. However, with advancements in technology and newer developments under CPB, there is need for biosafety integration and mainstreaming towards strengthening biosafety capacities in the country.</p>	<p>The project shall contribute towards mainstreaming biosafety as an integral part of the national programs facilitating an integrated and coordinated approach that will help minimize duplication, enhance synergies and promote efficient use of available resources/capacities towards implementing the CPB.</p> <p>Additionally, with the recent obligation of Parties to Convention on Biological Diversity, the parent treaty of CPB, it will contribute to target 17 of the Post Global Biodiversity Framework and the implementation and capacity building action plans (2021-2030).</p>	<ul style="list-style-type: none"> - Reviewing and updating the biosafety related policies and regulations along with roles and responsibilities of various agencies/institutions dealing with LMOs. - Collating and compiling information through real time online database/system for enhanced awareness. - Enhancing regulatory decision-making capacities with updation of application forms, decision making formats and supporting tools. - Incorporating international best practices to develop guidance for RARM for new categories of LMOs and emerging technologies and building capacities through trainings. - Developing technical briefs, resources and prototype/template for strengthening implementation of provisions of the NKLSP - Strengthening and operationalization biosafety regulatory systems in States with active coordination among regulatory committees - Documenting and disseminating best practices for monitoring of pre-release and post-release activities documented. - Developing online resources for wide spread public awareness and information sharing.
<p><u>Component 1: Stocktaking assessment and mainstreaming biosafety framework</u></p>		

<p>While India has an operational biosafety framework, an indepth assessment of policies in related department, agencies etc. is required for mainstreaming biosafety across sectors. Similar assessments for training needs and detection capacity in projects were extremely useful for planned set of activities to achieve desired outcomes.</p>	<p>The project is expected to update the national policies and regulations for biosafety integration and mainstreaming based on a stocktaking assessment and analysis of biosafety related policies/ programs. Regulatory capacities will be further strengthened for decision-making with updation of application forms, decision making formats and supporting tools.</p>	<ul style="list-style-type: none"> - Opportunities identified for biosafety mainstreaming in national policies and regulations to facilitate sustainable considerations of biosafety issues at centre and state level even beyond the project duration. - Developing guidelines/ Standard Operating Procedures for mainstreaming biosafety at central and state level through consultations, besides also updating application forms, decision making formats and supporting tools. - Developing a real-time, online information sharing resource depicting roles of various identified institutes/ agencies dealing with LMOs and updating information from time-to-time at the resource.
--	---	---

Component 2: Strengthening Institutional Capacity at Central and State levels

<p>There is provision for competent statutory bodies at both central and state levels while the committees at central level are functioning, the state level committees have either not in place or limited activity.</p>	<p>Initiatives towards enhancing institutional capacity of the GEAC with establishing a supportive biosafety unit and making operational systems for synergies and coordination between centre and state is expected to be achieved under the project.</p> <p>Coordination units at state level will be established in select states for achieving the same.</p> <p>Systems for information sharing for public outreach and awareness developed.</p>	<p>Institutional capacities will be enhanced through:</p> <ul style="list-style-type: none"> - Establishing a biosafety cell for support to the GEAC; - Establish Coordination units in identified select states - Training of staff with rules and regulations towards effective implementation of the regulatory system and facilitating a scientific decision-making process <p>Developing and disseminating information about LMOs, biosafety and relevant stakeholders through resource materials/online tools.</p>
---	--	---

Component 3: Strengthening key elements of National Biosafety Framework

<p>India has in place a sound safety assessment process, supplemented with a risk analysis framework and trained personals for RARM from the previous GEF Phase II capacity building project. Types of LMOs and advanced technologies require constant updation/review of procedures and new guidance. Implementation of obligations towards NKLSP and public awareness also need to be strengthened.</p>	<p>The project will support the strengthening of the institutional and human resource capacities for implementing the National Biosafety Framework including risk assessment and risk management of newer categories of LMOs, implementation of NKLSP, mechanisms for enhancing public outreach and awareness.</p>	<p>? The review and updation of procedures, guidance and developing resource materials will result in:</p> <ul style="list-style-type: none"> - Strengthened capacities to conduct RARM of newer categories of LMOs; - Improved technical resources to support biosafety decision making for new select categories of LMOs. <p>? Strengthening system for supporting implementing NKLSP through developing technical briefs, resources and template/prototype.</p> <p>? Increased number of trained personnel for dossier preparation, conducting RARM, and monitoring for shortlisted categories of LMOs and emerging technologies;</p>
<p><u>Component 4: Project Monitoring</u></p>		
<p>Each of GEF projects have standard monitoring and evaluation process for effective implementation and timely completion of project activities.</p>	<p>Activities undertaken through the project by reviewing international best practices and sharing of information for biosafety awareness will facilitate cost-saving and avoid duplication of efforts.</p>	<p>A consultative and integrated approach will result in time saving and cost saving for:</p> <ul style="list-style-type: none"> ? Implementation and management of the project, ? Management of capacity building activities ? Success in activities implemented and information shared among states

2.1 Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

With GEF support through this project, incremental financial resources necessary for effective review/ updating and/or translation of the Indian Biosafety system to the State Level will strengthen the State Biosafety Coordination systems mandated with monitoring, enforcement and translation of confined field trials to deliberate, commercial and release of LMOs into the Environment. The project will also provide the technical and financial resources for institutional capacity building for relevant and designated

stakeholders with clearly defined roles and responsibilities under the national biosafety systems at the State Level to support the work of the Genetic Engineering Appraisal Committee. The development of liability and redress measures which was not handled in the previous biosafety interventions will strengthen the decision-making processes to ensure that each intentional introduction of LMOs into the environment have back up procedures to handle issues of liability and redress. The proposed project will implement measures that will ensure a cost-effective approach and a coherent intervention strategy to maximize the possibilities of achieving the identified outcomes.

By building on the baseline with GEF support for the countries, the project will translate the current baseline into updated functional and operational biosafety frameworks to support handling and decision making on LMOs in line with obligations of the Cartagena Protocol. The results of the proposed project will set up measures guided by a strong policy regime focused on conservation of globally significant biodiversity in agriculture, medicine, food and the new/emerging biotechnologies beyond Agriculture biotechnology as has been the case of the previous phases.

The project will ensure sustainable use of the components of globally significant biodiversity guided by a strengthened risk analysis framework-based approach to decision making.

Innovation, Sustainability and potential for scaling up

India being a vast country, the proposed activities will be taken up at pilot level. The outputs developed will be adopted by regulatory agencies for implementation across the system to strengthen the Indian Biosafety System at the Federal and State Levels. The previous projects were more focused at the Central or Union Level to set up the structures. The tools and interventions will be mainstreamed into the institutional mandate and obligations to support modern biotechnology level at the marketplace and for deliberate release with a strong focus on State Level coordination through the State Biotechnology Coordination Committees and other concerned agencies. Due to the diverse ecological zones in India, tools and guidance, the best practices and lessons developed can be shared across different regions and potentially replicated in other countries across the region. The project will develop tools and regulatory responses to support the management of new LMOs and emerging biotechnologies across not only Agriculture but other areas of LMO development which is lacking in most biosafety regulatory frameworks. India, being a potential importer and exporter of LMOs, will develop Liability and Redress measures which can be tested with real life applications. The lessons and best practices will be helpful to similar situations across the region and has a potential for uptake and scale up across several countries.

1b. Project Map and Coordinates

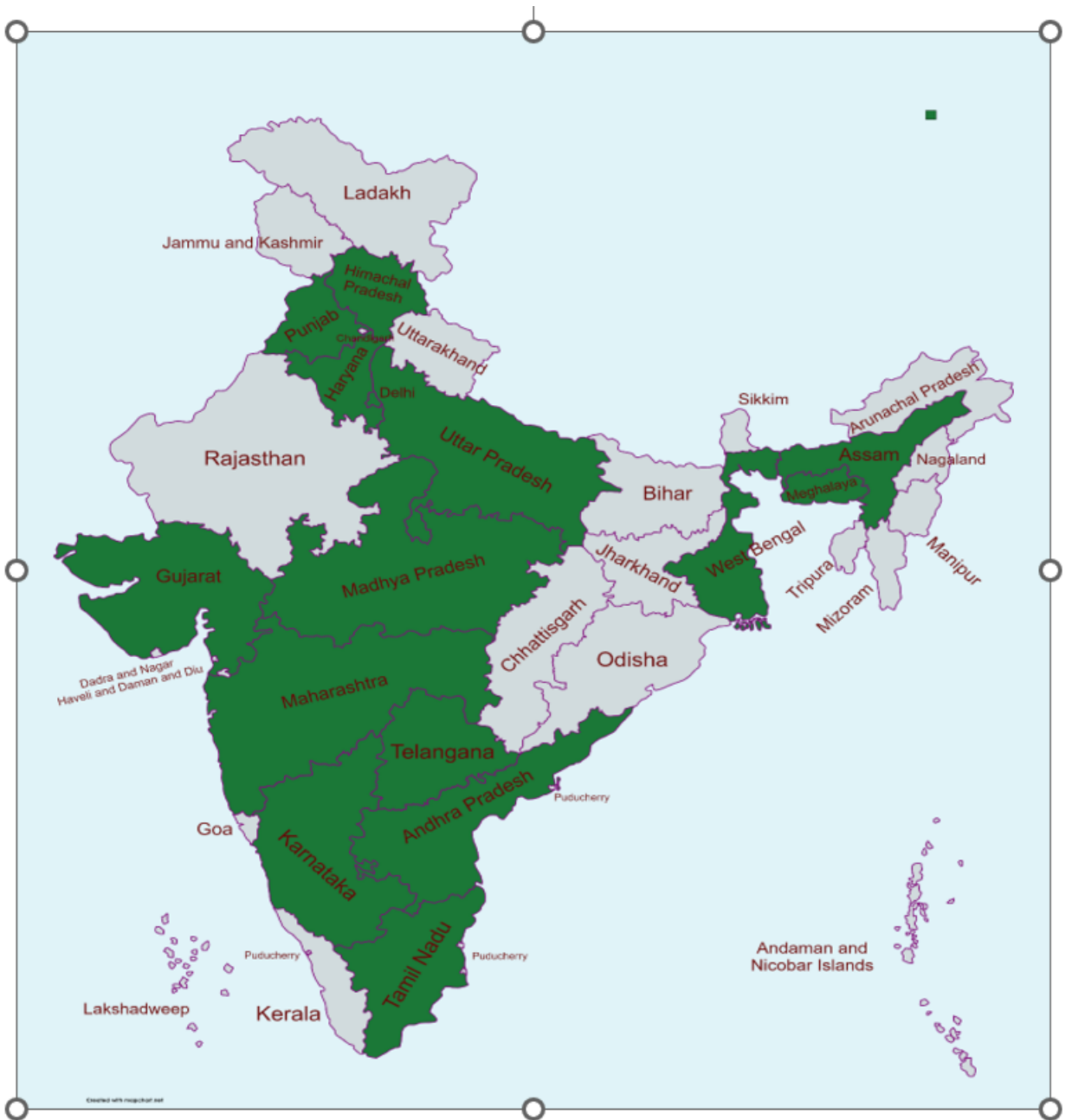
Please provide geo-referenced information and map where the project interventions will take place.

Project Map and Coordinates

The project will be implemented Pan India. Activities related to State level engagement will be in specific states in six regions (North, East, West, Central, Northeast, South). States will be shortlisted

based on results of stocktaking assessment and in view of active engagement in matters related to LMOs, such as confined field trials. States with active biotechnology programs for development and use of LMOs and where field trials have been permitted or are under active consideration in the recent past are highlighted in the map. Tentatively the states have been highlighted in green in the map.

Name	Longitude	Latitude
Andhra Pradesh	79.73999?E	15.9129?N
Assam	92.9376?E	26.2006? N
Gujarat	71.1924?E	22.2587?N
Haryana	76.0856?E	29.0588?N
Himachal Pradesh	77.1734?E	31.1048?N
Karnataka	75.7139?E	15.3173?N
Madhya Pradesh	78.6569?E	22.9734?N
Maharashtra	75.7139?E	19.7515?N
Meghalaya	91.3662?E	25.4670?N
New Delhi	77.200 E	28.610 N
Punjab	75.3412?E	31.1471?N
Tamil Nadu	78.6569?E	11.1271?N
Telangana	79.01930 E	18.11240 N
Uttar Pradesh	80.9462?E	26.8467?N
West Bengal	87.8550?E	22.9868?N



The Project map and coordinates is attached as **Annexure E**.

1c. Child Project?

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

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.

Biosafety entails involvement of multiple categories of stakeholders, who may be involved directly and indirectly. Activities in the present project document are based on feedback by stakeholders in the completed GEF supported capacity building projects and interactions during the preparatory phase. One to one interactions were held with key representatives and a multi stakeholder consultation was organised, wherein the proposed project activities were discussed in detail. Inputs from the stakeholders were documented and incorporated in the project design appropriately. The stakeholders consulted included concerned central and state government ministries/departments, subject specific expert organizations, members of regulatory committees, scientists and researchers, academia, private sector industries, farmer organizations, civil society organizations etc.

The project has been designed to be inclusive and participatory in its implementation and to accrue global biodiversity benefits as well as benefits to all concerned for productive and sustainable interaction between technologies and the environment. The project is guided by the CPB article 23 which makes public participation, education and consultation in decision making in biosafety is obligatory.

It is envisaged that the different stakeholders will be engaged and involved throughout the execution stages of the project through direct consultation and participation in the project activities. The major stakeholders and their proposed involvement is as summarized in the table below:

Stakeholders	Type of involvement
---------------------	----------------------------

Decision makers/policy makers	<ul style="list-style-type: none"> a. Members of National Steering Committee and the GEAC b. Consultations and meetings on key issues at national, sub-regional and regional level. c. Resource persons in programmes on awareness raising.
Scientists/technical experts, researchers and technicians from public and private sectors including academic institution	<ul style="list-style-type: none"> a. Consultations and workshops for training of trainers and awareness. b. Developing training modules and working knowledge documents. c. Developing outreach materials for different target groups.
Legal experts and economists	<ul style="list-style-type: none"> a. Consultations on documents related to liability and redress
Monitoring and enforcement officials, state agricultural departments, members of SBCCs, DLCs and IBSCs etc.	<ul style="list-style-type: none"> a. Participate in training workshops for post release monitoring and enforcement at border controls
Interest groups (Private Sector, Civil Society, Indigenous Peoples and Local communities), teachers, students, mass media and extension workers	<ul style="list-style-type: none"> a. Participate in awareness raising meetings b. Receiving outreach material designed for the different target groups. c. Community and targeted outreach engagements

The key stakeholders consulted besides the designated government ministries and agencies in Agriculture, Environment, Science and Technology, Health and Finance during the preparation of the PIF are grouped above are indicated above. The main stakeholders consulted are the following:

- 1) Industry and industry associations involved in activities involving LMOs
- 2) Scientific institutions and bodies engaged in research, testing and regulation of LMOs
- 3) Civil society organizations having familiarity with biotechnology, agriculture, LMOs etc.
- 4) National Biodiversity Authority; Is the key national agency tasked with Biodiversity management and provided support on the critical issues of biodiversity conservation and monitoring to ensure sustainable use

5) Biotech Consortium India Limited (BCIL) ? They provide technical support in the development of the PIF as they were the facilitating agency for all the previous GEF Biosafety project.

6) Institute of Forest Genetics and Tree Breeding (IFGTB) ? The institute highlighted the importance of research and high quality data in decision making and emphasized that as a critical role for risk assessment and decision from the earlier work on biology documents.

The **Stakeholder Analysis and Engagement Plan** for the project is placed as **Annexure Q**.

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

Stakeholder Engagement Plan

As biosafety relates to several sectors, including environment, agriculture, health, science and technology, industry, trade, etc. at central and state levels, stakeholder engagement is extremely important. Involvement of stakeholders is built throughout the preparation and execution of the project via direct consultations and participation in project activities. Stakeholder engagement will promote ownerships at central, state and institutional levels and take into account knowledge, experiences and capabilities of civil societies, indigenous people, communities and the private sector. The project activities and stakeholder engagement has been designed in line with the GEF policy on Gender Mainstreaming and taking also in account national socio-economic priorities.

STAKEHOLDER ENGAGEMENT PLAN				
Stakeholder	Role/Intervention	Type of involvement for project activities through inputs/suggestions	Timelines for engagement	Remarks

<p>Decision makers/policy makers[1]</p>	<ul style="list-style-type: none"> - Ministry of Environment, Forest and Climate Change (MoEFCC) to serve as the National Executive Agency (NEA), for the project. - As members of Project Steering Committee (PSC) and Project Monitoring Committee (PMC). - Advise on project design. - Facilitators for biosafety integration and mainstreaming of policies and regulations. - Resource persons and participants of consultative meetings and/or regional and international conferences/tours held under various project activities. 	<ul style="list-style-type: none"> - The Additional Secretary, MoEFCC to chair the PSC towards supervision of the project as part of the nodal ministry for CPB. - To contribute towards timely implementation of project activities. - Provide inputs and help review in the development of resources, guidelines, procedures, information sharing biosafety material etc. - To facilitate process for biosafety mainstreaming at centre and state level - To facilitate strengthening of systems for implementation of NKLSP. - Participate in national and international events during the project lifespan for showcasing project outcomes; - To advocate the sharing of project activities at national and international level. 	<p>Involvement throughout the project period.</p>	<p><u>Limitations:</u></p> <p>National level challenges including governance issues, frequent changes in workplace, limited knowledge and lack of prioritization of biosafety issues.</p> <p>Resource limitations for maintaining and updating online resources/websites.</p> <p><u>Suggestive solutions:</u></p> <p>Improved levels of Inter-ministerial cooperation and coordination.</p> <p>Increased number of officials with biosafety portfolio within each ministry/department with better tenure.</p> <p>Inclusion of biosafety issues in other stakeholder engagement meetings/fora for mainstreaming</p>
--	--	---	---	--

<p>State governments, departments and organizations</p>	<ul style="list-style-type: none"> - State governments and other state level organisations have a key role in monitoring of activities involving LMOs - Participate in developing guidance, procedures, SOPs for pre release and post release monitoring - 	<ul style="list-style-type: none"> - Provide inputs for mainstreaming of biosafety in policies and programs at state level. - To facilitate and cooperate for establishment of Coordination units in states. - To be involved in the process of developing guidance, procedures, SOPs under various project components as part of technical committees /working groups. - To contribute towards developing biosafety related awareness material for dissemination at state level. - To participate in training programmes for effective monitoring - 	<p>Involvement throughout the project period.</p>	<p><u>Limitations:</u></p> <p>Limited interaction between centre and state governments with respect to biosafety issues.</p> <p>Lack of awareness regarding monitoring activities in states</p> <p><u>Suggestive solutions:</u></p> <p>Sensitization to lay emphasis on biosafety issues in states.</p> <p>-</p>
--	---	--	---	--

<p>Scientists/researchers, technical experts and technicians from public and private sectors[2] including academic institution</p>	<ul style="list-style-type: none"> - Advise on the project design. - As resource persons for sensitization on key thematic issues, guidelines and working knowledge documents/tools developed. - Participate in consultative meetings/workshops and provide technical feedback. - Promote biotechnology through developing and disseminating biosafety awareness material and updating online resources. 	<ul style="list-style-type: none"> - To provide inputs and suggestions for fine-tuning of project design and support the NEA for need based biosafety related project activities. - To be part of technical committees /working groups for undertaking reviews and updating/developing working knowledge documents, guidelines, procedures, training material and online awareness resources. - Support the process of strengthening of capacities at central and state level for effective monitoring and enforcement of biosafety regulations. - To contribute towards developing biosafety related awareness material for dissemination at national and state level. 	<p>Involvement throughout the project period.</p>	<p><u>Limitations:</u></p> <p>Limited institutional capacities for monitoring and enforcement.</p> <p>Limited interaction between centre and state governments with respect to biosafety issues.</p> <p>Limited resources material and trainings not appropriate.</p> <p><u>Suggestive solutions:</u></p> <p>Increased trainings capacity building.</p> <p>Sensitization to lay emphasis on biosafety issues.</p> <p>Subject specific national and international experts to serve as resource persons.</p>
---	--	---	---	--

<p>Legal experts and economists</p>	<ul style="list-style-type: none"> - Participate in consultations for developing documents related to NKLSP. 	<ul style="list-style-type: none"> - To review existing national strategies/policies. - Facilitate development of appropriate technical briefs and resources for providing information on essential elements of NKLSP. - Provide inputs for developing template/prototype for implementation of NKLSP. 	<p>Involvement throughout the project period</p>	<p><u>Limitations:</u></p> <p>Limited resources</p> <p><u>Suggestive solutions:</u></p> <p>Enhance subject specific knowledge.</p>
<p>Enforcement officials including, state agricultural departments, members of SBCCs, DLCs and IBSCs, Plant Quarantine etc.</p>	<ul style="list-style-type: none"> - To support strengthening of biosafety monitoring and enforcement at state level. 	<ul style="list-style-type: none"> - Provide feedback to help develop guidance for pre- and post-monitoring activities for select categories of LMOs. - Enable to identify gaps in monitoring and enforcement mechanisms at state level. - In line with widespread dissemination towards strengthening of monitoring and enforcement mechanisms, to follow a Train the Trainer approach to build capacities. 	<p>Involvement during implementation of relevant activities of the project</p>	<p><u>Limitations:</u></p> <p>Limited trained personals for monitoring</p> <p>Limited knowledge and availability of information material.</p> <p><u>Suggestive solutions:</u></p> <p>Target specific capacity building through using online resources/databases.</p>

<p>Interest groups (Private Sector, Civil Society, Indigenous Peoples and Local communities), teachers, students, mass media and extension workers</p>	<ul style="list-style-type: none"> - To participate in awareness raising meetings. - Participate in consultations. - To review outreach material developed under the project. 	<ul style="list-style-type: none"> - To engage for information sharing through best experiences and lesson learnt from practicalities. - To be involved in public awareness trainings and promote sharing of feedback. 	<p>Involvement during implementation of relevant activities of the project</p>	<p><u>Limitations:</u></p> <p>Limited knowledge about existing online resources.</p> <p><u>Suggestive solution:</u></p> <p>Biosafety sensitization to promote informed decision making.</p>
---	--	--	--	---

[1] Nodal ministry for Biosafety viz., MoEFCC and other concerned Ministries such the Department of Biotechnology (DBT), Ministry of Science and Technology (MoST), MoAFW, Ministry of Health and Family Welfare (MoHFW), Ministry of Finance (MoF), Ministry of External Affairs (MEA) etc.; Relevant government agencies and authorities viz. FSSAI, PPV&FRA, ICMR, ICAR, CSIR, NBA and Members of statutory committees viz. GEAC, RCGM, MEC, SBCCs and DLCs.

[2] Examples include Federation of Seed Industry, Federation of Indian Chamber of Commerce and Industries, All India Biotech Association

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier;

Member of project steering committee or equivalent decision-making body; No

Executor or co-executor;

Other (Please explain) Yes

To participate in awareness raising meetings.

Participate in consultations.

To review outreach material developed under the project

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

The principle of gender equality is enshrined within the Constitution of India which guarantees gender equality and empowers the State to formulate affirmative action in favour of women. The Government of India has issued policies and taken various steps to ensure empowerment of women through their social, educational, economic and political uplifting through various schematic interventions. Gender balance in governance institutions and other walks of life has been an integral objective of governance and development agenda in India. The Constitution (73rd Amendment) Act, 1992 and the Constitution (74th Amendment) Act, 1992 have mandated reservation of at least one third of the seats for women in institutions of local governance at all levels in the rural and urban areas respectively. Nearly all the states have voluntarily raised this percentage to fifty. The elections in various states take place at different points of time. This ensures their representation and participation in governance at the local level and in

the planning and implementation of policies and programmes. Effective engagement of women in implementation of biodiversity related actions has been promoted and secured through specific provisions in policies and programmes to ensure their role and engagement. Gender budgeting (GB) process was started in India in 2001 and several initiatives have been taken at both central and state levels. Specifically National Education Policy, 2020 prioritises gender equity and envisions ensuring equitable access to quality education to all students. Provisions for involvement of women have been included in all aspects and schemes of agriculture and dedicated centres such as National Gender Resource Centre in Agriculture (NGRCA), New Delhi and ICAR- Central Institute for Women in Agriculture, Bhubaneswar are in place. National Environment Policy, 2006 promotes mutually beneficial multi-stakeholder partnerships including with gender agencies for enhancement of resources including technology and traditional knowledge for conservation. Government focuses on ensuring that gender commitments are translated into budgetary commitments through various schemes and projects as women, constitute 48% of India's population, but they lag behind men on many social indicators like health, education, economic opportunities, etc.

Gender equality and women empowerment is a powerful tool for achieving gender mainstreaming to ensure that the benefits of technology reach the society. Due emphasis would be essential when organizing various capacity building trainings and activities both at national and state level while keeping a gender perspective in policy / program formulation for effective dissemination. Women and youth also play a critical role in the management, handling and trade issues related to biodiversity at the community level. They warrant special attention due to their vulnerability and lack of access to resources. Government initiatives have the potential to transform gender inequalities. For example, 33% members of the Biodiversity Management Committees (BMC) in India are women and BMCs are part of biodiversity governance. Other issues for consideration will be strengthened by involvement of women and youth in biosafety governance, tailor made capacity building mechanisms.

In the consultative process leading to finalization of the project design efforts have been put in place for gender balance to ensure representation of women and men in the project activities. It is proposed to collect and disaggregate specific data to guide national design and implementation of gender specific tasks throughout project implementation to strengthen implementation of the Cartagena Protocol on Biosafety.

The project activities have been designed to ensure that both women and men participate fully and equally. Specifically, women participation will be encouraged right through the process of assessment of extant biosafety policies/regulations and mapping of the stakeholders. Gender concerns would be suitably integrated while updating centre/state level policies for mainstreaming of biosafety. Balanced representation of women, men and youth will be promoted for the purpose of compiling, maintaining and updating various databases through online tools. Induction of women and young scientists would be promoted in the functional units set up for the management and execution of project activities. Participation of women experts would be encouraged towards review and feedback of project activities such as guidelines, resource documents, etc. Wherever applicable gender sensitive analysis will be integrated. For various training programmes to be conducted as part of the project, there will be special emphasis on involvement of women both as trainers and trainees. During the process of developing resources for awareness and subsequent dissemination to stakeholders, women participation would be promoted.

The project provides a **Gender action plan** placed as **Annexure P**.

GENDER ACTION PLAN

OUTCOME	OUTPUTS	GENDER ACTION	INDICATOR	BUDGET
COMPONENT 1: STOCKTAKING ASSESSMENT AND MAINSTREAMING BIOSAFETY FRAMEWORK				\$
<p><u>OUTCOME 1.1:</u></p> <p>Stocktaking assessment</p> <p><i>Outcome indicator</i></p> <p><i>A functional regulatory system, strengthened through biosafety integration and mainstreamed across multiple relevant sectors, inclusive of identification of roles/responsibilities through stakeholders mapping.</i></p>	<p>Output 1.1.1</p> <p>Assessment of extant biosafety policies/ regulations and mapping of the stakeholders</p>	<ul style="list-style-type: none"> - Encourage women participation in analysis and identification of gaps/opportunities for biosafety integration and mainstreaming. - Encourage appropriate gender representation of men and women while mapping stakeholders for defining the roles and responsibilities. 	<ul style="list-style-type: none"> - Percentage of women representation considered appropriately for review process and also during mapping of stakeholders. 	- 5,000
<p><u>OUTCOME 1.2:</u></p> <p>Biosafety policies and involvement of stakeholders mainstreamed</p>	<p>Output 12.1</p> <p>Mainstreaming of biosafety policies</p>	<ul style="list-style-type: none"> - Integrate gender concerns while updating center/state level policies and regulations during consultations through consideration of gender equality guidelines of GEF for the project activities. 	<ul style="list-style-type: none"> - Policies and regulations updated and revised for biosafety mainstreaming inclusive of gender mainstreaming. 	- 5,000

OUTCOME	OUTPUTS	GENDER ACTION	INDICATOR	BUDGET
<p><i>Outcome indicator</i></p> <p><i>Biosafety mainstreaming achieved along with updation of application forms, decision formats etc and having an online database for information sharing with public.</i></p>	<p>Output 1.2.2</p> <p>Online database for institutes/ agencies associated with LMOs and their roles generated</p>	<ul style="list-style-type: none"> - Identification of various institutes/ agencies dealing with LMOs is an activity by itself and to be undertaken irrespective of any gender issues. - Promote a balance representation of men, women and youth for the process of developing, maintaining and updating information on online real time database/other tools. 	<ul style="list-style-type: none"> - Near equal proportion of men, women and youth involved in the entire process for implementation of the proposed activity. 	
<p>COMPONENT 2: STRENGTHENING INSTITUTIONAL CAPACITY AT CENTRAL AND STATE LEVELS</p>				

OUTCOME	OUTPUTS	GENDER ACTION	INDICATOR	BUDGET
<p><u>OUTCOME 2.1:</u></p> <p>Operational systems strengthened at Centre and State level for implementation of national biosafety regulatory framework</p> <p><i>Outcome indicator</i></p> <p><i>Capacities of biosafety cell and coordination units established for strengthening the infrastructure capacities and human resources towards facilitating effective monitoring and enforcement.</i></p>	<p>Output 2.1.1</p> <p>Strengthening and synchronization of Biosafety Secretariat at Central/State Governments.</p>	<ul style="list-style-type: none"> - Support induction of women and young scientists as staff in biosafety cell for GEAC Secretariat and also in the coordination units established in select states. - Promote women scientists? representation wherever feasible especially during trainings for enhancing capacities 	<ul style="list-style-type: none"> - Proportion of women staff working in biosafety support and coordination units increased. - Increased trained number of women. 	<ul style="list-style-type: none"> - 10,000

OUTCOME	OUTPUTS	GENDER ACTION	INDICATOR	BUDGET
<p><u>OUTCOME 2.2</u></p> <p>Pre-release and post-release mechanisms strengthened in line with Indian biosafety regulatory framework and CPB.</p> <p><i>Outcome indicator</i></p> <p><i>Enforcement of biosafety rules and regulations towards effective monitoring of LMOs, such that unintentional, illegal and local misuse of LMOs is efficiently regulated and reduced. Number or resources, working knowledge documents be made available for awareness.</i></p>	<p>Output 2.1.2</p> <p>Documenting and disseminating best practices for monitoring of pre-release and post-release activities documented</p>	<ul style="list-style-type: none"> - Encourage women expert participation towards reviewing and providing feedback in implementation of project activities such as developing guidance, resource documents etc through consultative approach. - Identify and encourage women and youth for trainings. 	<ul style="list-style-type: none"> - Number of gender and social issues considered and included in documentations. - Proportion of women experts providing inputs/feedback improved. - Increased capacities of women experts and officials for monitoring and enforcement 	<ul style="list-style-type: none"> - 5,000
<p>COMPONENT 3: STRENGTHENING KEY ELEMENTS OF NATIONAL BIOSAFETY FRAMEWORK</p>				

OUTCOME	OUTPUTS	GENDER ACTION	INDICATOR	BUDGET
<p><u>OUTCOME 3.1:</u></p> <p>Risk Assessment and Risk Management Regulatory Framework updated and streamlined to support biosafety decision making on new LMOs and related technologies.</p> <p><i>Outcome indicators:</i></p> <p><i>RARM strengthened to promote a science-based decision-making process for new select categories of LMOs and emerging technologies through supportive guidelines, procedures and human capacities for implementation of the same.</i></p>	<p>Output 3.1.1</p> <p>Risk assessment and risk management (RARM) procedures and guidelines are prepared/updated for (a) select categories of LMOs and (b) emerging technologies are published and used for trainings.</p>	<ul style="list-style-type: none"> - Encourage gender sensitive analysis for review and update of RARM framework, if applicable. - Encourage inclusion of women scientists in mentorship for developing resource documents, policy briefs and guidance document - Encourage women's participation in the conducting biosafety RA and RM - Inclusion of women in review and follow up for relevant information 	<ul style="list-style-type: none"> - Proportion of women participation in peer-to-peer mentoring and advisory for developing and adapting RARM framework increased. - Increased capacities of women in conducting biosafety RA and RM and contributing towards science based decision making on new categories of LMOs and emerging technologies. - Percentage of women representation increased for mentoring, review and providing feedback. 	<ul style="list-style-type: none"> - 5000
	<p>Output 3.1.2</p> <p>Training for regulators and scientists for conducting RARM for new LMOs and emerging technologies.</p>	<ul style="list-style-type: none"> - Representation of women as trainers and trainees for trainings be encouraged. 	<ul style="list-style-type: none"> - More number of women experts with subject specific expertise in RARM. - Percentage of trained women representation increased. 	

OUTCOME	OUTPUTS	GENDER ACTION	INDICATOR	BUDGET
<p><u>OUTCOME 3.2</u></p> <p>National systems strengthened for the implementation of the Nagoya Kuala Lumpur Supplementary Protocol on Liability and Redress (NKSLP).</p> <p>-</p> <p><i>Outcome indicators:</i></p> <p><i>Interventions for developing resources and template/prototype for implementing the NKLSLP.</i></p>	<p>Output 3.2.1</p> <p>Technical resources are prepared for implementation of NKLSLP.</p>	<p>- Encourage women participation and consideration of gender issues on NKLSLP for inclusion in technical briefs.</p>	<p>- Percentage of women representation increased for undertaking NKLSLP.</p> <p>- Percentage of women representation increased for mentoring, review and providing feedback.</p>	<p>- 5000</p>

<p><u>OUTCOME 3.3</u></p> <p>Implement mechanisms for information sharing for enhancing public outreach and awareness.</p> <p>-</p> <p><i>Outcome indicators:</i></p> <p>Level of awareness on biosafety enhanced for multiple stakeholders and capacities of public enhanced through developing online resources.</p>	<p>Output 3.3.1</p> <p>Development of online resources/ tools to increase biosafety related awareness among public.</p>	<ul style="list-style-type: none"> - Encourage women's participation in developing awareness generation resources and materials for online systems. - Ensure that gender sensitive/linked issues are appropriately addressed (if any) in the public awareness material prepared. 	<ul style="list-style-type: none"> - Percentage of women representation increased for developing and dissemination material. 	<ul style="list-style-type: none"> - 15,000
<p>COMPONENT 4: PROJECT MONITORING: Being a procedural process, gender issues are not directly relevant, though encouragement of women participation, but where possible shall be encouraged and their feedback/inputs considered appropriately.</p>				
<p>Total</p>				<p>40,000</p>

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.

Public-Private Partnerships are essential for addressing sustainability issues due to the expanding global wealth and influence of the private sector. Additionally, many of the traditional development actors in the public and civil society sectors now recognize the increasing difficulty of tackling certain global problems in a unilateral manner. There are occasions when the private sector, often in partnership with government, civil society or both, can be better positioned to provide solutions because of its resources (financial and in-kind), innovation and management skills.

At the same time, the private sector is increasingly finding competitive benefits in embracing a more proactive and collaborative role in development. These benefits include risk mitigation, new market opportunities and increased value added. At the end of the day, it is the market (society, community) that determines the success of a company; consequently, this becomes an important driver for companies to contribute to society.

It is important to engage private sector with Government agencies so that they are quite aware of the regulatory requirements for bringing their innovative ideas into commercial products. Private sector also becomes a conduit for new technologies and tools including regulatory packages. The approach of the project is to see a partnership that ensure, and support science and risk analysis based regulatory packages to support decision making in the delivery of modern biotechnology products.

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):

2.1 Risk Analysis and Risk Management Measures

No.	Risk	Priority	Risk Management Strategy
1.	Inadequate participation of the targeted stakeholders (especially at the State level) in the capacity building program.	Medium	To overcome this constraint, extensive efforts would be made to: ? involve high level functionaries in this capacity building initiative. ? Existing and mandated Central and State coordination mechanisms will be used. ? stimulate interest from stakeholders to leverage support for the project.
2.	Inadequate participation of concerned ministries and agencies for mainstreaming biosafety	Medium	Efforts will be made to build on existing policies/programs of concerned ministries and agencies to have better integration and mutual acceptance.
3.	Sustainability of Capacity building programs on completion of the project is essential.	Medium	Measures to overcome the risk would include preparation of training modules and documents as an integral part of the institutional and human resource capacity building
4.	Change in national biosafety policies.	Low	While this risk is negligible, change in national policies may require reprioritization of some of the activities under the capacity building program. This can be identified during annual/mid-term project reviews and if required, the programs can be realigned with extant policies.

5.	An outbreak of diseases (eg. COVID-19)	High	<p>The COVID Pandemic has had a severe impact on the country. The outbreak of Covid-19 had affected work nationally and regionally. Travel restrictions were in place. If similar situations take place again, the risk will be mitigated by carrying out relevant activities via alternative working methods (e.g. video-conferences, telecommuting, recourse to national human resources and hybrid interventions ? virtual/face to face meetings among others). Any mitigation measure will have to be discussed between the implementing and the executing partners/agencies.</p> <p>The risk is only partly under project control. Biosecurity considerations which is at the base of Biosafety capacity building and implementation will be fully triggered in a phased approach both to ensure human and environmental safety to project implementation measures and execution of activities guided by the technical principles of ensuring genetic and material confinement and management measures in project delivery. SOPs will be developed as applicable</p>
----	--	------	---

The **Safeguards Risk and Identification Form** is attached as **Annexure O**

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.

4.1 Institutional Arrangement and Coordination

MoEFCC being the nodal ministry for implementation of CPB in India will be the National Executing Agency (NEA) for this project. For effective implementation of the project (a) National Project Director (NPD), from MoEFCC would be designated to oversee implementation of project activities and (b) National Project Coordinator (NPC), MoEFCC for day-to-day project activities through identification and engagement of concerned stakeholders.

A Project Steering Committee (PSC) would be constituted, to provide guidance towards implementation of the project objectives and outcomes, approve work plans, budgets etc. through at least one annual meeting.

A facilitating agency would be engaged as the Project Management Unit (PMU) consisting of project officers and assistants for timely project execution and implementation. PMU would be reporting to the NPC.

Besides efforts towards mainstreaming biosafety activities across various sectors and international agreements, the project shall also closely associate with other UNEP-Biosafety projects within the region.

UNEP as the GEF Agency will provide Supervisory Agency support to ensure the GEF and UNEP procedures and rules are adhered to. In addition, UNEP shall provide technical support and ensure linkages to other biosafety projects to ensure synergies and information sharing/

The proposed **project implementation arrangements and decision-making flow chart** for the project and the **terms of reference for the key project personnels** is placed as **Annexure K and T**.

4.2 Coordination with ongoing GEF UNEP projects

Presently, India is one of the participating countries for a UNEP/GEF supported Multi country project titled ?Promoting the safe application of biotechnology through Multi-country Cooperation in the implementation of National Biosafety Frameworks in Asia?, wherein the PIF has been approved and CEO endorsement process is underway.

The institutional arrangement is shown below

1. UNEP/GEF

UNEP through its Ecosystems Division will be the GEF Implementing Agency responsible for the project. UNEP will provide supervisory and technical advisory oversight for the project.

2. National Executive Agency (NEA)

The Ministry of Environment, Forest and Climate Change (MoEFCC) acts as the national focal point for the CBD & CPB and is also responsible for the coordination and promotion of national efforts to conserve the nation?s biodiversity, manage the country?s biological wealth and oversee the biosafety related activities. Thus, MoEFCC will be implementing the project as the National Executive Agency (NEA). The project is to be implemented over a period of four years.

NEA will be responsible for project oversight to ensure that project implementation adheres to UNEP/GEF policies and criteria, and that the Project efficiently and effectively meets its objectives and achieves expected outcomes and outputs as delimited in the Project document. It will hold the ultimate reporting responsibility

at national level to UNEP/GEF. The NEA shall ensure that the project meets the UNEP-GEF policies and procedures.

The NEA will also provide the necessary scientific, technical, financial and administrative support to the project, working in close cooperation with in-line ministries, relevant state government agencies, the scientific community, other concerned stakeholders and UNEP. The NEA will ensure a strong country ownership and commitment of the project activities.

The NEA will establish a Project Steering Committee. NEA will also appoint a National Project Director and a National Project Coordinator (NPD and NPC) for overall project implementation and financial reporting.

3. Project Steering Committee (PSC)

The Project Steering Committee (PSC) will be established as the ultimate body with regards to matters relating to review and monitoring of the project implementation progress as agreed upon under GEF project document, facilitate co-ordination between project partners, provide transparency and guidance, and ensure support and sustainability of the project results. Thus, PSC will guide the overall implementation of the project through receipt of half-yearly progress reports and make recommendations to UNEP on the need to revise any aspects of the Results Framework or the M&E plan. It will ensure that the appropriate GEF and UNEP procedures for reporting are met.

The PSC will provide the policy guidance, review results based on Annual Work Plans and Budget and provide recommendations for resolving any constraints faced by the project. The PSC will participate in the mid-term review and develop a management response to the evaluation recommendations along with an implementation plan.

The Special Secretary/Additional Secretary, MoEFCC (Chairperson of the Genetic Engineering Appraisal Committee (GEAC)) will chair the PSC and the members will include senior representatives from line ministries, concerned ministries/agencies at state level with mandates relevant to biosafety, scientific experts, NGOs and a UNEP representative. Individual experts may be invited to provide inputs as appropriate to discuss specific items on a need's basis. PSC will meet at least once a year.

4. National Project Director (NPD)

A National Project Director (NPD) will be appointed by MoEFCC for overall project supervision, project implementation and accountability to the government and UNEP/GEF for proper and effective use of project resources, besides relevant stakeholder involvement. The National Focal Point of Biosafety in the ministry will be appointed as NPD. The NPD will oversee the work of the NPC such as preparation of the annual Project Implementation Reports (PIR) and ensure that project implementation is in compliance with the UNEP-GEF procedures. He/she will also participate in the mid-term review and terminal evaluation process.

At the conclusion of the project, he/she will be responsible for the completion of the project closure procedures including timely submission of all technical, financial and audit reports to UNEP.

5. National Project Coordinator (NPC)

For effective implementation of the project activities through day-to-day coordination with project team and project partners, a National Project Coordinator (NPC) from MoEFCC will be appointed. The NPC will report to the NPD and be responsible to ensure implementation of the project activities as set out in the project document.

He/she will be responsible for preparation of project progress and financial reports, annual project implementation reports, project work plans, audit reports and budgets, ensuring adequate articulation of national activities and priorities. The NPC will also ensure adequate inter-ministerial and inter-institutional coordination, update the project's M&E framework, support the NEA and UNEP field missions, coordinate and support international technical experts/consultants and encourage involvement of relevant stakeholders besides ensuring gender balance.

The NPC will be assisted by a Project Management Unit (PMU).

6. Project Management Unit (PMU)

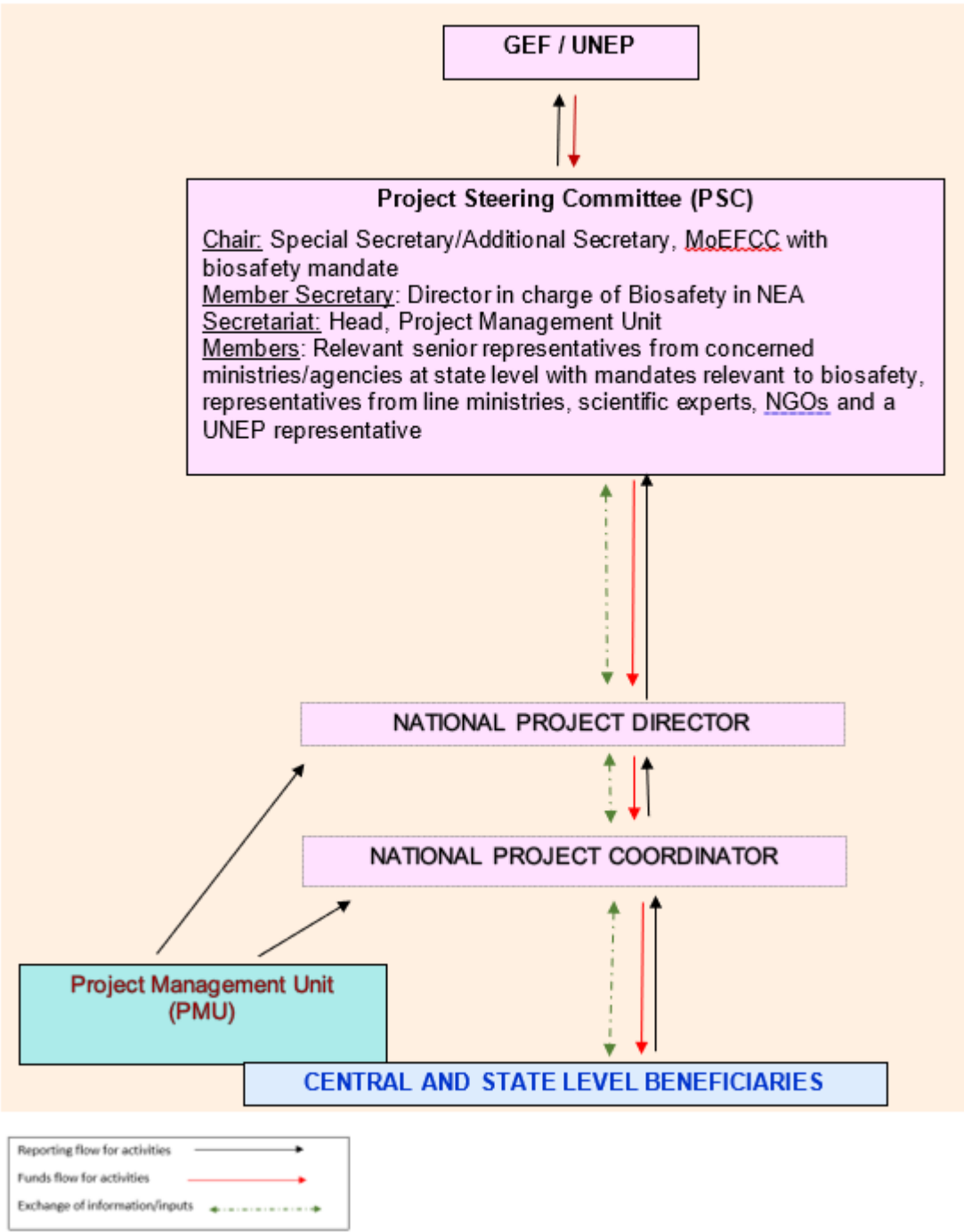
The Project Management Unit (PMU) will provide the required operational and administrative support for project implementation. The PMU will be overseen by the NPD and NPC and essential staff and premises will be contracted and located in a facilitating agency having experience in biotechnology and biosafety issues and familiarity with implementing GEF projects. The PMU will provide administrative and technical support towards implementation of the project activities.

7. National Beneficiaries

The project targets at strengthening the centre and state level capacities for biosafety integration and mainstreaming, besides also strengthening the infrastructure and human resource capacities towards a functional NBFs.

Inclusion of multi stakeholders in addition to ensuring gender balance will be encouraged in line with implementation of project objectives.

DECISION MAKING FLOW CHART



7. Consistency with National Priorities

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

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

4.1 Consistency with National Priorities

The project is consistent with the National strategies and plans or reports and assessments under relevant conventions as detailed below:

-

National Biodiversity Strategies and Action Plan (NBSAP) under UNCBD

The following action points identified in National Biodiversity Action Plan (NBAP), 2008 and its Addendum 2014 provide some guidance on mainstreaming and consistency with the project:

- ? Review the regulatory processes for LMOs so that all relevant scientific knowledge is considered, and ecological, health, and economic concerns are adequately addressed.
- ? Periodically review and update the national biosafety guidelines to ensure that these are based on current scientific knowledge.
- ? Ensure conservation of biodiversity and human health while dealing with LMOs in transboundary movement in a manner consistent with the multilateral biosafety protocol.
- ? Develop capacity for risk assessment, management and communication on LMOs.
- ? Support pilot studies on use of biotechnology tools for conservation where appropriate.
- ? Develop specific complimentary capacity building measures based on national needs and priorities for the formulation and implementation of national rules and procedures for liability and redress to strengthen the establishment of baseline information and monitoring changes.
- ? Strengthen participatory appraisal techniques and encourage formation of local institution structures for planning and management of natural resources for ensuring participation of women.

The Strategy specifically recognizes that advances in gene discovery and genomics have led to the identification of several novel genes that provide excellent opportunities for effectively tackling problems of biotic/abiotic stresses, for enhancement of crop productivity, and for improvement of their nutritional quality. In the era of climate change, degradation of farmlands, increased soil salinity, drop in groundwater as well as pollution of surface water sources, more frequent droughts and so on; research and development in transgenic crops has been identified as a priority area. The Strategy provides special attention to bio-resources rich States spread across diverse ecosystems and nurtured by indigenous communities.

Under the **National Action Plan on Climate Change**, India has launched a dedicated **National Mission on Sustainable Agriculture (NMSA)** to define its strategies for climate mitigation and adaptation within the agriculture sector. The National Mission for Sustainable Agriculture (NMSA) has been formulated for enhancing agricultural productivity especially in rainfed areas focusing on integrated farming, water use efficiency, soil health management and synergizing resource conservation. The focus areas of NMSA include

Dryland Agriculture, Risk Management, Access to Information and Use of Biotechnology. NMSA has identified the use of biotechnology in the following areas:

? Genetic engineering to convert C-3 crops to the more carbon responsive C-4 crops to achieve greater photosynthetic efficiency for obtaining increased productivity at higher levels of carbon dioxide in the atmosphere and to sustain thermal stresses.

? Development of strategies for low input sustainable agriculture by producing crops with enhanced water and nitrogen use efficiency which may also result in reduced emissions of greenhouse gases, and crops with greater tolerance to drought, high temperature, submergence and salinity stresses.

? Development of nutritional strategies for managing heat stress in dairy animals to prevent nutrient deficiencies leading to low milk yield and productivity.

? Development of salt tolerant and disease resistant freshwater fish and prawns

The fourth **National Report on Implementation of CPB by India** highlights priority areas for further capacity building. The following areas will be covered through project interventions.

- Institutional capacity and human resources
- Integration of biosafety in cross-sectoral and sectoral legislation, policies and institutions (mainstreaming biosafety)
- Risk assessment and other scientific and technical expertise
- Risk management
- Public awareness, participation and education in biosafety
- Handling of confidential information
- Measures to address unintentional and/or illegal transboundary movements of LMOs

Scientific biosafety research relating to LMOs taking into account risks to human health

Liability and redress

SDG: The project will also contribute and make inputs in meeting the following SDGs

SDG 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture

SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems

SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development.

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.

KNOWLEDGE MANAGEMENT

6.1 Knowledge Management Approach

UNEP has an existing platform through the library of its project management database ANUBIS (A New UNEP Biosafety Information System) for Biodiversity and Land Degradation projects and related initiatives to learn from each other, share experience and expertise and tools and methodologies to support Biosafety Decision making. ANUBIS also allows the projects to assess project outputs and reports in a user-friendly form. In addition, UNEP has created an annual forum funded by the Biosafety Technical Support Fund for the projects to physically meet at regional/sub regional levels to learn and share experiences on project management, including best practices and challenges, in addition to training on emerging issues in Biosafety. The project will also have access to both the SCBD and UNEP Biosafety's YouTube channels to access media files and share materials for the benefit of the projects in the Biosafety portfolio. Existing mechanisms and training will be offered for the project to assess and share information on the Biosafety Clearing House in line with obligations of Article 20 of the Cartagena Protocol on Biosafety and the ongoing BCH III Project.

The project will have access and contribute stories and news to the UNEP Biosafety website <https://www.unenvironment.org/explore-topics/biosafety> which is a forum set up to enable projects access information, publication, events and knowledge materials on Biosafety among the project partners.

At the national level, the knowledge management will help to build and maintain supportive and useful knowledge, attitudes, skills and practices via a number of workshops and trainings with participation of various stakeholders, including Union and State governmental sector, researchers, academia, farmers, women, the youth and local communities. Manuals and guidelines will be developed and published and made available for all the relevant stakeholders. The national BCH website, <http://in.biosafetyclearinghouse.net/>, will be updated periodically with new relevant information and made accessible via the Internet. Special publications, brochures, leaflets, posters, calendars on best practices on biosafety will be provided and disseminated through the relevant actors and stakeholders. The project will also make available new information and communicate through the GEAC website, that will be a key repository of Biosafety information, decision and declarations for India.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

Monitoring and Evaluation

In line with the GEF Evaluation requirements and UNEP's Evaluation Policy, GEF Medium- sized Projects and any project with a duration of 4 years or more will be subject to an independent Mid-Term Evaluation or management-led Mid-Term Review at mid-point. All GEF funded projects are subject to a performance assessment when they reach operational completion. This performance assessment will be either an independent Terminal Evaluation or a management-led Terminal Review.

In case a Review is required, the UNEP Evaluation Office will provide tools, templates, and guidelines to support the Review consultant. For all Terminal Reviews, the UNEP Evaluation Office will perform a quality assessment of the Terminal Review report and validate the Review's performance ratings. This quality assessment will be attached as an Annex to the Terminal Review report, validated performance ratings will be captured in the main report.

However, if an independent Terminal Evaluation (TE) of the project is required, the Evaluation Office will be responsible for the entire evaluation process and will liaise with the Task Manager and the project implementing partners at key points during the evaluation. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP staff and implementing partners. The direct costs of the evaluation (or the management-led review) will be charged against the project evaluation budget. The TE will typically be initiated after the project's operational completion. If a follow-on phase of the project is envisaged, the timing of the evaluation will be discussed with the Evaluation Office in relation to the submission of the follow-on proposal.

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalized. The evaluation report will be publicly disclosed and will be followed by a recommendation compliance process. The evaluation recommendations will be entered into a Recommendations Implementation Plan template by the Evaluation Office. Formal submission of the completed Recommendations Implementation Plan by the Project Manager is required within one month of its delivery to the project team. The Evaluation Office will monitor compliance with this plan every six months for a total period of 12 months from the finalization of the Recommendations Implementation Plan. The compliance performance against the recommendations is then reported to senior management on a six-monthly basis and to member States in the Biennial Evaluation Synthesis Report.

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 (LDCE/SCCF)?

The project activities take into account socio-economic impact on all sectors of society, including both men and women and other vulnerable groups while preparing regulations, guidelines and outreach material. The project will also contribute to promoting good governance through the participation of all stakeholders in decision-making on LMOs. Project staff recruitment, project activities, workshops and training activities will not discriminate against any particular group or gender.

The sustainable use of LMOs would have impact on the livelihood of local groups/population through strengthening of institutional mechanisms at central and state levels. Mechanisms for wider dissemination of project outcomes through various extension networks will be developed.

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	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.

2.1 Risk Analysis and Risk Management Measures

No.	Risk	Priority	Risk Management Strategy
1.	Inadequate participation of the targeted stakeholders (especially at the State level) in the capacity building program.	Medium	To overcome this constraint, extensive efforts would be made to: ? involve high level functionaries in this capacity building initiative. ? Existing and mandated Central and State coordination mechanisms will be used. ? stimulate interest from stakeholders to leverage support for the project.
2.	Inadequate participation of concerned ministries and agencies for mainstreaming biosafety	Medium	Efforts will be made to build on existing policies/programs of concerned ministries and agencies to have better integration and mutual acceptance.

3.	Sustainability of Capacity building programs on completion of the project is essential.	Medium	Measures to overcome the risk would include preparation of training modules and documents as an integral part of the institutional and human resource capacity building
4.	Change in national biosafety policies.	Low	While this risk is negligible, change in national policies may require reprioritization of some of the activities under the capacity building program. This can be identified during annual/mid-term project reviews and if required, the programs can be realigned with extant policies.
5.	An outbreak of diseases (eg. COVID-19)	High	<p>The COVID Pandemic has had a severe impact on the country. The outbreak of Covid-19 had affected work nationally and regionally. Travel restrictions were in place. If similar situations take place again, the risk will be mitigated by carrying out relevant activities via alternative working methods (e.g. video-conferences, telecommuting, recourse to national human resources and hybrid interventions ? virtual/face to face meetings among others). Any mitigation measure will have to be discussed between the implementing and the executing partners/agencies.</p> <p>The risk is only partly under project control. Biosecurity considerations which is at the base of Biosafety capacity building and implementation will be fully triggered in a phased approach both to ensure human and environmental safety to project implementation measures and execution of activities guided by the technical principles of ensuring genetic and material confinement and management measures in project delivery. SOPs will be developed as applicable</p>

The **Safeguards Risk and Identification Form** is attached as **Annexure O**.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Annex O_SRIF_India BS Project_CEO Endorsement _clean version	CEO Endorsement ESS	
Biosafety IndiaSRIF_PIFstage_updated	Project PIF ESS	
BS India_SRIF	Project PIF 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).

Project Objective	Objective level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP MTS reference *
--------------------------	-----------------------------------	-----------------	--	------------------------------	--------------------------------	-----------------------------

<p>Institutional Strengthening and Mainstreaming Biosafety for effective implementation of the Cartagena Protocol on Biosafety</p>	<p>Interventions, technical tools and capacities in place to support biosafety mainstreaming for ensuring compliance with CPB.</p>	<p>A basic biosafety regulatory framework with institutional support and capacities is in place.</p> <p>However, in line with advancements in modern biotechnology, increase in trade and application of LMOs, there is still need for building on these efforts through involvement of multiple stakeholders for effective mainstreaming of biosafety.</p>	<p>Taking stock of extant policies/ regulations alongside updating the application forms, decision formats and supporting tools for regulations.</p> <p>Stakeholder groups mapped for strengthening key elements of the national biosafety regulatory framework.</p> <p>Enhancing institutional capacities at both centre and state level through strengthening GEAC Secretariat, coordination units for facilitating effective monitoring and enforcement.</p> <p>Updating the risk assessment and risk management (RARM) framework including the select newer categories of LMOs.</p> <p>Capacities of human resources enhanced especially through sharing of information via., online database, modules etc and specific trainings for monitoring and enforcement.</p>	<p>Stocktaking assessment report.</p> <p>Stakeholder mapping documented</p> <p>Biosafety issues integrated and mainstreamed into relevant national policies and regulations.</p> <p>Nationally mandated institutions/agencies at centre and state strengthened with supportive biosafety capacities for effective monitoring and enforcement.</p> <p>Updated RARM framework for select newer categories of LMOs.</p>	<p><u>Assumptions:</u></p> <p>? Effective coordination and cooperation at inter-ministerial and inter-state level for various activities throughout the project span.</p> <p>? Biosafety issues prioritized in states.</p> <p>? Financial support available for functions of governance regimes</p> <p><u>Risk:</u></p> <p>? Lack of active interest or coordination at centre and state level.</p> <p>? Delay in receiving feedback and government approvals</p> <p>? Nomination of appropriate personnel for training</p>	<p>Nature Action</p> <p>Environmental Governance</p>
--	--	---	---	--	---	--

				Trained staff to support biosafety regulatory framework.		
--	--	--	--	--	--	--

COMPONENT 1: STOCKTAKING ASSESSMENT AND MAINSTREAMING BIOSAFETY FRAMEWORK

Outcome 1.1	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	MTS Expected Accomplishment
--------------------	---------------------------	-----------------	--	------------------------------	--------------------------------	------------------------------------

<p>Stocktaking assessment</p>	<p>A functional regulatory system, strengthened through biosafety integration and mainstreamed across multiple relevant sectors.</p> <p>Enhanced engagement of relevant stakeholders through their appropriate mapping of roles and responsibilities towards a functional regulatory system.</p> <p>Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment</p> <p>Female: 1,000 Male: 2,000</p>	<p>Biotechnological applications span across varied sectors and thus biosafety issues are cross sectorial, with limited considerations in various national policies and programs.</p> <p>Further clarity with respect to roles and responsibilities for stakeholders is also limited and needs to be consolidated appropriately.</p>	<p>Review of policies and programs undertaken for revision towards biosafety mainstreaming and also aligned with the Target 17 of the Post 2020 Global Biodiversity Framework and the Implementation plan and Capacity Building action plan (2021-2030).</p>	<p>Report of the Committee established for review and revision of extant policies/regulations for integrating biosafety and mainstreaming</p> <p>Documented roles and responsibilities of relevant mapped stakeholders.</p>	<p><u>Assumptions:</u></p> <p>? An enabling environment for revision of relevant policies, programs and regulations.</p> <p>? Broad participation by relevant stakeholders</p> <p><u>Risk:</u></p> <p>? Lack of internal support within the government for revisions of policies/regulations.</p> <p>? Delay in feedback.</p>	<p>2(iii), 2(iv)</p>
-------------------------------	---	--	--	---	---	----------------------

Output 1.1.1	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	PoW Output Reference Number
Assessment of extant biosafety policies/regulations and mapping of the stakeholders	Number of policies/regulations reviewed and revised to integrate biosafety and facilitate mainstreaming.	Limited consideration of biosafety issues across various national policies and programs. Documented roles and responsibilities of relevant stakeholder groups is lacking clarity and needs stakeholder specific mapping towards capacity effective regulatory implementation.	Assessment and review of extant policies, programs and procedures undertaken. Relevant stakeholders are mapped towards enhancing capacities and strengthening the regulatory system. Administrative tools, procedures and decision-making formats used by regulators are revised.	Assessment report. Appropriately revised extant policies/regulations towards biosafety mainstreaming in the country. Documented roles and responsibilities of relevant mapped stakeholders. Feedback/inputs from stakeholders.	<u>Assumptions:</u> Positive coordination and cooperation at inter-ministerial/department level for review and revision. Experts familiar with biosafety issues and their cross sectorial relevance/impact towards mainstreaming. <u>Risk:</u> ? Internal challenges due to lack of clearly defined roles and responsibilities ? Delay in inputs/feedback	2B, 2C
Outcome 1.2	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	MTS Expected Accomplishment

<p>Biosafety policies and involvement of stakeholders mainstreamed</p>	<p>Enhanced policies with mainstreaming of biosafety at centre and state level.</p> <p>Revised administrative tools and formats used by regulatory committees for handling LMOs requests/applications.</p> <p>Agencies/institutions dealing with LMOs identified and their roles documented</p> <p>Enhanced sharing of information through online databases/webpages.</p> <p>Core Indicator 11: Number of direct beneficiaries disaggregated by</p>	<p>A basic biosafety regulatory framework in place with need for updation to mainstream across relevant sectors.</p> <p>Existing administrative framework with application formats and supporting tools in place that need updation to include regulation of newer categories of LMOs.</p> <p>MoEFCC the nodal agency for biosafety regulations has a dedicated webpage for sharing of information but needs to be further updated.</p>	<p>Expert committee established for development of procedures/guidance for mainstreaming biosafety.</p> <p>Capacities of regulators enhanced with updated decision-making formats and procedures besides having updated online information systems in place.</p> <p>Information from identified institutions/agencies is compiled and collated to develop a comprehensive database of information related to LMOs.</p>	<p>Government notification</p> <p>Guidelines and other tools for biosafety mainstreaming.</p> <p>Availability of updated information through real-time online tools.</p> <p>Revised application forms, decision-making tools and supporting tools/formats</p>	<p><u>Assumptions:</u></p> <p>? Positive inter-ministerial and inter-state coordination and cooperation.</p> <p>? Expertise with biosafety issues for integration and mainstreaming needed.</p> <p>? Timely inputs received from institutions/agencies</p> <p><u>Risk:</u></p> <p>Delays in response from institutions/agencies.</p> <p>-</p>	<p>2(iii), 2(iv)</p>
--	--	---	--	---	---	----------------------

	<p>gender as co-benefit of GEF investment</p> <p>Female: 1,000</p> <p>Male: 4,000</p>					
Output 1.2. 1	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	PoW Output Reference Number
Mainstreaming of biosafety policies	<p>Procedures/guidelines for biosafety mainstreaming in place.</p> <p>Updated applications forms, decision formats and supporting tools.</p>	<p>General information articles for mainstreaming biosafety available.</p> <p>Unconsolidated information about agencies/institutions dealing with LMOs is available on internet through individual webpages.</p>	<p>Guidelines and standard operating procedures for functional system towards biosafety mainstreaming at centre and state level in place.</p> <p>Updated applications forms, decision formats and supporting tools validated by regulatory committees.</p>	<p>Guidelines and other tools for biosafety mainstreaming.</p> <p>Updated applications forms, decision formats and supporting tools.</p>	<p><u>Assumptions:</u></p> <p>? Expertise with biosafety issues for integration and mainstreaming.</p> <p>? Timely inputs received from institutions/agencies</p> <p>? Delays in response from institutions/agencies</p>	2B, 2C
Output 1.2. 2	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	PoW Output Reference Number

<p>Online database for institutes/agencies associated with LMOs and their roles generated</p>	<p>Up-to-date information from identified agencies/institutions dealing with LMOs made available for sharing of information through online mode.</p>	<p>Presently, there exist biosafety websites viz., GEAC and IBKP portal that provide information only on regulatory activities.</p>	<p>Online real time database with information collated, compiled and linked to information resources from various relevant institutions/agencies dealing with LMOs in the country.</p>	<p>Documented roles of identified agencies/institutions dealing with LMOs.</p> <p>Online database with real-time updation system in place.</p>	<p><u>Assumptions:</u></p> <p>? Willingness of agencies/institutions to share information online</p> <p>? Clarity in mandates and activities related to biosafety of agencies/institutions</p> <p><u>Risk:</u></p> <p>? Inadequate expertise on updation of online database.</p> <p>? Lack of understanding/clarity in biosafety activities.</p>	<p>2B, 2C</p>
---	--	---	--	--	--	-------------------

COMPONENT 2: STRENGTHENING INSTITUTIONAL CAPACITY AT CENTRAL AND STATE LEVELS

Outcome 2.1	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	MTS Expected Accomplishment
Operational systems strengthened at Centre and State level for implementation of national biosafety regulatory framework	Institutional and human resource capacities enhanced under the project through establishing biosafety activities of GEAC Secretariat and region wise coordination units in select states facilitating effective monitoring and enforcement	Limited trained staff available with regulatory committees for efficient functioning and to liaison at centre and state level. Thus, the need for dedicated capacities to support regulatory committees ? functionality at centre and state level.	Functional biosafety cell and coordination units at centre and select state level respectively to support regulatory system with trained staff.	Functional biosafety cell and coordination units at centre and select state level respectively	<p><u>Assumptions:</u></p> <p>? Willingness and cooperation of states and districts governments/departments.</p> <p>? Biosafety issues and effective regulations prioritized at state level.</p> <p><u>Risk:</u></p> <p>Limited support at state level</p>	2(iii), 2(iv)
Output 2.1.1	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	PoW Output Reference Number

<p>Strengthening and synchronization of Biosafety Secretariat at Central/State Governments.</p>	<p>GEAC Secretariat and region wise Coordination Unit in select states established and functional.</p> <p>Number of officials trained to support the functionality of the established Biosafety Cell Coordination units.</p> <p>Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment</p> <p>Female: 4,000</p> <p>Male: 4,000</p>	<p>There exist limited institutional capacities and trained staff, especially at state level and also to support the statutory apex body viz., GEAC.</p>	<p>Biosafety cell (GEAC) and coordination units at centre and select state level respectively established and made functional during the project.</p> <p>Sufficient capacities built</p>	<p>Biosafety cell of GEAC is functional.</p> <p>Region wise coordination unit in select states functional</p> <p>Trained personals</p>	<p><u>Assumptions:</u></p> <p>Trained staff can serve as mentors</p> <p><u>Risk:</u></p> <p>? Sustainability beyond project life.</p> <p>? Delayed timelines</p>	<p>2B, 2C</p>
<p>Outcome 2.2</p>	<p>Outcome Indicators</p>	<p>Baseline</p>	<p>Targets and Monitoring Milestones</p>	<p>Means of Verification</p>	<p>Assumptions & Risks</p>	<p>MTS Expected Accomplishment</p>

<p>Pre-release and post-release mechanisms strengthened in line with Indian biosafety regulatory framework and CPB</p>	<p>Enforcement of biosafety rules and regulations towards effective monitoring LMOs such that unintentional, illegal and local misuse of LMOs is efficiently regulated and reduced.</p> <p>Number of resource documents and guidance along with trained personnels for pre and post release monitoring.</p> <p>Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment</p> <p>Female: 2,000</p>	<p>Operational systems for biosafety regulation are implemented in states through SBCCs and DLCs with varied levels of functionality due to lack of clearly defined roles/responsibilities and trained capacities.</p> <p>Enforcement and monitoring mechanisms are existent but gaps exist in the required infrastructure and human capacities against the actual need, also taking into account newer applications of LMOs.</p>	<p>Interventions and capacities developed for strengthening mechanisms of monitoring and enforcement.</p> <p>Resource/working knowledge documents and online tools on monitoring developed/updated also in view of newer select categories of LMOs.</p> <p>State level interventions and capacities developed and upgraded including sufficient human resources trained.</p>	<p>Upgraded systems in place for enforcement and monitoring that are also appropriately documented.</p> <p>Resource/working knowledge documents and online tools developed/upgraded.</p> <p>Trained personals</p>	<p><u>Assumptions:</u></p> <p>Willingness and cooperation of states and districts governments/departments/committees</p> <p><u>Risk:</u></p> <p>? Delay in receiving feedback from respondents</p> <p>? Challenges due to lack of clearly defined roles/responsibilities</p>	<p>2(iii), 2(iv)</p>
--	--	---	--	---	--	----------------------

	Male: 2,000					
Output 2.2.1	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verificatio n	Assumptions & Risks	PoW Output Referenc e Number

<p>Documenting and disseminating best practices for monitoring of pre-release and post-release activities documented</p>	<p>Interventions in form of resource documents and online tools developed for monitoring of pre-release and post-release of regulated (commercial released) LMOs.</p> <p>Number of trained personals</p>	<p>Information available for monitoring practices of pre-release and post-release activities but there is still need for updation and further standardizing systems with best practices and set of criteria for both pre and post release monitoring.</p> <p>Guidelines for monitoring of confined field trials of regulated GE crops in place.</p> <p>A brochure on post release monitoring of GE crop plants has been developed through previous GEF supported project.</p>	<p>Roles and responsibilities of mandated Central/State level agencies w.r.t monitoring of LMOs appropriately documented.</p> <p>Resource /working knowledge documents and other standards with specific set of criteria for pre-release and post-release monitoring activities developed.</p> <p>Dissemination of resources developed through trainings and web-based mechanisms.</p>	<p>Documented information on roles and responsibilities for pre and post release monitoring activities.</p> <p>Resource /working knowledge documents and other standards with specific set of criteria including online tools for monitoring in place and disseminated.</p>	<p><u>Assumptions</u></p> <p>? Peer review by national experts.</p> <p>? Government support for strengthening monitoring and enforcement mechanisms.</p> <p>? Further building on existing information/ tools.</p> <p><u>Risk:</u></p> <p>? Lack of priority for monitoring and enforcement.</p> <p>? Limited human capacities</p> <p>? Limited financial resources for post release activities.</p>	<p>2B, 2C</p>
--	--	---	--	---	--	-------------------

COMPONENT 3: STRENGTHENING KEY ELEMENTS OF NATIONAL BIOSAFETY FRAMEWORK

Outcome 3.1	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	MTS Expected Accomplishment
<p>Risk Assessment and Risk Management (RARM) Regulatory Framework updated and streamlined to support biosafety decision making on new LMOs and related technologies.</p>	<p>RARM framework strengthened, enabling science-based decision making for new select categories of LMOs and emerging technologies through supportive guidelines, procedures and human capacities.</p> <p>Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment</p> <p>Female: 1,000 Male: 4,000</p>	<p>A basic Risk Analysis Framework towards science-based decision making and enabling public participation in decision making exist, which is also in line with Annex 3 of CPB.</p> <p>Also, for capacity building user's guide and an E-learning module on guidelines for environmental risk assessment of GE plants, 2016.</p>	<p>Categories of newer LMOs are selected for development of guidance and conducting trainings.</p> <p>At least 3-5 trainings conducted for dossier preparation, conducting RARM, and monitoring for shortlisted categories of LMOs and emerging technologies with multiple stakeholders including regulators, scientists, students, laboratory staff, enforcement officials.</p>	<p>Updated Gender Responsive Risk analysis framework.</p> <p>Supportive guidance and resources for newer select categories of LMOs</p> <p>Training reports and feedback</p>	<p><u>Assumptions:</u></p> <p>? Peer review by national and international experts.</p> <p>? Timely inputs and feedback received from stakeholders</p> <p><u>Risk:</u></p> <p>? Relevant stakeholders interested in new technologies</p> <p>? Adequate number of experts/trainees available at national level</p>	<p>2(iii), 2(iv)</p>

Output	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	PoW Output Reference Number
3.1.1						

<p>RARM procedures and guidelines are prepared/updated for (a) select categories of LMOs and (b) emerging technologies are published and used for trainings</p>	<p>Guidelines, procedures and supportive regulations for RARM of select newer categories of LMOs and emerging technologies developed/revised and published.</p> <p>Number of trainings undertaken at national level</p>	<p>The basic RARM guidelines and procedures for genetically engineered (GE) plants including a risk analysis framework is in place.</p> <p>Also ?A Guide for stakeholders for environmental risk assessment of GE plants?, is present, but there is a need for specific resource documents and supportive regulations to cover select categories of LMOs and emerging technologies that are at the advanced stage of research and development.</p>	<p>RARM procedures, guidelines and supportive regulations prepared/updated and adopted for newer select categories of LMOs and emerging technologies through a consultative approach.</p> <p>International best practices and approaches considered</p>	<p>Categories of LMOs identified and shortlisted.</p> <p>Consultative meeting/workshop reports</p> <p>Government notifications</p> <p>RARM guidance and procedures updated/developed for select categories of LMOs and emerging technologies</p>	<p><u>Assumptions:</u></p> <p>? Validation and adoption of updated RARM framework during project life span</p> <p>? Best practices and lesson learnt taken into consideration for updation</p> <p>? Timely inputs and feedback received from stakeholders</p> <p><u>Risk:</u></p> <p>Lack of interest and priority for safety assessment of new categories of LMOs among stakeholders</p>	<p>2B, 2C</p>
---	---	--	---	--	---	-------------------

Output 3.1.2	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	PoW Output Reference Number
Training for regulators and scientists for conducting RARM for new LMOs and emerging technologies.	Number of trainings to build capacities for the effective implementation guidance on RARM for new select categories of LMOs and emerging technologies.	Series of trainings and consultations have been conducted for capacity building with support from previous GEF projects.	Targeted trainings for sensitization/awareness/dissemination of newer guidelines and policies for RARM of newer select categories of LMOs.	Training workshop material and report. Trained personnels	<p><u>Assumptions:</u></p> <p>? The RARM guidance and tools validated during the project lifespan.</p> <p>? Trainings through train the trainer approach.</p> <p><u>Risk:</u></p> <p>Inadequate trainings</p>	2B, 2C
Outcome 3.2	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	MTS Expected Accomplishment

<p>National systems strengthened for the implementation of NKLS</p>	<p>Interventions for developing resources and template/prototype for implementing the NKLS.</p> <p>Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment</p> <p>Female : 1,000</p> <p>Male : 2,000</p>	<p>Limited level of awareness about NKSL.</p>	<p>Functional system strengthened for implementation of NKLS</p>	<p>Meeting reports</p> <p>Technical inputs and resources</p> <p>Template/prototype</p>	<p><u>Assumptions:</u></p> <p>Experts familiar national policies and international treaties relevant to biosafety viz., CPB</p> <p>Government willingness and allocation of resources for implementation</p> <p><u>Risk:</u></p> <p>Limited feedback</p>	<p>2(iii), 2(iv)</p>
<p>Output 3.2.1</p>	<p>Output Indicators</p>	<p>Baseline</p>	<p>Targets and Monitoring Milestones</p>	<p>Means of Verification</p>	<p>Assumptions & Risks</p>	<p>PoW Output Reference Number</p>

Technical resources are prepared for implementation of NKLSLP.	Number of resource documents for information on NKLSLP.	Limited level of awareness about NKSLP.	Information on essential elements of NKLSLP developed. A template/prototype developed as a means to implement NKLSLP	Technical briefs and resources Template/prototype	<u>Assumptions:</u> ? Peer review by experts ? Resources allocated for supporting implementation <u>Risk:</u> Lack of active interest on topic	2B, 2C
Outcome 3.3	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	MTS Expected Accomplishment
Implement mechanisms for information sharing for enhancing public outreach and awareness	Level of awareness on biosafety enhanced for multiple stakeholders Number of awareness creation material and systems developed	Limited public awareness resources, online modules and information dissemination undertaken done under previous GEF projects; India being large country; mechanisms to be put in place for information dissemination.	Review of commercial utilization of LMOs as per their market value undertaken and documented. Wide spread information dissemination through online resources such as audio-video clips, infographics, learning manuals and education material developed.	Review report of current market value status of LMOs Various forms of information material developed and disseminate through online resources.	<u>Assumptions:</u> ? Stakeholders interested in LMOs ? Quality of resources inadequate ? Dissemination of resources - <u>Risk:</u> Stakeholder States identification and outreach mechanism complementary -	2(iii), 2(iv)

Output 3.3.1	Output Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	PoW Output Reference Number
Development of online resources / tools to increase biosafety related awareness among public	Enhanced public awareness via online resources such as audio-video clips, infographics, manuals etc Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment Female : 1,000 Male : 10,000	Various forms of public awareness material available (English and regional languages) including factsheets, biosafety information kit, online modules, short video film on GM crops and educational modules resource material on Swayam Portal.	Status of market value of commercialized LMOs and their derived products reviewed and documented. Online resources such as audio-video clips, infographics, learning manuals and education material generated for public awareness.	Status report of market value of commercialized LMOs and their derived products. Audio-video clips, infographics, learning manuals and education material developed as online resources for widespread biosafety information dissemination.	<u>Assumptions:</u> Informed public to participate in decision making <u>Risk:</u> ? Information resources and online material dissemination inadequate ? Language as a constraint for wider outreach	2B, 2C
COMPONENT 4: PROJECT MONITORING						
Outcome 4.0	Outcome Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	MTS Expected Accomplishment

<p>Project effectively monitored, lessons codified and mainstreamed in national biosafety system</p>	<p>Effectiveness and efficiency of project monitoring and evaluation</p> <p>M& E framework developed</p> <p>Lesson learnt documented</p> <p>Project monitoring made through PSC supported by PMU</p> <p>Project reports, reviews and financial reporting adequately done.</p>	<p>No M& E framework developed yet</p> <p>Project implementation to be done through multiple levels of checks via., committees</p>	<p>Monitoring of achievement of project objective and outcomes reported</p> <p>M& E framework in place</p> <p>PSC and PMU established</p> <p>Assessment of activities at mid-term and to verify incorporation of lessons learnt by end of project.</p>	<p>M&E framework document developed.</p> <p>M&E reports reflecting outputs being monitored</p> <p>Documented lessons learnt</p> <p>Annual audits and reporting.</p> <p>Project technical and financial reporting, mid-term, technical report etc timely developed and submitted.</p>	<p><u>Assumptions:</u></p> <p>M&E framework adapted and used.</p>	<p>2(iii), 2(iv)</p>
<p>Output 4.1.1</p>	<p>Output Indicators</p>	<p>Baseline</p>	<p>Targets and Monitoring Milestones</p>	<p>Means of Verification</p>	<p>Assumptions & Risks</p>	<p>MTS Expected Accomplishment</p>

<p>Establish systems for project monitoring and evaluation</p>	<p>A PSC established</p> <p>Evaluation at mid-term and towards end of project undertaken</p>	<p>No PSC in place yet</p>	<p>PSC established within the first quarter of the project cycle</p> <p>Evaluation to be undertaken as per required GEF/UNEP schedules</p>	<p>List of PSC members.</p> <p>Minutes of PSC meetings</p> <p>Mid-term report</p> <p>Terminal report</p>	<p><i>Assumption</i></p> <p>PSC to have appropriate representation of relevant experts/scientist/decision makers</p> <p>PSC recommendations considered</p> <p>Mid-term and terminal reports developed through effective analysis of outcomes</p>	<p>2(iii), 2(iv)</p>
--	--	----------------------------	--	--	--	----------------------

Prepare reports and share with stakeholders	Timely progress reports and reports of outcomes for key stakeholders	Limited information and guidance available for key stakeholders	Project reporting as per prescribed requirements undertaken and submitted Outcomes of project activities documented and disseminated for information sharing and mainstreaming	Project progress reports Project implementation reports Project work plans Project financial reports Outcomes and lessons learnt documented Reports shared and circulated to concerned stakeholders	<i>Assumptions</i> Reporting done in timely manner Timely amendments as need be made in work plans and financial allocations, if required	2(iii), 2(iv)
---	--	---	---	--	---	------------------

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).

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

Status of Utilization of Project Preparation Grant (PPG)

(Provide detailed funding amount of the PPG activities financing status in the table below)

PPG Grant Approved at PIF: Mainstreaming of Biosafety and Institutional Capacity Building to strengthen effective implementation of Cartagena Protocol on Biosafety			
<i>Project Preparation Activities Implemented</i>	<i>GEF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
Data collection	10,000		
Consultancy	20,000		
Consultative and Validation Meetings	20,000		
Total	<u>50,000</u>	-	

ANNEX D: Project Map(s) and Coordinates

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

The project will be implemented Pan India. Activities related to State level engagement will be in specific states in six regions (North, East, West, Central, Northeast, South).

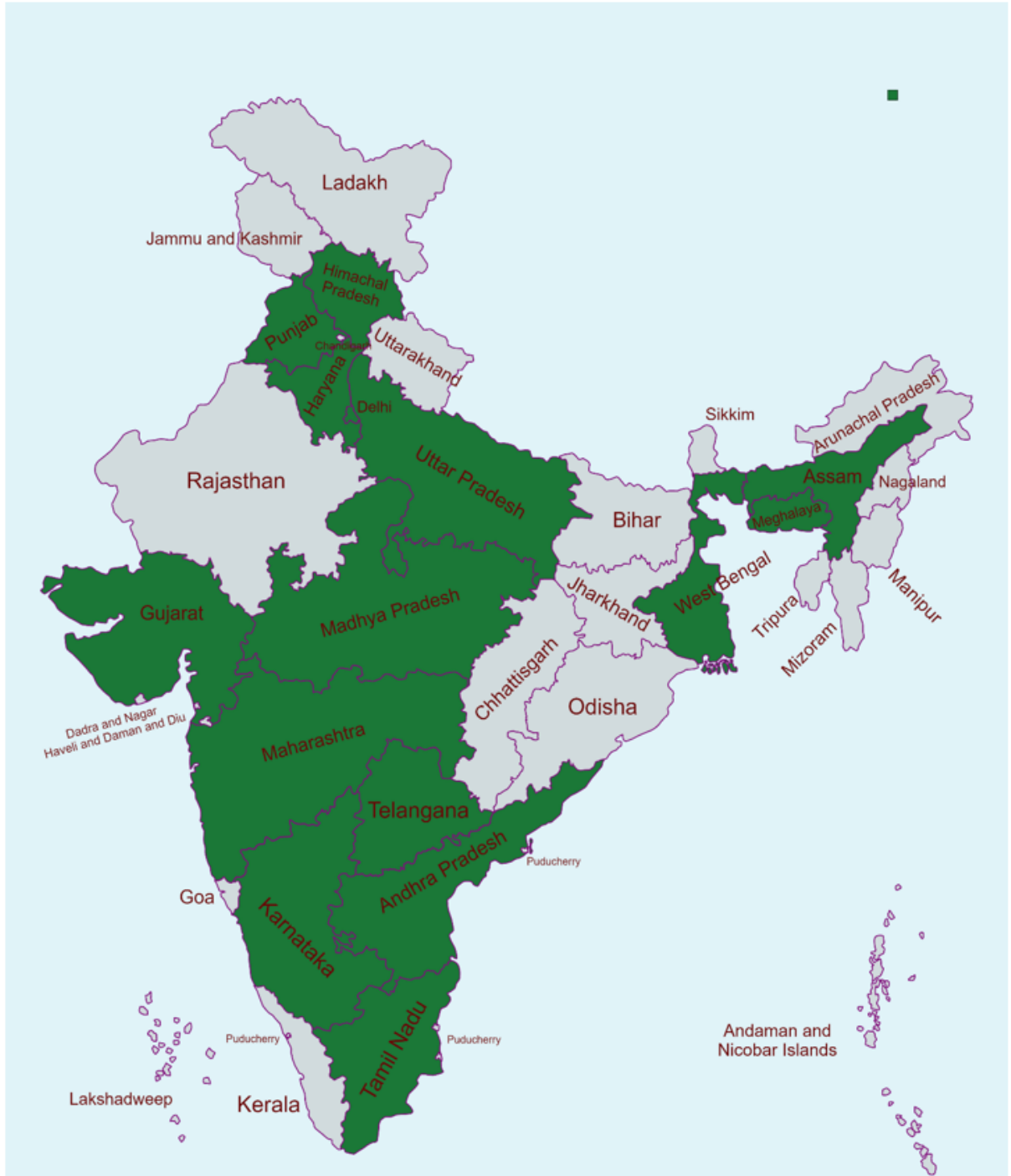
States will be shortlisted based on results of stocktaking assessment and in view of active engagement in matters related to LMOs, such as confined field trials.

States with active biotechnology programs for development and use of LMOs and where field trials have been permitted or are under active consideration in the recent past are highlighted in the map.

Name	Longitude	Latitude
Andhra Pradesh	79.73999?E	15.9129?N
Assam	92.9376?E	26.2006? N
Gujarat	71.1924?E	22.2587?N
Haryana	76.0856?E	29.0588?N

Himachal Pradesh	77.1734?E	31.1048?N
Karnataka	75.7139?E	15.3173?N
Madhya Pradesh	78.6569?E	22.9734?N
Maharashtra	75.7139?E	19.7515?N
Meghalaya	91.3662?E	25.4670?N
New Delhi	77.200 E	28.610 N
Punjab	75.3412?E	31.1471?N
Tamil Nadu	78.6569?E	11.1271?N
Telangana	79.01930 E	18.11240 N
Uttar Pradesh	80.9462?E	26.8467?N
West Bengal	87.8550?E	22.9868?N

The identified States have been highlighted in green in the map.



GEO LOCATION INFORMATION

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. These IDs are available on the [GeoNames? geographical database](#) containing millions of placenames and allowing to freely record new ones. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as [OpenStreetMap](#) or [GeoNames](#) use this format. Consider using a conversion tool as needed, such as: <https://coordinates-converter.com> Please see the Geocoding User Guide by clicking [here](#).

Location Name	Latitude	Longitude	Geo Name ID	Location & Activity Description
Andra Pradesh	15.9129	79.73999		<input type="checkbox"/>
Assam	26.2006	92.9376		<input type="checkbox"/>
Gujarat	22.2587	71.1924		<input type="checkbox"/>

Location Name	Latitude	Longitude	Geo Name ID	Location & Activity Description
Haryana	29.0588	76.0856		<input type="checkbox"/>
Himachal Pradesh	31.1048	77.1734		<input type="checkbox"/>
Karnataka	15.3173	75.7139		<input type="checkbox"/>
Madhya Pradesh	22.9734	78.6569		<input type="checkbox"/>
Maharashtra	19.7515	75.7139		<input type="checkbox"/>
Meghalaya	25.4670	91.3662		<input type="checkbox"/>
New Delhi	28.610	77.200		<input type="checkbox"/>
Punjab	31.1471	75.3412		<input type="checkbox"/>
Tamil Nadu	11.1271	78.6569		<input type="checkbox"/>
Telangana	18.11240	79.01930		<input type="checkbox"/>
Uttar Pradesh	26.8467	80.9462		<input type="checkbox"/>
West Bengal	22.9868	87.8550		<input type="checkbox"/>

ANNEX E: Project Budget Table

Please attach a project budget table.

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 Agency 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).