GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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General Project Information

Project Title

CoHABITAT – Conservation and sustainable management of wetlands, forest and grasslands to secure the population of Migratory species along Central Asian Flyway in India

Region	GEF Project ID
India	11478
Country(ies)	Type of Project
India	FSP
GEF Agency(ies):	GEF Agency ID
UNDP	11478
Executing Partner	Executing Partner Type
Ministry of Environment, Forest and Climate Change (MoEFCC)	Government
GEF Focal Area (s)	Submission Date
Biodiversity	10/18/2023

Project Sector (CCM Only)

Taxonomy

Chemicals and Waste, Focal Areas, Sound Management of chemicals and waste, Climate Change, Climate Change Adaptation, Climate resilience, Ecosystem-based Adaptation, United Nations Framework Convention on Climate Change, Nationally Determined Contribution, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, Biodiversity, Biomes, Mangroves, Grasslands, Wetlands, Temperate Forests, Lakes, Tropical Dry Forests, Coral Reefs, Sea Grasses, Tropical Rain Forests, Desert, Rivers, Mainstreaming, Agriculture and agrobiodiversity, Ceritification - International Standards, Fisheries, Forestry - Including HCVF and REDD+, Tourism, Infrastructure, Financial and Accounting, Payment for Ecosystem Services, Conservation Finance, Species, Invasive Alien Species, Threatened Species, Protected Areas and Landscapes, Productive Seascapes, Productive Landscapes, Community Based Natural Resource Mngt, Coastal and Marine Protected Areas, Terrestrial Protected Areas, Sustainable Development Goals, Sustainable Land Management, Land Degradation, Ecosystem Approach, Community-Based Natural Resource Management, Income Generating Activities, Integrated and Cross-sectoral approach, Improved Soil and Water Management Techniques, Sustainable Livelihoods, Sustainable Agriculture, Forest, Forest and Landscape Restoration, Influencing models, Stakeholders, Gender Equality, Capacity, Knowledge and Research, Convene multi-stakeholder alliances, Demonstrate innovative approache, Deploy innovative financial instruments, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Beneficiaries, Private Sector, SMEs, Financial intermediaries and market facilitators, Individuals/Entrepreneurs, Local Communities, Type of Engagement, Participation, Information Dissemination, Partnership, Consultation, Communications, Awareness Raising, Public Campaigns, Education, Behavior change, Civil Society, Academia, Community Based Organization, Non-Governmental Organization, Gender results areas, Capacity Development, Access and control over natural resources, Participation and leadership, Access to benefits and services, Knowledge Generation and Exchange, Gender Mainstreaming, Women groups, Sex-disaggregated indicators, Gender-sensitive indicators, Knowledge Generation, Targeted Research, Innovation, Knowledge Exchange, Learning, Indicators to measure change, Adaptive management, Theory of change, Enabling Activities

Type of Trust Fund	Project Duration (Months)

GET	72
GEF Project Grant: (a) 10,709,174.00	GEF Project Non-Grant: (b) 0.00
Agency Fee(s) Grant: (c) 963,826.00	Agency Fee(s) Non-Grant (d) 0.00
Total GEF Financing: (a+b+c+d) 11,673,000.00	Total Co-financing 73,100,000.00
PPG Amount: (e) 300,000.00	PPG Agency Fee(s): (f) 27,000.00
PPG total amount: (e+f) 327,000.00	Total GEF Resources: (a+b+c+d+e+f) 12,000,000.00
Project Tags CBIT: No NGI: No SGP: No Innovation: Yes	

Project Summary

Provide a brief summary description of the project, including: (i) what is the problem and issues to be addressed? (ii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? iii), how will this be achieved (approach to deliver on objectives), and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. The purpose of the summary is to provide a short, coherent summary for readers. The explanation and justification of the project should be in section B "project description".(max. 250 words, approximately 1/2 page)

The project aims to provide a common strategic framework and affirmative action for protecting, conserving, restoring, and sustainably managing populations of migratory bird species and their associated wetland habitats in the Indian subcontinent falling under the Central Asian Flyway[1][1]. Despite a number of positive measures taken in the past by the Government of India to protect critical habitats along the flyway, rising incomes and consumption have recently increased across all economic classes resulting in natural habitat loss, fragmentation and degradation through conversion of wetlands, livestock grazing, urbanization, mining and industrial development. Agricultural intensification further threatens many of the wetland species through increased exposure to agrochemicals, eutrophication and loss of habitat heterogeneity. Finally, overarching threats such as anthropogenic climate change are posing danger for vulnerable ecosystems such as coastal areas, riparian and floodplain areas and migratory birds that dependent on them. To address these threats, the project has developed a clear strategy and step-by-step approach to identify and manage critical corridors and transition areas to improve ecological conditions, connectivity and integrity of wetland sites on the CAF. As part of this effort, the identification and planning for these critical wetland areas for the CAF will be developed and tailored within a regional context (wetland scape[2][2] approach) that takes into full consideration the ecological needs to sustain the migratory bird populations. The project has identified five nationally recognized priority wetland scapes within India which are critical to maintain and sustain the migratory birds that use the CAF that the project will focus on. It will enable national and state level policy and decision makers, those responsible for species conservation and management of habitats, stakeholders and society at large to take coordinated actions for securing and enhancing populations of migratory birds and their associated habitats. It aims to halt and reverse decline of migratory birds, reduce pressure on critical wetland habitats that serve as wintering sites, transition or migratory corridors for the CAF bird populations by management based on landscape (or wetland scape) approaches; develop capacity at multiple levels to anticipate and avoid threats to habitats and species undergoing long term decline; improve monitoring, database and decision-support systems to underpin science-based conservation of species and management of habitats; and catalyze stakeholders to take collaborative actions on securing habitats and associated wetland species; and support trans-boundary cooperation with other CAF countries to secure migratory birds and

habitats within the flyway. Through this integrated wetland scape approach, the project will result in several global environmental benefits, namely to: (i) improve management effectiveness of 48,254 hectares of key wetland protected areas; (ii) improve management effectiveness of 136,964 hectares of marine protected areas; (iii) restore 10,000 hectares of degraded wetland habitats to benefit biodiversity; (iv) improve management of 900,000 hectares of terrestrial and coastal areas (outside protected areas) to benefit migratory birds and biodiversity, (v) improve management of 63,000 hectares of marine areas (outside protected areas) to benefit migratory bird species and biodiversity and (vi) directly benefit 60,000 people (30,000 men and 30,000 women) through improved wetland resource use and livelihood opportunities, agricultural management practices, and small scale enterprises and climate mitigation measures. This effort also recognizes UNDP's Nature Pledge to achieve Global Biodiversity Framework (GBF) goals and targets.[3][3]

[1] The Central Asian Flyway (CAF) is a flyway covering a large continental area of Eurasia between the Arctic Ocean and the Indian Ocean and the associated island chains comprising several important migration routes of waterbirds, most of which extend from the northernmost breeding grounds in Siberia to the southernmost non-breeding wintering grounds in West Asia, India, the Maldives and the British Indian Ocean Territory

[2] A wetland scape in this context refers to a system of wetlands that are associated with adjacent grasslands, forests and agricultural lands that are used by migratory species

[3] https://www.undp.org/nature/nature-pledge

Indicative Project Overview

Project Objective

Conservation and sustainable management of wetlands, forests and grasslands to conserve the population of migratory bird species along the Central Asian Flyway in India

Project Components

Component 1: Enabling framework for establishment of ecologically representative, well-connected and governed wetlands and associated habitats in the Central Asia Flyway

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
1,223,906.00	7,200,000.00

Outcome:

Outcome 1: Improved policy, governance and institutional capacities for integrated planning, management and maintenance of a network of healthy wetland systems to sustain diversity and population of wetland-dependent species. This will be measured by:
(i) Number of policy directives on conservation and sustainable use of wetlands
(ii) Number of sector-based technical guidelines on sustainable use of wetland resources piloted in project wetland scapes
(iii) Migratory waterbirds conservation needs integrating into state/district level planning, including natural resources, agriculture and water resources
(iv) Improved institutional capacity to administer the national and state wetland systems for migratory waterbird and globally threatened species conservation, indicated by UNDP Capacity Development Scorecards
(v) National CAF Flyway Cell with functional mandate and staff and resources

Output:

Output 1.1: National policy, directives, and guidelines for conservation and sustainable management of network of wetland systems for conservation of biodiversity and migratory birds

Output 1.2: Guidelines for cross-sectoral planning and budgeting for integrated management of wetland systems to support conservation outcomes
Output 1.3: Strengthened national inventory contributing in planning, decision-making, management and reporting for effective management of wetland systems in the CAF in India
Output 1.4:

Development and roll out of a comprehensive capacity building program at national, state and sub-state levels to improve management effectiveness of wetlands

Output 1.5. Establishment of a Central Asian

Flyway Coordination Cell in India

Component 2: Conservation and sustainable management of wetland systems to conserve the habitats of migratory birds and attendant species through an integrated wetland scape approach

Component Type	Trust Fund
Investment	GET
GEF Project Financing ($)	Co-financing ($)
4,589,646.00	32,200,000.00

Outcome:

Outcome 2: Integrated ecosystem-based wetland management approaches demonstrated and up-scaled in five wetland scapes to support the conservation of migratory birds and associated wetland species. This will be measured by:
(i) Local population status of globally threatened migratory waterbird species at the target sites based on annual peak counts Species to be identified at PPG stage)
(ii) Increased management effectiveness of 43,522 hectares of terrestrial protected areas and 136,964 hectares of marine protected areas indicates “sound” management (as measured by the GEF Management Effectiveness Tracking Tool (METT)
(iii) Guidelines addressing flyway friendly agriculture, aquaculture, livestock grazing, capture fisheries, etc., applied to reduce threats to migratory waterbirds applied
(iv) Threats to migratory waterbirds and other globally important species (river dolphin, turtles and others) reduced at project target sites (species to be confirmed at PPG stage)

Output:

Output 2.1: Prioritization and spatial mapping of selected wetland systems for assessing threats and opportunities for securing biodiversity and habitats for migratory birds

Output 2.2 Multi-sectoral and multi-stakeholder engagement for integrated and inclusive planning of selected wetland systems to promote wetland conservation and associated aquatic species to maintain favorable ecological conditions for migratory bird species

Output 2.3. Site specific implementation of adaptive habitat conservation, management and rewilding with selected priority/target wetland systems for migratory birds and other key wetland species

Output 2.4: Monitoring of biodiversity (such as for dolphins, turtles, amphibians and fish) and migratory birds, to assess the ecological conditions and environmental flows in the target wetlands and their adaptive management

Component 3: Enhanced Community stewardship of aquatic habitats incentivized by sustainable resource use

Component Type	Trust Fund
Investment	GET
GEF Project Financing ($)	Co-financing ($)
3,161,756.00	22,300,000.00

Outcome:

Outcome 3: Sustainable models for community conservation and economic improvement demonstrated. This will be measured by:
(i) Number of direct project beneficiaries (% women), consisting of: targeted communities in demonstration sites and number of government staff and communities receiving training

(ii) Area of wetlands under procedures/ guidelines for addressing human-waterbird conflict are applied (extent to be determined at PPG stage)
(iii) Strengthened financial sustainability and resource allocation for the expanded national wetland system for migratory waterbird conservation

Output:

Output 3.1. Sustainable fisheries, grazing, agriculture and resource use co-management models promoted to reduce threats from poaching and unsustainable use of wetland resources

Output 3.2. Small and medium biodiversity-friendly business and value-chain ventures and livelihood activities promoted for local community income improvement. to reduce resource use conflicts

Output 3.3: Development and implementation of conflict resolution mechanisms for conservation of species (Gangetic dolphins, migratory waterbirds and other species) with resource users (fisher-folk, farmers and other aquatic biodiversity resource use at wetland levels).

Output 3.4. Assessment and testing of appropriate financial solutions and resource mobilization strategies (based on BIOFIN) to support community business and livelihood activities with involvement of local private Industry and businesses

Component 4: Awareness raising, knowledge, communication, management and gender mainstreaming to promote replication and scale-up of integrated wetland conservation approach for Central Asian Flyway

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
1,019,921.00	5,200,000.00

Outcome:

Outcome 4: Enhanced awareness, recognition, political support and capacity of stakeholders promote replication and scale-up integrated wetland approaches. This will be measured by:
(i) Improved awareness of the value of migratory birds and biodiversity among key target groups based on Knowledge, Attitude and Practices (KAP) surveys conducted at the start and end of the project
(ii) Number of project best practices and lessons documented and disseminated

Output:

Output 4.1: National communication strategy and plan developed and implement to create increased awareness, enhanced public support and active engagement of stakeholders to protect and maintain wetlands in the CAF
Output 4.2: Replication, scaling up, and long-term sustainability strategy/plan; communication and knowledge shared and exchanged on approaches for integrated wetland conservation
Output 4.3.
Coordination and knowledge sharing among CAF countries for conservation and management of migratory waterbirds and disease surveillance

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
203,984.00	2,700,000.00

Outcome:

Outcome 5: Enhanced monitoring for adaptive management. This will be measured by:

(i) Adaptive management measures applied to adjust changing needs.

Output:

Output 5.1: M&E system supports project impact assessment including gender and youth mainstreaming

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
Component 1: Enabling framework for establishment of ecologically representative, well-connected and governed wetlands and associated habitats in the Central Asia Flyway	1,223,906.00	7,200,000.00
Component 2: Conservation and sustainable management of wetland systems to conserve the habitats of migratory birds and attendant species through an integrated wetland scape approach	4,589,646.00	32,200,000.00
Component 3: Enhanced Community stewardship of aquatic habitats incentivized by sustainable resource use	3,161,756.00	22,300,000.00
Component 4: Awareness raising, knowledge, communication, management and gender mainstreaming to promote replication and scale-up of integrated wetland conservation approach for Central Asian Flyway	1,019,921.00	5,200,000.00
M&E	203,984.00	2,700,000.00
Subtotal	**10,199,213.00**	**69,600,000.00**
Project Management Cost	509,961.00	3,500,000.00
Total Project Cost ($)	**10,709,174.00**	**73,100,000.00**

Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

Briefly describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

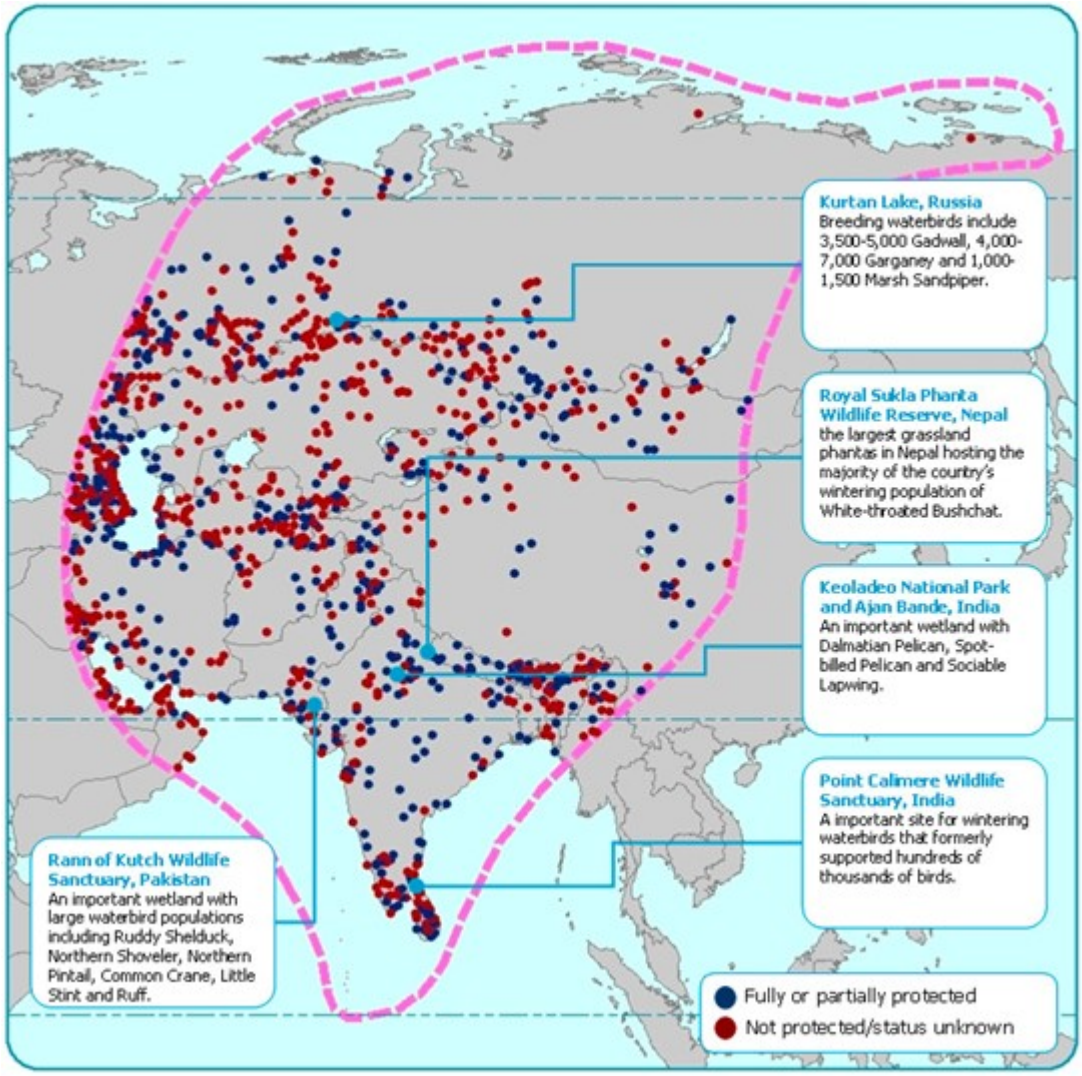
Being at the terminus of the Central Asian Flyway (CAF), India holds some crucial wintering populations of water bird species and also serves as a key breeding area for many other water birds such as Pygmy cormorant and Ruddy-shelduck, globally threatened water birds such as Sarus crane (*Antigone antigone*), Black-necked stork *(Ephippiorhynchus asiaticus),* Greater Adjutant stork (*Leptoptilos dubius*), White winged wood duck (*Asarcornis scutulata*), etc. Being located at the 'tip' of the CAF, and several important convergent migration routes, the country covers a large intra-continental territory between Arctic and Indian Ocean. Being aware of the importance of the wetlands for migrating avifauna, India has developed a wetland conservation program with 15.26 million hectares under wetlands comprising 75 wetlands that have been recognized as RAMSAR sites.[1][4] It has identified more than 300 other sites that have the potential to be considered as RAMSAR sites. These RAMSAR sites also harbor other important species such as the Gangetic Dolphin (*Platanista gangetica*) and various species of marine dolphins, turtles and vulnerable and threatened fish species. Healthy populations of migratory birds and other species are emblematic of a thriving wetland and riverine habitat in the country. However, being the second most populated nation in the world with an agricultural economy, wetlands that are used by water birds are also under intense use by people. It is, therefore, necessary to monitor the wetlands as well as the water birds dependent on them to ensure that favorable wetland conditions are maintained. India also considers it a priority to join hands with the regional and international community for developing a framework and an action plan for proper conservation and management of migrating waterfowl. India's quest for inclusive economic development and need to maintain integrity of its natural capital presents a challenge to management of its migratory bird populations as it can result in a conflict of priorities in resource use. Despite, these challenges, India has made significant progress in declaration of protected areas. The National Wildlife Action Plan supported by the Indian Wildlife (Protection) Act, 1972 provides the legislation relating to migratory water birds and wetlands. Various other legislations such as Environmental Protection Act, Indian Forest Act, Pollution Control Act, Coastal Zone Regulatory Acts also support conservation of wetland and migratory waterfowl habitats. India is also a signatory to CITES, CMS and other regional and bilateral agreements with respect to migratory water birds and wetlands.

Despite a number of positive measures taken in the past, Indian biodiversity faces numerous challenges in the coming decades. In addition, the small size of many protected areas (in particular wetland sites) is not always sufficient to host a full complement of species of migratory birds that occur outside the PA system. Forest fragmentation, resource exploitation, illegal hunting, presence of humans and invasive species are prevalent in many PAs and natural areas—that negatively affect conservation of migratory bird species. With rising incomes, there is natural habitat loss, fragmentation and degradation through conversion of wetlands, livestock grazing, urbanization, mining and industrial development.[2][5] Agricultural intensification also threatens many of the wetland species through increased exposure to agrochemicals, eutrophication and loss of habitat heterogeneity. Finally, change is also posing danger for vulnerable ecosystems such as coastal areas, riparian and floodplain areas and species, including migratory birds dependent on them.[3][6]

The Central Asia Flyway

In India, the most actively used migration corridor is the "Central Asian Flyway". The Central Asian Flyway (CAF) covers a large continental area of Eurasia between the Arctic and Indian Oceans and the associated island chains. The Flyway comprises several important migration routes of waterbirds, most of which extend from the northernmost breeding grounds in Russia (Siberia) to the southernmost non-breeding (wintering) grounds in West and South Asia, the Maldives and British Indian Ocean Territory. The waterbirds of the CAF use a wide variety of habitats during their annual cycle. This continental flyway comprises extensive large semi-arid habitats with a limited number of wetlands, particularly in the staging areas, and different groups of migratory waterbirds appear to overlap considerably in the usage of important sites. The large coastal wetland areas and islands of South Asian countries provide good habitat for many species. Many of the wetlands are situated in areas with dense human populations where the wetlands provide many goods and services to the people, but where they are increasingly being unsustainably exploited. Thus, the management of these

habitats requires coordinated multi-sectoral and participatory planning and implementation to realize the needs of local people as well as biodiversity conservation.



Map 1: Showing Important Bird Areas in the CAF.

An approach to scale up to meet international commitments for conservation of the CAF

As a consequence, to the importance of protecting the CAF, the Parties to the Convention on the Conservation of Migratory Species of Wild Animals recognized the urgent need for science-based and internationally coordinated conservation measures, ensuring the survival of species and their habitats as well as other critical species that occupy these habitats such as dolphins, turtles and others, and ensure sustainable benefits to people. In order to address those needs and to identify coordinated actions to conserve those species, CMS convened three meetings of range states (Tashkent 2001, New Delhi, 2005 and Abu Dhabi, 2012). The second meeting in New Delhi (2005) broadly agreed on the content of the Central Asian Flyway Action Plan to Conserve Migratory Waterbirds and their Habitats. The Action Plan has been developed with technical support from Wetlands International and was finally adopted in January 2008. The Action Plan provides the basis for the 30 Range States to take individual and coordinated region-wide activities to conserve waterbirds and their habitats. It covers 175 species of birds. Thirteen of the species are already listed in Appendix I of the Convention. It contains provisions for species and habitat conservation, single species action plans and emergency measures. Priority issues for conservation of migratory waterbird and their habitats, include the lack of information on population status and trends, information on precise migration routes of populations, limited capacity of local agencies and communities to monitor and manage wetlands and the need to balance the needs of conservation against the needs of local people. In the project areas, a number of national, state and donor activities have been initiated (although not within an integrated wetland scape approach) to enhance PA management, public participation in joint forest management and ecodevelopment activities, address the conflicts between development and conservation. In addition, India currently assumes the role of the president of the COP of CMS and expects to contribute significantly towards the achievement of its objectives, which the project greatly addresses. Given its focus on the conservation and effective management of critical wetland habitats, the project also contributes towards achieving the objectives of the Ramsar Convention on wetlands. India

also hosted the 13th COP of CMS leading to the adoption of the 'Gandhinagar Declaration', which interalia, called for "ecological connectivity" to be integrated and prioritized in the Kunming-Montreal Global Biodiversity Framework. It also calls for the establishment of a Central Asian Flyway Coordination Cell in India to lead the effective coordination and scientific monitoring of species and habitats not only in India, but across the CAF network. The project is also aligned with the newly launched 'Amrit Dharohar' scheme of the Government of India that will be implemented over the next three years to encourage optimal use of wetlands, and enhance biodiversity, carbon stock, eco-tourism opportunities and income generation for local communities along with contributing towards achieving the objectives of the Ramsar Convention on wetlands and National Plan for Conservation of Aquatic Ecosystems.

Notwithstanding the above, the project calls for a clear strategy and step-by-step approach to identify and manage critical wetland corridors and transition areas to improve ecological conditions, connectivity and integrity of wetland sites on the CAF. In this regard, the identification and planning for these critical staging areas for the CAF will be developed and tailored within a regional context (wetland scape approach) that takes into full consideration the ecological needs to sustain the migratory bird populations. The project has identified five nationally recognized priority wetland scapes within India which are critical to maintain and sustain the migratory birds that use the CAF. The selection of these sites are based on specific criteria (such as being a Ramsar site; meets the Ramsar criteria, but not yet declared; a KBA site; and a site that meets KBA criteria, but not yet formally designated). India is at an advantage that the existing legislation and policies have proven effective and efficient for conserving critical biodiversity within a broad and varied system that also recognizes community stewardship that promotes sustainable resource use, benefit sharing and local decision-making. This approach allows for conservation of wetlands (either within or outside PAs), protected forests and village forests, including (under the Forest Conservation Act), Biodiversity Heritage sites (under Biological Diversity Act), ecologically sensitive and important coastal and marine areas (that include mangroves, corals/coral reefs), areas close to breeding and nesting areas for birds, including wetland conservation areas under the (Environment Protection Act – Wetland Conservation and Management Rules).

Drivers and threats to achieving CAF outcomes

There are a number of threats, that vary across the CAF leading to ecosystem degradation impacting terrestrial, freshwater and marine ecosystems and the key species that occupy these ecosystems, including migratory birds that use the flyway. As a consequence, many of the world's migratory birds are in decline and are particularly vulnerable to a variety of threats. Drivers and threats continue to result in significant loss of biodiversity, wetland degradation, diminished ecosystem services, livelihoods, and the natural ecosystems that support socio-economic development, human well-being and global environmental benefits.

Habitat Loss and Degradation: As high-quality natural habitats are important to sustain biodiversity and migratory populations, many parts of the CAF, including in India, have dense and growing human populations that have altered the landscape significantly. Anthropogenic pressures affecting coastal regions have revealed that the entire Indian Ocean coastline of has less than 20% of intact habitat, reflecting the high levels of human impact on habitat change.[4][7] These are important non-breeding grounds for migratory shorebirds, other waterbirds and seabirds. Inland wetlands, which are important habitats for migratory waterbirds, raptors and many land birds have been impacted by rapid human development in India. The pressure on all natural habitats (including coasts, grasslands and forests) is increasing, with large-scale changes evident particularly in the last decades. In India, like other CAF countries, agricultural and pastoral lands are used by a range of migratory species. Intensification of agriculture and animal husbandry with increased use of agrochemicals and pesticides has impacts on a range of migratory birds using these habitats.

Capture of Migratory Birds: The illegal capture and local trade of wild birds for food by local people across the region, including India has been a traditional source of protein for some communities.[5][8] The illegal capture of different species of birds (and their young) takes place in nearly all CAF countries, including India (reflecting challenges in implementation of legislation, management and enforcement). Illegal poaching or capturing of birds by trapping and poisoning is reported for (a) food, (b) pet trade, (c) merit release as part of religious customs, (d) traditional medicine, as well as (e) persecution due to conflict with aquaculture and agriculture.

Human disturbance and disruption to migratory birds or their habitats: Across the CAF, and in India, in particular, migratory birds share their breeding, staging and non-breeding habitats with local people, often in high densities. As many species of migratory birds tend to flock in large numbers and in mixed groups, they can be very sensitive to unintentional or intentional disturbance from the mere presence of people and their activities. Disturbance could include any human intrusion or activity that risks disrupting the feeding, breeding, roosting or other behavior of migratory animals, or significantly increasing their stress levels, which may affect their nutrition levels, reproduction rate or life expectancy. While there are no detailed studies published on the impact of disturbance on migratory birds within the CAF, the general consensus is that fishing, recreation, religious and other types of tourism, and agriculture

are activities that may affect birds. Disturbance may be a major issue particularly when species are breeding, as the presence of humans may scare away adults and allow predators to take eggs and young.

Poisoning: Predator control where poisons are being used intentionally, can kill wild birds. In addition to direct causes of mortality to migratory birds, there can be mortality from accidental/indirect poisoning from toxic substances, for example (a) in agriculture (pesticides, fungicides, algicides), (b) veterinary pharmaceutical treatments to treat cattle, which then die and are eaten by vultures, to which these drugs are poisonous, (c) from use of lead for hunting and fishing, (d) unintentional secondary poisoning resulting from the legal intensive use of rodenticides is also reported to have a negative impact on vultures[6][9] and (e) biomagnification of heavy metals and other chemicals known to affect waterbirds and others. Some groups of migratory birds are reported to be susceptible to interactions with plastics due to their specific behaviors, including intentional handling of plastics as building materials, unintentional contact and entanglement, and microplastic ingestion by adults and juveniles[7][10].

Climate Change: Current and future climate-related drivers of risk for wetland scapes include extreme weather events, such as heatwaves, droughts, forest fires, flooding, storms, coastal swells, and erosion in the monsoon regions. Increased rainfall and higher temperatures have also caused 30% glacial melting over the past 50-60 years, increasing flood risk and landslides in the Himalayan region (IPCC 2022a). There is also the additional risk of sea level rise at marine, coastal and inter-tidal marshes. These climate changes can result in future impacts associated with these risks including loss of adaptive capacity and ecosystem services critical to lives and livelihoods. From an ecological stand point, the most immediate threat will be the loss of vital habitat from increased desertification and flooding from glacial, sea ice and tundra permafrost melts, as well as the collapse of food webs in the oceans linked to changing zooplankton abundance. Temperature increases can also change the timing of migration patterns and potentially result in a phenological mismatch between peak in food sources and demand and alter species distribution, with particular species avoiding certain areas outside of their temperature and humidity comfort ranges.[8][11] Details of threats for each site are provided in Table C.2. (refer Annex C).

Systems that need to be transformed

The main drivers of degradation targeted through the project are impacting natural systems, local livelihoods and customary rights. The perversive policies, political interventions and ineffective governance systems affecting wetland scapes are significantly contributing to the degradation of these systems. Key to the success of enhancing conservation of these ecosystems is to help transform these systems towards more sustainable, resilient, and effective outcomes.

Pervasive policies and practices: Acknowledging the social structure and the historical and political realities of the use of natural resources will enable the design of governance regimes that recognize customary rights, local strategies and local adjustments. This will enable the reversal of ill-conceived past changes in property right regimes from state, common property or open access to a state-managed private access guaranteed by land entitlements that had previously caused significant environmental degradation, social marginalization and conflict development and led to capitalization of natural resources by powerful societal groups at the expense of the poorest communities. By increasing community ownership and their customary rights, the project will likely overcome the key threat of habitat loss and destruction of natural systems.

Political interventions that increase conflict with local community resource use*:* The uncertainty and limited understanding of physical interventions and institutional reforms for the sustainable management of natural resources has resulted in unintended consequences to the benefit of socially and politically influential groups at the expense of others. The management of the uncertainty and conflicting interests calls for governance and mechanisms to ensure convergence of interests among the various resource uses, the production of consistent data on the effect of physical interventions on wetland productivity and establishment of a negotiatory platform to discuss and resolve conflicts that will allow for a more sustainable use and management of natural resources.

Lack of statutory powers and governance to address threats to wetlands and associated landscapes: While, governance bodies have been established to curb environmental degradation and improve management of wetland scapes, these bodies generally are focused on technical matters rather than governance issues, because they lack statutory powers in most cases to enforce decisions and have limited participation of communities in decision-making. As a consequence, there is limited efforts at improving benefits or enhancing livelihoods of the marginalized and lack of adequate policies that govern (and statutory means for their enforcement) the management

and enforcement of conservation actions that lead to failure. The project will seek to address these through policy review, improved co-management and community role in decision-making and planning.

***Institutional fragmentation and over lapping and conflicting agendas**:* A strong institutional framework is needed as an integral part of the governance regimes of natural resources and is critical for the effective management of wetland scapes so as to overcome conflicts over natural resources in general, in particular because Institutional fragmentation with overlapping and conflicting agendas and organizations' lack of resources are commonly pointed out as major impediments to management of wetland scapes. The project will seek to ensure institutional coordination and collaboration at all levels to promote integrated landscape/seascape approaches to resource governance and use.

Barriers

The key barriers to address the drivers and threats to achieve sustainable management of the wetland scapes are the following:

Barrier 1: Inadequate enabling national framework for strengthening the management of wetland scapes that are critical for maintenance of their ecological integrity to sustain migratory bird species: While there is significant recognition of the value of integrated and inclusive approaches to conservation (and promoted at project levels) in India, there is a need for a national policy and functional institutional framework that supports integrated planning and management of wetland scapes (and landscapes/seascapes in general). The current approach to planning and management of basins and coastal zones remains largely sectoral and governed by separate sector policies, legislation, regulations and institutional arrangements that make it impossible to ensure complementarity of approaches. As a consequence, the full range of wetland and associated natural system ecosystem services and biological diversity values are rarely integrated into sectoral developmental plans, impeding their ecological and hydrological functioning and leading to stakeholder conflicts.

***Barrier 2: Insufficient capacity and proven models for integrated management of wetland habitats and the ecological linkages with their inter-linked landscapes**:* Although aquatic and terrestrial ecosystems are intimately linked by the process of the water flowing through them as well as there is a dependency across these systems by migratory birds, management planning for wetlands do not take account of the wider planning and management context of the basin within which these aquatic wetlands are located. Although wetlands are one of the most embedded and inter-linked systems with human well-being, there is limited recognition and capacity for considering the complexity of the geological, geomorphological and climatic reality of the wetland, linkages with other designated and non-designated adjacent wetlands and basin inter-relationships and the spatial dimensions in which these interactions take place. The lack of capacity to use spatial planning tools, the technical knowledge to evaluate and define ecosystem services and their socioeconomic value, as well as the ability to determine trade-offs is an issue. Capacity is limited for promoting a diagnostic, adaptive and integrated planning process wherein the ecological, hydrological, socioeconomic and institutional features are comprehensively assessed and trends therein determined. This is further compounded by the lack of guidelines, capacity and procedures for ensuring that monitoring information of migratory species, habitats and threats are used in decision-making for planning and management of key habitats within the CAF.

***Barrier 3: Limited private sector engagement and financing is an impediment to promotion of support for management and co-management of wetlands and other critical ecosystems within the CAF**.* This is constrained by the current approach of nature being viewed as an externality by business and finance sector in India. To incentivize and change this thinking would require creating an enabling policy environment for businesses to integrate nature and biodiversity as a core risk and internality in all business operations; incentivizing and capacitating responsible reporting and disclosure by businesses on their impact on nature and biodiversity; and piloting innovative measures through which business can close the biodiversity funding gap in India through responsible investing.

Barrier 4: Inadequate awareness and knowledge exchange to conserve critical habitats of migratory birds and their habitats within the CAF impedes scaling up and replication: The global significance of the migratory birds and their habitats within CAF and the threats (many of which may remain undocumented at the ground level) remain poorly understood and appreciated. Low awareness of risks posed to these systems (particularly also on the dependencies of local communities for food security and livelihoods on these wetland systems) means that there is little local and public investment in conservation and management of these ecosystems. Underlying these difficulties is the lack of appropriate and sustainable solutions for effective management of the wetlands and associated basins and their productive resources. Although there has been documentation of experiences from the past, there is also a lack of regular review processes that involve community organizations, non-governmental environmental organizations and research agencies, thus limiting opportunities for replication and scaling up of best practices.

Baseline

In terms of the baseline, the Government of India has already developed a national action plan for the conservation of migratory birds in the CAF. That calls for the integrated management of wetland systems, cross-sectoral institutional systems, integration of CAF species and habitat conservation objectives into PA management, capacity development, strengthen stakeholder capacity and engagement and establish a national CAF office in India, all of which are being supported by the proposed project. In the project areas, a number of national, state and donor activities have been initiated (although not within a integrated wetland scape approach) such as state and national level support to enhance PA management, public participation in joint forest management and ecodevelopment activities, addressing the conflicts between development and conservation through the (i) Integrated management of wildlife and their habitats, (ii) management of aquatic biodiversity integrating sustainability and climate change adaptation, (iii) promotion of ecotourism, nature Education and participatory management, (iv) wildlife research and monitoring and development of human resources in wildlife conservation, and (v) enabling policies and resources for conservation of wildlife in India.

In terms of wetlands, the Government has developed action plan for conservation of aquatic ecosystems (2019) that calls for the (i) development of policy guidelines for conservation and sustainable management of wetlands; (ii) supporting, promoting and strengthening conservation of prioritized wetlands through integrated management; (iii) facilitating the development of a national inventory and setting up an information decision support system for the management of wetlands; (iv) strengthening the capacity of wetlands managers and stakeholders for effective management of wetlands; and (v) strengthening the implementation of international commitments related to wetlands. All of these activities are relevant will be addressed in the proposed GEF 8 project. Complementary to the effort to support migratory bird conservation in the CAF, the Government of India is actively supporting a Project Dolphin Program to conserve both riverine and oceanic dolphin species launched in 2021. The program supports targeted initiatives and multi-stakeholder approaches with various Line Ministries, State Governments, Organizations, and Institutions, taking up and following best practices, identifying and filling gaps in research and supporting conservation initiatives. The project interventions in the project landscapes is directly aligned to and will contribute towards the vision of the project Dolphin to conserve and establish ecologically functional socio-culturally valued populations of the dolphins within their historic range, ensure ecological integrity of their habitat, minimize threats, and promote sustainable livelihood of people.

On the broader global scale, India has been an active supporter of the regional effort to support the Convention on Migratory Species (CMS). Following up on previous COPs, the upcoming COP 14 of CMS (scheduled for February 2024, Uzbekistan) is to discuss proposals (prepared by Government of India) for the adoption of a draft resolution and draft decisions establish the Initiative for Central Asian Flyway under CMS. India has taken a lead in advancing regional efforts in conservation of the CAF. These activities will be supported through regional collaborative efforts, rather than through the proposed GEF 8 project. The targeted set of interventions in India will help to conserve migratory species and the 'bottle neck' and transition sites that are used by the birds within the CAF. This effort is not in insolation, but will contribute to the regional efforts (involving 30 countries and multiple international and national organizations) that calls for a coordinated effort to protect migratory birds and their habitats within the CAF. Lessons from India and other regional countries will be shared along with best practices, sharing of data and information and collective training efforts as part of the regional effort within the CAF. While national plans and programs have suggested integrated landscape approaches to manage wetlands, this approach has been promoted only in a very limited way, and hence the GEF 8 project provides an opportunity to actively support such an approach in a concerted manner. Specific programs at the target way that are recent or on-going are presented in Table 1 of the PIF. However, as the flyway extents way beyond the five project sites, there are a multitude of national programs that offer co-financing for a range of activities that could complement investments from GEF both within the five project sites and other numerous wetlands and their bird (and other species) aggregates throughout the country (refer Annex A Table A.1)

The baseline investments, initiatives, projects and commitments are aligned with the National Biodiversity Strategy and Action Plan that proposes integration of the biodiversity concerns in economic and social development planning. It also aligned with the National Action Plan for Conservation of Aquatic Ecosystems (2019) to maintain a network of healthy wetlands to contribute to human well-being through their diverse ecosystem services, as well as sustain diversity and populations of wetland-dependent species. It is also supportive of the National Action Plan for Conservation of Migratory Birds and their habitats along the CAF (2018-2023) to halt and reverse the decline of migratory birds and reduce pressure on critical habitats by management based on wetland scape approaches. These efforts will be supported through various ongoing government schemes such as: (i) Integrated Development of Wildlife Habitats (IDWH) Scheme that provides financial support to the protection and conservation of wildlife and its habitats within and outside PAs; (ii) National Wetlands Conservation program that provides state governments with financial and technical support for conservation of wetlands; (iii) National River Conservation program to support solutions to reduce effluents in catchment and rivers; (iv) Integrated Watershed Management Program to restore wetland catchments, prevent erosion and soil loss, regeneration of natural vegetation and develop multi-cropping systems; (v) Project Dolphin to conserve both riverine and oceanic dolphins; (vi) National Water Mission to restore water bodies and protect their catchments; (vii) Mangrove Initiative for Shorelines Habitats for restoration, conservation and resource mobilization; and (viii) Mahatma Gandhi National Rural Employment Scheme to support watershed management, rehabilitation of water bodies, coastal belt conservation and community livelihoods. Other important baseline schemes (that also have

potential for co-financing) include the Centrally funded National Afforestation program to restore ecologically damaged forests and develop forest resources with people's participation; Green Mission India to support increasing forest/tree cover; National Coastal Management Program to ensure livelihood security to fishing and other local communities to conserve and protect coastal stretches; Compensatory Afforestation Fund Management and Planning Authority (CAMPA) to promote afforestation and regeneration activities to compensate for forest land diverted to non-forest uses. Refer Table A.1 in Annex A for further details of national and state schemes that can provide co-financing for supporting proposed project activities.

In addition to the baseline activities discussed in the preceding paragraph, the project will build on a number of recent or on-going programs within the target sites in the CAF. These details are provided in Table 1. All of these programs are relevant to all proposed CAF sites that the project will seek to build complementarity that would be further assessed and updated at PPG stage. However, as the flyway extents way beyond the five project sites, there are a multitude of national programs that offer co-financing for a range of activities that could complement investments from GEF both within the five project sites and other numerous wetlands and their bird (and other species) aggregates throughout the country (refer Annex A Table A.1). The baseline scenario, including threats and underlying drivers, will be further explored and consolidated during the PPG phase.

Table 1: Some key current investments in the CAF

Plans/Projects	Objectives	Activities complementary to GEF 8 Project
World Bank: Assam Integrated River Basin Management Project (2022-2026) – USD 100 million	To strengthen institutional capacity for integrated water resources planning and management, in particular in the Brahmaputra and Barak basins	Integrated basin planning that could include the protection and restoration of wetlands, identified via community-based planning and rolling out policies for their use, mangrove planning along certain dike sections, and watershed management, including reforestation and soil-water conservation and other catchment management activities.
ADB Building Capacity for Climate Change Adaptation in Smallholder Fish Farming (2022-2025) – USD 225 million (national)	To build the capacity of 2,700 smallholder fish farmers in India (of which at least 540 are women) for (i) climate resilient farming best practices and (ii) functional financial literacy, including farm budget management, access to credit facilities, and economics of climate-resilient capital investment.	Provide best practices for promoting more sustainable and climate resilient practices in aquaculture for fish farmers including women that could be relevant to the GEF project
ABD Proposed Strengthening institutions for integrated coastal management USD 375 million (Tamil Nadu)	The objective of this component is to strengthen the capacity of state institutions to build coastal resilience, through the development of integrated coastal zone management plans, capacity development and training, establishing a network of knowledge institutions, and project management.	The project will provide experiences in (i) shoreline management, and coastal protection and conservation; (ii) Improving livelihoods for natural resource dependent communities; (iii) improving the management of plastic wastes
World Bank Coastal Management project (Gujarat)- USD 221 million	The project development objective is to assist GoI in building national capacity for implementation of comprehensive coastal management approach and piloting the integrated coastal zone management approach i	Useful to the GEF 8 project are; the following (i) national and State level technical capacity established for ICZM planning; (ii) knowledge and planning base in integrated coastal zone management established according to defined criteria and (iii) mangrove conservation i
Wetlands International: Kanwar Jheel: An integrated management action plan for conservation and wise use of wetlands	Assisting state governments and wetland management authorities in developing and implementing integrated management plans is one of the significant work areas of Wetlands	This project provides integrated management plans for wetland systems, evaluation of economic values of wetlands, etc. that can provide some guidance on diagnostic analysis tools and their application to define appropriate management solutions
Government of Punjab – Beas Initiative	Objective is to re-introduce critical species to the river system (Gharial or *Gavialis gangeticus*)	Provides guidance for future re-introduction of key species
State Planning Commission of Tamil Nadu	Documentation of the wetlands in Tamil Nadu	It prioritized wetlands among which, around 141 were studied that will provide guidance to selection of critical wetlands systems to protect migratory birds and other critical biodiversity and habitats
State Government of Assam – Harike wetland	Facilitated the development of monitoring indicators and activity especially to help analyze the incorporation of ecosystem services and	This work provides a framework for updating and developing management interventions for wetlands

	biodiversity values and mapping the interventions with the threats.	

The proposed project is a national project that is aimed at helping India implement its national action plan (NAP) for the conservation of migratory birds and their habitats in the CAF. The NAP states the national priority and specific actions required to ensure healthy populations of these migratory species in India, within their range across the flyway. The NAP draws from the Regional Central Asian Flyway Action Plan which provides a common strategic framework for regional collaboration and affirmative action for protecting, conserving, restoring, and sustainably managing populations of migratory bird species and their habitats in the Indian subcontinent falling under the Central Asian Flyway region. In keeping with the objectives of the Regional Central Asian Flyway Action Plan, the NAP (as well as the national action plan for the conservation of aquatic habitats) calls for the integrated management of wetland systems, cross-sectoral institutional systems, integration of CAF species and habitat conservation objectives into PA management, capacity development, strengthen stakeholder capacity and engagement. This is a shift from the existing sector-based planning and management approach for large landscapes to one that calls for a transition to an integrated and inclusive planning and management of wetland scapes, that the GEF 8 project will support.

While, the GEF 8 project is focused on activities in India within the CAF, on a broader scale, it is anticipated that the efforts in India, particularly to protect 'bottleneck' and transition sites that are used by the birds within the CAF in India will have a profound and wider regional impact in overall contributing to conservation of migratory birds within the larger CAF region. Lessons from India and other regional countries will be shared along with best practices, sharing of data and information and collective training efforts as part of the regional effort within the CAF.

Specific programs at the target way that are recent or ongoing are presented in Table 1 of the PIF. However, as the flyway extends way beyond the five project sites, there is a multitude of national programs that offer co-financing for a range of activities that could complement investments from GEF both within the five project sites and other numerous wetlands and their bird (and other species) aggregates throughout the country (refer Annex A Table A.1).

Furthermore, on a broader global scale, India has been an active supporter of the regional effort to support the Convention on Migratory Species (CMS). Following up on previous COPs, the upcoming COP 14 of CMS (scheduled for February 2024, Uzbekistan) is to discuss proposals (prepared by the Government of India) for the adoption of a draft resolution and draft decisions to establish the Initiative for Central Asian Flyway under CMS. India has taken the lead in advancing regional efforts in the conservation of the CAF. These activities will be supported through regional collaborative efforts, rather than through the proposed GEF 8 project.

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[8] Seri, N.A. and Rahman, A (2021). Some Abiotic and biotic factors influencing firefly population abundance in Southeast Asia

B. PROJECT DESCRIPTION

Project description

This section asks for a theory of change as part of a joined-up description of the project as a whole. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the PIF guidance document. (Approximately 3-5 pages) see guidance here

The proposed alternative scenario involves a substantively more democratic, inclusive, and participatory approach to landscape-seascape integrated and inclusive planning, which includes all segments of society, under which trust and commitment is built between government and local communities. This inclusive planning extends to the wetlands and associated habitats used by the migratory birds that use the CAF, and inputs to the broader wetland scape management efforts to be developed. The project goal is to promote sustainable and integrated planning and management across wetland scapes to enable the conservation of globally significant biodiversity and ecosystems, and in particular to enable the conservation and sustainable management of wetlands, forests and grasslands to conserve the population of migratory bird species along the Central Asian Flyway in India. This will be achieved through restoration, protection and sustainable management of wetlands and associated habitats within the wetland scape through cooperative consultative community-based integrated and inclusive planning. Under this scenario, local communities and resource uses will assume a greater role in wetland scape management planning in the five target sites, sustainably managing wetlands and their resources, community-based managed areas (and to the extent feasible, proposals for community managed areas would be determined at PPG stage), increased responsibility against illegal activities and self-enforcement, and in diversifying their livelihoods through wetland resources, agriculture, fisheries and forest based livelihood options, and improved monitoring to enable informed and adaptive management of the wetland scape resources. These changes will be achieved through better policy, regulations, improved information, capacity building and participatory governance. Establishing interests among the communities in their resource use areas, with the support of government, will help to ensure long-term sustainability of biodiversity and ecosystem services.

This proposed project is planned as a wetland scape management model for wider implementation across India into the future. The project would be designed to (i) develop policy, practices and capacity to change how wetland scapes are planned and managed, especially by involving communities; (ii) ensure mainstreaming of biodiversity conservation and ecosystem services into all planning processes across key sectors (agriculture, fisheries, water resources, forestry and animal-husbandry) and at different administrative levels; (iii) implementing sustainable, nature-friendly land and water-management and use and wetland plans, including the promotion of community co-management, wetland restoration, and community self-enforcement to arrest illegal harvesting of wetland resources, killing and poisoning of birds and pollution control; and (iv) ensuring that learning and experiences in integrated wetland scape planning and management are applied later on, throughout the country. Over time, the expectation is that there will be improved governance, more conducive policies that support improved wetland scape governance, community ownership and promotion of customary rights, effective institutional coordination and collaborative mechanism, effective negotiatory platforms for resolving conflicts in resource use, better community capacity to manage, substantially reduced illegal losses, and increased biodiversity and supply of ecosystem services at sustainably managed levels, consistent with the GEF priority to improve planning to ensure that land and resource use is appropriately used to maximize production, without undermining or degrading biodiversity, while mainstreaming biodiversity across sectors and within production landscapes.

Under this alternative scenario, the project will have a significant role in the implementation of the National Action Plan (NAP) for Conservation of Migratory Birds in Central Asian Flyway (2018-2023). The project will work with the national and relevant state governments to provide technical support, training and investment support to assist communities to take responsibility and ownership to manage the resources on which their livelihoods depend on and improve the potential benefits from their wetland scapes. To address the imminent threats to the wetland scapes within the flyway, the project intends to bring around 900,000 hectares of terrestrial and wetland habitats and 196,964 hectares of marine areas under some form of integrated planning and management systems that pays attention to the inter-linkages between ecology and economic development. To this end, the proposed initiative would help establish institutional and policy changes, including: guidelines and procedures for integrated and inclusive wetland scape planning, involvement of resource dependent households, formal negotiatory and grievance mechanisms to resolve possible conflicts in resource use; biodiversity considerations mainstreamed into planning; expansion of efforts for restoration of wetland habitats (including associated agricultural, grazing and forest lands) of around 8,000 hectares through active community engagement, improved information for nature-friendly and adaptive management and strategies for replication and scaling up based on project-based successes in integrated wetland scape planning.

An important component of the proposed wetland scape planning and management effort will be planning efforts to reduce unsustainable resource uses, encroachment and application of ill-conceived policies and practices that act against customary, but more sustainable practices of resource harvest and use. In this regard, the project will move forward with a four-pronged approach: policy improvement, improved and integrated planning and biodiversity mainstreaming, training of government staff and communities on the value of biodiversity for ecosystem services, and the development of livelihood options. Another important objective is to raise awareness among local people of the importance of sustaining functioning ecosystems to deliver the ecosystem services that people require to live.

Resilience to future changes in drivers

Given the above discussion of threats, drivers and baseline factors, the probability of further loss and degradation of wetland and coastal biodiversity and their ecological functions forecast across the CAF regions in India will remain **high**. The project team has developed simple narratives that explore potential future changes in key drivers beyond the project's scope. These narratives are not centered on varying degrees of integrated landscape/coastal and wetland management, which the project already addresses, instead, they focus on external factors. Key narratives are outlined below, which are now supporting the proposed project in better assessing its resilience to external factors and uncertainties:

External Driver 1 – Uncertainty of external influences related to land and wetland uses: The potential of worsening financial conditions in key economies, the uncertain post-pandemic path and potential for new pandemics and the challenging global political environment can fundamentally alter India's economic outlook in the future. This can put pressure of critical forest, wetland and coastal areas, in particular those areas that are already in the forefront of the economic progress. The pressure on these ecosystems may escalate, causing higher loss of critical corridors and existing bottleneck locations for migratory birds. Better integration of ecosystem service valuation and cost benefit analysis as well as integrated spatial planning will/could reduce the threat level of this driver and the materialization of the risk it poses. The project through the work done by Component 1 (enabling framework that supports the establishment of ecologically representative, well-connected and governed wetlands and associated habitats in the Central Asia Flyway); Component 2 (testing of financial solutions and mobilizing finance for promotion of integrated and inclusive conservation actions) and Component 3 (testing and demonstrating solutions to enhance ecologically representativeness, connectivity and ecological integrity of landscapes and seascapes) will add value to planning and management of multiple-use landscapes and seascapes for ecological and socio-economic benefit.

External Driver 2 – Inability to accurately predict the future climate situation: This scenario envisions a future where climate change effects intensify beyond current projections. Unprecedented climate variations can also increase droughts, flooding, erosion and landslides that reducing the productive potential of the land, thereby potentially re-directing government investments and priorities away from conservation action. However, the project due to its nature of interventions in the areas of biodiversity, sustainable resource use and governance can produce results that enhance the resilience of wetland and coastal ecosystems to climate change but also provide India with mechanisms that can be utilized even within the context of severe climate impacts. In this regard, Component 3 is aimed at identification of specific management measures to ensure that activities are environmentally sustainable and supporting best practices managed for their climate risks, including protection and management of critical wetland habitats and coastal ecosystems to help increase the overall resistance of the natural systems to climate risks compared to business as usual. At PPG stage, further assessment will be undertaken of potential future climate projections and risks to help design management intervention to manage and mitigate these risks.

External Driver 3 – Ineffective International Collaborations along the entire Flyway: International cooperation for the conservation of migratory birds along the CAF takes many forms. This includes formal government-level participation in international MEAs, such as CBD, Ramsar, UNCCD and, particularly relevant, CMS. It also includes cooperation among NGOs, both national and international, along the flyway, as well as multiple partnership among scientists, researchers, universities and independent experts, often focused around specific species or groups of species or tracking species flyways. Given so, the challenge beyond India, is the need to ensure effective international cooperation across all of the range countries and in particular to agree on a framework and process for bringing together these different groups and the structures and mechanisms involved to protect and preserve the migratory birds and their habitats along the entire flyway. In this scenario, international policies and collaborations must collectively prioritize conservation outcomes for ensure the maintenance of the viability of the

entire flyway. The project's alignment with such initiatives enhances its impact, but also necessitates careful coordination of actions across the entire range and also to effectively leverage external resources effectively. The project is already aligned with the current international and national frameworks (please see respective section on the PIF – Table 6) and more work will be done during the PPG stage to catch up on the developments in particular in relation to decisions regarding the CAF and generate and maintain specific links across the countries along the CAF.

Based on the above-referenced plausible changes in key drivers, which are outside the scope/control of the project, we suggest beyond the 'Business-as-Usual' (without the project intervention) that focuses on a scenario that is based on 'Project-Based reality' (with project intervention) that supports transformative changes brought by interventions that focus on a broader inter-sectoral and integrated planning approach across the wetland scapes of migratory birds that would likely lead to a measured, but tangible outcome. This approach will likely promote a gradual shift to innovative approaches to integrated wetland scape management, that collectively include protected areas, wetland systems, riparian and floodplains and intervening production areas that are commensurate with sound ecological principles In this situation, key aquatic wetlands and coastal habitats that are critical to migratory birds may likely be conserved, not only within protected areas, but in intervening aquatic and agricultural, forest and grassland habitats that are used by migratory birds. During the PPG stage the project will work to incorporate robustly in its design exactly the augmentation of these above-mentioned dimensions.

Theory of change considerations:

- If community members are more involved in planning processes that concern them, then there will be increased trust in government and subsequent buy-in to the implementation of sustainable resource use practices and to wetland scape planning overall.
- if participatory approaches are used for planning, local knowledge, data and best practices are incorporated it would lead to improved wetland scape planning.
- If land use and development plans are improved in this regard, then broader wetland scape (or landscape/seascape) planning will lead to integration with other sectoral fisheries, agriculture, forest and community livelihood development plans.
- if communities begin to understand the important role that ecosystem services can play in their lives, they will likely see the benefits of improving their capacity and having tools and technologies to better conserve globally significant biodiversity across the wetland scapes
- if community members have increased capacity and awareness to pursue monitoring and enforcement activities including livelihood options that are conservation-friendly, this will lead to better management of resources and increase in income.
- Overall, if there is improved wetland scape and district/local level planning; improved management of community wetlands and their resources; increased capacity among communities; and operationalization of the integrated plans and other sectoral management plans; then this will lead to less degraded landscapes.
- These results will also lead to improved self-enforcement, which together with conservation-friendly livelihood options, will help alleviate the need to exploit natural resources, reducing behaviors such as illegal killing, over-harvest, poor agricultural and fisheries practices, and conversion of wetlands to other use.
- If these threat are reduced, then the wetland quality, integrity and biodiversity of these important wetland scapes will be conserved, allowing the continued use of these areas for migratory birds that use the CAF and conservation of globally important biodiversity.
- If the wetland scapes and biodiversity are conserved, the ecosystem services will be maintained leading to improved security, wellbeing and livelihoods for surrounding communities.
- Within India, if the project is implemented as planned it will become a model for wetland scape management that will be successfully scaled-up to other parts of the country as well as regionally with the CAF countries.

The Project's Theory of Change (as presented in Figure 1) makes the assumption that underlying the project's feasibility is the potential to reverse, or at least, not accelerate the ongoing process of environmental degradation of key freshwater and coastal wetlands within the proposed wetland scapes that are important for the CAF. It is also premised on the commitment of the key stakeholders to actions in achieving this overall objective through the potential and sustainable uses of available terrestrial, coastal and marine resources. Most importantly, it is also dependent on the commitment of institutions (public and private) collective agreement to an integrated and inclusive approach to planning and management of wetland scape within existing democratic governance structures (e.g., at local government level), with the participation of community organizations (farmer, fisheries, tourism and other local organizations) that take into active consideration the role of women, youth and local people. Best management practices, new and innovative technologies, improved and sustainable production systems, and financial solutions are factors that will help catalyze change and bring about a more nature-positive development scenario. To achieve this transformational change, the project's logical pathways are discussed below:

The project's logical pathways are discussed below:

In response to these barriers, key outputs were identified consistently applying six system transformation levers of the GEF-8: policy and capacity, coordination with parallel initiatives[1][12], multi-sectoral governance, financial leverage, innovation and learning. The transformation levers also helped to thematically cluster program outputs into **five** inter-linked and inter-dependent components. In particular, the outputs and outcome of **Component 1** apply the levers of policy, capacity and multi-stakeholder dialogues and are thus important in setting the enabling conditions to improve the likelihood of success of components 2, 3 and 4. This logical pathway sets a route to arrive at an agreed 'enabling framework for action' under which functional governance, policies, institutions and regulations can purposefully and strategically be managed to promote an integrated and inclusive approach to planning and management of wetland-scapes within CAF. It proposes that if strategies for inter-sectoral collaboration are established in target wetland scapes through collective decision-making processes, then effective bridges between sector-specific approaches can lead to collective actions. This would lead to innovations and new approaches that recognize the linkages between ecological, social and economic dimensions that operate in these critical wetland scapes. It will support a strengthened monitoring and reporting system that tracks the conditions of these ecosystems and more importantly ensure that this information is effectively used for improved management of wetlands and associated habitats. This entire effort will be backed-up by a comprehensive program to enhance institutional and stakeholder capacities on the use of integrated spatial planning tools to support and promote connectivity in the multi-use wetland scapes, combining conservation, sustainable resource use, restoration of ecosystem services, climate-resilience and sustainable economic investments that will then be institutionalized. The outputs and outcomes of **Components 2 and 3** will operate in an integrated manner at the level of the same target wetland scapes, delivering together the innovative and transformation change on the ground. In this respect, **Component 2** primarily hinges on the transformation levers of financial leverage that is critical to provide the financing to ensure the sustainability of the outcomes of component 3. This is set on a pathway that is premised on the assessment of financing needs and development of appropriate financial solutions to sustain investments in terrestrial, coastal and marine environments that would require the active participation of the private sector, as a means to supplement the limited financing available through the public sector. It is also premised on working with local government entities to promote new models of private and public investments at the local level. **Component 3** is ensuring that there is non-duplication, but rather complementarity with parallel/ongoing initiatives. This features a pathway that is dependent on the demonstration of appropriate and validated nature-based solutions to aquatic resource use that will be based on the premise that if local communities receive adequate benefits from environmentally positive practices, it will result in behavioral changes that encourage sustainable resource use. The pathway of **component 4** proposes that if the knowledge, data and information from previous initiatives from GEF and other development partners are synthesized and shared together with good practices resulting from the implementation of this project with other wetland scapes in the country, it will catalyze its widespread adoption, scaling up and replication for greater impact and long-term sustainability, while also raising the profile of the marine and coastal ecosystems amongst sector entities, private sector partners and the public nationally, regionally and globally. **Component 5** supports monitoring protocols to track progress towards meeting planned environmental and socio-economic benefits from the project and to provide for adaptive management for any adjustments to changing needs.

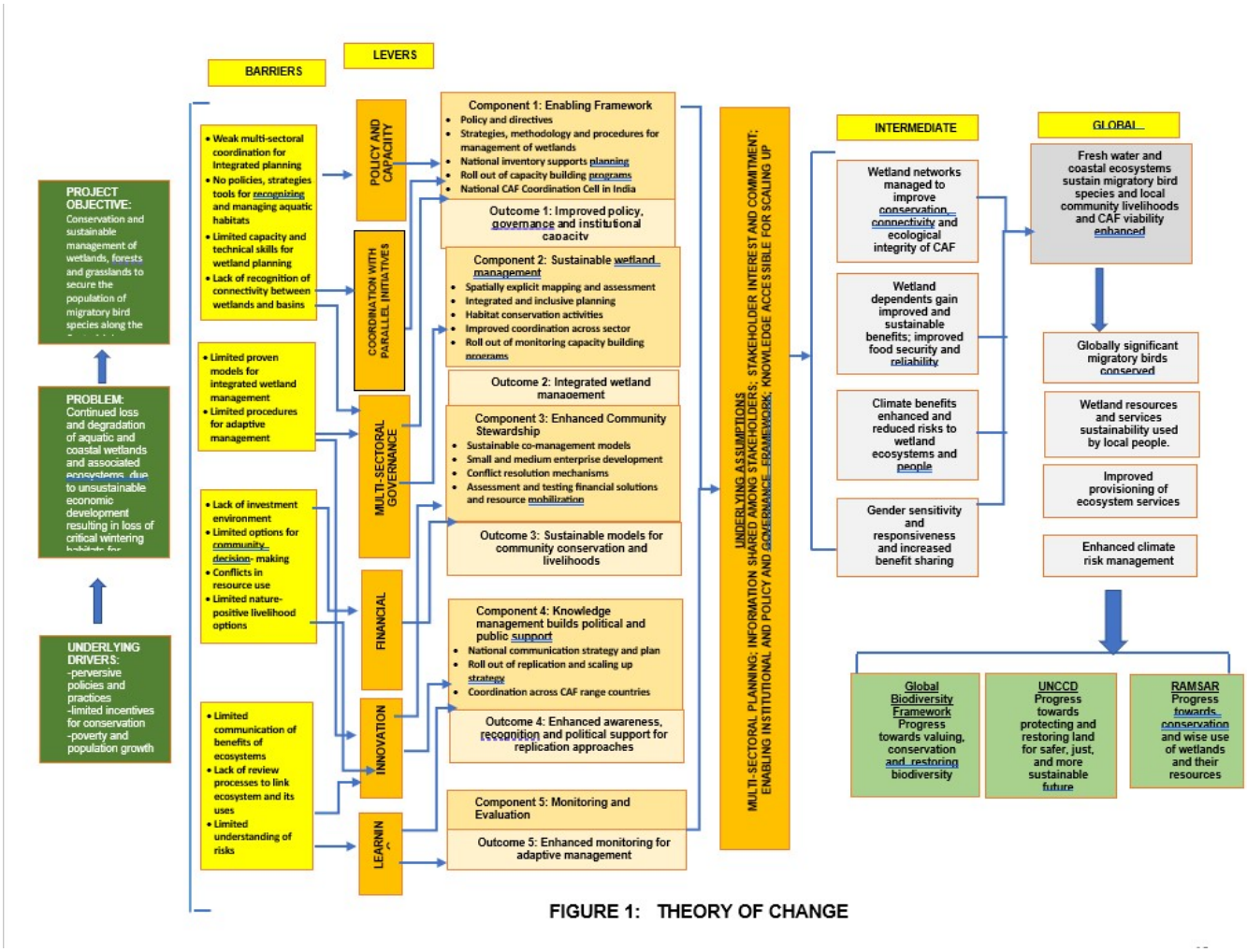


FIGURE 1: THEORY OF CHANGE

Project Components

Based on the Theory of Change (Figure 1), the proposed alternative scenario involves the following Components, Outcomes and Outputs:

Component 1: Enabling framework for establishment of ecologically representative, well-connected and governed wetlands and associated habitats in the Central Asia Flyway

(Total Cost: USD 8,423,906; GEF project grant requested: USD 1,223,906; Co-financing: USD 7,200,000)

The promotion of an inclusive and integrated approach to wetlands (fresh water and coastal and surrounding productive use areas) requires the strengthening of institutional frameworks to enable the participation of all relevant public, NGOs, communities (including men, women, vulnerable people and local groups) and private stakeholders in order to ensure that strategies for conservation of migratory birds and their habitats are developed in consonance with sustainable and environmentally friendly economic development to benefit wetland resource dependents. A common framework will help integrate protected areas, biodiversity rich wetland habitats and ecosystems and the intervening productive spaces (occupied by agriculture, grasslands and other economic activities). The strengthening of existing multi-level governance frameworks and capacities for management of the wetland spaces will enable the convergence of planning and human and financial resources among the different development sectors. This Component has five Outputs:

Outcome 1: Improved policy, governance and institutional capacities for integrated planning, management and maintenance of a network of healthy wetland systems to sustain diversity and population of wetland-dependent species. This Outcome has five Outputs:

Output 1.1: National policy, directives, and guidelines for conservation and sustainable management of network of wetland systems for conservation of biodiversity and migratory birds developed

While, India has adopted several effective policies, laws and strategic plans, such as the National Action Plan for Conservation of Aquatic Ecosystems (2019) and National Action Plan for conservation of migratory birds and their habitats along the Central Asian Flyway (2018-2023) to support sustainable wetland management, there is no single policy or legislative mechanism to support the planning and implementation of an integrated plan for wetlands. Existing policy, legislation and sector mandates have overlaps and gaps that impede the integrated planning at wetland scapes (covering broader landscapes within which several designated and non-designated wetlands exist and their immediate watersheds). A policy and legislative review will assess options for implementing the integrated plans for wetland scapes (including wetlands and their watershed given the profound need to coordinate across many sectors and stakeholder and legislative and policy tools. The analysis will help Identify, the best option(s) for implementation of the integrated wetland plans, either through tweeting one or more of the existing sector legislation and policy that is best suited for the purpose of making recommendations for creating new ones. Policy recommendation will be aligned to ensure that it supports an integrated and inclusive landscape/seascape approach to resource governance as well as being aligned to targets of the CBD Kunming-Montreal Global Biodiversity Framework in ensuring the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes. The enhancement of policy coherence and alignment of policy and legal incentives which will be a central part of component 1 will be further explored and detailed during PPG phase.

Output 1.2: Guidelines for cross-sectoral planning and budgeting for integrated management of wetland systems to support conservation outcomes

This Output will facilitate the development of guidelines and procedures for ensuring that management of wetlands systems are based on a diagnostic evaluation of their ecological, hydrological, socioeconomic and institutional features, and factors governing these features so as to arrive at an action plan suited to specific context. Multi-stakeholder and multi-sector coordination is needed to enable such a process. Such guidelines and procedures will also ensure that wetlands are integrated with water resources management to ensure that land and water use decisions within catchments and coastal zones apply wetland ecosystem services values synergistically to achieve water, food and climate security solutions. Institutional arrangements for managing aquatic ecosystems will also need to integrate across multiple sectors (such as agriculture, water resources, rural development, forests and others) to balance the needs of a group of diverse stakeholders while ensuring that ecological integrity of these fragile ecosystems is not adversely affected. This need can be best served by designating agencies with responsibilities for wetland management within State to serve as a distinct regulatory, planning and policy making body for conservation, restoration and sustainable management of its wetlands as mandated by the Wetlands (Conservation and Management) Rules, 2017. Under this output technical support, consultations and training will be supported for the development of such guidelines, support coordination efforts in planning and convergence of funds.

Output 1.3: Strengthened national inventory contributing in planning, decision-making, management and reporting for effective management of wetland systems in the CAF in India

While data collection of migratory birds is being undertaken in India, there is limited information and monitoring of drivers and pressures that act at multiple spatial, temporal and political scales. Wetland management plans, therefore, need to accommodate uncertainties and challenges. This can be overcome through adaptable management approaches, that ensure that information collected on migratory birds and the conditions of the wetlands are constantly monitored and more importantly this information is used for planning and adaptive management. This will allow for suitable modification of management based on continuous site monitoring and assessment of new information. This output will support an assessment of current monitoring systems to strengthen and update monitoring methodologies and practices, standardization of information and development of appropriate methodology and practices for application of data for adaptive management, establish a decision support system for planning and management of wetland systems as well as capacity development within key institutions for ensuring functionality of the decision support system.

Output 1.4: Development and roll out of a comprehensive capacity building program at national, state and sub-state levels to improve management effectiveness of wetlands

Informed by Outputs 1.1 through 1.3, a capacity needs assessment would be undertaken to define existing institutional constraints for planning and implementation of integrated and inclusive approaches to wetland systems. Tasks will likely involve capacity building in areas such as diagnostic evaluation of their ecological, hydrological, socioeconomic and institutional features of wetland systems, wetland spatial planning, water resource planning, integrated wetland planning etc. Moreover, an important task will be to develop a cadre of trainers through a Training-of-Trainer program. The successful elements of the approach and upscaling methodologies will be

disseminated, with targeted capacity building in challenged areas, as well as across-government in relevant agencies at national and state levels. Participation of women and private sector representatives will be strongly encouraged for both national and state level groups. This output will result in: (i) development and undertaking of a comprehensive capacity building partnerships in identified scientific approaches, innovation, technology transfer, sustainable practices and spatial planning and climate risk management processes, including in particular targeted training to build capacity of communities, government and land users; (ii) institutionalization of the training within an appropriate institution (to be identified at PPG stage) to develop and sustain institutional human capital on wetland spatial planning, as well as to support higher-level education programs and continuous professional development, among others that will be initiated by the project; and (iii) support on-the-job training to update and improve technical knowledge and professional qualifications of staff in key sectors

Output 1.5. Establishment of a Central Asian Flyway Coordination Cell in India

Given India's strategic location in the CAF, the establishment of a flyway coordination cell at MOEFCC is considered important with a view to increasing interaction and cooperation between national and state governments and other key sector entities. It will also ensure that India's obligations to international treaties and conventions are met, along with the coordination and support for promoting concrete actions to CAF National Action Plan 2018 to ensure the conservation of migratory birds and their habitats. This Coordination Cell will be responsible for ensuring that actions listed in the CAF NAP are linked with a principal body/organization responsible for leading implementation. Similarly, the Coordination Cell will take responsibility for facilitating the organization and management of some proposed actions, such as workshops and training courses, as well as monitoring the implementation of the CAF NAP in collaboration with concerned divisions of the Ministry, State Forest Departments, Wetlands Authorities, and expert organizations. Every two years, a status report on implementation of the NAP will be compiled and published for information of all concerned. While, the GEF project will support the establishment of the CAF national coordination cell. Activities outside of India, including the establishment of a CAF Secretariat within the region with a view of increasing interaction and cooperation between governments, conventions, technical experts and conservationists from countries in the flyway as a basis for promoting concrete actions to ensure the conservation of migratory birds and their habitats throughout the flyway with not be supported by the GEF project, but in cooperation with regional countries and support from regional conservation programs.

Component 2: Conservation and sustainable management of wetland systems to conserve the habitats of migratory birds and attendant species through an integrated wetland scape approach

(Total Cost: USD 36,789,646; GEF project grant requested: USD 4,589,646; Co-financing: USD 32,200,000)

The intent is to ensure that the assessments, tools and solutions developed under Component 1 get integrated into the planning, decision-making and implementation process at the wetland scapes. The overall expectation is that through this process, conservation and ecological, hydrological, socioeconomic and institutional features assessed are applied in decision-making for integrated management of wetland scapes to help identify, test and later populate a range of such practices in other freshwater and coastal wetland systems. Through this effort, it is expected that around 900,000 hectares of the area of the priority wetland scapes (within the selected five sites) would directly or indirectly benefit from improved ecosystem services that benefit migratory bird species within the flyway. Refer Annex C for rationale in selecting the wetland scapes. Overall the intent of this Component is to improve the management effectiveness of 43,522 hectares of terrestrial and coastal PAs; (ii) improve the management effectiveness of around 136,964 hectares of marine PAs; (iii) the restoration of around 8,000 hectares of degraded wetland habitats; and (iv) area of wetland scapes under improved management covering around 900,000 hectares of terrestrial and coastal areas (coastal wetlands, agricultural lands, forest lands, etc.) located outside PAs to benefit biodiversity and migratory birds (this figure will be further confirmed at PPG stage) This effort will be supported through financing from the GEF 8 project, existing budgetary allocations of national development schemes as well as additional financial resources that might be envisaged under Outputs 3.4.

Outcome 2: Integrated ecosystem-based wetland management approaches demonstrated and up-scaled in five wetland scapes to support the conservation of migratory birds and associated wetland species. This outcome will have four outputs.

Output 2.1: Prioritization and spatial mapping of selected wetland systems for assessing threats and opportunities for securing biodiversity and habitats for migratory birds

The prioritization of aquatic systems for project interventions that was done at PIF stage will be further assessed and refined at PPG stage based on the following values: (i) biological and ecological values, in particular their values and critical corridors for maintenance of migratory bird species and their habitat requirements; (ii) opportunities for establishing connectivity between the individual wetlands, feeding sites (including within agricultural and other productivity lands), protected areas and floodplain areas; (iii) intricate relationships between different habitat types/ecosystems that are critical for the maintenance of water balances for rejuvenizing the wetland systems (including its catchments); (iv) the economic potential in terms of building supplementary incomes for local communities in the form of tourism, fisheries, grazing and agriculture; and (iv) existence of effective institutional structures (or interest in forming such structures) that can serve as a vehicle for the planning and management of wetland scapes, etc. Participatory mapping will entail overlay of natural wetland habitats, existing protected areas, and watershed areas to ensure fuller inter-ecological and hydrological linkages and maintenance of wetland ecosystem integrity. Gender equality considerations will be taken into consideration in the mapping and identification of conservation activities so these exercises do not marginalize women and their land rights and resource needs. The global significance of these priority wetland scapes are provided in Annex C.

Output 2.2 Multi-sectoral and multi-stakeholder engagement for integrated and inclusive planning of selected wetland systems to promote wetland conservation and associated aquatic species to maintain favorable ecological conditions for migratory bird species

In consonance with other outputs in Component 2, this output will help strengthen the management of target wetland scapes that are identified and mapped under Output 2.1. GEF funds will provide training and operational and technical guidelines and support to local communities groups (including women, youth and IPs), private sector institutions and sector entities to (i) facilitate inventory of wetland resources, assessment of sustainable wetland use parameters, conservation needs for migratory birds for the planning and management of their individual areas; (ii) identify or zone areas for conservation, sustainable use and ecological restoration (to enhance conservation outcomes and promote their resilience to climate risks); (iii) support consultation and dialogue with neighboring PA managers (national parks, sanctuaries, RAMSAR sites, etc.) to promote environmentally-friendly practices to enhance the viability and conservation of key migratory and keystone species that occupy these systems (e.g. dolphin, turtles, amphibian and fish species), the latter groups serving as indicators of the health of these aquatic systems; and (iv) and enhance community and stakeholder engagement and co-management. Decisions regarding management interventions would be agreed amongst land owners and land users and based on Free Prior Informed Consent and their collective agreement rather than be imposed by government directives. The planning would be done at a wetland scape level that would capture key water resources connectivity and habitat restoration issues at a sub-wetland scape/individual wetland level (or other appropriate conservation levels as determined later) tied to primary objectives (e.g., increasing biodiversity and key migratory bird populations, minimizing habitat loss, improving ecosystem services, etc.). It would identify indicators for inputs (investment of resources to conserve or restore habitat integrity and connectivity), outputs (implementation of CAF related policies and practices), intermediate outcomes (changes in structural connectivity, e.g., mean habitat patch size or migratory bird corridors), and ultimate outcomes (changes in functional value and hydrological and ecological connectivity within wetland systems). A wide range of stakeholders would be involved in identification of indicators and to develop a formal process for evaluation of the performance and subsequent updating of the management interventions plan based on results of monitoring and evaluation. Based on the management prescriptions, sector agencies, communities and other relevant stakeholders will be responsible for undertaking management actions (in would be agreed and supported by water authorities within the States) so as to contribute to the overall objectives of wetland management.

Output 2.3. Site-specific Implementation of adaptive habitat conservation, management and rewilding within the selected priority/target wetland systems for migratory birds and other key species

Building on the outcomes of Outputs 2.1 and 2,2, this output will seek ways of protecting, restoring and improving the health of the wetland complexes to conserve and thereby overcome the current degradation of these ecosystems and ecosystem services that they provide. Key activities will be prioritized and undertaken (either collectively between by sector entities (as appropriate) or collectively in cooperation with local communities and wetland resource users. While, the specific activities will vary from one area to another, broadly these might fall in these range of activities, namely: (a) recovery/restoration of species and habitats; (b) improving protection and conservation actions; (c) establishing and implementing sustainable harvest protocols for wetland resources; (d) developing and implementing community-based survey and monitoring protocols; (e) improving livelihoods of local communities; etc. The project will provide limited GEF financing, in particular for activities that require a collective response, with additional funding to be solicited from ongoing national and state funded schemes (as discussed in the baseline section of the PIF) and funds that are generated through the outcomes achieved through Output 3.4. During PPG stage, specific activities to enhance conservation of river dolphins (which is also of transboundary interest) and fish species will be determined, but could likely include: (i) evaluation of population numbers; (ii) assessment of status and condition of habitats; (iii) assessing the health of populations; (iv) assessing home ranges and habitats needs; (v) creating small sanctuaries to protect critical dolphin populations; (vi) community engagement in conservation efforts and management of conflict between fishing and dolphin conservation; (vii) developing co-management plans for critical parts of aquatic systems, etc. The project will also provide training, technical support and restoration guidelines to wetland and other productive users (e.g. agriculture, fisheries, pastoral, etc.), including women, youth and local groups to implement these actions. The project will also provide training to land owners, including women, youth and local groups to implement these actions.

Output 2.4: Monitoring of biodiversity (such as for dolphins, turtles, amphibians and fish) and migratory birds, to assess the ecological conditions and environmental flows in the target wetlands and its adaptive management

In consonance with Output 1.3, the intent of this Output is to apply (and if necessary develop) standards, protocols and procedures for monitoring the status of the wetland ecosystems (initially in the project target wetland scapes) to assess the health and status of these wetlands (and trends) that are being used by migratory birds. The intent is through the monitoring system to track the health of the wetlands and support actions to maintain favorable conditions in these wetlands, not only for the migratory birds, but for other key species that occupy these wetlands. The indicators that can be used to track wetland health (to be further assessed at PPG stage) and decide on the need to upgrade implementation procedures and capacity and improve enforcement. The opportunity will also be used to monitor water quality, habitat conditions etc. This would also provide an opportunity to focus on key endangered species in these wetland systems that are of national interest and under threat, such as the river dolphins and some key aquatic fish species, the conservation of which will enhance and complement the measures to protect these wetland habitats for the migratory birds. Based on this monitoring develop measures to restore/maintain favorable conditions in the wetlands; monitor the effectiveness of mitigation/management, etc.

Component 3: Enhanced Community stewardship of aquatic habitats incentivized by sustainable resource use

(Total Cost: USD 25,461,756; GEF project grant requested: USD 3,161,756; Co-financing: USD 22,300,000)

This Component will help identify appropriate private and public sector financing to support communities and local stakeholder-based sustainable natural resources use, nature-positive small enterprise and livelihood development activities and mechanisms for reducing resource use conflicts. Capacity building and skills development for a selected number of small-scale community enterprises will support this effort, the type and nature of the enterprises will be assessed during the PPG stage.

Outcome 3: Sustainable models for community conservation and economic improvement demonstrated. This outcome has four outputs:

Output 3.1. Sustainable fisheries, grazing, agriculture and resource use co-management models promoted to reduce threats from poaching and unsustainable use of wetland resources

Under Output 3.1 the project will work with state and local governments as well as engaging communities and users of wetland resources to pilot technical
guidelines developed in Output 1.2 over significant areas to promote the adoption of sustainable practices that support local livelihoods while reducing threats
to flyway wetlands and waterbirds across the CAF. Project support will include technical assistance and incentives to encourage the adoption of wise use
practices. It will also support the demonstration of wetland-compatible practices for agriculture, aquaculture, capture fisheries, grazing, and other users.
Special efforts will be focused on women, vulnerable people and IPs to ensure that they actively participate and are engaged in these co-management exercises.
The project will focus on piloting best practices in line with project-supported national guidelines.

Output 3.2. Small and medium biodiversity-friendly business and value-chain ventures and livelihood activities promoted for local community income improvement to reduce resource use conflicts

This output will support the diversification of livelihoods at community level in order to reduce exploitation pressures on wetlands that can no longer be sustained. Community engagement in project approaches will be facilitated through technical assistance, co-management agreements for sustainable resource use, micro-credit opportunities linked to eco-compensation mechanisms, and outreach and awareness-raising activities, including partnerships on nature-based education with local schools at each demonstration site (see Component 4). Low value grants to support community engagement will be evaluated at PPG stage through co-financing (see Output 3.4), with proactive encouragement of gender mainstreaming and women's empowerment in grant selection, orientation and training provided to grant recipients, and knowledge management requirements included in grant procedures (e.g. reporting on success stories, photographs, videos, etc.).

Output 3.3: Development and implementation of conflict resolution mechanisms for conservation of species (Gangetic dolphins, migratory waterbirds and other species) with resource users (fisher-folk, farmers and other aquatic biodiversity resource use at wetland levels).

As human and birds use the same resources, the possibility of conflicts with human interests (e.g., agriculture, fisheries, development, water use, etc.) can increase. The conflicts can occur across social, economic, environmental, and regulatory contexts, with each conflict being somewhat unique in terms of species biology, stakeholders involved, extent of damage, and additional factors. Species that depredate crops or capture fisheries for human consumption may cause a significant, negative economic impact. Conflicts can also arise

where other natural resources are being adversely affected resulting from locally very abundant bird populations. To better address these conflicts in a systematic and comprehensive manner, this outcome will help to draft a systematic step-wise framework/approach to promote consistency and coordination with stakeholders in identifying and implementing management solutions to reduce conflict. The framework will consist of a series of steps that incorporate decision analysis methods: (i) identify the issue as a conflict appropriate for the framework, (ii) through stakeholder engagement describe and quantify the issue and solicit input for the development of management options, (iii) develop viable management options to consider and make a selection; (iv) implement selected option(s), and (v) evaluate the outcome(s). A feedback mechanism will be incorporated to allow for assessment of the implemented action and, if not fully successful, to consider other management options or re-engage stakeholders.

Output 3.4. Assessment and testing of appropriate financial solutions and resource mobilisation strategies (based on BIOFIN) to support community business and livelihood activities with Involvement of local private Industry and businesses

Building on the findings of BIOFIN work in India, this output will undertake a limited assessment to identify innovative financial instruments and their implementation mechanisms for promotion of community business and livelihood activities within the CAF to reduce impacts on wetlands and migratory birds. The Biodiversity Finance Plan for India identifies a mix of potential replicable and scalable financial solutions (e.g. corporate social responsibility, ecological fiscal transfers, sustainable standards and labeling, ecolabels, ecotourism, augmentation of public budgetary support, diaspora savings and investment, revenue from environmental penalties and PES based on tourism) for filling the funding gap, recognizing that public financing which has been the mainstay of biodiversity finance in the past, will need to be supplemented by other sources of funding. This means that other sources of funding, including public-private partnerships will likely have to contribute significantly towards community business, livelihood and conservation options. This Output will help identify appropriate public and private sector financing to support communities and local stakeholder-based nature-positive small enterprise and livelihood improvements (including specific investment opportunities for women, youth and vulnerable groups) using financial instruments (particularly those developed under the BIOFIN India program). Several options will be evaluated, including innovation in new and sustainable agricultural and resource use techniques and products, organic farming, NTFP and wetland natural resource-based enterprises, community-based ecotourism, forest and wetland-based livelihoods and sustainable fisheries-related activities, etc. The possibility of support for micro-grants and microcredit through co-financing (as India already has a small grants program) will be assessed and supported.

It will also support the preparation of a database of nature-friendly enterprises that are promising for the key wetland scapes that will be regularly updated as new and innovative value chain opportunities become available.

Component 4: Awareness raising, knowledge , communication, management and gender mainstreaming to promote replication and scale-up of integrated wetland conservation approach for Central Asian Flyway

(Total Cost: USD 6,219,921; GEF project grant requested: USD 1,019,921; Co-financing: USD 5,200,000)

This Component will apply learning as levers to ensure the required knowledge and capacity are available not only to achieve outcomes of components 2 and 3, but also to sustain them over the longer term and to achieve programmatic outcomes by effectively linking and upscaling project level investments. It will ensure that lessons learned from previous initiatives of GEF and other development partners are synthesized together with good practices resulting from the implementation of this project are shared between different wetland scapes to support their widespread adoption for greater impact and long-term sustainability, while also raising the profile of the terrestrial, marine and coastal ecosystems for conservation of migratory birds amongst sector entities, private sector partners and the public nationally, regionally and globally. More specifically, this component will support: (i) promotion of gender sensitive awareness and communication of CAF and associated migratory birds and their habitats; (ii) use of social media and internet based platforms and forums; (iii) documentation and dissemination of best practices and enhanced communication; (iv) preparation of guidance notes to address current gaps in policy, knowledge and institutional capacities; (v) technical reports, publications and other knowledge management products; (vi) national and sub-national workshops to facilitate dissemination and promote replication of project successes; and (vii) preparation of replication and scaling up strategy.

Outcome 4: Enhanced awareness, recognition, political support and capacity of stakeholders promote replication and scale-up integrated wetland approaches. This outcome will have three outputs:

Output 4.1: National communication strategy and plan developed and implement to create increased awareness, enhanced public support and active engagement of stakeholders to protect and maintain wetlands in the CAF

To move away from business-as-usual, it is necessary to ensure that across all stakeholder groups, including the wider society, women, youth and vulnerable communities that wetlands and their associated habitats are valued and appreciated for their functional and supportive role in supporting migratory birds that use the CAF. Enhancing political support is particularly crucial as without political will, the country cannot meet its international obligations to conserve migratory birds. Key to increasing political support will be advancing their recognition of the value and importance of wetlands in achieving national and international commitments, particularly as they relate to CAF, RAMSAR and migratory bird populations. The development and implementation of effective and targeted communication and awareness strategies will be essential for mobilizing action in government and non-government stakeholders. This will entail preparation and implementation of a gender-sensitive communication strategy and plan that would focus on sharing knowledge. The implementation of this strategy should be a cooperative process and as such places the effective participation and collaboration of local, national, state and sub-state stakeholders, encompassing inter- governmental agencies, local communities, civil society, private sector, research/academic community, and relevant Regional and International Organizations at its core for successful implementation. This Output will be conducted in coordination with Output 4.2 in delivering the outcomes of this strategy through sharing best practices, building capacity, co-financing activities and advising on new tools and approaches.

Output 4.2: Replication, scaling up, and long-term sustainability strategy/plan; communication and knowledge shared and exchanged on approaches for integrated wetland conservation

This Output will ensure that successes (and failures) of the project are documented and disseminated, determine where knowledge is stored, managed and accessed, that learning and experiences are shared in regional, national and international fora. As part of an effort to promote scaling up, this output will support the following activities: (i) documentation and dissemination of case studies, best practices and experiences; (ii) development of policy guidance notes to address gaps and constraints of existing planning and policies that favor wetlands; (iii) technical reports, publications and other knowledge management products in English and local languages; (iv) use of social media and other internet-based solutions for knowledge dissemination and stakeholder engagement (v) conduct of state level workshops to facilitate dissemination of field lessons; and (vi) inter-state site visits to share lessons. As a means of replication regionally and nationally, the project will support the following actions: (a) institutionalization of best practices through promotion of planning instruments in order to secure replication; and (b) replication/up-scaling strategy based on lessons and experiences from the project. In particular, efforts will be made to identify best practices (that promote gender equality so as to provide specific guidance and examples for mainstreaming gender perspectives across the lifecycle of the project) – to achieve greater effectiveness, better outcomes and stronger co-benefits. The replication strategy will provide guidance on key factors that define the successes (institutional, planning, financial solutions and decision-making), participatory planning and consultative practices, capacity assessment and skills development, tools for adaptive management, monitoring, reporting and auditing, etc. This will be further defined at PPG stage.

Output 4.3. Coordination and knowledge sharing among CAF countries for conservation and management of migratory waterbirds and disease surveillance

To bring the lessons learned from the project and to share best practices, this Output will explore opportunities for meaningful participation in specific events to promote opportunities for regional cooperation among CAF countries. This would include close collaboration, knowledge sharing and exchange visits with other regional CAF countries through the following indicative activities: (i) host CAF cooperation and exchanges in the area of wetland conservation and disease surveillance; (ii) participate in relevant regional and global events for information and lessons sharing and learning; (iii) promote knowledge sharing and best practices through formal and informal networks, study visits and improved communication channels, and (iv) promote exchange of experiences in inclusive gender mainstreaming approaches that engage women, youth and minority groups in conservation and sustainable use of wetland resources and in active engagement in decision making regarding management of habitats and ecosystems. In addition to (iv) which has a strong focus on gender mainstreaming etc. the indicative activities (i-iii) will also have a gender equality orientation which will seek an optimal engagement of women to promote empowerment and women's advancement. The GEF financing will only support activities related to activities in the country, while activities of regional scope will be financed either via co-financing or other local or international donor-financed activities. These opportunities will be explored during the PPG stage.

Component 5: Effective project monitoring and evaluation ensured and support adaptive management

(Total Cost: USD 2,903,984; GEF project grant requested: USD 203,984; Co-financing: USD 2,700,000)

Outcome 5: Enhanced monitoring for adaptive management.

Output 5.1: M&E system supports project impact assessment including gender and youth mainstreaming

The project will design and operate a monitoring and evaluation system to track environmental and socio-economic benefits generated by the project. The M&E system will follow UNDP and GEF M&E policies. The monitoring system can be used to inform decision-making by government resource managers and private resource users. The project's M&E and adaptive management system will be based on the monitoring of the relationships between action and result and will be anchored in a subset of SMART indicators to be developed during the PPG phase. Furthermore, the project will employ adaptive management principles not only in its risk management but also in its management of results.

Stakeholder engagement:

The project provides the opportunity for partnerships with a range of stakeholders, including key national, state, district and local entities with the mandate for biodiversity and sustainable development; communities living in these wetland areas; and key sector agencies that benefit and/or impact on such systems. During the PPG phase and implementation, a broad approach to stakeholder engagement will be continued, including preparation of a stakeholder engagement plan, to support strong partnerships across government and with the private sector and local communities are needed to achieve sustainable biodiversity-related natural resources and economic development. The role and responsibilities of key stakeholders in preparation and implementation including in decision-making, planning, implementation and management is provided in Table 2.

Table 2: Stakeholder Engagement

Stakeholders	Project Implementation Role
Ministry of Environment, Forest and Climate Change (MoEFCC)	MoEFCC is the executing nodal agency for the planning, promotion, co-ordination and overseeing the implementation of India's environmental and forestry policies and programmes. It will coordinate the implementation of all actions mentioned under the National Wildlife

	Action Plan, National Action Plan on Conservation of Aquatic Ecosystems and National Biodiversity Action Plan. MOEFCC will be the EA of the project. MOEFCC will seek technical cooperation with its Forest and Wildlife Division and SACON and Wildlife Institute of India.
Ministry of Jal Shakti (Ministry of Water Resources)	The Ministry works on conservation of rivers, implements sustainability measures such as recharge and reuse of water resources. The National River Conservation Directorate implements the National River Conservation Plan (NRCP) and provides financial assistance to the State Government for conservation of rivers.
The Wildlife Institute of India (WII) and Salim Ali Centre for Ornithology and Natural History (SACON)	SACON is now part of the Wildlife Institute of India with a focus on research and conservation of migratory birds, river dolphins, wetlands and rivers and functions under the ministry. The institute supports wildlife research and management. This institute will serve as the extended wing of the Ministry in providing training and technical support for the implementation of the project activities and lead to institutionalisation and sustainability of training activities beyond the project period.
Ministry of Defence (MoD)	The Coast Guard and Indian Navy support conservation of coastal and marine biodiversity. the Inclusion of dolphins as Schedule I species, empowers the Indian Coast Guards for search, seizure, arrest, and detention in the Wildlife (Protection) Amendment Act, 2022.
Sectoral Ministries/ Departments	At the target wetland scapes a number of sectoral Ministries will be important stakeholders e.g., the Ministries of Rural Development (MoRD), Urban Development (MoUD), Panchayati Raj (MoPR), Agriculture (MoA), Ministry of Earth Sciences (MoES), Ministry of Fisheries, Animal Husbandry and Dairying (MoFAHD), Ministry of Tourism (MoT), Ministry of Ports, Shipping and Waterways (MoPSW), Ministry of New and Renewable Energy (MNRE). These Ministries are critical for their contributions to funding for biodiversity conservation and for meeting the NBTs. They will also play in key role in design, development, screening and implementation of finance solutions
Panchayati Raj (MoPR)	The Ministry of Panchayati Raj supports strengthening of the Panchayati Raj Institutions and has devolved responsibility for planning of economic development and social justice as well as the implementation of “entrusted” schemes of economic and social development. The MoPR will be one of the key stakeholders in planning, and implementation of local conservation action plans
State Forest Departments	The State Forest and Wildlife departments are responsible for all forest and wildlife protection activities and the interface between National and State level programs. Representation in key committees. Involvement in implementation, consultations, participatory workshops, training workshops, enabling stakeholder participation and interaction, strengthening enforcement activities and gathering information related to illegal trade
State governments, municipal and district level government bodies (corporations, agencies, etc.)	This group includes the municipal and district level government bodies (such as municipal corporations, rural development agencies, tourism and infrastructure agencies etc.). State, municipal, and district level government bodies will participate in project activities related to implementation of existing government plans, programs and schemes
Research and academic institutions and universities	The project will work with Institutes like State Institute of Rural Development, State Forest Training Academy, Botanical Survey of India, Zoological Survey of India, National Biodiversity Authority, National Centre for Sustainable Coastal Management and other relevant bodies for environment and natural resources as appropriate to source technical expertise. Partnerships with training institutions will be explored for the capacity building outputs of the project.

Ministry of Information and Broadcasting	Dissemination of information and awareness about the project at national and regional levels through mainstream channels, television, print, festivals, press and direct institutional arrangements, and addressing communication gaps related to stakeholders as well as the general public. Key Partner for information dissemination at global, regional and national levels.
Women's organizations	In particular, Women Welfare Organizations in project wetland scapes will provide training, advisory services and oversight to strengthen the participation in women in decision making, and their ability to be involved in planning and sharing benefits
Local Communities	Local communities represented through CBOs like the Biodiversity Management Committees, Joint Forest Management Committees, Gram Panchayat etc. will be engaged in project implementation as primary agents for managing priority biodiversity conservation actions at the local level and taking measures for other effective area based conservation measures, mobilisation of financial resources through convergence and other financial models etc.
Local Communities	Key target groups from wetland management and traditional knowledge, adoption of new techniques and practices for improved livelihood, prevention of illegal wildlife trade, conservation, value addition on agro-produce and tourism. Participatory role in workshops, consultations, recipients for capacity building in different aspects from data collection, mapping, pastureland management, eco-tourism, information collection and monitoring, to communication
NGOs	There are several NGOs in the country working on biodiversity conservation, natural resource management, environmental protection, and environmental awareness and education. These NGOs (e.g. BNHS, BVIEER, FRLHT, Zoo Outreach, CCD, CEE, ATREE, WII, WWF etc., and local level NGOs) will be engaged in design and implementation of the project, including in community mobilization, implementation of biodiversity actions, training and capacity building, communication, education and public awareness etc.
Private Sector	Private sector and private sector platforms like the India Business and Biodiversity Initiative which includes several large companies that are demonstrating their leadership in addressing biodiversity loss will be key stakeholders of the project, including advising on potential financing instruments and mechanisms including mainstreaming biodiversity in business and Corporate Social Responsibility. Other private sector entities will be tapped (based on the financial assessment) for supporting the promotion of new and renewable energy to reduce mortality due to collision with wind turbines and high voltage electricity lines that is a problem in particular in western India as well as wind power farms in the sea off western coast.
Private Sector Banks	Private sector banks in India like RBS, YES Bank and HDFC Bank are investing in biodiversity conservation through CSR in areas including afforestation, sustainable agriculture, alternative livelihoods and water resources management.
International development partners (JICA, World Bank, KFW etc.)	These international development agencies that supports initiatives towards environment and conservation will be important stakeholders/partners for providing substantive inputs and guidance. The project will complement and build on lessons of work done by these agencies.
UNDP	UNDP, as GEF implementing agency will oversee the successful design and implementation of the project providing oversight, technical coordination and monitoring.

[1] Such as the projects in the baseline section for component 3 of the proposed as well as e.g. BIOFIN for component 2

Coordination and Cooperation with Ongoing Initiatives and Project.

Does the GEF Agency expect to play an execution role on this project?

Yes

If so, please describe that role here. Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing

To be determined (TBD) at PPG stage. The proposed Executing Agency (EA)/Implementing Partner (IP) for the project will be the Ministry of Environment, Forest and Climate Change (MOEFCC) and the project will be implemented over a period of six years with UNDP as the GEF Implementing Agency. Execution support if required for the implementation of the project (i.e. CO support to NIM or any other third-party engagement in execution), this will be determined at PPG phase following UNDP's HACT Micro Assessment and Partner Assessment of the executing agency and partners. UNDP will engage the government to carefully assess and jointly determine the scope and extent of the execution support including presenting third-party options. An upstream discussion will be held with the GEF Program Manager during PPG. Policy guidance will be obtained through the National Steering Committee set up with the Secretary of MOEFCC the chairperson. The Project Manager will head this Unit and be responsible for working in close collaboration with the state entities. District Secretaries will be chairing the District Coordinating Committees ensuring the coordination of activities at the district level. Existing community committees (to be assessed at PPG stage) will help mobilize the local communities and other stakeholders in planning and implementation of the project activities at the target wetland-scapes. The GEF project will cooperate with ongoing initiatives as described in the Table 3 below:

Table 3: Complementarity with Existing and past GEF, GCF and Other Projects and Programs

Ongoing Initiatives	Complementarity with GEF 8 project
GEF/UNDP Securing livelihoods, conservation, sustainable use, and restoration of high range (2017-2024) $11,544,192	The landscape based approach, sustainable livelihoods and socio-economic activities for communities will be useful lessons, including strengthening of partnerships between conservation institutions (PAs and Forest Reserves) and Gram Panchayats and communities. This will align with the GEF-8 project's outcome to improve integrated management of significant freshwater and coastal wetlands through multi-stakeholder participation.
GEF/UNDP Strengthening conservation and resilience of globally significant wild cat landscapes through a focus on small cat and leopard conservation (2022-2027) $1,975,000	This project aims to secure the conservation of globally significant wild cat landscapes through a 'landscape-based conservation approach' that brings together species conservation programs, connects stakeholders and empowers communities, and operates across Protected Areas (PAs), tiger corridors and buffer zones. The GEF-8 project may learn from the useful lessons including the importance of strengthening of partnerships between conservation institutions and Gram Panchayats and communities in the vicinity of these areas. It may also be useful for identification of freshwater and coastal-wetlands of high biodiversity significance.
FCDO, UK -Infrastructure for Climate Resilient Growth (ICRG) (2019-2-23) $3,700,000	The project provides climate change related inputs towards planning and design of Natural Resource Management structures built under MGNREGS program, strengthening capacities of Program staff, enhance income of vulnerable people through various schemes in convergence with MGNREGS program. Since the GEF-8 project aligns with Government of India's Project Dolphin and other key initiatives for utilization of large government schemes.
Green Climate Fund- Enhancing Climate Resilience of India's Coastal Communities (2019-2025) $43,400,000	A Pan-India Coastal Resilience Network to share knowledge among 13 coastal states and UTs to promote inter-sectoral coordination in the 24 target landscapes, where multi-stakeholder coordination structures: -comprising representatives from relevant state-level ministries, district-level governments, NGOs and academic/research institutions – will be established to promote dialogue and coordination concerning climate-resilience. This network will support the GEF-8 project in identifying coastal wetlands. The best practices will support management of important coastal landscapes and conservation of important migratory bird species.
GEF Small Grants Program in India (2021-2026) $4,474,886	The project will bring important learning in terms of community small grants to conserve biodiversity, sustainable use of biological resources, stimulating agro-ecological practices by small farmers, biodiversity-based organic green product developments, creation of stakeholder platforms, landscape governance arrangements, private-civil society partnerships, etc.

UNDP Biodiversity Finance Initiative (BIOFIN) (2021-2027) $1,700,000	The GEF-8 project will take forward the three prioritized biodiversity finance solutions of BIOFIN India. BIOFIN's detailed review of 60 public sector undertakings and 150 private corporations to assess their expenditure/ investments for biodiversity conservation will be drawn upon. The project's Output will also apply BIOFIN method and approaches in supporting local governance institutions and communities to develop capacity to access financial resources. Through the vast experience that BIOFIN has with the private sector, the GEF-8 project can streamline sustainable- biodiversity friendly investment plans for these corporates
GEF/UNDP Strengthening institutional capacities for securing biodiversity conservation commitments. (pipeline) (2024-2029) $4,880,000	The project will work with community organizations and Panchayati Raj institutions, supported by district and state governments, to undertake mainstreaming and accessing finance to carry out priority actions – to protect remaining natural forest areas, strengthen connectivity for wildlife, and create opportunities for sustainable livelihoods and businesses for women and men, including marginalized groups. The GEF-8 project will build on the project's outcome of creating platforms for replicating this approach across other states. Institutes like the WII and SACON can support this process throughout the country.
GEF/UNDP Sustainable management and restoration of degraded landscapes for achieving Land Degradation Neutrality (LDN) in India (2023-2028) $6,600,000	The project will take a three-pronged approach starting with strengthening the enabling environment for LDN; develop and implement SLM practices, and scaling up of resilient SLM practices across degraded landscapes and developing information and knowledge management systems; national outreach approaches; and enhanced South-South cooperation. The GEF-8 project can build on lessons for implementing SLM practices in intervening parts of the landscape to support integrated management of multiple use landscapes.
Phase II of Japan Supplementary Budget-Leveraging NDCs for Low Carbon Development Pathways' (2023-2024) $5,174,839	The GEF-8 project can learn from the project's Just Transition plans supporting eco-restoration and alternate wildlife friendly energy technologies such as development of solar parks etc.
GEF/UNDP Strengthening institutional capacities for securing biodiversity conservation'	The proposed GEF 7 project would provide opportunities for collaboration in terms of lessons related to: (i) multi-sectoral coordination and governance mechanisms; (ii) use of tools to mainstream biodiversity and sustainable natural resources management at local level; (iii) integrated measures for transitioning towards a green and resilient recovery; (iv) financial solutions for biodiversity conservation, but more importantly that would be more relevant to GEF 8 project is the effort to ensure convergence of planning at local panchayat level for improved decision-making to support biodiversity outcomes
GEF Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Migratory Waterbirds in Asia	Provides useful insights and examples of integrative approaches for conservation, that will be fully examined, synthesized and integrated in the PPG phase.
GEF Enhancing Conservation of the Critical Network of Sites of Wetlands Required by Migratory Waterbirds on the African/Eurasian Flyways.	The project recognizes that conservation of migratory waterbirds requires effective management of their critical sites individually and coordinated planning and management throughout the flyway as a whole. Importance of reliable data for management of threats, monitoring, collective decision-making, implementation of best practices and effective communication is also emphasized
GEF Mainstreaming Conservation of Migratory Soaring Birds into Key Productive Sectors along the Rift Valley / Red Sea Flyway	Provides lessons on the need to ensure less complex design, simplified implementation arrangements, mainstream activities with safeguard work, results framework to directly link with outputs and monitorable indicators, importance of effective governance arrangements, etc.
GEF Strengthening the protected area network for migratory bird conservation along the East Asian-Australasian Flyway (EAAF) in China	Will provide lessons on institutionalization of capacity building programs, developing models of replication and site network planning and management
GEF- Multi-sectoral and integrated systems approach to the conservation, management and sustainable utilization of coastal biodiversity	The project recognizes the need for approaches to integrate biodiversity conservation into coastal zone management plans by minimizing fishing pressure and providing alternative livelihoods opportunities through vocational training for local communities especially for the youth. It also provides an example that could be useful in terms of the GEF 8 project in that it helped create a corpus fund which gave access to micro-credit to almost 30,000 women of the local communities. Building on the recommendations of the GEF 3-4 project, better inter-departmental and agency coordination would be a part of the proposed project. This includes more streamlined government and private sector co-financing.

GEF UNDP Mainstreaming Conservation and Sustainable Use of Medicinal Plant Diversity in Three Indian States	Provides guidance on inter-sectoral strategies for conservation and sustainable use of medicinal plants formulated at both national and state level and the need for national and state level policies on forests and traditional knowledge to address the concerns of conservation and sustainable use natural resources.

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
43522	0	0	0

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
43522	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Beas Conservation Reserve	NA	Protected Landscape/Seascape	6,429.00						
Harike Lake Wildlife Sanctuary	68008	Protected area with sustainable use of natural resources	4,100.00						
Kanwar Lake Wildlife Sanctuary	NA	Protected area with sustainable use of natural resources	6,311.00						
Karaivetti Wildlife Sanctuary	NA	Protected area with sustainable use of natural resources	454.00						
Khijadia Wildlife Sanctuary	NA	Protected area with sustainable use	605.00						

		of natural resources							
Nagi Dam Wildlife Sanctuary	NA	Protected area with sustainable use of natural resources	1,123.00						
Nalsarovar Wildlife Sanctuary	555555579	Protected area with sustainable use of natural resources	12,000.00						
Pani-Dihing Wildlife Sanctuary	NA	Protected area with sustainable use of natural resources	3,393.00						
Thol Lake Wildlife Sanctuary	NA	Protected Landscape/Seascape	699.00						
Velavadar National Park	NA	Protected area with sustainable use of natural resources	3,408.00						
Vikramshila Dolphin Sanctuary	NA	Protected area with sustainable use of natural resources	5,000.00						

Indicator 2 Marine protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
136964	0	0	0

Indicator 2.1 Marine Protected Areas Newly created

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0	0	0	0

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Indicator 2.2 Marine Protected Areas Under improved management effectiveness

Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
136964	0	0	0

Name of the	WDPA ID	IUCN Category	Total Ha (Expect	Total Ha (Expected at CEO	Total Ha (Achiev	Total Ha (Achiev	METT score (Baseline	METT score (Achiev	METT score (Achiev

Protected Area			ed at PIF)	Endorsement)	ed at MTR)	ed at TE)	at CEO Endorsement)	ed at MTR)	ed at TE)
Gulf of Mannar National Park	900665	Protected Landscape/Seascape	52,672.00						
Marine National Park	NA	Protected area with sustainable use of natural resources	45,792.00						
Point Calimere Sanctuary	900774	Protected area with sustainable use of natural resources	38,500.00						

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
8000	0	0	0

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
8,000.00			

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
900000	0	0	0

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
900,000.00			

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Document(s) that justifies the HCVF)

Title

Indicator 5 Area of marine habitat under improved practices to benefit biodiversity (excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 5.1 Fisheries under third-party certification incorporating biodiversity considerations

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Type/name of the third-party certification

Indicator 5.2 Large Marine Ecosystems with reduced pollution and hypoxia

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

LME at PIF	LME at CEO Endorsement	LME at MTR	LME at TE

Indicator 5.3 Marine OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
NA	NA	63,000.00			

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	0	0	0	0
Expected metric tons of CO_2e (indirect)	0	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)				
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)				
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

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	20,000			
Male	20,000			

Total	**40,000**	**0**	0	**0**

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

Notes: C.I. 1: includes wetlands PAs in (A) Assam: Pani-Dihing Sanctuary (3,393 ha); (B) Tamil Nadu: Karaivetti sanctuary (454 ha); (C) Gujarat: Nalsarover sanctuary (12,000 ha), Thol Lake Sanctuary (699 ha), Khijadia sanctuary (605 ha), Velavadar national Park (3,408 ha); (D) Bihar: Kanwar Lake sanctuary (6,311 ha), Vikramshila sanctuary (5,000 ha), Nagi Dam sanctuary (1,123 ha), (E) Punjab: Beas Reserve (6,429 ha) and Harike Lake Sanctuary (4,100 ha)

C.I. 2 includes (A)) Gujarat: Marine National Park (45,792); (B) Tamil Nadu: Gulf of Mannar (52,672 ha) and Point Calimere Sanctuary (38,500 ha)

C.I.3 restoration of wetlands and surrounding marshes and bird roosting and nesting areas in all wetland sites through rewetting, vegetation restoration, small dyke construction, creation of nesting and roosting areas, improving water access and drainage, litter removal, shoreline redevelopment, native species restoration, etc.

C.I.4: Terrestrial landscapes (outside PAs) under improved management in wetland associated agricultural and grazing lands, wetland catchment management, wetland catchment forest conservation and natural restoration processes

C.I.5: Marine areas (outside PAs) under improved management through reducing of fishing and other pressures, land and water based pollution management, waste management, etc.

C.I. 11 – Community living, in and around these wetlands directly benefiting from improved natural resources, fisheries and marine resource management practices, community-based livelihood improvement and small-scale enterprises and ecotourism practices and improved capacities.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	Please see pre-SESP (Annex D)
Environmental and Social	Substantial	Please see pre-SESP (Annex D)
Political and Governance	Moderate	While, India is a signatory to the Convention of Migratory Species, its implementation will take place at state and local levels, the willingness of the administrative entities (and local communities) at these levels to work together to meet these obligations could present some problems, given that political priorities tend to generally over-ride other priorities. During PPG stage, the risk will be further assessed to identify additional and focused

		consultation, dialogue and planning needs for engagement of administrative structures at the state, district, divisional and panchayat levels. The functionality of this governance arrangement is critical to ensure better coordination in conservation of wetlands within the CAF in India
INNOVATION		
Institutional and Policy		
Technological		
Financial and Business Model		
EXECUTION		
Capacity for Implementation	Moderate	The limited capacity of government and state administrative bodies for integration of economic and ecological consideration into conservation planning and management at wetland levels could negatively affect implementation of the project. This will be further assessed, and arrangements made in consultation with the IP for UNDP CO, following the HACT assessment to identify potential UNDP oversight, training and technical support required during the project implementation phase that would be reviewed by GEFSEC
Fiduciary	Moderate	Some capacity constraints might exist in terms of financial management and procurement within the IP that can delay project implementation. This will be rectified with identification of limited UNDP support to execution and training needs in procurement and financial management for PMU staff
Stakeholder	Moderate	Stakeholders may not immediately recognize the benefits of sustainable use of wetland resources and the

		benefits to sustainable fisheries, agriculture and livelihood improvement and be reluctant to engage in the project. This will be rectified through identification of capacity development and training needs and means for demonstration of nature-based activities that could incentivize community and stakeholder engagement.
Other		NA
Overall Risk Rating	Substantial	The overall risk is rated as 'Substantial' that can negate and/or delay project implementation. Overall project design will assess needs for improved capacity, coordination and collective decision-making for the project. It will ensure that if IPs are present, then they will be adequately consulted, engaged and benefit through the application of FPIC procedures. The above rated risks are not expected to undermine the viability of the project.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Describe how the proposed interventions are aligned with GEF- 8 programming strategies and country and regional priorities, including how these country strategies and plans relate to the multilateral environmental agreements.

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how. (max. 500 words, approximately 1 page)

Given the full flexibility of GEF-8 programming, the project is utilizing India's STAR resources from Climate Change and Land Degradation focal areas to
program exclusively for the Biodiversity Focal area.

The project is consistent with *BD-1-1: Financial sustainability, effective management, and ecosystem coverage of protected area systems.* Relevant project components include conservation of critical wetland systems that are important to protect migratory birds using the CAF and other critical species that use these aquatic systems, like the river and oceanic dolphins, turtles and key fish species (Component 2 and Outputs 3.1, 3.2 and 3.3 of Component 3). The project is also supporting the improved management of surrounding catchments of the wetland systems to enhance their viability for conservation of the CAF network by collaborative efforts with local communities, improve public-private partnerships for supporting community engagement in nature-positive activities, etc. In terms of BD 1-4, the

project will focus on mainstreaming biodiversity conservation at the wetland scape levels (Outputs 1.2, 1.4, 2.2 and 2.3) and its sustainable use and aim to improve/enhance positive environmental practices in economic sectors. It would improve guidelines, protocols and planning strategies and build institutional capacities at the administrative levels and across key sectors to better integrate conservation outcomes for wetlands and their respective catchments. The intent is to use local community organizations and private sector institutions as the key vehicle for delivery of conservation actions, so that local communities and local business entities become agents of change. The overall objective is to conserve not only the migratory birds and their associated habitats, but to produce global environmental benefits for globally significant biodiversity by focusing on global significant landscapes and seascapes. Without the GEF project, it is likely that there will be limited effort at strengthening the integration of biodiversity at the wetland scape that will likely result in further loss of biodiversity, associated wetland habitats and ecosystem services. This will be corrected through improved mapping, decision making and integrated wetland scape planning and the management and sustainable use of resources and developing integrated wetland planning approaches. In terms of BD 3*: To increase mobilization of domestic resources for biodiversity* - the project aims to identify and mobilize domestic resources for investment in community livelihood activities that are toed to wetland resource conservation (Output 3.4). In terms of BD 3-1, it would build on the proposed BIOFIN assessment and BFP planned for 2024, to undertake a limited assessment of financial needs and develop a domestic resource mobilization plan for application at the wetland scape levels through the relevant local government and community entities and financial resource mobilization. This assessment and planning exercise will actively engage financial entities at various administrative levels at the State, district and local levels and private sector actors. In terms of BD 3-2, the project will facilitate the implementation of the resource mobilization plan, working closely with the district and local government authorities to enhance their capacity for resource mobilization through targeted training programs and their capacity for making investments in conservation actions through development of guidelines and availability best practice examples. It will also demonstrate implementation of locally based financial solutions, such as linking with government sector financing, generating revenues from private sector, conservation-related tourism activities and supporting biodiversity-friendly small-scale enterprises that will build community support for conservation.

In terms of the GEF-8 Land Degradation Focal Area, the project aligns with *Objective 1: Avoid and reduce land degradation through sustainable land management (SLM)*; and *objective 2: Reverse land degradation through landscape restoration (LD-1 & LD-2) of the programming directions*. In terms of LD 1, the project will aim to avoid and reduce degradation through promoting an integrated and collaborative planning and decision-making approach to reduce inherent conflicts to land and resource use. It will focus on best practices in forestry, grazing and agriculture to reduce harmful impacts and promote nature-friendly practices to reduce chemical usage, promote soil fertility improvements, reduce erosion, promote mixed cropping to conserve soil and improve habitat for species in cultivable areas. The project will focus on smallholder farms that sustain a significant number of households, where agricultural management practices underpin the livelihoods of rural farmers. The project will include support for improved access to technical assistance and finance for smallholders to implement innovative agricultural practices (climate smart agriculture) to biodiversity and ecosystem services, and improve profitability. Project SLM interventions will target the drivers of land degradation within a framework of integrated community planning, governance and management at landscape scale. It will provide technical support and training to restore and maintain functional landscapes to avoid and manage degradation through local government and community planning systems, enhanced technical knowledge, demonstration on the ground and other unsustainable activity and technical support for integration local level planning. These activities would be undertaken through active community mobilization and involvement, including men, women, youth and ethnic minorities. Upscaling will be achieved through extension programs and sharing of successful interventions through community exchanges and visits. Strategies pursued with the private sector will target SMEs that are promoting innovations in agriculture, forestry and livestock production systems and improved access to markets.

In terms of GEF CCM 1-4 Climate Change programming directions, '*enhance nature-based solutions with high mitigation potential'* the project will support mitigation actions in the agriculture, forest and fisheries sectors to generate significant co-benefits, notably in terms of climate adaptation and improved livelihoods for large numbers of farmers, fishers and rural communities to enhance biodiversity outcomes and reduced wetland, land and forest degradation that is further threatened by unsustainable and increased exploitation as well as by the impacts of climate change, drought, flooding and erosion. In terms of the target wetland-scapes, the project will work with communities to enhance protection and support natural regeneration of these ecosystems so as to reduce carbon losses. The design of the wetland scape activities to be defined through the integrated multi-sectoral planning will take into consideration gender-specific actions to enhance their more productive use of these resources and increase their resilience to climate change impacts through diversification of incomes, capacity building and enhanced awareness on managing climate risks.

Alignment with national and global priorities are presented in Table 5 and 6, including with the CBD Kunming-Montreal Global Biodiversity Framework in terms of ensuring that policies, strategies and plans are aimed at meeting ecosystem integrity (Goal A), improve sustainable use of wetland resources (Goal B) and ensure finance, capacity, technology and science (Goal D) promote integrated landscape/seascape planning approaches, policies recognizes the full integration of biodiversity and improve financing through innovative financial solutions and private-public partnerships (refer Table 6 for more details regarding alignment with the CBD Kunming-Montreal Global Biodiversity Framework). It is also fully aligned with the Convention on the Conservation of Migratory Species of Wild Animals.

Table 5: Conformity with Existing National Strategies and plans

Strategy/Plan	Conformity with the proposed project
National Biodiversity Strategy and Action Plan	The GEF project is aligned with NBSAP: (i) reducing habitat fragmentation, degradation and loss of genetic diversity; (ii) dealing with invasive alien species; (iii) integration of biodiversity concerns in economic and social development; (vi) improving the biodiversity information base; (v) economic valuation and accounting; (vi) building national capacities; and (vii) international cooperation.
National Wildlife Action Plan (2017-2031)	The GEF project is aligned with the National Wildlife Action Plan in adopting a landscape approach for conservation, recognizing concerns of climate change on wildlife and reconciling the conflict between development and wildlife conservation in a cross-sectoral approach.
National Action Plan on Climate Change (NAPCC)	The proposed project aligns with the core focus of the NAPCC on climate change adaptation and mitigation as well as natural resource conservation. The project aligns with the objectives of the National Mission for Green India and the National Mission for Sustainable Agriculture under the NAPCC by contributing to the following objectives: enhancing carbon sinks and carbon sequestration, adaptation of vulnerable species/ecosystems to changing climate, adaptation of forest-dependent communities and water and soil health management.
National Adaptation Plan	The GEF- 8 project is aligned to the major theme of NAP to reduce vulnerability to the impacts of climate change by building adaptive capacity and resilience. It will also promote integration of adaptation into new and existing national, sectoral and sub-national policies and programs, especially development strategies, plans and budgets.
National Environment Policy (2006)	The GEF-8 project is aligned to the dominant theme of this policy with regards to aquatic ecosystems the supports the conservation and wise use of wetlands as components of 'freshwater resources' and recommends integration in developmental planning, management based on prudent use strategies, promotion of ecotourism and implementation of a regulatory framework.
National Action Plan for Conservation of Aquatic Ecosystems (2019)	It is aligned to the NAP to develop and maintain a network of healthy wetlands which contribute to human well-being through their diverse ecosystem services, as well as sustain diversity and populations of wetland-dependent species and to mainstream the full range of wetlands biodiversity and ecosystem services within developmental plans and programs at various levels.
National Action Plan for Conservation of Migratory Birds and their habitats along the CAF (2018-2023)	The GEF 8 project is aligned to the specific objectives of the CAF NAP to (i) Halt and reverse decline of migratory birds; (ii) Reduce pressure on critical habitats by management based on landscape approaches; (iii) Develop capacity at multiple levels to anticipate and avoid threats to habitats and species undergoing long term decline; (iv) Improve database and decision-support systems to underpin science-based conservation of species and management of habitats; (v) Sensitize stakeholders to take collaborative actions on securing habitats and species; and (vi) Support trans-boundary co-operation to secure migratory bird species and habitats in range countries.

Table 6: Contribution to key Global Programs and KM-GBF

Program	Program Contribution	Project Conformity
Strategic Development Goals	SDG 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture,	The project will facilitate promotion of nature-positive small-scale enterprises and livelihood operations to help improve nutrition and food security
	SDG 5: Gender Equality:	Project investments are targeted at enhancing the role of women in decision-making, enhance economic benefits to women and promote gender equality
	SDG 13: Climate Action	The project will promote climate resilience through enhanced conservation outcomes, ensuring sustainable natural resources

		use that reduces climate negative impacts on critical ecosystems and support diversification of incomes and livelihoods
	SDG 14: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development	Through the promotion of enhancing of the marine conservation estate, the intent is to ensure delivery of sustainable ecosystem services
	SDG 15: Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss,	The focus of the project is to enhance the conservation estate at the landscape level to enhance conservation outcomes
Kunming-Montreal Global Biodiversity Framework (KM-GBF)	GOAL A: Maintain ecosystem integrity, connectivity, resilience; halt extinctions; maintain genetic diversity by 2050.	The project through its integrated wetland scape approach intends to improve protection of migratory birds and their wetland habitats, improve ecological connectivity between component parts of these wetland scapes, and reduce pressures on key species with the aim to conserve as much migratory bird species(and associated species and habitats).
	GOAL B: Biodiversity is sustainably used and managed and nature's contributions to people, including ecosystem functions and services, are valued, maintained and enhanced, with those currently in decline being restored, supporting the achievement of sustainable development for the benefit of present and future generations by 2050.	The intent of the project is improve the sustainable use of wetland and associated natural resources through creation of awareness, enhancing sustainable harvest regimes tied to improved value chains and livelihoods to create opportunities for local community participation in achieving conservation outcomes, while improving the contribution of wetland resources and associated ecosystems to benefit local communities.
	Goal D: Ensure adequate implementation means, including finance, capacity, technology and science.	The project intends promoting an integrated, participatory and inclusive landscape/seascape planning and management approach to resource governance and use
	Target 1: Ensure that all areas are under participatory integrated biodiversity inclusive spatial planning and/or effective management processes addressing land and sea use change.	The project intends promoting an integrated, participatory and inclusive wetland scape planning and management approach to resource governance and use
	Target 2: At least 30 percent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration. To meet	To meet the above goal, the project intends to reduce degradation improved and sustainable management of 900,000 ha of terrestrial habitats and 63,000 ha of marine habitats for biodiversity conservation and restore about 8,000 ha of wetland and associated habitats.
	Target 3: At least 30 percent of terrestrial, inland water, and of coastal and marine areas effectively conserved and managed including over their traditional territories.	To meet this goal, the project intends to improved management effectiveness of 43,522 ha of terrestrial PAs and 136,964 ha of marine PAs,
	Target 10: Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably.	The overall intent of the project is to ensure that fisheries, aquaculture, agriculture and other livelihood activities within the 5 wetland scape sites are managed in a sustainable fashion.
	Target 11: Restore, maintain and enhance nature's contributions to people.	The project recognizes and promotes maintenance and enhanced contribution of these wetland scapes for the economic benefit of local communities through sustainable use.
	Target 14: Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes.	Output 1.1 is directed at ensuring the policies and sectoral guidelines are complementary to outcome of achieving biodiversity and its multiple values in planning and development processes, while Output 1.2 focusses on ensuring integrated and cross-sectoral planning and budgeting across the wetland scapes to avoid activities that impact biodiversity.
	Target 19: Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner.	Component 3 seeks to improve financing for conservation actions, such as Outputs 3.1 and 3.1 seek private sector engagement (and resources) to support co-management models in resource use and the development of small business and value chain programs respectively, while Output 3.4 specifically targets the assessment and testing of innovative financial solutions to resource use and community benefit building of the BIOFIN program in India.

	Target 21: Ensure that the best available data, information and knowledge, are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity	Output 1.3 is specifically geared at improving national inventory and sharing information to support planning, decision-making, management and reporting on effectiveness of actions in wetland scapes under CAF.
	Target 22: Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity.	The overall intent of the project is to ensure full and inclusive participation of all stakeholders (including women, youth and ethnic groups) in decision making, access to information and benefit sharing from project interventions.
Convention on the Conservation of Migratory Species of Wild Animals	The parties acknowledge the importance of migratory species being conserved and of range states agreeing to take action to this end 'whenever possible and appropriate', 'paying special attention to migratory species the conservation status of which is unfavorable and taking individually or in cooperation appropriate and necessary steps to conserve such species and their habitat.'	In keeping with the CMS, the project will contribute to the following: (a) assess conservation status of the migratory species; (b) coordinated conservation and management plans; (c) research into the ecology and population dynamics of the migratory species; (d) exchange of information; (e) conservation and restoration of the habitats; (f) maintenance of a network of suitable habitats along migration routes; (g) provision of new habitats favorable to the migratory species; (h) elimination of, or compensation for activities and obstacles which hinder migration; (i) prevention, reduction or control of the release of substances harmful to that migratory species; (j) measures based on sound ecological principles to control and manage the taking of the migratory species; (k) coordinating action to suppress illegal taking; (l) exchange of information on substantial threats; (m) emergency procedures for conservation action; and (n) making the general public aware of the CMS agreements

Incremental/additional cost reasoning and expected contributions from the baseline

Table 7: Incremental Cost Reasoning

Baseline	Alternative to be put in place	Project impact including GEBs
Enabling framework for establishment of ecologically representative, well-connected and governed wetlands and associated habitats in the Central Asia Flyway		
-Planning and management of wetland basins and coastal zones remains largely sectoral and governed by a multitude of separate sector policies, legislation, regulations and institutional arrangements that make it impossible to ensure complementarity of approaches - No single policy or legislative mechanism to support the planning and implementation of an integrated plan for wetlands. - Limited information and monitoring of drivers and pressures that act at multiple spatial, temporal and political scales. results in uncertainties and challenges. - Limited recognition and capacity for considering the complexity of the geological, geomorphological and climatic reality of the wetland, linkages with other designated and non-designated adjacent wetlands and basin	- Strengthened policies that address gaps and inconsistencies and contradictions - Improved guideline and practices to identify best options for implementation of integrated wetland scape plans that are best suited for the effective and sustainable management of wetland scapes. - Improved and adaptive planning and adaptive management of wetland scapes, migratory birds and their habitats through improved information availability In management of wetlands - Capacity for integrated approaches for wetland biodiversity conservation and sustainable use of marine resources strengthened	-Policy and legislative changes facilitate planning and implementation of integrated and inclusive management of wetland scapes to align with national priorities and GBF goals and targets -Guidelines and procedures provide tools that ensure that wetlands are integrated into sectoral land and water use decisions to achieve conservation, water, food and climate security solutions. - Increased capacity of institutions for wetland conservation and sustainable use - Institutional arrangements for managing aquatic ecosystems through designated state agencies with responsibilities for wetland management as mandated by the Wetlands (Conservation and Management) Rules, 2017. -Improved tools and capacity of institutions for integrated wetland conservation and sustainable use planning and management

inter-relationships and the spatial dimensions in which these interactions take place. - Lack of understanding of and capacity to use spatial planning tools, the technical knowledge to evaluate and define ecosystem services and their socioeconomic value, as well as the ability to determine trade-offs using readily available decision-making systems		-Improved inventory and information facilitate better site management decision-making
Conservation and sustainable management of wetland systems to conserve the habitats of migratory birds and attendant species through an integrated wetland scape approach		
-Globally important wetland scapes are inadequately protected by existing protected areas and areas outside them -Globally significant biodiversity, habitats and natural ecosystems are lost due to loss or degradation of wetlands, grasslands and forests -Globally significant migratory waterbird populations are declining due to lack of coordinated flyway conservation measures - Full range of wetland ecosystem services and biological diversity values are rarely integrated into sectoral developmental plans, impeding their ecological and hydrological functioning and leading to stakeholder conflicts. -Lack of information and monitoring of status of migratory birds and track wetland conditions	-Improved management effectiveness of protected areas strengthen species and habitat conservation for migratory birds and associated species and habitats -Threats are addressed through improved planning and management of habitats outside the PA network - Improved inter-sectoral coordination and collaboration across sectors and interests that support integrated and inclusive plans for wetland scapes --Monitoring and evaluation enable adaptive management of migratory birds and associated wetland conditions	-At least 43,522 hectares of terrestrial protected areas under improved management to conserve species, habitats and biodiversity -Improved management of 136,964 hectares of marine protected areas to conserve species, habitats and biodiversity - Improved management of 900,000 hectares of terrestrial landscapes and 63,000 hectares of marine seascapes (outside of protected area network) to benefit biodiversity through integration of biodiversity and ecosystem considerations in sectoral and economic develop plans and programs - At least 8,000 hectares of degraded wetland scapes restored to benefit migratory birds, other key species and improve ecosystem services -Monitoring and reporting systems track status of wetland biodiversity and ecosystem health
Enhanced Community stewardship of aquatic habitats incentivized by sustainable resource use		
-Human use of wetland resources are often unsustainable resulting in their loss and degradation - Consumptive use from hunting, fishing and wetland product collection are not valued and are likely to result to further increases without effective management -Lack of conflict resolution mechanisms for wetland resource uses result in degradation of these resources -Limited opportunities to promote sustainable economic development opportunities and alternative livelihoods to existing unsustainable activities -Inadequate and sustainable financial resources and private sector participation prevents effective and collective action for conservation of species and habitats	-Resource use in wetlands are effectively managed in accordance of rules, regulations and self-enforcement by local communities -Communities have information and improved knowledge of ecological and economic values of improving sustainable management of wetland resources -Improved information, procedures and practices reduces conflicts arising from different priorities and needs for use of wetland resources -Alternative livelihood products and value chain enterprises available to promote more sustainable use of natural resources - Internalization and capacitating responsible private sector participation can contribute towards maintenance of the globally important CAF by supporting pathways and mobilizing finance investment in biodiversity economy and promote industry-led portfolio of wetlands	-At least 40,000 (20,000 men and 20,000 women) direct beneficiaries from improved ecosystem services, sustainable resource use, livelihood benefits and improved capacity and knowledge -Reduction in threats to migratory birds, associated other species and habitats through promotion of sustainable use of wetland resources -A conflict resolution mechanism functional that provides a management solution to reduce conflicts in resource use -Innovative financial solutions promote community business and livelihood activities within the CAF to reduce impacts on wetlands and migratory birds. -Private-public partnerships increase contribute towards community business, livelihood and conservation efforts.

Awareness raising, knowledge , communication, management and gender mainstreaming to promote replication and scale-up of integrated wetland conservation approach for Central Asian Flyway		
-Wetland ecosystems remain poorly appreciated due to lack of baseline information for decision-making - Awareness and understanding about biodiversity, ecosystem service values and threats is limited at all levels and in all sectors, which constrains engagement and behavior change. -No comprehensive efforts to raise awareness of the benefits and need for conservation of globally threatened and endemic species, habitats, ecosystem management and threat reduction -Lack of effective information sharing, coordination and sharing of experiences at flyway level hinders collaborative international coordination within the flyway	-Increased awareness and knowledge sharing promote community and stakeholder conservation actions - Results and lessons learned from project are made available to a wide national and global audience -Increased level of information available to support a coordinated and collaborative regional effort to protect the CAF	-Improved awareness among local communities on importance of wetland ecosystems and value to their livelihoods among 50% of beneficiaries -At least ten lessons of best practices in wetland biodiversity conservation and sustainable use available for public access - At least ten initiatives demonstrate active participation and knowledge exchange in wetland biodiversity conservation and special area management platforms -Improved collaboration among CAF countries as measured by the number of collaborative bi-country or multi-country events for information sharing, training and programs under implementation

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed as per GEF Policy and are clearly articulated in the Project Description (Section B).

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during PIF development as required per GEF policy, their relevant roles to project outcomes and plan to develop a Stakeholder Engagement Plan before CEO endorsement has been clearly articulated in the Project Description (Section B).

Yes

Were the following stakeholders consulted during project identification phase:

Indigenous Peoples and Local Communities:

Civil Society Organizations: Yes

Private Sector: Yes

Provide a brief summary and list of names and dates of consultations

During the PPG phase and implementation, a broad approach to stakeholder engagement will be continued, as strong partnerships across government and with the private sector and local communities (including IPs) are needed to achieve sustainable biodiversity-related natural resources and economic development.

Table 8: Consultations during PIF stage

Name of the expert/ institute	Description	Date
Wetland International- South Asia (WISA)	Director, Wetland International-South Asia- Preliminary Consultation regarding the proposed scope of the project was held with the UNDP team.	31 August 2023
Wetland International- South Asia (WISA)	Director, Wetland International- South Asia - Discussions regarding important habitats and CAF species of conservation priority. Criteria for species and priority landscape selection were discussed w.r.t CAF species. WISA shared their experience on prioritizing landscapes.	06 September 2023
Aaranyak (NGO), BNHS (NGO), SACON (MoEFCC Institute)	Consultations with Research Institution, NGOs involved at pan-India level and North-east India working on migratory birds regarding sites and species of high priority for CAF species. Valuable insights and suggestions for probable landscapes, conservation potential and issues in different areas were discussed.	19 September 2023
Principal Chief Conservator of Forest and Chief Wild Life Warden of States of: Tamil Nadu, Andhra Pradesh, Odisha, Gujarat, West Bengal, Punjab, Himachal Pradesh, Bihar, Assam, Uttar Pradesh & Wildlife Institute of India.	Stakeholder consultation with States/Union Territories regarding views on Conservation of Migratory Wildlife and Habitats in the Central Asian Flyway and River Basins of India. The meeting was chaired by the Additional Direct General of Forests (MoEFCC), eight States and Union Territories could participate in the meeting, (Assam, Bihar, West Bengal, Orissa, Punjab, Himachal Pradesh and Gujarat). Representative scientist from Wildlife Institute of India (WII, MoEFCC) attended the meeting. Different landscapes and their importance were discussed. It was decided that WII in consultation with UNDP will develop a template of criteria which will be shared with all State and Union Territories for the required information.	25 September 2023

(Please upload to the portal documents tab any stakeholder engagement plan or assessments that have been done during the PIF development phase.)

Private Sector

Will there be private sector engagement in the project?

Yes

And if so, has its role been described and justified in the section B project description?

Yes

Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided indicative information regarding Environmental and Social risks associated with the proposed project or program and any measures to address such risks and impacts (this information should be presented in Annex D).

Yes

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
High or Substantial			

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described in the Project Description (Section B)

Yes

ANNEX A: FINANCING TABLES

GEF Financing Table

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

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
UNDP	GET	India	Biodiversity	BD STAR Allocation: BD-1	Grant	9,909,174.00	891,826.00	10,801,000.00
UNDP	GET	India	Biodiversity	BD STAR Allocation: BD-3	Grant	800,000.00	72,000.00	872,000.00
Total GEF Resources ($)						**10,709,174.00**	**963,826.00**	**11,673,000.00**

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount ($)

300000

PPG Agency Fee ($)

27000

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	PPG($)	Agency Fee($)	Total PPG Funding($)
UNDP	GET	India	Biodiversity	BD STAR Allocation: BD-1	Grant	300,000.00	27,000.00	327,000.00
Total PPG Amount ($)						**300,000.00**	**27,000.00**	**327,000.00**

Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)
UNDP	GET	India	Biodiversity	BD STAR Allocation	12,000,000.00

Total GEF Resources	**12,000,000.00**

Indicative Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
BD-1-1	GET	6,909,174.00	45600000
BD-1-4	GET	3,000,000.00	22700000
BD-3-1	GET	350,000.00	2100000
BD-3-2	GET	450,000.00	2700000
Total Project Cost		**10,709,174.00**	**73,100,000.00**

Indicative Co-financing

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	Public Investment	Investment mobilized	40000000
Recipient Country Government	Ministry of Environment, Forest and Climate Change	In-kind	Recurrent expenditures	4000000
Recipient Country Government	Ministry of Defense and Ministry of Ports, Shipping and Waterways	Public Investment	Investment mobilized	2000000
Recipient Country Government	Ministry of Defense and Ministry of Ports, Shipping and Waterways	In-kind	Recurrent expenditures	200000
Recipient Country Government	Ministry of Earth Sciences (National Centre for Coastal Research)	Public Investment	Investment mobilized	1000000
Recipient Country Government	Ministry of Earth Sciences (National Centre for Coastal Research)	In-kind	Recurrent expenditures	100000
Recipient Country Government	Ministry of Fisheries, Animal Husbandry and Dairying	Public Investment	Investment mobilized	2000000

Recipient Country Government	Ministry of Fisheries, Animal Husbandry and Dairying	In-kind	Recurrent expenditures	200000
Recipient Country Government	State Governments	Public Investment	Investment mobilized	10000000
Recipient Country Government	Ministry of Jal Shakti (Department of Water Resources, River Development & Ganga Rejuvenation)	Public Investment	Investment mobilized	4000000
Recipient Country Government	Ministry of Jal Shakti (Department of Water Resources, River Development & Ganga Rejuvenation)	In-kind	Recurrent expenditures	200000
Recipient Country Government	Ministry of Rural Development and Ministry of Skill Development and Entrepreneurship	Public Investment	Investment mobilized	2000000
Recipient Country Government	Ministry of Rural Development and Ministry of Skill Development and Entrepreneurship	In-kind	Recurrent expenditures	200000
Recipient Country Government	Ministry of Agriculture and Farmers Welfare (Central Marine Fisheries Research Institute- Indian Council of Agricultural Research)	Public Investment	Investment mobilized	1500000
Recipient Country Government	Ministry of Agriculture and Farmers Welfare (Central Marine Fisheries Research Institute- Indian Council of Agricultural Research)	In-kind	Recurrent expenditures	100000
Recipient Country Government	Ministry of tourism	Public Investment	Investment mobilized	2500000
Recipient Country Government	Ministry of tourism	In-kind	Recurrent expenditures	250000
Recipient Country Government	Ministry of New and Renewable Energy	Public Investment	Investment mobilized	1000000
Recipient Country Government	Ministry of New and Renewable Energy	In-kind	Recurrent expenditures	100000
Private Sector	HSBC funded WWFs, airlines such as JAL (Japan), Lufthansa (Germany), Suzlon, Tata power, Inox Wind Limited, Vestas Wind Systems. Adani Solar, Tata power solar	Grant	Investment mobilized	1250000

Private Sector	HSBC funded WWFs, airlines such as JAL (Japan), Lufthansa (Germany), Suzlon, Tata power, Inox Wind Limited, Vestas Wind Systems. Adani Solar, Tata power solar	In-kind	Recurrent expenditures	250000
GEF Agency	UNDP	In-kind	Recurrent expenditures	250000
Total Co-financing				**73,100,000.00**

Describe how any "Investment Mobilized" was identified

Note: above figures to be validated during PPG stage

1. Ministry of Environment, Forest and Climate Change: Investment will be mobilized through the on-going Centrally-Funded Government Schemes: (i) National Afforestation Program (NAP) for the eco-restoration of degraded migratory bird forest habitats and adjoining areas through people's participation; (ii) Compensatory Afforestation Fund Management and Planning Authority (CAMPA) to support rewilding of roosting and nesting areas for through ANR, fire management, forest and soil and water protection; (iii) Green India Mission (GIM) for increasing forest cover; (iv) Integrated Development of Wildlife Habitats Scheme to support conservation of wildlife and habitats within and outside PAs and species recovery, particular in areas where there is significant wetland areas; (v) Project Dolphins for protection to conserve both riverine and oceanic dolphin species; (vii) National Wetlands Conservation Program preventing the wetlands from further deterioration and to ensure their judicious usage for the benefit of local people and the general conservation of biodiversity; (vii) National Coastal Management program for protection of coastal habitats, community sustainable fisheries activities, etc. (viii) National Mission on Himalayan Studies focus on conservation and sustainable development activities; (ix) National Coastal Mission for conservation of coastal ecosystems and community livelihood and employment promotion; (x) National River Conservation Program supports financial and technical support to States for pollution control, and water quality improvements; (xi) Conservation of Natural Resources and Ecosystems Program for conservation/restoration of mangroves, wetland, etc. The Wildlife Institute of India, Zoological society of India, National Centre for Sustainable Coastal Management, Indian Council of Forestry Research and Education provide direct and in-kind support in form of technical and financial support.

2. Ministry of Defense: The Coast Guard and Indian Navy support conservation of coastal and marine biodiversity. The Inclusion of dolphins as Schedule I species, empowers the Indian Coast Guards for search, seizure, arrest, and detention in the Wild Life (Protection) Amendment Act, 2022.

3. Ministry of Ports, Shipping and Waterways: Investment mobilized through implementation of interventions for preservation and protection of marine environment and control of marine pollution. Management of vessel movement in rivers and marine ecosystem, with a view to be in sync with Dolphin conservation interventions.

4. Ministry of Earth Sciences: Investment mobilized through cooperation in Marine Dolphin and associated species estimation and management and abatement of marine litter and pollution activities and also supporting activities like marine Dolphin enumeration, identification of marine dolphin habitats using advanced technology etc. The National Centre for Coastal Research (NCCR) can provide technical as well as financial support under their mandate to improve the country's capabilities in addressing the challenging problems prevailing in the coastal zone, which have societal, economic, and environmental implications.

5. Ministry of Fisheries, Animal Husbandry and Dairying: Investment mobilized through schemes like Pradhan Mantri Matsya Sampada Yojana (PMMSY) supporting in improving livelihood opportunities of fisherfolks such as adopting alternative livelihood opportunities such as aquaculture, shrimp farming, pisciculture, etc.; Enhancing fisheries conservation thereby creating adequate prey-base for Dolphins; Supporting fisheries related activities aimed at adoption of Dolphin friendly fishing practices, including by-catch reduction and un-intended entanglement of Dolphins in fishing near and providing incentives to fisherfolk for adoption of such dolphin friendly fishing practices.

6. Ministry of Jal Shakti: Investment mobilized through (I) Namami Gange Program; Monitoring on maintenance of water flow in rivers and management and abatement of riverine pollution; support for taking up activities relating to creating network of Dolphin Mitra, and providing incentives for discouraging use of Dolphin as bait and for awareness generation programs on pollution reduction, maintain water quality, reducing release of industrial effluents to rivers, etc. (II) National River Conservation Directorate (NRCD), implementing the Centrally Sponsored Schemes of the National Conservation Plan (NRCP) and National Plan for Conservation of Aquatic Ecosystems (NPCA) for the conservation of rivers, lakes, and wetlands in the country. NRCD has now amalgamated biodiversity conservation and community participation in the conservation process.

7. Ministry of Rural Development and Ministry of Skill Development and Entrepreneurship (Water Resources, River Development, biodiversity-friendly skilling): Investment mobilized through (I) Mahatma Gandhi National Rural Employment Guarantee Scheme on NRM works focused on check dam, ponds, renovation of traditional water bodies, land development, embankment, field bunds, field channels, plantations, contour trenches etc. (II) National Skill Development Mission, (III) National Rural Livelihoods Mission (Deendayal Antayodaya Yojana-DAYNRLM) for facilitating establishment of required infrastructure; facilitating technical know-how to communities in establishing and carrying out livelihood generation activities; supporting artisans and fishermen in developing biodiversity-friendly nets and other similar initiatives.

8. Ministry of Tourism: Investment mobilized through various schemes namely- Swadesh Darshan Scheme 2.0, and Pilgrimage Rejuvenation and Spiritual Augmentation Drive (PRASAD Scheme). Support through promotion of Dolphin Tourism activities like financial assistance for development of tourism related infrastructures, promoting tourism circuits involving dolphin tourism with cultural, religious, historical places, training and capacity building for Dolphin tourism activities.

9. Ministry of Agriculture and Farmers Welfare: Investment mobilized through (I) National Mission on Sustainable Agriculture (NMSA) initiative on Soil Health Management; (II) Paramparagat Krishi Vikas Yojana (PKVY); (III) Organic farming National Project on Organic Farming (NPOF); appropriate land use based on land capability, judicious application of fertilizers and minimizing the soil erosion/degradation. Support from scientific institutes like CMFRI, etc. in development and implementation of marine dolphin estimation protocols and marine dolphin conservation.

10. Ministry of New and Renewable Energy: Investment mobilized through schemes for Development of Solar Parks and Ultra Mega Power Projects to support wildlife-friendly energy technologies.

11. State Governments: The state government schemes in Bihar, Assam, Gujarat, Punjab and Tamil Nadu can be finalized during the PPG phase but will include support for wetland and forest and wildlife conservation, ecodevelopment programs for forest communities around wetlands, community livelihood programs, water resources management, catchment conservation, , etc.

12. Private Sector: Investment mobilized through ongoing and planned initiatives related to biodiversity conservation by corporates such as airlines, solar and wind power industries. Other private sector entities will be tapped (based on the financial assessment) for supporting the promotion of new and renewable energy. Support for community micro-enterprise development, ecotourism promotion, etc. The private sector partners will be finalized during the PPG.

13. UNDP will provide staff time and resources from their relevant sector units (conservation, climate change, private sector etc.) to support the project activities. This will be finalized at PPG stage

Table A.1: Detailed Information on Centrally and State Funded Schemes for Potential Co-financing (see in a separate file)

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Name	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	Pradeep Kurukulasuriya	10/17/2023	Tashi Dorji		pradeep.kurukulasuriya@undp.org
Project Coordinator	Tashi Dorji	10/17/2023	Tashi Dorji		tashi.dorji@undp.org
Project Coordinator	Carsten Germer	10/17/2023	Tashi Dorji		carsten.germer@undp.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Name	Position	Ministry	Date (MM/DD/YYYY)
Neelesh Kumar Sah	Joint Secretary	Ministry of Environment, Forest and Climate Change (MoEFCC)	10/18/2023

ANNEX C: PROJECT LOCATION

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

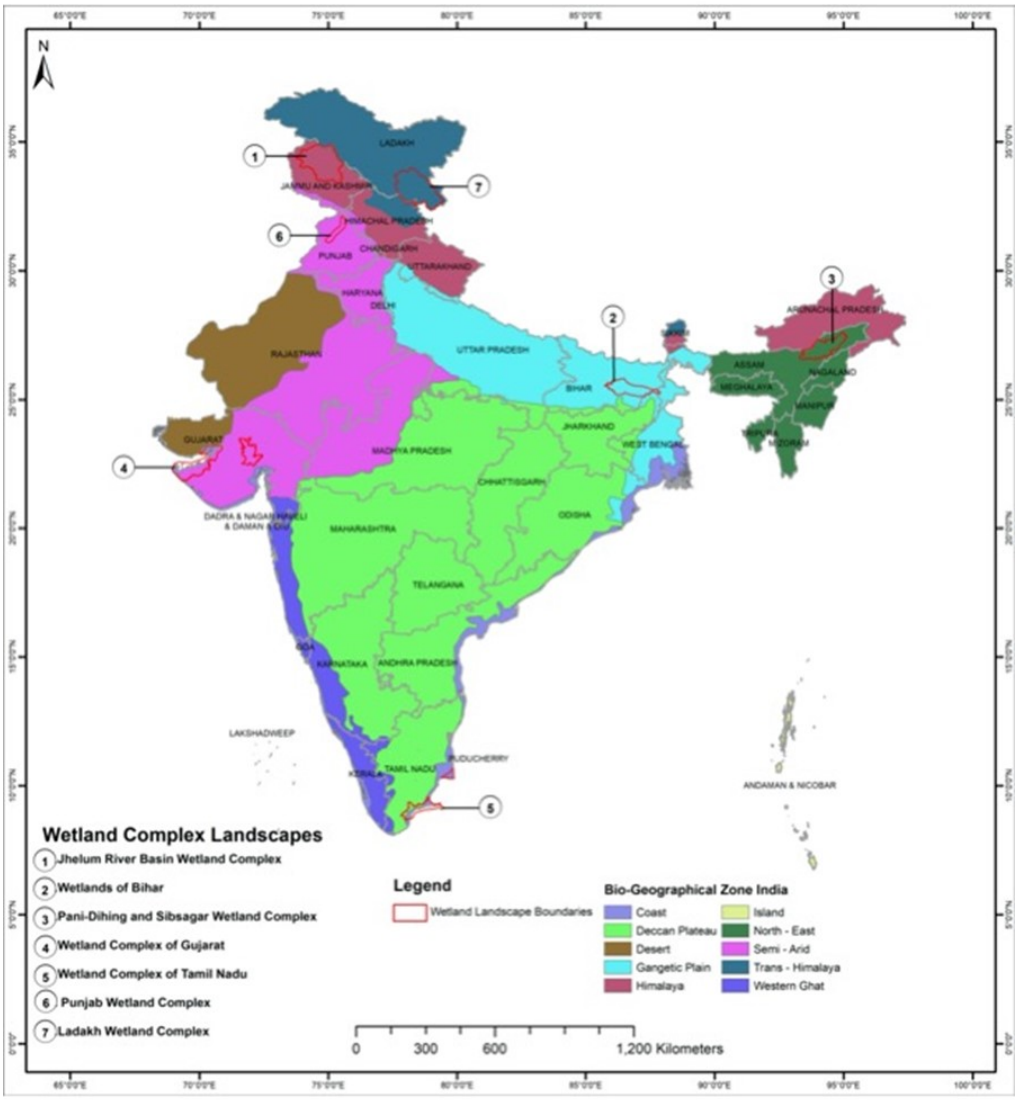
Criteria for selection of wetland scape systems for project investment: These following five sites were selected for conservation of CAF meets the criteria fir determining global biodiversity significance for a wetland-scape such as:

- Ramsar site;
- A site that meets Ramsar criteria but hasn't been declared;
- a Key Biodiversity Area (KBA); and
- A site that meets KBA criteria, even if not yet formally designated.

	Wetland Complex	Area in km^2
1	Bihar - Gangetic plains wetlands and rivers	1,250
2	Upper Assam - Brahmaputra river and wetland complex	4,800
3	Gujarat - Wetland and grassland complex (2 sub-units)	5,650
4	Tamil Nadu -Wetland Complex (2 sub-units)	2,100
5	Punjab - Beas River Wetland Complex	200

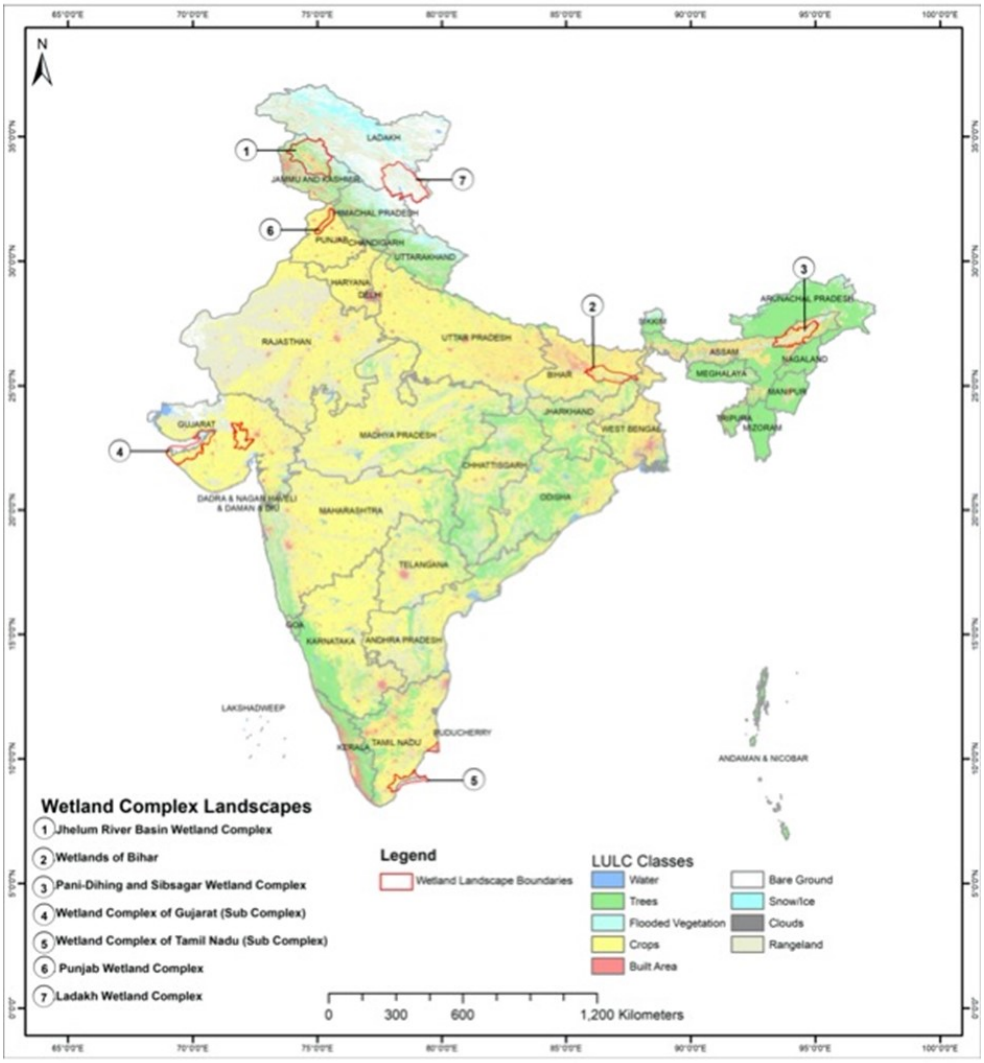
Total	14,000

The mosaic of ecologically integrated wetland complexes identified reflects the vast diversity of riverine, wetlands, and associated habitats that the Indian subcontinent offers in the context of the Central Asian Flyway that is vital for the survival and wellbeing of migratory species, and for the ecosystem services provided to the local communities. The migratory birds use these habitats at various times of the year for staging, wintering, and breeding stages, providing an opportunity for systemic conservation of these birds, involving local communities across varying cultural and socio-economic contexts. Complexes in the states of Gujarat and Tamil Nadu act as bottleneck sites in the Central Asian Flyway allowing for large congregations of migratory birds to use the sites within for breeding, staging and wintering. Sites within the complexes in Punjab, Bihar, and Assam provide a unique assemblage of overlaps between habitats for migratory birds (and river dolphins coexisting) in wetland scapes that have heavy anthropogenic use. All these wetland complexes provide a unique opportunity for developing community-led, community-based models of conservation where the mushrooming aspirations of local communities can be addressed by creating and augmenting sustainable livelihoods.



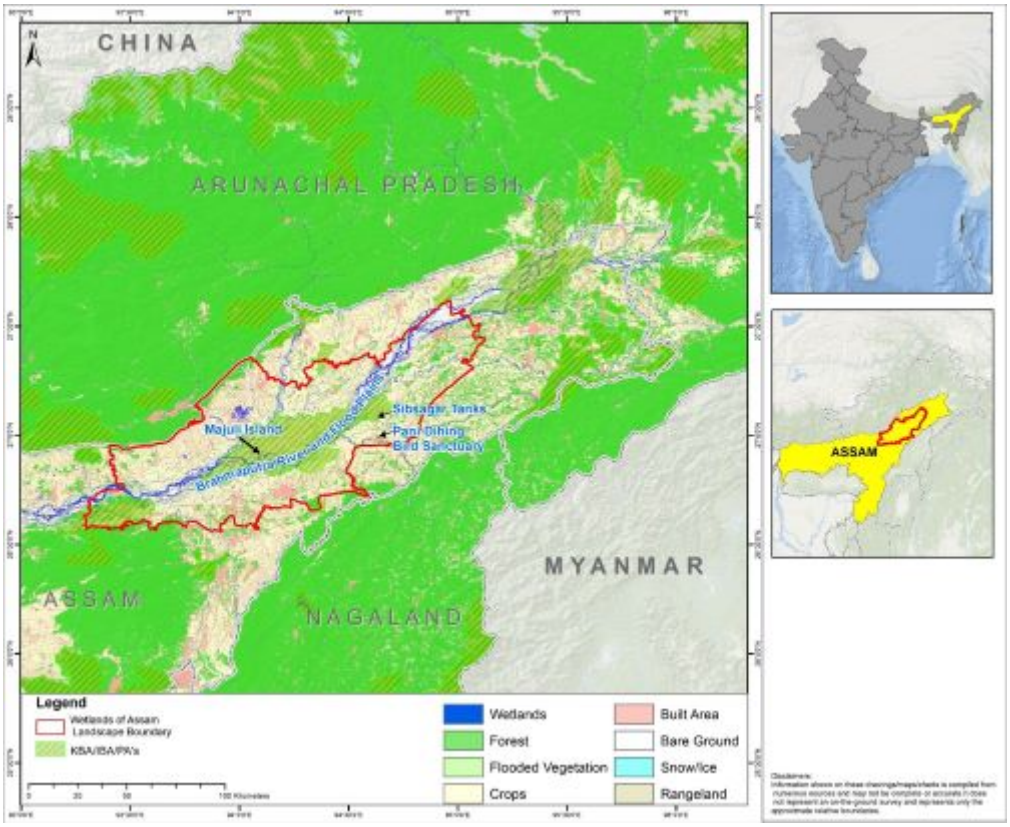
Map C.1. Proposed Wetland scapes and biogeographic zones

(disclaimer: The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries

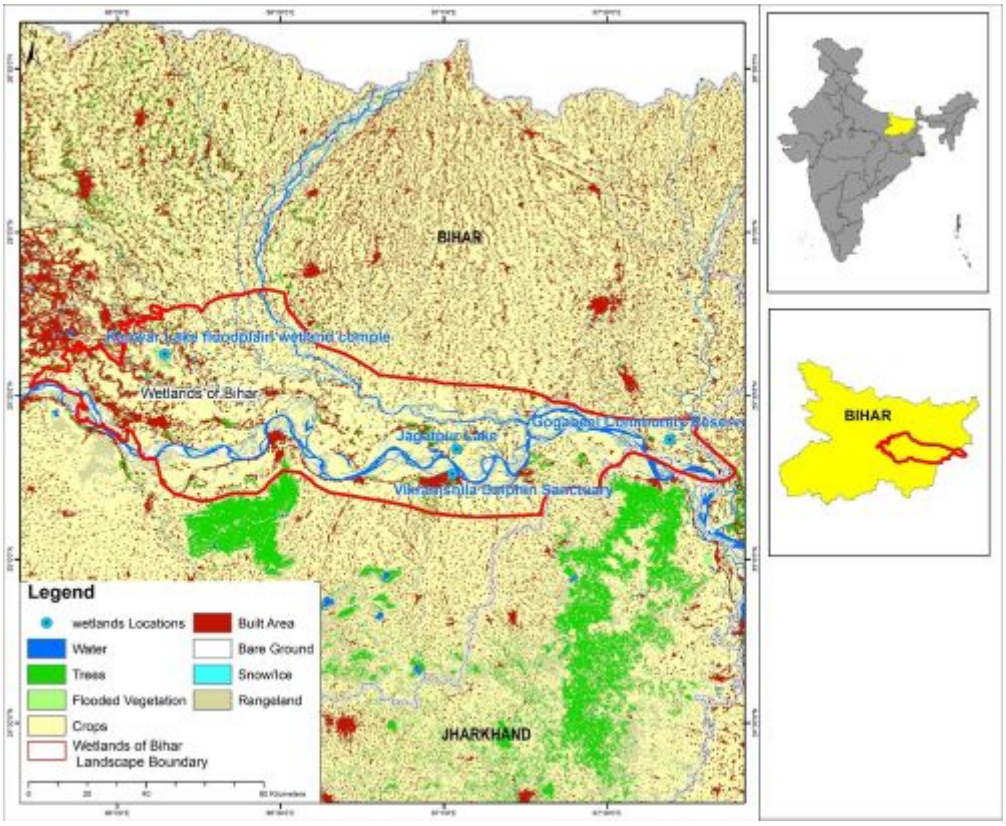


Map C.2. Proposed Wetland scape and land use and Land Cover

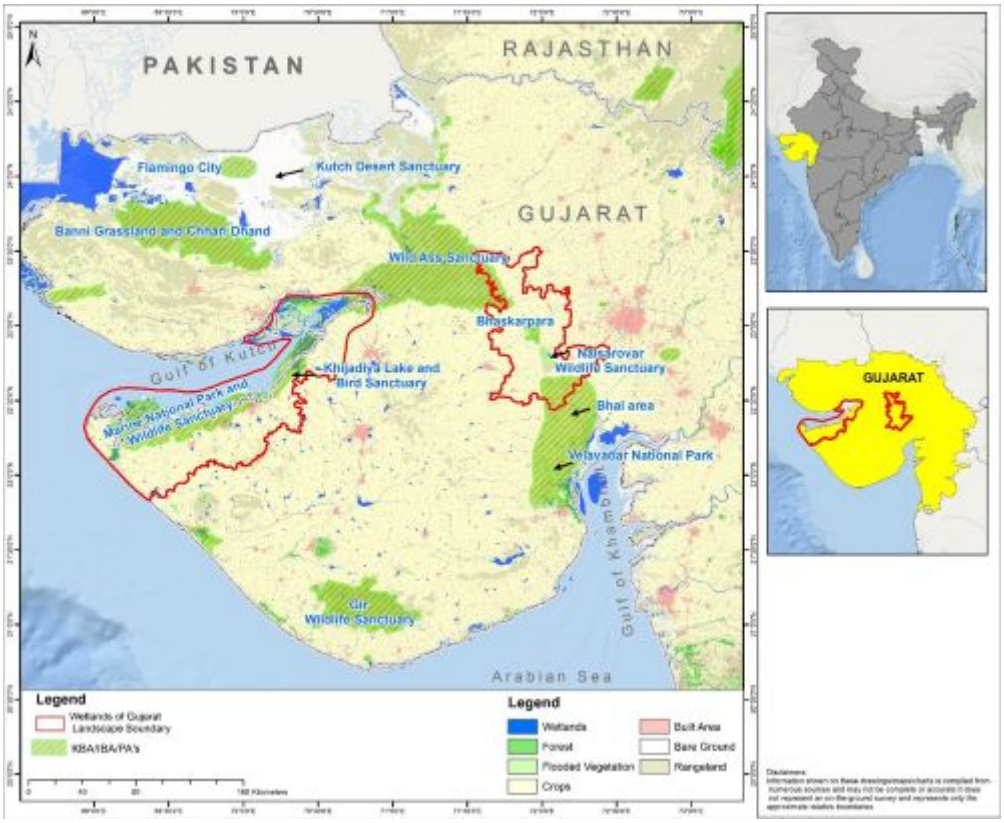
MAP C.3. Wetland Complex of Assam (Pani-Dihing and Sibsagar Tanks) (27°0'0''N; 94°0'0''E)



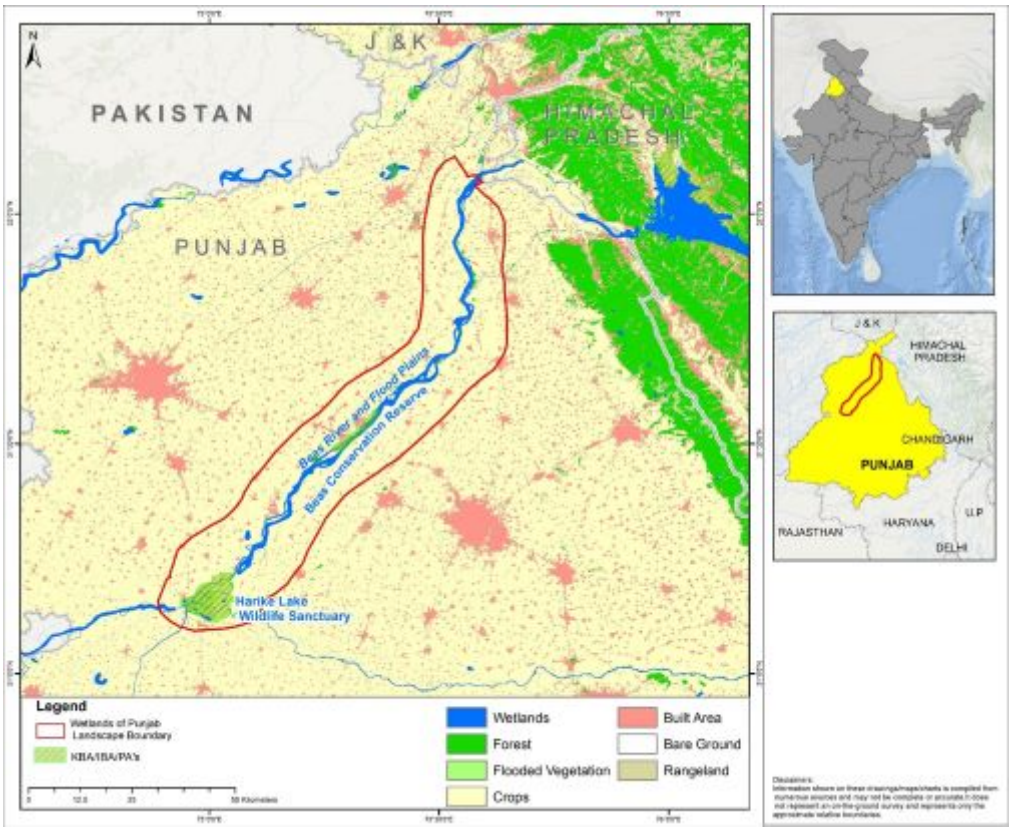
MAP C.4. Wetland complex of Bihar (25°30'0''N; 86°30'0'E)



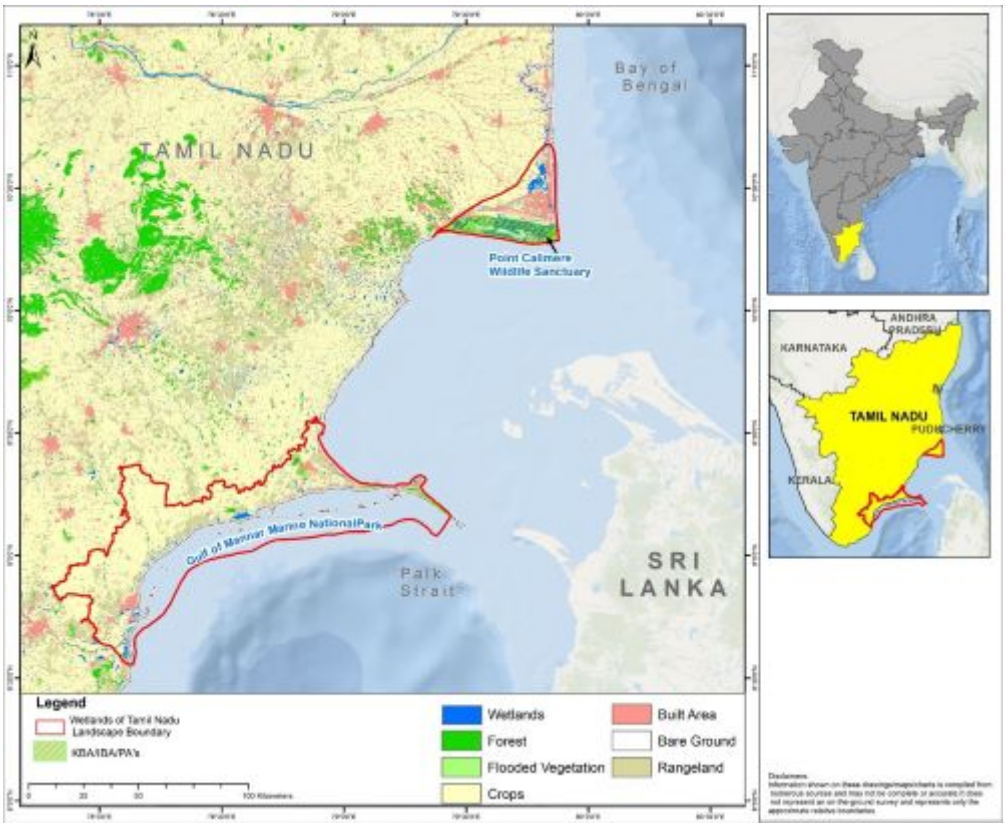
MAP C.5. Wetland complex of Gujarat ((23°30"0""N; 69°30"0""E) and (23°0'0''N; 72°0'0''E))



MAP C.6. Wetland complex of Punjab (32°0'0''N; 75°30'0''E)



MAP C.7. Wetland complex of Tamil Nadu ((9°0'0"N; 78°30'0"E) and (10°30'0"N; 79°30'0"E))



- **Table C.1: Detailed information for each of the five wetland scapes[1][13]**

- **(NOTE for the PIF in the GEF Portal please see the "Documents" tab for Annex 3 Table C1)**https://undp-my.sharepoint.com/personal/sarawut_tangsakha_undp_org/Documents/NCE-EBD/COs/India/9661%20CAF/GEF%20Review%20Sheet/PIMS%209661_11478_CoHabitat_PIF_resubmission_v.27.11.2023.docx - _ftn1

Table C.2: Site Threat matrix

Threat/Wetland scape	Bihar	Punjab	Assam	Gujarat	Tamil Nadu
Illegal hunting	67	33	44	33	33
Illegal trade	53	0	22	30	8
Deliberate poisoning	0	0	22	0	0
Bycatch	7	0	0	3	8
Electrocution	0	0	0	30	0
Wind turbines	0	0	0	30	0
Disturbance	60	50	67	50	42
Habitat loss/destruction	53	0	56	50	42
Habitat degradation	60	17	56	57	50
Invasives	27	33	44	47	67
Changes in Hydrological Regimes	20	33	0	27	0
Mineral extraction	0	0	0	17	0
Unsustainable land-resource use	33	33	0	37	42
Urbanization	0	0	0	3	17
Pollution	53	50	33	33	33

Note: Threats ranked from 0 (lowest, not known) - 100 (Highest possible). Green-Red - Low to High.

[1] **This information will be further assessed, validated and revised at PPG stage.**

ANNEX D: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

(PIF level) Attach agency safeguard screen form including rating of risk types and overall risk rating.

Title

Annex D_9661 CAF Pre-SESP_13 oct 2023_Final

ANNEX E: RIO MARKERS

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
No Contribution 0	No Contribution 0	Principal Objective 2	No Contribution 0

ANNEX F: TAXONOMY WORKSHEET

** Please note that the taxonomy worksheet above are the selected taxonomy tags which are aligned with those on the front page of the Portal.

Level 1	Level 2	Level 3	Level 4
Influencing models			

	Transform policy and regulatory environments		
	Strengthen institutional capacity and decision-making		
	Convene multi-stakeholder alliances		
	Demonstrate innovative approaches		
	Deploy innovative financial instruments		
Stakeholders			
	Indigenous Peoples		
	Private Sector		
		Financial intermediaries and market facilitators	
		SMEs	
		Individuals/Entrepreneurs	
	Beneficiaries		
	Local Communities		
	Civil Society		
		Community Based Organization	
		Non-Governmental Organization	
		Academia	
	Type of Engagement		
		Information Dissemination	
		Partnership	
		Consultation	
		Participation	
	Communications		
		Awareness Raising	
		Education	
		Public Campaigns	
		Behavior Change	
Capacity, Knowledge and Research			
	Enabling Activities		
	Capacity Development		
	Knowledge Generation and Exchange		
	Targeted Research		
	Learning		
		Theory of Change	
		Adaptive Management	
		Indicators to Measure Change	
	Innovation		
	Knowledge and Learning		
		Knowledge Management	
		Innovation	
		Capacity Development	
		Learning	
	Stakeholder Engagement Plan		
Gender Equality			
	Gender Mainstreaming		
		Beneficiaries	
		Women groups	
		Sex-disaggregated indicators	
		Gender-sensitive indicators	
	Gender results areas		
		Access and control over natural resources	
		Participation and leadership	
		Access to benefits and services	
		Capacity development	
		Awareness raising	
		Knowledge generation	
Focal Areas/Theme			
	Biodiversity		
		Protected Areas and Landscapes	

			Terrestrial Protected Areas
			Coastal and Marine Protected Areas
			Productive Landscapes
			Productive Seascapes
			Community Based Natural Resource Management
		Mainstreaming	
			Forestry (Including HCVF and REDD+)
			Tourism
			Agriculture & agrobiodiversity
			Fisheries
			Infrastructure
			Certification (National Standards)
		Species	
			Threatened Species
			Invasive Alien Species (IAS)
		Biomes	
			Mangroves
			Coral Reefs
			Sea Grasses
			Wetlands
			Rivers
			Lakes
			Tropical Rain Forests
			Tropical Dry Forests
			Temperate Forests
			Grasslands
			Desert
		Financial and Accounting	
			Payment for Ecosystem Services
			Conservation Finance
	Forests		
		Forest and Landscape Restoration	
	Land Degradation		
		Sustainable Land Management	
			Ecosystem Approach
			Integrated and Cross-sectoral approach
			Community-Based NRM
			Sustainable Livelihoods
			Income Generating Activities
			Sustainable Agriculture
			Sustainable Forest/Woodland Management
			Improved Soil and Water Management Techniques
	Chemicals and Waste		
		Sound Management of chemicals and Waste	
	Climate Change		
		Climate Change Adaptation	
			Climate Resilience
			Ecosystem-based Adaptation
			Community-based Adaptation
			livelihoods
		Climate Change Mitigation	
			Agriculture, Forestry, and other Land Use
		United Nations Framework on Climate Change	
			Nationally Determined Contribution
			Sustainable Development Goals
		Climate Finance (Rio Markers)	
			Climate Change Mitigation 1
			Climate Change Adaptation 1