

## GEF-8 PROJECT IDENTIFICATION FORM (PIF)

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## General Project Information

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| Project Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                    |
| Strengthening Nature-Based Solutions to Restore Ecosystems, and Conserve and Enhance Blue Carbon Stocks and Biodiversity in Viet Nam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                    |
| Region                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | GEF Project ID                     |
| Asia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 11668                              |
| Country(ies)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Type of Project                    |
| Viet Nam                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | MSP                                |
| GEF Agency(ies):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | GEF Agency ID                      |
| UNDP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 9818                               |
| Executing Partner                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Executing Partner Type             |
| Department of Climate Change, Ministry of Agriculture and Environment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Government                         |
| GEF Focal Area (s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Submission Date                    |
| Multi Focal Area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 8/30/2024                          |
| Project Sector (CCM Only)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                    |
| Taxonomy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                    |
| Focal Areas, Climate Change, Climate Change Mitigation, United Nations Framework Convention on Climate Change, Paris Agreement, Nationally Determined Contribution, Climate Change Adaptation, Mainstreaming adaptation, Influencing models, Transform policy and regulatory environments, Strengthen institutional capacity and decision-making, Stakeholders, Type of Engagement, Consultation, Information Dissemination, Communications, Civil Society, Academia, Non-Governmental Organization, Gender Equality, Gender results areas, Capacity Development, Knowledge Generation and Exchange, Gender Mainstreaming, Gender-sensitive indicators, Sex-disaggregated indicators, Capacity, Knowledge and Research, Knowledge Exchange, Knowledge Generation, Learning, Indicators to measure change, Local Communities, Agriculture, Forestry, and Other Land Use |                                    |
| Type of Trust Fund                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Project Duration (Months)          |
| GET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 60                                 |
| GEF Project Grant: (a)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | GEF Project Non-Grant: (b)         |
| 3,502,968.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 0.00                               |
| Agency Fee(s) Grant: (c)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Agency Fee(s) Non-Grant (d)        |
| 332,782.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0.00                               |
| Total GEF Financing: (a+b+c+d)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Total Co-financing                 |
| 3,835,750.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 23,000,000.00                      |
| PPG Amount: (e)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | PPG Agency Fee(s): (f)             |
| 150,000.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 14,250.00                          |
| PPG total amount: (e+f)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Total GEF Resources: (a+b+c+d+e+f) |

|                                                                |              |
|----------------------------------------------------------------|--------------|
| 164,250.00                                                     | 4,000,000.00 |
| Project Tags                                                   |              |
| CBIT: No NGI: No SGP: No Innovation: No Competitive Window: No |              |

## 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)

Coastal and marine degradation in the Mekong Delta region of Viet Nam are driven by subsidence and sea level rise, in tandem with unsustainable land and natural resources use practices, urbanization, and industrial development. Impacts of this degradation include loss of agricultural and aquacultural land and productivity, community displacement, salinity intrusion, coastal ecosystems switching from carbon sinks to sources, and heightened vulnerability to extreme weather events. This threatens the region's food security, economy, livelihoods of 17.5 million people, and overall resilience. Furthermore, coastal degradation jeopardizes the region's rich biodiversity and puts globally threatened species including Crab-eating Macaque (*Macaca fascicularis*), Small-clawed Otter (*Aonyx cinereus*), Dugong (*Dugong dugon*), Green Turtle (*Chelonia mydas*), and Hawksbill Turtle (*Eretmochelys imbricata*) further at risk.<sup>[1]<sup>1</sup>[2]<sup>2</sup></sup> The Mekong Delta is considered a highly vulnerable ecosystem under threat from increasing anthropogenic pressure.<sup>[3]<sup>3</sup>[4]<sup>4</sup>[5]<sup>5</sup></sup>

Given Viet Nam's global biodiversity and agricultural significance, solutions are urgently needed to prevent coastal degradation exacerbated by climate change. Nature-based solutions (NbS), as acknowledged by the International Union for Conservation of Nature (IUCN), leverage the power of healthy ecosystems to protect people and infrastructure, and safeguard a stable and biodiverse future.<sup>[6]<sup>6</sup>[7]<sup>7</sup></sup> Coastal blue carbon ecosystems—mangroves, coral reefs, seagrasses, and tidal mudflats—provide numerous benefits for coastal communities. When healthy, they preserve biodiversity, enhance disaster mitigation potential, and support inclusive socio-economic development of surrounding communities. Blue carbon ecosystems sequester and store significant amounts of carbon, contributing to achieving Viet Nam's Nationally Determined Contribution (NDC) targets<sup>[8]<sup>8</sup></sup> while opening the potential for blue carbon credits, another financing option and incentive for local communities to sustainably manage coastal ecosystems. Many NbS in Viet Nam are linked to local traditional practices of ecological agriculture,<sup>[9]<sup>9</sup></sup> or the concept of “living with floods,”<sup>[10]<sup>10</sup></sup> where bamboo fences<sup>[11]<sup>11</sup></sup> and other nature-based measures are integrated into regional development and coastal defense and management approaches.

The project's objective is to strengthen NbS to restore ecosystems, and conserve and enhance blue carbon stocks with biodiversity, land protection and livelihood co-benefits in coastal landscape mosaics of the Mekong Delta.<sup>[12]<sup>12</sup></sup> To achieve this, the project will promote nature-positive, inclusive livelihood activities and enhance socio-economic development by strengthening national and

regional plans and strategies for the systematic introduction and implementation of NbS in the Kien Giang Biosphere Reserve. This will be achieved by: (i) enhancing national, regional, and provincial plans and strategies for developing and implementing NbS; (ii) strengthening cross-sectoral planning and coordination capacities for implementing NbS at the national and provincial levels; (iii) mobilizing participation and investments of the private sector and local communities in demonstrating NbS; and (iv) communication and knowledge management to analyse, adapt and share valuable lessons learned to feed back into i-iii.<sup>[13]</sup><sup>13</sup> This project is innovative in that it extends beyond mangroves and seeks to pilot novel measures in other blue carbon ecosystems such as seagrasses and coral reefs; includes the development of a collaborative monitoring, reporting and verification (MRV) approach; and establishes blue carbon business models and linkages to the blue carbon market.

The project is aligned with Viet Nam's National Biodiversity Strategy and Action Plan (NBSAP) and supports achieving the Kunming-Montreal Global Biodiversity Framework (KMGBF), specifically Goals A, B and D; and Targets 1-3, 8, 10, 11, and 20-23. The project will generate several global environmental benefits, namely by improving the management of 1,450 hectares of terrestrial protected areas (CI-1) and 307 hectares of marine protected areas (CI-2) for the improved conservation of globally threatened biodiversity and sustainable use of natural resources by local communities; restoring 30 hectares of mangroves (CI-3); and putting 3,000 hectares of landscapes and 2,000 hectares of marine habitat (excluding core zones of the Kien Gian Biosphere Reserve) under improved practices (CI-4; CI-5). The project will conserve approximately 468,594 tons of carbon dioxide equivalent (tCO<sub>2</sub>e) stored in coastal ecosystems, of which 2,223 tCO<sub>2</sub>e comes from community-based management and restoration efforts (CI-6). The project will directly benefit approximately 1,500 people (at least 45 percent women) (CI-11), and indirectly benefit approximately 450,000 people (at least 45 percent women).

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<sup>[1]</sup> IUCN. (2022). *Exploring Kien Giang's Island clusters*. Retrieved from <https://www.iucn.org/news/viet-nam/202205/exploring-kien-giangs-island-clusters>

<sup>[2]</sup> German Corporation for International Cooperation (GIZ) and Government of Australia. (2011). *Conservation and development of the Kien Giang Biosphere Reserve*. Retrieved from <https://www.dfat.gov.au/sites/default/files/cccep-kien-giang-lessons-learned-pd.pdf>

<sup>[3]</sup> Asian Development Bank (ADB). (2011). *Climate Change Impact and Adaptation Study in the Mekong Delta: Climate Change Vulnerability and Risk Assessment Study for Ca Mau and Kien Giang Provinces, Vietnam – Final Report*. Retrieved from <https://www.adb.org/projects/documents/climate-change-impact-and-adaptation-study-mekong-delta-final-report>

<sup>[4]</sup> Seleznev D.G., et al. (2024). Biodiversity of aquatic organisms in the Mekong Delta, Vietnam. *Biodiversity Data Journal*, 11. <https://doi.org/10.3897/BDJ.11.e105314>

<sup>[5]</sup> Ministry of Agriculture and Environment (MONRE). (2020). *Third National Communication of Vietnam to the UNFCCC*. Retrieved from [https://unfccc.int/sites/default/files/resource/Viet%20Nam%20-%20NC3%20resubmission%2020%2004%202019\\_0.pdf](https://unfccc.int/sites/default/files/resource/Viet%20Nam%20-%20NC3%20resubmission%2020%2004%202019_0.pdf)

<sup>[6]</sup> [Resolution 5](#), adopted by the United Nations Environment Assembly (UNEA) of the United Nations Environment Programme (UNEP) on 2 March 2022, defines NbS as “actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services, resilience and biodiversity benefits.”

<sup>[7]</sup> NbS are already observed in Kien Giang Biosphere Reserve, the proposed project area, as well as numerous other locations along Viet Nam's 3,260-kilometre-long coastline.

<sup>[8]</sup> While there is no explicit reference to blue carbon in [Viet Nam's NDC \(2022\)](#), there is reference to carbon sequestration from the land use, land use change and forestry (LULUCF) sector in Section 2.3.3.

<sup>[9]</sup> Stockholm Environment Institute (SEI). (2023). *Ecosystem-based Adaptation in Agriculture, Water Resources and Disaster Risk Management in the Greater Mekong Subregion*. Retrieved from <https://www.sei.org/wp-content/uploads/2023/07/attachment-2-2-ccesp-policy-study-eba-in-water-and-agriculture.pdf>

<sup>[10]</sup> Sinh, B.T., Lebel, L., Tung, N.T. (2009). *Indigenous knowledge and decision making in Vietnam: Living with floods in An Giang Province, Mekong Delta, Vietnam*. Asia-Pacific Network for Global Change Research. Retrieved from <https://www.apn-gcr.org/publication/indigenous-knowledge-and-decision-making-in-vietnam-living-with-floods-in-an-giang-province-mekong-delta-vietnam/>

<sup>[11]</sup> Cong, M.V., Ngo, A., Mai, T., and Dao, H.T. (2021). Bamboo Fences as a Nature-Based Measure of Coastal Wetland Protection in Vietnam. *Frontiers in Marine Science*, 8. <https://doi.org/10.3389/fmars.2021.756597>

<sup>[12]</sup> In the context of the GEF-8 Strategy, and as per the [Strategic Positioning and Programming Directions](#) prepared by the Global Environment Facility (GEF) Secretariat, mosaics are defined as “networks of protected areas and complementary landscapes/seascapes that include combinations of protected areas, other effective area-based conservation measures (OECMs), sustainable use areas, production landscapes and seascapes, and Indigenous Peoples and local communities (IPLC)-managed lands and waters.” Landscapes include all the freshwater and aquatic biodiversity therein.

<sup>[13]</sup> The selection, design, and implementation of practical NbS, as well as the incorporation of NbS into policy and planning frameworks at the national and provincial levels, will be informed by the [IUCN Global Standard for Nature-based Solutions](#), consisting of eight criteria and associated indicators which address the pillars of sustainable development (biodiversity, economy and society) and resilient project management to increase the scale and impact of the NbS approach, to prevent unanticipated negative outcomes or misuse, and to assist funding agencies, policymakers and other stakeholders assess the effectiveness of interventions. Selection of appropriate NbS will also be subject to UNDP's project-level Social and Environmental Screening Procedure (SESP).

## Indicative Project Overview

### Project Objective

Strengthen nature-based solutions to restore ecosystems, and conserve and enhance blue carbon stocks with biodiversity, land protection and livelihood co-benefits in coastal landscape mosaics of the Mekong Delta

### Project Components

**Component 1: Enhancing national, regional and provincial plans and strategies for mainstreaming, developing and implementing NbS to restore critical ecosystems, and conserve and enhance blue carbon stocks and biodiversity**

|                            |                   |
|----------------------------|-------------------|
| Component Type             | Trust Fund        |
| Technical Assistance       | GET               |
| GEF Project Financing (\$) | Co-financing (\$) |
| 480,000.00                 | 3,000,000.00      |

Outcome:

Outcome 1: National, regional and provincial plans and strategies that are gender-responsive enhanced for implementing NbS to restore critical ecosystems and conserve and enhance blue carbon stocks with biodiversity, environmental, social, gender and climate change adaptation co-benefits.

*This is measured by:*<sup>[14]</sup>

- At least one plan/strategy instrument mainstreaming/integrating NbS in the updated NDC, National Adaptation Plan (NAP), and/or NBSAP submitted for adoption.
- At least one gender-responsive provincial/regional coastal management tool updated with consideration for the implementation of NbS for enhancing blue carbon ecosystems submitted for adoption.
- At least two sectoral development plans/strategies (e.g. fisheries, aquaculture, mangrove forest management) incorporate NbS for carbon mitigation with co-benefits.
- One technical guidelines developed and adopted to incorporate NbS into provincial action plans on climate change mitigation and adaptation.

One regulation guidance document on applying monitoring, reporting and verification (MRV) for measuring comprehensive benefits from coastal blue carbon ecosystems developed.

<sup>[14]</sup> Quantified indicator values are tentative and subject to change during the PPG stage.

Output:

Output 1.1: Strengthened national, provincial, sub-sectoral policies/plans (NDC, NAP, Province's' Climate Change Response Programme) related to coastal mangroves, seagrass and coral reefs for upscaling NbS.

Output 1.2: Technical guidelines and tools developed to support the formulation and implementation of gender-responsive provincial action plans to respond to climate change towards gender-sensitive financing priority NbS.

---

Output 1.3: Collaborative MRV approach designed to report transparently on quantified mitigation, biodiversity and livelihood co-benefits from NbS, as part of Viet Nam's NDC/NAP, in alignment with United Nations Framework Convention on Climate Change (UNFCCC) guidance.

Output 1.4: Mechanisms for gender-sensitive regulatory, planning and budgeting processes reviewed and recommendations made to mainstream NbS in the updating of the NDC, NBSAP and NAP, in line with international commitments.

---

## Component 2: Strengthening capacity for cross-sectoral coordination, planning, budgeting and implementation of NbS at national and provincial levels to restore ecosystems, and conserve and enhance blue carbon stocks with biodiversity, environmental, social and climate change adaptation co-benefits

|                            |                   |
|----------------------------|-------------------|
| Component Type             | Trust Fund        |
| Technical Assistance       | GET               |
| GEF Project Financing (\$) | Co-financing (\$) |
| 650,000.00                 | 4,000,000.00      |

### Outcome:

Outcome 2: National and provincial cross-sectoral planning and coordination capacities strengthened for implementing NbS to restore ecosystems and conserve and enhance blue carbon stocks with biodiversity, environmental, social and climate adaptation co-benefits.

*This is measured by:*

- *At least two technical guidelines developed for development and financing of NbS for blue carbon at the provincial/local level, and policy recommendations for blue carbon incentive mechanisms prepared.*
- *Documented portfolio prepared, including at least 15 best practices in NbS for carbon mitigation with co-benefits relevant for the target province and coastal blue carbon ecosystems, with generic standard operating procedures, and mechanisms for social and environmental safeguards and economic cost-benefit analysis.*
- *At least ten trainings and awareness raising events conducted on NbS for carbon mitigation with co-benefits at the national, regional, provincial and district levels.*
- *Communication campaign designed and implemented at the national and provincial levels, using appropriate information tools including seminars, study tours, field demonstration, social media, etc.*

*Cross-sectoral coordination mechanism established/strengthened in the target province linked to regional and national coordination systems, bringing together sectoral stakeholders (conservation, fisheries, aquaculture, forestry, regional planning, science, etc.).*

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### Output:

Output 2.1: Capacity needs assessed and targeted capacity building programmes implemented for national and subnational institutions and community stakeholders<sup>[1]</sup><sup>15</sup> on spatial planning, financing and implementation of NbS to conserve and enhance blue carbon.

Output 2.2: Technical guidelines developed for the assessment, MRV and financing of NbS, as part of NDC/NAP implementation including: (i) assessment mechanisms for NbS designed and piloted; (ii) tool designed for quantification of blue carbon benefits from NbS in mangrove, seagrasses and coral reefs, with piloting in Output 3.4; and (iii) financing mechanism for NbS designed, building on pilots in Output 3.3, which include relevant guidelines for developing NbS investment projects to access climate finance (climate funds and private sector investment) and selection criteria for investment project prioritization, particularly for promoting private sector finance.

Output 2.3: Communication campaign implemented promoting NbS strategies, policies, planning and investments in coastal landscapes.

Output 2.4: Strengthened national and provincial cross-sectoral high-level dialogues, workshops, multi-stakeholder coordination and partnerships on mainstreaming NbS into national, sectoral and provincial plans.

Output 2.5: Inventory and portfolio of NbS developed, including maps of blue carbon potentials and best practices with community participation and gender mainstreaming.

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<sup>[1]</sup> Communities include households, farmers, fishers, farmers'/fishers' groups and community cooperatives, semi-private and private companies, and other private business representatives.

### Component 3: Mobilizing participation and investments of the private sector and local communities in demonstrating NbS to restore ecosystems and enhance blue carbon stocks in coastal ecosystems in one target province (Kien Giang)

|                            |                   |
|----------------------------|-------------------|
| Component Type             | Trust Fund        |
| Investment                 | GET               |
| GEF Project Financing (\$) | Co-financing (\$) |
| 1,955,000.00               | 13,400,000.00     |

#### Outcome:

Outcome 3: Effective participation and investments by the private sector and local communities, including women and youth groups, mobilized for the implementation of NbS to restore ecosystems, and conserve and augment blue carbon stocks in coastal ecosystems.

#### *This is measured by:*

- *Conducting coastal zone spatial assessments in four districts, including mapping and valuation of carbon stock potential, and assessment of ecosystem and livelihood climate risk and vulnerability.*
- *Technical support mechanism put in place to guide the design, financing and monitoring of grants issued.*
- *Fifteen grants (average of US\$50,000) issued to community groups, with preference to women- and youth-led groups, cooperatives, households, and public and private sector organizations to demonstrate NbS in coastal blue carbon ecosystems.*

*At least two MRV reports issued from participatory carbon quantification of supported NbS.*

#### Output:

Output 3.1: Participatory coastal zone spatial assessment, mapping and valuation of carbon stock potential, climate risk and vulnerability of ecosystems, ecosystem services, and coastal livelihoods.

Output 3.2: Technical assistance to support communities, particularly women and youth groups, and public and private sector actors with identifying, planning, financing, implementing and monitoring NbS.

Output 3.3: Finance provided to implement priority NbS by communities, particularly women-led solutions, and the private sector that reduce adverse impacts and maximize conservation and enhancement of blue carbon stocks with biodiversity and climate change adaptation co-benefits.

Output 3.4: Participatory MRV to quantify conserved and enhanced blue carbon stocks from implementation of priority NbS.

### Component 4: Communication and knowledge management

|                            |                   |
|----------------------------|-------------------|
| Component Type             | Trust Fund        |
| Technical Assistance       | GET               |
| GEF Project Financing (\$) | Co-financing (\$) |
| 151,160.00                 | 1,000,000.00      |

#### Outcome:

Outcome 4: Project best practices and innovations on NbS in priority sectors documented and disseminated.

#### *This is measured by:*

- *At least five best practices and lessons learnt reports, and policy briefs prepared.*

- *Online publicly accessible database and documentation repository operational, on mappings of climate risks, vulnerabilities, impacts and blue carbon potentials for information sharing.*

*At least three national/provincial seminars facilitate dissemination of implementation results and lessons learned, to inform relevant regulations related to NbS.*

#### Output:

Output 4.1: Experiences, best practices and lessons learned from gender-sensitive NbS across priority sectors are systematically documented and disseminated. Specific emphasis will be given to documenting and sharing lessons learned and best practices on women and youth empowerment, ensuring accessibility through various platforms for public and private stakeholders.

## M&E

|                            |                   |
|----------------------------|-------------------|
| Component Type             | Trust Fund        |
| Technical Assistance       | GET               |
| GEF Project Financing (\$) | Co-financing (\$) |
| 100,000.00                 | 500,000.00        |

#### Outcome:

Project progress and results are regularly monitored and evaluated.

*This is measured by:*

- *M&E plan designed and implemented, including results framework.*

*Tracking safeguard tools, annual reports, mid-term and terminal evaluation in line with UNDP/GEF requirements*

#### Output:

Project M&E and adaptive management system incorporating gender mainstreaming and social and environmental safeguards approaches designed and systematically integrated into project planning and implementation

## Component Balances

| Project Components                                                                                                                                                                                                                                                                                         | GEF Project Financing (\$) | Co-financing (\$) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------|
| Component 1: Enhancing national, regional and provincial plans and strategies for mainstreaming, developing and implementing NbS to restore critical ecosystems, and conserve and enhance blue carbon stocks and biodiversity                                                                              | 480,000.00                 | 3,000,000.00      |
| Component 2: Strengthening capacity for cross-sectoral coordination, planning, budgeting and implementation of NbS at national and provincial levels to restore ecosystems, and conserve and enhance blue carbon stocks with biodiversity, environmental, social and climate change adaptation co-benefits | 650,000.00                 | 4,000,000.00      |
| Component 3: Mobilizing participation and investments of the private sector and local communities in demonstrating NbS to restore ecosystems and enhance blue carbon stocks in coastal ecosystems in one target province (Kien Giang)                                                                      | 1,955,000.00               | 13,400,000.00     |

|                                                     |                     |                      |
|-----------------------------------------------------|---------------------|----------------------|
| Component 4: Communication and knowledge management | 151,160.00          | 1,000,000.00         |
| M&E                                                 | 100,000.00          | 500,000.00           |
| <b>Subtotal</b>                                     | <b>3,336,160.00</b> | <b>21,900,000.00</b> |
| Project Management Cost                             | 166,808.00          | 1,100,000.00         |
| <b>Total Project Cost (\$)</b>                      | <b>3,502,968.00</b> | <b>23,000,000.00</b> |

Please provide justification

N/A

## 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

Coastal and marine degradation in the Mekong Delta region of Viet Nam is driven by a complex interplay of factors. Soil subsidence and sea level rise, exacerbated by climate change, are major drivers of the region's degradation, further compounded by unsustainable land and natural resource use practices, rapid urbanization and industrial development. These impacts manifest in various ways, including the loss of agricultural and aquacultural land, reduced productivity, displacement of communities, salinity intrusion, and increased vulnerability to extreme weather events.

Moreover, the degradation of the ecosystems in the Mekong Delta poses a significant threat to the biodiversity of the region, which is home to four rich biosphere reserves: Kien Giang Biosphere Reserve,<sup>[1]16</sup> Mui Ca Mau Biosphere Reserve,<sup>[2]17</sup> Can Gio Mangrove Biosphere Reserve,<sup>[3]18</sup> and Dong Nai Biosphere Reserve.<sup>[4]19</sup> This degradation not only undermines the region's rich ecological diversity, particularly in the aforementioned biosphere reserves, but also jeopardizes its food security and economy, and puts the livelihoods of 17.5 million people, or approximately 18 percent of the population of Viet Nam, at risk. As the coastal ecosystems transition from carbon sinks to sources, the global implications of this degradation become stark, exacerbating climate change and disrupting marine ecosystems worldwide.

In an uncertain future, the trajectory of coastal degradation in the Mekong Delta could vary depending on the actions taken or not. The region is one of the largest and most fertile plains in Southeast Asia and the world, and it is the leading area for agricultural and aquacultural exports in Viet Nam. It contributes about 50 percent of rice production, 95 percent of rice exports, nearly 65 percent of aquaculture production, 60 percent of fish exports and nearly seven percent of all fruits in the country.<sup>[5]20</sup> Failure to address the root causes of degradation may lead to further loss of ecosystems, exacerbating vulnerabilities and undermining resilience. This could result in heightened socio-economic disparities, increased migration pressures, and heightened conflicts over scarce resources.

Alternatively, concerted efforts to implement NbS and ecosystem restoration could lead to positive outcomes. Restoring coastal ecosystems and enhancing resilience could not only mitigate the impacts of climate change, but also replenish blue carbon stocks,

foster sustainable development and contribute to biodiversity conservation. This would result in thriving coastal communities, enhanced ecosystem services, and greater resilience to future environmental challenges.

Despite these challenges, there are opportunities for Viet Nam to address coastal degradation and enhance resilience. NbS in the coastal zones offer promising avenues for protecting coastal communities and infrastructure while promoting socio-economic development. Blue carbon ecosystems such as mangroves, coral reefs, seagrasses, and tidal mudflats play a crucial role in biodiversity conservation, disaster mitigation, and carbon sequestration. Integrating NbS with traditional practices of ecological agriculture and flood management, for example, presents a holistic approach to coastal defence and management.

Yet, to upscale NbS, Viet Nam needs to overcome multifaceted barriers, ranging from inadequate land and resource management practices to the lack of integrated governance and financial constraints. Climate change exacerbates these challenges, posing threats to food and livelihood security, and socio-economic stability. Moreover, gender and social disparities in land ownership and decision making further compound the complexity of addressing coastal degradation.

However, Viet Nam also has significant opportunities to address these challenges. The alignment of NbS, particularly in the restoration of coastal and marine ecosystems, with global and national biodiversity and climate goals has been clearly set out in Viet Nam's updated NDC (2022)<sup>[6]21</sup> and the NBSAP, and highly prioritised in the National Adaptation Plan (2020-2030) (undergoing update in 2024).<sup>[7]22</sup> Along with global frameworks like the United Nations Decade on Ecosystem Restoration, the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Convention on Biological Diversity (CBD), such timely alignment provides a strategic direction for action; stimulates environmentally-friendly investments and creates green jobs, primarily in rural areas; and helps to secure livelihoods of local communities. Mobilizing diverse stakeholders, including the private sector and local communities, and leveraging innovative financing mechanisms can unlock resources for ecosystem restoration at scale. Furthermore, integrating gender considerations and empowering youth, particularly from local and ethnic minority social groups, into restoration efforts not only promotes equity but also enhances the effectiveness and sustainability of interventions.

The project interventions focus on strengthening NbS to restore coastal ecosystems and enhance resilience in the Mekong Delta. This involves promoting inclusive and participatory approaches that engage diverse stakeholders, including local communities, women, youth and ethnic minorities. Key areas of intervention include (i) enhancing plans and strategies and coordination mechanisms at national and regional levels to support the systematic implementation of NbS, (ii) mobilizing investments from the private sector and local communities to demonstrate the economic sense and the huge carbon reduction effectiveness of NbS in restoring ecosystems and conserving biodiversity; (iii) building capacity for ecosystem restoration and sustainable land management, including the adoption of best practices and decision support tools, that can contribute to food and water security, improved livelihoods, jobs, and avoided conflicts and migration; (iv) strengthening financing mechanisms, including innovative schemes such as payment for environmental services and carbon market readiness, to support local ecosystem restoration efforts at scale; and (v) promoting inclusive approaches to ecosystem restoration, particularly empowering women, youth and ethnic minority groups as co-managers or owners, innovators and decision makers of the restored lands and resources.

By focusing on these priority areas, the project can contribute to achieving both local and global environmental goals, while also fostering sustainable development and resilience in the Mekong Delta region of Viet Nam.

### **Blue carbon ecosystems in the Mekong Delta**

Coastal and marine ecosystems – mangroves, coral reefs, seagrasses, and tidal marshes – are some of the most biodiverse and productive ecosystems on Earth. These blue carbon ecosystems provide numerous benefits and services for coastal communities, supporting food security and subsistence livelihoods (e.g., fuelwood, timber, medicinal plants, fish and shellfish), as well as commercial fisheries, agriculture and aquaculture, tourism and other economic activities. They also provide a range of non-market benefits, including habitat for multiple species of flora and fauna, regulation of coastal water quality, recreation and scenic beauty. Furthermore, coastal and marine ecosystems serve as a first line of defence for local communities, effectively dissipating storm surges and wave energy, reducing flooding and erosion, and acting as a natural buffer against extreme weather events, effectively protecting humans and their assets from disasters.

Blue carbon ecosystems are also hotspots for carbon storage, as they can store two to four times more carbon per hectare and sequester it 30-50 times faster than terrestrial forests.<sup>[8]23</sup> Carbon can be stored in their above-ground biomass, roots or underlying sediments.<sup>[9]24</sup> As such, blue carbon ecosystems can make a significant contribution to global climate action. With a coastline stretching more than 3,260 kilometres, blue carbon ecosystems in Viet Nam play an important role in mitigating greenhouse gas (GHG) emissions, maintaining ecosystem services, and minimizing the adverse impacts of climate change, particularly in coastal

areas.<sup>[10]25</sup> Carbon sequestration in Viet Nam's blue carbon ecosystems supports Viet Nam's NDC to the Paris Agreement while opening the potential for blue carbon credits, an innovative finance solution and incentive for local communities to maintain these coastal ecosystems.

Viet Nam is ranked sixteenth among the countries with the highest biodiversity globally.<sup>[11]26</sup> The nation contains a variety of marine and coastal habitats, inland lakes and rivers, tropical rainforests, monsoon savannahs, sub-alpine scrublands and two important river deltas.<sup>[12]27</sup> Viet Nam's ecosystems are inhabited by approximately 51,400 species, including 7,500 species or varieties of microorganisms; 20,000 plant species; 10,900 species of terrestrial animals; 2,000 species of aquatic invertebrates, freshwater and saltwater fish; and over 11,000 other marine species. The level of endemic species is quite high, at about 30 percent for terrestrial species, 4.6 percent for species and subspecies of birds, 27.4 percent for freshwater mussels and snails, and 58 percent for freshwater shrimp.<sup>[13]28</sup>

In Viet Nam, natural coastal and marine ecosystems, from sub-temperate ecosystems in the north to tropical ecosystems along its central to southwestern coasts, serve as habitat for a very rich biodiversity of terrestrial and aquatic flora and fauna species, including globally rare and threatened species as well as economically significant species. Viet Nam's coral reef ecosystems include about 2,100 species, of which coral reef fish are the most diverse (763 species), followed by molluscs (nearly 700 species), crustaceans (more than 250 species), polychaetes (about 170 species) and echinoderms (nearly 100 species). The number of reef-forming species varies in different coastal regions of the country, from 176 species in the northern Gulf of Tonkin to more than 400 species in the southern regions. The area of seagrass beds in Viet Nam is estimated at 15,000 hectares, inhabited by 14 species of seagrasses and 1,743 aquatic fauna species.<sup>[14]29</sup>

The coastal and marine ecosystems also provide critical habitats and feeding areas to a variety of migratory species, including the critically endangered Spoon-billed Sandpiper (*Eurynorhynchus pygmeus*) and the endangered, Black-faced Spoonbill (*Platalea minor*). Additionally, globally endangered marine turtle species occur, including the Green Turtle (*Chelonia mydas*), Loggerhead Turtle (*Caretta caretta*), Olive Ridley Turtle (*Lepidochelys olivacea*), and Leatherback Turtle (*Dermochelys coriacea*), as well as the critically endangered Hawksbill Turtle (*Eretmochelys imbricata*). Fifteen species of dolphin, including Irrawaddy Dolphin (*Orcaella brevirostris*),<sup>[15]30</sup> and porpoise, including the Indo-Pacific Finless Porpoise (*Neophocaena phocaenoides*), and one species of baleen whale have also been recorded, as well as the Dugong (*Dugong dugon*).<sup>[16]31</sup>

The wealth of natural resources along Viet Nam's extensive coastline and within its exclusive coastal and marine economic zone, which exceeds one million square kilometres, has greatly contributed to the country's sustained economic development in recent decades. Globally, Viet Nam is recognized for its transformational socio-economic progress; political and economic reforms have transformed the country from one of the poorest nations in the world to a middle-income country. Between 1990 and 2021, Viet Nam's gross domestic product (GDP) per capita grew at an average annual rate of 5.5 percent, reaching USD 3,757 in 2021. During the same period, the proportion of the population living below the national poverty line decreased significantly, from close to 45 percent in 1991 to 0.5 percent in 2020.<sup>[17]32</sup>

### Existing environmental challenges and/or climate vulnerabilities and drivers of environmental change

Despite their globally important benefits and services, Viet Nam's blue carbon ecosystems are under significant threats of depletion. The area of mangrove forests in Viet Nam decreased significantly between 1943 and 2010, from 408,500 hectares in 1943 to 94,276 hectares in 2010. The Government has since launched a large number of mangrove protection, restoration and plantation programmes, leading to an annual increase in mangrove area of around 5,400 hectares. In 2020, Viet Nam's total mangrove area covered 147,797 hectares, with the Mekong River Delta accounting for about 55 percent of this, followed by the Southeast (23 percent) and the Northeast (13 percent).<sup>[18]33</sup> In Kien Giang province, the total land area for forestry is 82,652 hectares, however only 67,790 hectares are covered with forest and only 9,784 hectares are contracted for protection. Forest protection efforts by

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some landowners lack effectiveness, which is worsened by sparse forest protection forces and extensive territory. Consequently, instances of illegal deforestation for aquaculture and encroachment upon forestry land often go undetected.<sup>[19]34</sup>

Similarly, coral reef ecosystems, comprising over 255 species and 69 genera, have experienced a dramatic decrease both in terms of area and coverage of live corals. Only about one percent of Viet Nam's reefs are in 'very good' condition (with coverage of live corals above 75 percent), while 31 percent are in 'bad' condition; in other words, the coverage of live corals is less than 25 percent.<sup>[20]35</sup> The poor state of coral reefs in Viet Nam is also reflected in the poor diversity of aquatic organisms, such as fish, molluscs, echinoderms and crustaceans.<sup>[21]36</sup>

Seagrass meadows also show an alarming decline in almost all parts of Viet Nam. From a total area of 29,162 hectares in 1990, a decline of 46.5 percent or 13,549 hectares was found, and only in a few protected and difficult-to-reach areas was an increase observed.<sup>[22]37</sup> The average annual rate of seagrass decrease in the whole country is 4.4 percent.<sup>[23]38</sup> In 1990, the estimated total seagrass area in Viet Nam was about 29,162 hectares. However, Viet Nam's seagrass area declined significantly between 1990 and 2019 when 51 percent of seagrass was lost due to tourism, urbanization, fishery farming and water pollution. Southern Viet Nam's seagrass beds span 10,832 hectares, while a total of 2,562 hectares (or 19.1 percent) of seagrass coverage was lost over the period from 2000 to 2019. Phu Quoc Island in Kien Giang province has the largest seagrass area at 10,313 hectares; here, five species of seagrass were found in 2019 before the seagrass area dropped to 7,579 hectares.<sup>[24]39</sup>

Despite the rapid growth of the industry and service sectors, many people's livelihoods remain largely natural resource-based, with agriculture, aquaculture and capture fisheries together accounting for the largest share of both income and employment. While rapid economic development has lifted many people out of poverty, there are growing income gaps between social groups, between rural and urban areas, and between regions.<sup>[25]40</sup> Following a period of substantial growth in the agriculture, aquaculture and fisheries sectors in recent decades, today the growth of these sectors is below average. Indeed, these sectors' share of GDP is decreasing and farmers' incomes are lagging behind those of other groups, while coastal and marine ecosystems, and by extension, their natural resources and biodiversity, are increasingly degraded and under threat.

The loss of blue carbon ecosystems carries with it the loss of critical functions that these coastal ecosystems provide, as habitat for commercial and intrinsic marine and terrestrial biodiversity, including rare and endangered species, control of coastal erosion and retention of shorelines, water quality, scenic beauty, etc. When degraded or lost, these blue carbon ecosystems can also become significant sources of greenhouse gas carbon dioxide emissions.

## Threats to blue carbon ecosystems and root causes

### Threats

Given the rapid decline of coastal and marine ecosystems, the Mekong Delta region and Kien Giang province have witnessed significant land and water degradation, depletion of blue carbon reserves, and loss of biodiversity and ecosystem services. The dire state of blue carbon ecosystems is predominantly caused by human activities. The main threats for the conversion and degradation of blue carbon ecosystems are the following:

**Over-exploitation of land and water resources:** The over-exploitation of coastal and marine biological resources, driven by economic development, population growth, changing consumption patterns, and improved transportation networks, poses a severe threat to land and water qualities and services that ultimately affect livelihoods and socio-economic stability in the coastal ecosystem. Particularly alarming is the deteriorating productivity of nearshore fisheries, as indicated by a decrease in small fishing boats operating in shallow waters (less than 50 metres), from 92,391 boats in 2013 to 66,135 boats in 2019. During the same period, the number of offshore boats increased, from 26,398 in 2013 to 30,474 in 2019,<sup>[26]41</sup> indicating that boats are moving more offshore to find new fishing grounds.<sup>[27]42</sup> Destructive fishing techniques (explosives, poisons, electrical shocks, etc.) further exacerbate the

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problem, causing damage to fish populations, especially affecting small-scale fishers, and leading to the degradation of vital ecosystems like seagrass beds and coral reefs. As a consequence, coastal communities, especially marginalized groups reliant on marine resources for their livelihoods, face economic hardships, further perpetuating socio-economic disparities and poverty.

This includes water extraction and changes in tidal regimes, which have become alarming threats to the Mekong Delta. Upstream hydropower plants are diverting river run-off and sedimentation downstream, particularly in the dry season. Annually, the soil subsidence rates are up to several centimetres due to excessive groundwater extraction. Over the past 25 years, groundwater exploitation has increased dramatically, transforming the delta from an almost undisturbed hydrogeological state to one with increasing aquifer depletion. This has led to unpredictable coastal erosion, soil subsidence, and land loss.<sup>[28]43</sup> On the other hand, the region is losing its natural tidal influence due to extensive dyke systems designed to prevent saltwater intrusion during the dry season. This diminishes the delta's self-regulating ability to flush out saltwater and cleanse itself with seawater during tidal cycles, as well as with freshwater during the rainy season.

Productive agricultural areas in the Mekong are increasingly being replaced by scattered urban development, while coastal forest lands are being encroached upon for agriculture. The land has suffered severe degradation due to continuous rice cultivation and intensive aquaculture. Closed sea dykes and sluice gate systems prevent natural alluvium from upstream floodwaters, depriving the land of essential nutrients. Moreover, excessive reliance on chemicals has led to widespread pollution of lands and rivers, rendering river water unfit for domestic and industrial use. In the long term, food security, especially beyond the next two decades, is under serious threat as soil health continues to deteriorate under the pressure of maximizing output over the past three decades.<sup>[29]44</sup> The depletion of these natural assets could lead to a significant decrease in gross national savings, exacerbating economic instability, migration, and poverty.

**Habitat loss and degradation:** Over the past decades, regional ecosystems have undergone radical transformation to support economic development. This has resulted in widespread habitat degradation, particularly affecting marine ecosystems along the shoreline. Since the economic reforms of the 1980s, extensive land transformations, such as land reclamation and the conversion of natural swamps and mangrove forests into cultivated land, have taken place. The conversion of saline rice fields and unused areas into brackish water ponds for aquaculture has further intensified habitat loss and alteration.

Despite government efforts to increase mangrove forest cover, the area of primary mangrove forests has drastically declined. As of 2020, the total mangrove forest area increased to 165,914 hectares, but these newly planted mangroves lack biodiversity and biomass. The area of primary mangrove forests has nearly vanished, with current mangroves mainly consisting of monocultures that are newly planted and deficient in biomass and biodiversity.<sup>[30]45</sup> To date, only 0.068 million hectares of the original four million hectares (1.7 percent) of the Mekong Delta remain as primary swamp forest ecosystems.<sup>[31]46</sup>

Rapid increase in the number of offshore boats and their relentless exploitation has led to a significant decline in fisheries resources, resulted in a 14 percent reduction in the average annual biomass of coastal and offshore marine fish resources, from 5.1 million tons in 2000-2005 to 4.4 million tons in 2011-2016, or 1.4 percent annually.<sup>[32]47</sup> The demand for marine tourism, including souvenirs and tourist consumption, has endangered species like marine turtles, black seahorses, and corals, adding to the pressure on already vulnerable ecosystems.

In the Mekong Delta alone, over one million hectares of natural ecosystems have been converted into cultivated land, leaving only a small fraction of primary swamp forest intact. Aquaculture expansion, particularly shrimp farming, has dominated the coastal landscape, resulting in the loss of blue carbon ecosystems and critical spawning grounds for aquatic species. While aquaculture ponds and cages occur everywhere along Viet Nam's coastal zone, 72 percent of the total aquaculture area is located in the Mekong Delta, accounting for 71 percent and 84 percent of national fish and shrimp production, respectively,<sup>[33]48</sup> which are primary exports.

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Overall, this economic transformation has not only depleted natural resources but also disrupted vital ecological processes, leading to a decline in coastal biodiversity and ecosystem services. The loss of habitat and biodiversity poses long-term threats to the resilience and sustainability of coastal ecosystems, exacerbating environmental degradation and compromising the well-being of both human and natural communities.

**Pollution (solid waste, wastewater, plastics, chemicals):** The inadequate management and regulation of economic activities in coastal and island regions, where the dumping of untreated wastewater and solid waste directly into the sea is common, have adverse impacts on the abundance and quality of coastal and marine resources.<sup>[34]49</sup> Coastal and marine ecosystems are also polluted from industrial, agricultural and fishery production waste, as well as from domestic waste in the wider landscape. Increased discharge of nutrients – particularly nitrogen and phosphorus – from agriculture, aquaculture and domestic activities has led to increased eutrophication, causing more frequent episodes of harmful algal blooms and hypoxia, affecting biological resources in the shallow, nearshore coastal zone.

Waste, which is mounting with the growth of the tourism sector, is often dumped in ecologically sensitive areas. The increase in the level of pollutants in the environment also results in the accumulation of toxic compounds in ecosystems and food chains, causing health problems from contaminated seafood (particularly in molluscs).<sup>[35]50</sup> With an estimated volume of between 280,000 and 730,000 tons of plastic waste entering the marine environment as of 2015 (this figure is higher today),<sup>[36]51</sup> Viet Nam ranked fourth in the list of the world's highest emitters of plastic pollution into the ocean. Plastic pollution originates from land-based sources (landfills or unofficial waste dumps)<sup>[37]52</sup> and from marine activities, such as tourism and recreation, abandoned fishing gear, and shipping waste.

**Climate change (temperature, precipitation, increase in extreme events):** Viet Nam is among the countries most vulnerable to the impacts of climate change. The Global Climate Risk Index from 2021 ranks Viet Nam 13th on the list of countries most affected by disasters and extreme weather events.<sup>[38]53</sup> Approximately 71 percent of the population and 59 percent of the land area are vulnerable to natural hazards, with floods and storms causing the highest number of fatalities, material loss, and economic damage.<sup>[39]54</sup> Communities in coastal regions are increasingly susceptible to fast-onset impacts such as typhoons, storm surges, and floods, as well as slow-onset, compounding impacts like rising temperatures, droughts, riverbank and shoreline erosion, salinity intrusion, and sea-level rise. The degradation of blue carbon coastal and marine ecosystems exacerbates the vulnerability of coastal communities by reducing their natural protective buffer against cyclones, storm surges, and floods.

Over the past 50 years, the annual average temperature has increased by 0.5-0.7°C, and the sea level has risen by an average of 20 centimetres. Over the last three decades, climate change-related disasters have caused an estimated annual loss of 1-1.5 percent of GDP.<sup>[40]55</sup>

Today, more than 50 million people live in Viet Nam's 28 coastal provinces, of which it is estimated that between six and 12 million people (6-12 percent of the population) will be affected by coastal flooding by 2070, without effective adaptation action,<sup>[41]56</sup> many of whom are poor or near-poor, despite the country having reached lower middle-income status. These communities, including those in the target province of Kien Giang, are most adversely impacted by climate change, extreme weather, and disaster events.

By 2050, Viet Nam's rainfall is expected to increase by about 4.1 percent in the northern Delta during the rainy season and decrease by about 20 percent during the dry season, particularly in the southern regions, including the Mekong Delta. Additionally, by 2050, the sea level is forecasted to rise by 30 centimetres compared to the average for 1980-1999. By 2060, the average annual temperature is projected to increase by 0.8-2.7°C,<sup>[42]57</sup> and by 2100, the sea level could rise by 75 centimetres to one meter,

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compared to the 1980-1999 period.<sup>[43]58</sup> Without significant action, this rise would inundate approximately 30,000 square kilometres, equivalent to 9.3 percent of the country's total land area.<sup>[44]59</sup> Notably, by 2050, climate change may reduce national income by up to 3.5 percent.<sup>[45]60</sup>

Drivers such as elevated sea-surface temperatures and acidification are expected to decrease the maximum catch potential in ocean fisheries in the range of six percent to 11 percent by 2050,<sup>[46]61</sup> negatively affecting fisheries and coastal resources. Increases in sea temperature and changes in salinity will also have pronounced adverse impacts on aquaculture, affecting yields and increasing vulnerability to disease.<sup>[47]62</sup> Climatic changes will also affect the biodiversity of blue carbon ecosystems by altering species growth, development, reproductive capacity, and distribution.<sup>[48]63</sup> In particular, natural coastal ecosystems, already weakened by fragmentation and degradation, will be less resilient to the impacts of climate change and more vulnerable to mass species loss.

### **Root causes**

The combined impacts of socio-economic development threats to coastal and marine blue carbon ecosystems, along with the increased occurrence and severity of climate change-related natural hazards, undermine the security, livelihoods, and resilience of coastal communities. Poor and traditionally marginalized groups, including women and ethnic minorities, are among the most vulnerable. They tend to live in the most exposed areas and are most dependent on natural resources for their livelihoods. Traditionally, women play an important role in food production and natural resource use, as well as in fulfilling social roles in education, upbringing, and caregiving for children and the elderly. However, persistent gender gaps and vulnerabilities remain due to social discrimination against women and their disadvantaged position in benefiting equally from economic, social, and political opportunities. Women also encounter barriers to accessing resources and training and have limited opportunities for participation in decision-making.

At the root of these issues is the absence of effective legal and policy measures, including poorly planned coastal and marine development initiatives, coupled with a lack of information and local awareness, leading to limited participation from affected communities. Additionally, factors such as poverty, population growth, and limited sustainable financing and incentives further exacerbate the situation, driven by inadequate institutional frameworks and enforcement mechanisms. Economic growth and urbanization amplify the problem by facilitating the conversion of coastal and marine land, resulting in the loss of critical ecosystems such as mangroves, seagrasses, and salt marshes, and their related carbon stocks. Addressing these root causes is imperative to mitigate the adverse effects on coastal and marine environments and foster sustainable development in these regions.

In 2022, the United Nations Environment Assembly adopted Resolution 5 on NbS. Resolution 5 includes the framing of the concept and a multilaterally agreed definition of NbS as “actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, freshwater, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits.”<sup>[49]64</sup> The protection, restoration and management of coastal blue carbon ecosystems are recognized as key NbS to respond to climate change.<sup>[50]65</sup> Investing in NbS for restoring and conserving coastal blue carbon ecosystems provides multiple benefits, including protecting biodiversity and threatened species, strengthening community resilience to climate change, contributing to food security, and supporting businesses reliant on healthy ecosystems such as fishing, tourism, agriculture and aquaculture. In addition, blue carbon ecosystems capture and store carbon, which contributes to climate change mitigation efforts.<sup>[51]66</sup>

### **Project Barriers**

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To ensure that NbS effectively strengthen the delivery of climate change mitigation and adaptation benefits from blue carbon ecosystems at scale in coastal landscape mosaics of Kien Giang province in the Mekong Delta, the proposed project will support the Government of Viet Nam in addressing identified systemic barriers.

These barriers include:

**Barrier 1:** *Insufficient national, regional and provincial plans, strategies and regulations that incorporate considerations for NbS, particularly for coastal ecosystems.*

In recent decades, in its effort to respond to climate change and implement international commitments, Viet Nam has issued and implemented numerous guidelines, policies, strategies, programmes and plans related to greenhouse gas (GHG) emissions reduction and climate change adaptation. However, there remains an overall lack of guiding documents, such as on a mechanism for sharing information and data on climate change among state agencies; prioritization of climate change mitigation and adaptation activities of all sectors; and integration of gender equality in climate change adaptation.<sup>[52]67</sup> Regarding blue carbon ecosystems, multiple government agencies are involved in their management, and related legal regulations and policies are often subject to contradictions and overlaps. While a large number of policies are in place, such as on enhancing marine protected area management and strengthening law enforcement on protecting and restoring mangrove ecosystem services, there are very few policies on seagrass, coral reef and tidal marsh management specifically.

The concept of NbS is relatively new and is not well understood by most decision makers. Thus, NbS are not yet fully recognized or integrated into policy making on conservation and development at either the national or provincial levels. For example, the NDC (2022)<sup>[53]68</sup> does not include specific reference to the application of NbS for mitigation in any of the energy, agriculture; land-use, land-use change and forestry (LULUCF); waste; and industrial sectors. Indeed, the announced actions mainly focus on applying structural and technological solutions, rather than non-structural and ‘soft’ solutions. Only some implicit reference to NbS is made, for example, with regards to forest conservation, restoration and improved management of natural forests; the conservation of biodiversity and ecosystems, with a focus on developing marine and coastal conservation zones; and the development of adaptive models based on nature and ecosystems that ensure sustainable livelihoods for people.

Only Viet Nam’s NBSAP contains specific reference to the deployment of NbS, albeit for their application in socio-economic development, disaster prevention and adaptation to climate change, however not specifically for climate change mitigation. Technical guidance and documents on the management of sectoral adaptation solutions are not sufficiently detailed for application in practice, resulting in difficulties in implementation by provinces, as well as by ministries at the central level and their branch offices. As well, scientific tools for climate change scenario forecasting are insufficiently developed, especially at the subnational level. Therefore, data from such scenarios are not sufficient to serve as a basis for developing standards and regulations, let alone for designing adaptation investments. On the management of blue carbon ecosystems, national policies are either absent (e.g., management of seagrass meadows) or ineffective (e.g., mangrove conservation vs. aquaculture development). While parts of blue carbon ecosystems are protected under national or provincial regulations,<sup>[54]69</sup> few activities are underway to conserve them, and as such, they remain under threat. While there are several models piloted for blue carbon ecosystem management (e.g., as part of integrated coastal zone management programmes for the north-central and central coastal zones, or under co-management models adopted in the Cu Lao Cham Marine Protected Area (MPA) since 2011), the roles and responsibilities have yet to be defined within current planning and management practices, and ecosystem-specific management models are still lacking.

**Barrier 2:** *Limited national and provincial cross-sectoral coordination, multi-stakeholder engagement and capacities to support coordinated inter-sectoral planning, financing and implementation of NbS with high climate change mitigation and adaptation potential.*

While the awareness among sectors of the need to adopt integrated planning is improving, a key barrier to strengthening coastal resilience in Viet Nam is the lack of coordination and collaboration in climate action, both among ministries as well as between ministries, sectors and local authorities.

Key sector institutions lack human resources and technical capacities for integrated planning and management of coastal and marine areas, specifically incorporating biodiversity, natural resources and environmental factors that underpin sustainable development. As a result, in major sectors, including agriculture, aquaculture, fisheries, and urban and industrial development, agencies continue to plan and manage the use of land and resources with a focus on their individual sectoral interests and operations. There is limited cross-sector integration, and little attention to comprehensively addressing sectoral drivers of environmental degradation. For example, contradictory national sectoral policies can encourage mangrove conservation on the one hand, and aquaculture

expansion in mangrove areas on the other, thus making it difficult to address mangrove deforestation and degradation effectively.<sup>[55]70</sup>

Viet Nam has already undertaken a participatory process for identifying biodiversity priorities, which are reflected in the country's NBSAP to 2030, vision to 2050.<sup>[56]71</sup> However, it lacks critical baseline data on the extent, location, condition, threats and drivers of loss, including from climate change, for many important ecosystems and species, including blue carbon ecosystems. While the NBSAP presents quantified strategic monitoring and assessment indicators, it lacks clear approaches for acquiring and distributing data, and building the institutional, technical, human resources, and infrastructural capacity needed to support biodiversity decision making to strengthen the conservation and expanded restoration of critical ecosystems.

In continuation of past actions, or lack thereof, the country's knowledge base on biodiversity and natural resources, and capacity for stewardship, remain weak. Among local communities, there is limited understanding of the importance of biodiversity and natural systems in providing critical ecosystem services in support of nature-based livelihoods, nor of the impact that socio-economic development and unsustainable natural resources use practices could have on the provisioning of such services. Understanding of the impacts that environmental degradation, including mangrove, seagrass and coral reef degradation, can bring to local livelihoods and the regional and national economies is also quite limited. Similarly, the lack of the exchange of results, best practices and lessons learned from pilot projects on nature-based co-management or private sector initiatives applying NbS may cause communities and private sector actors to miss out on new, innovative solutions to strengthen coastal nature-based livelihoods, enrich biodiversity, and conserve and enhance blue carbon stocks.

**Barrier 3:** *Lack of proof-of concept for localized NbS delivering quantifiable climate change mitigation with co-benefits, hampering the mobilization of engagement and investments from the private sector and local communities for upscaling NbS in coastal and marine ecosystems.*

In recent years, the Government of Viet Nam has increasingly put emphasis on the importance of coastal ecosystems, especially mangroves, for climate change mitigation and addressing environmental issues such as coastal erosion. However, coastal protection solutions predominantly focus on hard ('grey') infrastructure such as sea dykes, which require high capital investment and maintenance costs. Although necessary in certain strategic locations, evidence has shown that grey infrastructure interferes with natural biological and physical processes, including natural erosion and sedimentation, leading to land loss, coastal ecosystem degradation, biodiversity loss, loss of livelihoods and income-generating activities, and greater community exposure.

In Viet Nam's coastal zone, in recent decades, various nature-based co-management models have been piloted in the capture fisheries, aquaculture and biodiversity conservation sectors, typically within the framework of projects financed by state and international actors. As part of the revised Fisheries Law,<sup>[57]72</sup> a legal framework and regulations for co-management establishment and operations were adopted. However, while most initiatives operated successfully during the project implementation period and the body of evidence to support the efficacy of NbS compared to traditionally favoured grey infrastructure expanded, critical gaps remain to advance the application of NbS. Challenges include limited awareness; knowledge gaps surrounding applications and their effectiveness; insufficient understanding of costs and benefits; diverse stakeholder values and perceptions; and limited policy and economic instruments, and the will to apply them.<sup>[58]73</sup>

A comprehensive review revealed that most NbS initiatives stopped functioning after projects' conclusion and were not maintained, upscaled or replicated. The reasons include a lack of investment capital and financial mechanism to continue operations; the absence of engagement of local people in policy formulation and project design and implementation; the inequitable distribution of power and benefits; low payments for providing protection services by community members; poor coordination mechanism between state and civil society stakeholders; conflicts between tourism companies, industrial companies, fishermen, conservation groups and local communities with regards to natural resource uses; the lack of recognition of local rights; gaps, overlaps and insufficient clarity in legal and organizational mandates of government agencies and communities at all levels; continuation of illegal natural resources activities, including from poor law enforcement; lack of alternative livelihood opportunities; limited awareness, education, access to information, and management skills of local communities; and lack of motivation of local community participation after sponsoring ends.<sup>[59]74</sup> For example, the Government of Viet Nam is providing higher payments (VND 30,000,000

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per hectare to support mangrove planting) and paying local people VND 200,000 a day to plant new mangroves, while under annual mangrove forest protection contracts, government agencies only provide around VND 300,000 per hectare per year.<sup>[60]75</sup>

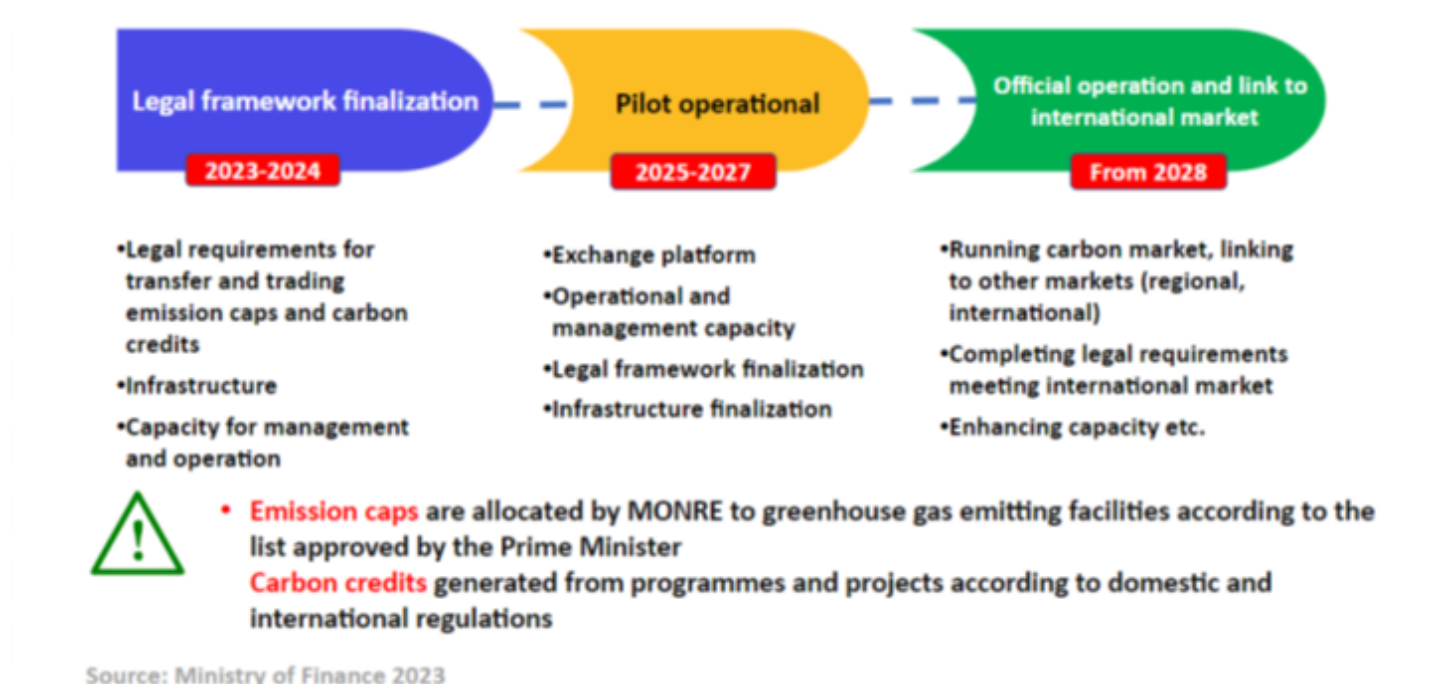
At the same time, in Viet Nam, national and local stakeholders' knowledge and understanding of innovative state-of-the-art NbS piloted in other countries in Southeast Asia and globally remains fragmentary at best. Further, local knowledge on promising adaption solutions to climate change remain insufficiently researched, piloted, evaluated and upscaled.

**Barrier 4:** Lack of financial incentives, particularly at the local level, for investments in NbS for blue carbon ecosystems by communities and private sector actors.

Globally, the potential of NbS to strengthen carbon capture and storage in blue carbon ecosystems is increasingly recognized, as is the understanding that investments in restoring or protecting these ecosystems will generate “credits” based on the quantity of carbon captured and/or stored, while also generating co-benefits related to income generation, coastal livelihood improvement, resilience to climate change impacts, and biodiversity conservation.

However, to date, financing for the protection, restoration and effective management of these ecosystems has been limited and has failed to reach the scale needed for them to contribute effectively to global climate change mitigation and adaptation efforts.<sup>[61]76</sup> The role of blue carbon in international carbon markets has also been minimal thus far, and there are no obvious policy directions and only limited development of pipeline projects to access carbon markets, green/blue finance or green/blue bonds to realize the potential of blue carbon-based payments from both compliance and voluntary carbon markets.

In Viet Nam, the recently adopted Prime Minister Decree No. 06/2022/ND-CP on Mitigation of GHG Emissions and Protection of Ozone Layer elaborates some Articles of the Law on Environmental Protection, including on the organization and development of a carbon market. Viet Nam has also recently developed the national Scheme for the development of a domestic carbon market which aims to be operationalized from 2028 (Figure 1). However, the legal framework for Viet Nam's carbon market is not ready to support the implementation of carbon projects in the forestry and land-use sectors, nor blue carbon projects, due to: (i) the lack of information, and technical issues in terms of measurement, verification and reporting, particularly to improve blue ecosystem inventories; and (ii) financial incentives being insufficient to entice people to participate in carbon projects and programmes.<sup>[62]77</sup>



**Figure 1.** Roadmap for carbon market development in Viet Nam (Ministry of Finance, 2023).

**Barrier 5:** Limited knowledge and scientific evidence to quantify blue carbon potential.

A general gap analysis conducted in 2022 on knowledge gaps on NbS demonstrated the main recurrent gaps linked to issues around the technical design of NbS, as well as the development of tools and methodologies for systemic evaluation and performance of NbS over time, including cost-benefit analyses, as well as proper considerations for NbS' effectiveness across socio-ecological contexts.<sup>[63]78</sup> Regarding the quantification of blue carbon potential, a recent review shows that blue carbon research is expanding in South and Southeast Asia, generating more robust data that can inform policy frameworks for better conservation of blue carbon ecosystems.<sup>[64]79</sup> However, numerous challenges to coastal blue carbon accounting make comprehensive carbon sequestration quantification, and therefore management to maximize the mitigation benefits of NbS, rather difficult.

The ability to continuously measure and monitor carbon and other GHG fluxes and stores over long periods is crucial when considering whether a sequestration process meaningfully contributes to climate mitigation.<sup>[65]80</sup> While in recent years, a variety of new practical tools, guidelines and methodologies for proper carbon analyses and the quantification of blue carbon have emerged, large data gaps remain, especially in developing countries. This is due to insufficient knowledge, in tandem with a lack of the technical and financial resources required to carry out complex analyses using state-of-the-art standardized measurements and analytical methods.<sup>[66]81</sup>

In addition to the lack of practical tools, estimating total mangrove carbon stocks at scale remains challenging due to the difficulty and high cost of soil carbon measurements, particularly in mixed and dense blue carbon ecosystems. As a result, total carbon stocks are rarely estimated and reported.<sup>[67]82</sup> Currently, with regards to blue carbon ecosystems, the Government of Viet Nam only pays attention to mangrove areas; the high potential of seagrass and tidal marsh areas remains overlooked in forest inventories. Improving the national database and monitoring systems could generate additional benefits from a blue carbon market, while promoting biodiversity conservation and improving local livelihoods.<sup>[68]83</sup> Additional requirements relate to the need to strengthen the technical knowledge within both the developer and finance communities, to improve scientific evidence and baseline data against which to measure progress, and further support the development of standardized methodologies.<sup>[69]84</sup>

## Baseline

The project's approach to addressing threats and barriers to achieve strengthened NbS to restore ecosystems, and conserve and enhance blue carbon stocks and biodiversity in Viet Nam will be designed to align with, leverage and expand on a variety of ongoing initiatives, projects, programmes, commitments and investments that support achieving Viet Nam's updated strategic priorities and targets. These include, inter alia, the NDC, NAP, land degradation neutrality (LDN) targets and NBSAP. The project will support the implementation of policy-level interventions and cross-sectoral planning, coordination and capacity building measures, in addition to on-the-ground demonstrations of proof-of-concept for NbS.

**Policy baseline:** In recent decades, the Government of Viet Nam has given increased recognition to focusing socio-economic development towards green growth, climate change response, and the strengthening of, inter alia, coastal and marine ecosystems and their attendant biodiversity. A range of recent policy reforms and initiatives provide a supportive baseline for addressing the threats, drivers and barriers outlined above.

Specifically, Viet Nam demonstrated dedication to combating climate change through a range of national policies and concrete adaptation measures. In 2011, the National Climate Change Strategy was issued, outlining national objectives for 2016-2050. In 2012, the National Green Growth Strategy was approved, which includes mitigation targets and measures. In 2013, the Law on Natural Disaster Prevention and Control was enacted, aiming to address diverse natural hazards that affect the country, which are primarily climate change related. Viet Nam subsequently ratified the Paris Agreement on 3 November 2016 and submitted its NDC in 2020. The country revised and submitted to the UNFCCC its updated NDC, aligned with its net zero by 2050 target, in 2022.

The legal framework regarding climate change response was further institutionalized in a number of legal documents, including the Voluntary Land Degradation Neutrality Targets in Viet Nam for the period of 2017-2020 with vision to 2030,<sup>[70]85</sup> the Law on

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Environmental Protection;<sup>[71]86</sup> the update of the National Green Growth Strategy for the period from 2021-2030, with vision to 2050;<sup>[72]87</sup> the National Strategy on Biodiversity to 2030, with vision to 2050;<sup>[73]88</sup> and the NAP for the period from 2021-2030, with vision to 2050.<sup>[74]89</sup> The NAP was updated in 2022,<sup>[75]90</sup> setting out national prioritized measures until 2030 to reduce vulnerability and enhance the resilience of communities, economic sectors, and ecosystems to the impacts of climate change. NbS are among the prioritized strategic approaches adopted, which not only helps elevating the transformative changes of adaptation solutions, but also supports effectively addressing the potential long-term climate loss and damage that Viet Nam is unlikely to adapt to through technical solutions solely. Further, in 2021, Viet Nam pledged to achieve net zero by 2050 and revised its National Climate Change Strategy to be fully aligned with this target.

These actions demonstrate Viet Nam's commitment to tackling climate change, biodiversity conservation and land degradation. The gap lies in the implementation of agreed actions, which is largely due to a lack of funding and capacity. For this reason, this project will focus on plans and strategies for implementation, engagement of financing in all sectors, and educational campaigns.

**Existing projects and interventions on blue NbS:** As a result of targeted government investments and official development assistance (ODA)-supported programmes, coastal mangrove forests in Viet Nam are on the track of recovery. Recently, the Government of Viet Nam approved a national project on the 'Protection of coastal forests to respond to climate change and promote green growth' for 2021–2030.<sup>[76]91</sup> This project aims to: (i) conserve coastal forests, especially protection and special-use forests; (ii) re-forest 9,800 hectares of mangroves for sea-wave prevention; and (iii) restore 6,800 hectares of poor mangrove forests. However, a detailed plan for the conservation, reforestation and restoration of mangroves is not yet available at the provincial level. The carbon credit potential of this mangrove conservation and restoration project is estimated at up to 36.42 megatons (Mt) CO<sub>2</sub>e annually,<sup>[77]92</sup> but most other mangrove development projects did not account for blue carbon sequestration, except the United Nations Development Programme (UNDP)-Green Climate Fund (GCF)-funded projects.

At the same time, Viet Nam has a very limited number of projects or investment programmes that directly tackle seagrass and tidal marshland development as well as conservation of blue carbon sinks. The regional UNEP-GEF project 'Reversing environmental degradation trends in the South China Sea and Gulf of Thailand (2001-2009)' was one of the few that included specific action plans for mangroves, seagrasses, coral reefs, coastal wetlands, the protection of fisheries resources, and prevention of pollution originating from inland sources.<sup>[78]93</sup> At the provincial level, there have been a number of forest development projects to respond to climate change that are being implemented by Kien Giang Provincial People's Committee. Among them, the largest project aims to restore and develop Kien Giang's protective forests for the period 2016-2020. The province has completed the plantation of more than 543 hectares of mangrove forests. Key actions have included planting forests on non-forest land areas and contracting land for forest protection combined with aquaculture and afforestation on alluvial plains. The province invested in building two nurseries to serve planting coastal mangrove forests and two forest management and protection stations.<sup>[79]94</sup>

Over the past several years, some new initiatives have emerged. These are primarily ODA-supported pipeline development programmes, projects and studies that promote NbS in coastal and marine ecosystems in the Mekong Delta, especially in Kien Giang province (and more specifically, Phu Quoc Island).

The upcoming design of this project will benefit from synergies and collaboration with these programmes, projects and studies. In particular:

The UNDP-Green Climate Fund (GCF) project 'Improving the resilience of vulnerable coastal communities to climate change-related impacts in Viet Nam' was implemented from 2017-2024. The project successfully strengthened storm and flood protection for coastal communities in Viet Nam through resilient housing, plantation and rehabilitation of mangrove forests, and improved access to climate risk information for the public and private sectors. To enhance coastal resilience and create natural storm surge buffers, more than 4,000 hectares of mangroves were planted and rehabilitated, contributing to sustainable coastal livelihoods. Additionally,

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the project developed systematized climate and economic risk assessments for private and public sector application in all 28 coastal provinces of Viet Nam.

The UNDP-Canada project “Viet Nam Climate-Smart Coastal Communities” (VNCSCC), with an implementation period of 2024-2029, is funded by the Government of Canada (CAD 20,000,000) and began initial implementation in 2024. The project aims to improve the resilience to climate change of coastal communities and enriched marine and coastal biodiversity in Viet Nam by empowering nature-dependent communities, particularly women, to scale up nature-based climate solutions to enhance their resilience, strengthen the sustainable use of coastal natural resources, and protect biodiversity of mangrove and coral reef ecosystems. The project will reach 20,000 direct and 200,000 indirect beneficiaries among poor and near poor households in coastal communities, strengthen about 10,070 hectares of marine and coastal areas for effective biodiversity conservation and rehabilitation of coral reefs and mangroves and their ecosystem services, and the sustainable use of these natural resources by the coastal communities in three target coastal areas of Viet Nam: Hue City and Binh Dinh province in the North-Central Coastal region, and Soc Trang province in the Mekong Delta region.

The Mekong Delta Habitat Conservation Project was implemented in Kien Giang and Soc Trang provinces by the IUCN (2021-2024). The project aimed to support the mitigation of environmental impacts that threaten biodiversity and coastal aquatic resources, as well as enhance the resilience of coastal areas in the Mekong Delta region. Coordinating implementation partners included the Government of Viet Nam, local authorities of project provinces, the private sector, management boards of protected areas, development partners and fishing communities.

The “climate and mangrove protection combined with income improvement for vulnerable communities” project, funded by Bread for the World (BftW) (2021-2024), was implemented in Ca Mau Cape National Park, Ngoc Hien district and Tam Giang Protection Forest Management Board, Nam Can district of Ca Mau province. The project's goal was to enhance mangrove carbon storage through forest conservation efforts, forest development and improved livelihoods for poor and vulnerable communities living in mangrove areas, without affecting environmental protection and mangrove forests.

The project 'Strengthening resilience to climate change of coastal communities in the Mekong Delta - Phase 1' was funded by the Ministry of Climate, Environment and Energy of the Republic of Austria (2022-2024). The project contributed to protecting and enhancing the CO<sub>2</sub> absorption capacity of coastal mangrove protection forests in three communes of Lai Hoa, Vinh Hai and Lac Hoa of Vinh Chau Town, Soc Trang province through joint efforts of communities and local authorities. The project also improved the livelihoods of communities living in buffer zones through contracting mangrove protection forests to people with the management of the State to deploy aquaculture in a sustainable and environmentally friendly manner.

The Asian Development Bank (ADB) project 'Restoring and sustainable management of coastal forests in the Mekong Delta to increase adaptation to climate change,' envisioned to be financed by the GCF (2023-2029) aims to protect and develop coastal forests, and at the same time, support localities in the Mekong Delta region to adapt to climate change and rising sea levels.

Furthermore, a number of additional projects that could offer valuable insights or benefits for learning are described in Annex H.

The proposed project will leverage and expand upon existing investments while ensuring alignment with Viet Nam's strategic priorities. By demonstrating that NbS are effective, engagement and investments from the private sector and communities can be mobilized to achieve quantifiable climate change mitigation benefits, with biodiversity and adaptation co-benefits. Drawing from experience and knowledge garnered from previous initiatives in the country, such as the UNDP-GCF project 'Improving the resilience of vulnerable coastal communities to climate change-related impacts in Viet Nam' and the IUCN 'Mekong Delta Habitat Conservation Project in Kien Giang and Soc Trang provinces,' the project will build on practices and lessons learned to ensure a more effective and sustainable approach.

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[73] Please see footnote 60 for reference.

[74] Prime Minister Decision 1055/QĐ-TTg Promulgating the National Climate Change Adaptation Plan for the 2021-2030 period, with a vision toward 2050, dated 20 July 2020.

[75] Please see footnote 56 for reference.

[76] Prime Minister Decision 1662/QĐ-TTg, dated 4 October 2022.

[77] Please see footnote 9 for reference.

[78] IW: learn. (n.d.). *Reversing Environmental Degradation Trends in the South China Sea and Gulf of Thailand (SCS)*. Retrieved from <https://iwlearn.net/iw-projects/885>

[79] Department of Agriculture and Rural Development of Kien Giang. *Report on National Project to Restore and Develop Kien Giang Protected Forests During 2016-2020*.

## 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

Despite the increased recognition and action by the Government of Viet Nam to focus socio-economic development towards green growth, climate change response, and conservation and restoration of natural coastal and marine ecosystems and their attendant biodiversity these ecosystems in Viet Nam continue to be negatively affected by the combined impacts from several socio-economic development trends. At the same time, the mounting impacts of climate change in the coming years and decades will put many more people living in coastal areas at risk, threatening their livelihoods and resilience.

The long-term solution in dealing with the above-mentioned threats from socio-economic development and climate change to coastal and marine blue carbon ecosystems and the livelihoods of vulnerable coastal communities is to improve the conservation,

protection, restoration and sustainable management of these important blue carbon ecosystems. This will be achieved through strengthening national and sectoral planning and strategy processes, in addition to cross-sectoral coordination and multi-stakeholder engagement and capacity to scale up planning, financing, and implementation of NbS in coastal blue carbon ecosystems. Location-appropriate NbS that mobilize engagement and investments from the private sector and communities will demonstrate quantifiable climate change mitigation benefits, with biodiversity and adaptation co-benefits, in support of ensuring the long-term well-being and prosperity of humans and the planet.

Considering the complex socio-economic and climate change challenges in the Mekong Delta region, the Theory of Change for the project is that **IF** the proof-of-concept of innovative NbS is demonstrated in the coastal region of the Kien Giang province to restore ecosystems and conserve and enhance blue carbon stocks, supported by enhanced plans and strategies, cross-sectoral planning and coordination, and capacity building **THEN** a transformative upscaling of investments in NbS by communities and the private sector can be achieved, **PROMOTED THROUGH** supportive national and provincial regulations and increased access to blue carbon finance instruments, **LEADING TO** the regional revitalization of coastal blue carbon ecosystems, promoting nature-positive livelihoods and fast-tracking community transition to a low-carbon, climate-resilient pathway while at the same time, offering blue carbon sequestration services to reduce GHG emissions, and strengthening vulnerable communities' capacity to withstand climate extremes. The Theory of Change is presented in Figure 2.

**Note:** The below Theory of Change is provisional; it was developed based on preliminary consultation and will be revised during the PPG stage following further consultations.



**Figure 2. Project Theory of Change**

The overall vision of the project is to strengthen national and local institutional capacity and regulatory frameworks, including cross-sectoral coordination, multi-stakeholder engagement and capacity building, to scale up planning, financing, and implementation of NbS in coastal ecosystems. The scale-up momentum will be informed by demonstrated NbS that mobilize engagement and investments from the private sector and communities, to achieve quantifiable climate change mitigation benefits, with biodiversity and adaptation co-benefits.

The objective of the project is to **strengthen nature-based solutions to restore ecosystems, conserve and enhance blue carbon stock with biodiversity, land protection and livelihood co-benefits in coastal landscape mosaics of the Mekong Delta.**

**Impact/ultimate outcome:** National and subnational authorities, communities and the private sector embrace a transformational shift towards a low-carbon, resilient development pathway through the strengthening and upscaling of NbS in coastal ecosystems for ecosystem restoration in support of better conserved and enhanced blue carbon stocks, as well as biodiversity conservation.

## Project Components

The project objective will be achieved through the implementation of four inter-related and mutually complementary Components (Project Outcomes) that are focused on addressing existing threats and barriers, as identified above:

***Component 1: Enhancing national, regional and provincial plans and strategies for mainstreaming, developing and implementing NbS to restore critical ecosystems, conserve and enhance blue carbon stocks and biodiversity.***

Within the Government, more cross-sectoral collaboration is needed among ministries and between state agencies at the national and local levels to develop and implement policies that strengthen the integration of NbS into plans and strategies. Many policies and plans, including the NDC and NBSAP, provide insufficient guidance on approaches to achieve targets, and lack a comprehensive description of measures and approaches to incentivize, support and enforce implementation of climate mitigation and adaptation measures. The current NDC and NBSAP also lack systematic MRV and monitoring and evaluation (M&E) stipulations to assess and quantify mitigation and adaptation impacts. Although an MRV system for GHG emissions reduction is available at the national level, such a mechanism is lacking at the sectoral and local levels, a gap similar for M&E for adaptation. Overarching plans and strategies also lack a clear vision on financing mechanisms, budget allocation and timelines for implementation, as well as a clearly defined pipeline of priority investment programmes and projects. The current financial support mechanism is insufficient to encourage the private sector to invest in emissions reduction activities. There are no specific mechanisms or policies in place to encourage participation and provide opportunities for small and medium enterprises or community groups to access preferential credits for emissions reduction and climate change adaptation measures.

The project proposes to address gaps in the enabling environment, so as to set Viet Nam on a transformative pathway towards enhanced enabling regulations for action under which functional governance, policies, institutions and technical guidance can purposefully and strategically be managed to promote and finance an integrated and inclusive approach to planning, implementation and management of NbS to restore blue carbon ecosystems. This will achieve the following:

**Outcome 1: National, regional and provincial plans and strategies that are gender-responsive enhanced for implementing NbS to restore critical ecosystems and conserve and enhance blue carbon stocks with biodiversity, environmental, social, gender, and climate change adaptation co-benefits.** [\[1\]95](#)

**Output 1.1:** Strengthened national, provincial, sub-sectoral policies/plans (NDC, NAP, Province's Climate Change Response Programme) related to coastal mangroves, seagrass and coral reefs for upscaling NbS.

A critical way to enhance the conservation and protection of coastal blue carbon ecosystems is to recognize their value as a potentially significant contribution to achieving both the mitigation and adaptation goals set in government policies and strategies at the national, subnational, and sectoral levels. The project will undertake a comprehensive assessment of existing policies and stakeholder needs, including identification of gaps, related to the conservation, restoration, and management of coastal mangrove, seagrass, and coral reef blue carbon ecosystems at the national, regional, and provincial levels in Kien Giang province. The assessment will engage relevant national, regional, and provincial stakeholders, including government agencies, local communities, non-governmental organizations (NGOs), and academia, to gather input and ensure buy-in.

Based on conducting analyses of key policy gaps for NbS with a broad range of experts and stakeholder consultations the assessment findings, the project will implement prioritized measures to strengthen relevant national, provincial, and sub-sectoral policies and plans to support the scaling up of NbS to conserve and enhance blue carbon ecosystems, including drafting amendments to plans and strategies or new regulations to integrate NbS principles.

**Output 1.2:** Technical guidelines and tools developed to support the formulation and implementation of gender-responsive provincial action plans to respond to climate change towards gender-sensitive financing priority NbS.

The project will particularly focus on strengthening several technical guidelines and tools, which combined, aim to serve as a framework for understanding, developing, implementing, and mainstreaming NbS measures appropriate for the restoration and enhancement of coastal blue carbon ecosystems. Preliminarily identified topics to be addressed in the technical guidelines include: stocktaking and preliminary assessment of available information; climate change vulnerability assessment to understand current and future threats and vulnerable areas; mapping of key ecosystems and ecosystem services to understand how ecosystem conservation, management, and restoration can help tackle climate issues; and development of a provincial vision on NbS, highlighting community aspirations, among others.

The guidelines and tools will facilitate the standardization and efficiency of adopting NbS to assist provinces in formulating and implementing climate change adaptation and mitigation strategies and action plans that prioritize NbS. These guidelines should be tailored to the specific needs and contexts of provinces, informed by the project's practical experience in Kien Giang province.

**Output 1.3:** Collaborative MRV approach designed to report transparently on quantified mitigation, biodiversity and livelihood co-benefits from NbS as part of Viet Nam NDC/NAP, in alignment with UNFCCC guidance.

Acknowledging its reporting commitments under international conventions to which Viet Nam is a party, the Government of Viet Nam is committed to improving and developing MRV and M&E systems at the national and sectoral levels. These systems will monitor and report on mitigation and adaptation measures taken, including the collection of gender-disaggregated data, to the UNFCCC, CBD, and SDGs. In support of this, the project will design a collaborative MRV approach to transparently report on the quantified mitigation, biodiversity, and livelihood co-benefits of NbS initiatives.

The project will introduce a participatory, digitalized and integrated approach to quantifying mitigation, biodiversity, and livelihood co-benefits of NbS initiatives at the provincial level. This approach will be aligned with UNFCCC guidance and involve relevant stakeholders in robust and coordinated data collection, analysis, and reporting processes to ensure accuracy and accountability. Implementation of the MRV approach will be demonstrated further under Outcome 3, in close consultation with national and provincial governments for their adaptation. It will then be proposed to the government as a national MRV reporting tool to transparently track GHG emissions reduction, carbon sequestration, and adaptation benefits from NbS demonstrated in blue carbon ecosystems. As such, the project will support downscaling the national M&E system of climate change adaptation<sup>[2]96</sup> adopted recently in Viet Nam.

**Output 1.4:** Mechanisms for gender-sensitive regulatory, planning and budgeting processes reviewed and recommendations made to mainstream NbS in the updating of the NDC, NBSAP and NAP, in line with international commitments.

By reviewing best practices and policies, including those in the Mekong Delta and the demonstration province of Kien Giang, the project will identify opportunities for mainstreaming NbS into existing planning and budgeting processes, while ensuring gender-responsiveness. Specifically, the project will focus on producing recommendations or proposing regulatory instruments for upscaling NbS in coastal blue carbon ecosystems as part of government procedures for updating the NDC, NAP, or NBSAP for formal adoption, advancing Viet Nam's progress in implementing the Paris Agreement.

Envisioned deliverables under Outcome 1 include:

- At least one plan/strategy instrument mainstreaming/integrating NbS in the updated NDC, NAP and/or NBSAP submitted for adoption.
- At least one gender-responsive provincial/regional coastal management tool updated with consideration for the implementation of NbS for enhancing blue carbon ecosystems submitted for adoption.
- At least two sectoral development plans/strategies (e.g., fisheries, aquaculture, mangrove forest management) incorporate NbS for carbon mitigation with co-benefits.
- One technical guideline adopted to incorporate NbS into provincial climate change action plans on mitigation and adaptation.
- One regulation guidance document on applying MRV for measuring comprehensive benefits from coastal blue carbon ecosystems developed.

Overall, activities implemented under Outcome 1 will contribute to addressing Barrier 1 *insufficient national, regional, and provincial plans, strategies, and regulations that incorporate considerations for NbS, particularly for coastal ecosystems* (Output 1.1, Output 1.2, and Output 1.4), Barrier 3 *lack of proof-of-concept for localized NbS delivering quantifiable climate change mitigation with co-benefits, hampering the mobilization of engagement and investments from the private sector and local communities for upscaling NbS in coastal and marine blue carbon ecosystems* (Output 1.2 and Output 1.3), and Barrier 5 *limited knowledge and scientific evidence to quantify blue carbon potential* (Output 1.2, Output 1.3, and Output 1.4).

Addressing the barriers and elevating NbS for coastal ecosystems in policies and strategies will enhance addressing the relevant root causes of inadequate institutional frameworks, absence of effective legal and policy measures, poor planning of coastal and marine development initiatives. Combined, they contribute to addressing threats to blue carbon ecosystems, leading to their better protection and restoration, contributing to improved livelihoods, reduced inequality, food and water security, improved resilience and disaster risk management, and the conservation of globally important biodiversity. Moreover, the restoration and conservation

of blue carbon ecosystems increases their sequestration and storage service capability. In other words, employing NbS to strengthen blue carbon ecosystems enhances the blue economy.<sup>[3]97</sup>

***Component 2: Strengthening capacity for cross-sectoral coordination, planning, budgeting and implementation of NbS at national and provincial levels to restore ecosystems, conserve and enhance blue carbon stocks and biodiversity, with environmental, social and climate adaptation co-benefits.***

The adoption and implementation of good management practices, whether in the conservation and enhancement of natural coastal blue carbon ecosystems or in the aquaculture sector, are severely hindered by the lack of streamlined national and provincial cross-sectoral coordination and multi-stakeholder engagement mechanisms. There is also limited awareness of the connections between climate change impacts, development planning in priority sectors, ecosystem health, and livelihoods, along with the relevance of location-appropriate NbS to strengthen climate mitigation, improve ecosystems and biodiversity, and enhance societal resilience.

The project aims to address gaps in coordination, engagement, and the capacities of communities, private and public sectors. It seeks to establish a mutually agreed understanding among stakeholders on spatial planning, financing, and the implementation of NbS to conserve and enhance blue carbon. Through the use of technical guidelines, cross-sectoral dialogue, and partnerships, the project aims to lay the foundation for collective actions that foster innovations and new approaches in NbS within blue carbon ecosystems. These approaches should acknowledge the interconnections between ecological, social, and economic dimensions to achieve:

**Outcome 2: National and provincial cross-sectoral planning and coordination capacities strengthened for implementing NbS to restore ecosystems, and conserve and enhance blue carbon stocks and biodiversity, with environmental, social and climate adaptation co-benefits.**

**Output 2.1:** Capacity needs assessed and targeted capacity building programmes implemented for national and subnational institutions and community stakeholders on spatial planning, financing and implementation of NbS to conserve and enhance blue carbon.

The project will strategize and implement capacity-building programmes targeting national and subnational institutions, as well as community stakeholders. These programmes will focus on enhancing knowledge, understanding, and skills related to the identification, spatial planning, financing, and implementation of location-specific and effective Nature-based Solutions (NbS). The goal is to conserve and enhance blue carbon stocks, biodiversity, and promote sustainable natural resource use and economic development that benefits nature.

Training topics will be informed by a comprehensive capacity and needs assessment, including identification of gaps, conducted by the project to address specific needs and contexts at both institutional and grassroots community levels. Capacity building will also aim to forge stronger links between academics, policy developers, the private sector, livelihood practitioners, and local communities.

**Output 2.2:** Technical guidelines developed for the assessment, MRV and financing of NbS, as part of NDC/NAP implementation.

To address the technical barrier of limited knowledge and scientific evidence to quantify blue carbon potentials, the project will develop comprehensive technical guidelines specifically for assessing and quantifying NbS initiatives. This includes designing assessment mechanisms and tools to quantify blue carbon benefits in mangroves, seagrasses, and coral reefs. These guidelines will be piloted as part of the project's activities under Outcome 3 to refine and validate their effectiveness.

Additionally, the project will develop guidelines for creating NbS investment projects, leveraging climate funds and private sector investments. Criteria for prioritizing investment projects will be established, with a focus on promoting the participation and financing of private sector and community investments.

**Output 2.3:** Communications campaign implemented promoting NbS strategies, policies, planning and investments in coastal landscapes.

To effectively address the lack of knowledge, capacity, and skills among the most vulnerable groups—including women and ethnic/poor communities—in implementing NbS and ensuring equitable access to the benefits of conservation and restoration efforts, the project will launch a communication campaign. This campaign aims to promote NbS strategies, policies, planning, and investments in coastal landscapes.

Using a variety of communication channels, social media platforms, and digital tools such as webinars, study visits, field demonstrations, and community engagement activities, the project will raise awareness and garner support for NbS initiatives

among diverse stakeholders. The project will specifically empower youth and women, envisioning them as key catalysts and champions in implementing NbS to support blue carbon ecosystems throughout the project duration.

**Output 2.4:** Strengthened national and provincial cross-sectoral high-level dialogues, multi-stakeholder coordination and partnerships on mainstreaming NbS into national, sectoral and provincial plans.

To address the barrier of limited national and provincial cross-sectoral coordination, multi-stakeholder engagement, and capacity among authorities, the private sector, communities, ethnic/poor groups, and others to support coordinated inter-sectoral planning, financing, and implementation of NbS with high mitigation and adaptation potential, the project will undertake several initiatives.

Firstly, the project will promote regular national and provincial cross-sectoral regulatory dialogue workshops, multi-stakeholder coordination mechanisms, and partnerships. These efforts aim to mainstream NbS into national, sectoral, and provincial plans. By facilitating constructive dialogues and collaborations among relevant stakeholders—including government agencies, NGOs, private sector entities, academia, and local communities—the project will support national and local stakeholders in developing and maintaining coordinated cross-sectoral work plans that integrate sectoral efforts in NbS implementation.

Secondly, regular monitoring and evaluation will be conducted to track progress, identify challenges, and adjust engagement strategies for stakeholders. This approach ensures alignment with project outcomes and maximizes the participation of vulnerable and socially marginalized groups in adopting NbS.

**Output 2.5:** Inventory and portfolio of NbS developed, including maps of blue carbon potentials and best practices with community participation and gender mainstreaming.

Drawing upon an inventory of innovative NbS practices and outcomes piloted in coastal blue carbon ecosystems worldwide, as well as relevant NbS solutions previously successful in Viet Nam, the project will develop an NbS portfolio. This portfolio will encompass a range of descriptions of best-practice NbS approaches applicable to coastal blue carbon ecosystems in Viet Nam. It will include protective measures, enhanced management strategies, and restoration efforts that hold significant potential for enhancing carbon stocks and biodiversity.

Each description of best-practice NbS will feature quantified estimates of blue carbon potentials and other anticipated co-benefits resulting from implementation. The portfolio aims to inform, support, and engage decision-makers, the private sector, and communities—including women, youth, ethnic minorities, and other vulnerable groups—in selecting the most suitable NbS tailored to specific locations and threats. It will serve as an innovative tool to implement transparent, high-quality NbS that achieve impactful outcomes at scale for people, climate resilience, and biodiversity conservation across selected coastal blue carbon ecosystems.

Envisioned deliverables under Outcome 2 include:

- At least two technical guidelines developed for project development and financing NbS for blue carbon at the provincial/local level, and policy recommendations for blue carbon incentive mechanisms prepared.
- Documented portfolio prepared, including at least 15 best-practices in NbS for carbon mitigation with co-benefits relevant for the target province and coastal blue carbon ecosystems, with generic standard operating procedures, and mechanisms for social and environmental safeguards and economic cost-benefit analysis.
- At least 10 trainings and awareness raising events conducted on NbS for carbon mitigation with co-benefits at national, regional, provincial and district levels.
- Communication campaign designed and implemented at the national and provincial levels, using appropriate information tools including seminars, study tours, field demonstrations, social media, etc.
- Cross-sectoral coordination mechanism established/strengthened in the target province linked to regional and national coordination systems, bringing together sectoral stakeholders (conservation, fisheries, aquaculture, forestry, regional planning, science, etc.).

Overall, activities implemented under Outcome 2 will contribute to addressing Barrier 2 *Limited national and provincial cross-sectoral coordination, multi-stakeholder engagement and capacities* (Output 2.1, Output 2.4), Barrier 3 *Lack of proof-of-concept for localized NbS delivering quantifiable climate change mitigation with co-benefits, hampering the mobilization of engagement and investments from the private sector and local communities for upscaling NbS in coastal and marine blue carbon ecosystems* (Output 2.5), Barrier 4 *Lack of financial incentives, particularly at the local level, for investments in NbS* (Output 2.2), and Barrier 5 *Limited knowledge and scientific evidence to quantify blue carbon potential* (Output 2.1, Output 2.2, Output 2.3, and Output 2.5).

Strengthening co-operation and coordination, combined with improved knowledge, scientific evidence and proof of concept will enhance addressing the relevant root causes of poor planning of coastal and marine development initiatives, lack of awareness and information, limited participation, and poor enforcement. Combined, they contribute to addressing threats to blue carbon ecosystems, including habitat degradation and loss, overexploitation and pollution.

***Component 3: Mobilizing participation and investments of the private sector and local communities in demonstrating NbS to restore ecosystems and conserve and enhance blue carbon stocks in coastal ecosystems in one target province (Kien Giang).***

In Viet Nam, interventions qualifying as NbS—supporting climate change mitigation, adaptation, and biodiversity conservation—have primarily been demonstrated only at the pilot scale to date. Upscaling these efforts has been insufficiently supported due to several enabling factors lacking. These include inadequate knowledge and awareness among government, communities, and the private sector; poor cross-sectoral coordination and institutional engagement; absence of embedding NbS in legal-regulatory frameworks; lack of sustainable finance mechanisms; and insufficient engagement and ownership by the private sector and communities. These gaps have hindered long-term sustainability and scaling up of NbS initiatives.

The project aims to address these identified gaps by demonstrating proof-of-concept for NbS in two priority areas: the conservation and restoration of natural coastal blue carbon ecosystems—specifically mangroves, coral reefs, seagrass meadows, and tidal mudflats—and in the aquaculture sector. The project's approach is based on the premise that demonstrating proof-of-concept of location-appropriate NbS, with quantified benefits from environmentally positive practices, will encourage behavioural changes among the private sector and local communities. This, in turn, will support the sustainable scaling up of NbS initiatives, leading to better-conserved and enhanced blue carbon stocks, biodiversity conservation, and more resilient livelihoods.

The project will adopt a clear implementation strategy that prioritizes inclusivity, empowerment, and collaboration among stakeholders to ensure successful mobilization of private sector and local community participation and investments in NbS initiatives. During project design, emphasis will be placed on mobilizing local knowledge, customs, culture, and capacities, as well as incorporating good practices from local stakeholders in certain project design steps and implementation.

Market mapping and analysis for blue NbS and blue carbon 'goods' or 'commodities' that could attract private sector investment or financing will be crucial. Based on this analytical framework, the project will develop a strategy to foster partnerships with private sector and/or community partners to leverage their resources and expertise in scaling up blue NbS. This strategy aims to bring these services and commodities to domestic or international carbon markets.

Among coastal ecosystems, mangroves are crucial for blue carbon, acting as significant carbon sinks. Kien Giang province, in the Mekong Delta of Viet Nam, is a key area for mangroves. Phu Quoc Island, part of Kien Giang, hosts the largest seagrass area in the region, currently estimated at 10,313 hectares, encompassing five species. However, Viet Nam has seen a significant reduction in seagrass area from 1990 to 2019, with approximately 51 percent lost during this period due to anthropogenic activities such as tourism, urbanization, fishery farming, and water pollution.

Based on the initial assessment of current distribution and associated threats of existing marine coastal ecosystems, and in alignment with prioritized mitigation measures in Viet Nam's NDC and co-benefits in Viet Nam's NAP, the following NbS are proposed for upscaling and/or demonstration in Phu Quoc MPA and significant mangrove areas in Kien Giang:

- i. Upscale community-based protection of mangroves (1,000 hectares) and plantation of mangroves for increased carbon sequestration (30 hectares);
- ii. Upscale conservation of mangroves in aquaculture (250 hectares) and enhance mangroves (200 hectares) in aquaculture; and
- iii. Demonstration of conservation of seagrass for avoided emissions (300 hectares) and newly plant two hectares of seagrass.

Please refer to Annex I for a detailed assessment of the selection of demonstration sites and scoping of blue nature- based interventions.

The project proposes to address gaps in the demonstration of proof-of-concept of NbS for upscaling and engagement of private sector and communities, to achieve:

**Outcome 3: Effective participation and investments by private sector and local communities, including women and youth groups, mobilized for the implementation of NbS to restore ecosystems, and conserve and augment blue carbon stocks in coastal ecosystems.**

**Output 3.1:** Participatory coastal zone spatial assessment, mapping and valuation of carbon stock potential, climate risk and vulnerability of ecosystems, ecosystem services, and coastal livelihoods.

The project will undertake a participatory coastal zone spatial assessment, mapping, and valuation to determine the potential carbon stock, climate risks, and vulnerabilities of ecosystems and livelihoods at selected project sites in Kien Giang province. Currently, the project has tentatively identified four demonstration sites (please refer to Annex C). These sites will undergo further assessment and adjustments during the detailed project development stage, conducted in close consultation with local government, the private sector, and community stakeholders. Additional sites will be assessed during the PPG phase to maximise cost-effectiveness.

Specifically, the project will involve local communities, private sector actors, and other relevant stakeholders in the assessment process. This inclusive approach ensures that their perspectives and needs are incorporated from the outset, empowering them to lead and innovate in subsequent project phases.

**Output 3.2:** Technical assistance mechanism to support communities, particularly women and youth groups, and public and private sectors with identifying, planning, financing, implementing and monitoring NbS.

The project will establish a grant finance mechanism to support the identification, design, incubation, financing, implementation, and monitoring of tailored grant-finance schemes for NbS initiatives aimed at promoting sustainable co-management models and private sector initiatives. These initiatives are intended to achieve a positive impact on nature and strengthen livelihoods in the coastal blue carbon ecosystems of Kien Giang province.

The implementation of the grant finance mechanism will be guided by a project-specific Technical Assistance Facility (TAF), ensuring the appropriate and effective use of grant funds. The TAF will provide hands-on technical assistance to candidate grant applicants and recipients, facilitating the development and growth of sustainable NbS projects. This support will span from concept development to project realization and beyond. Specifically, the TAF will:

- Raise awareness about the constraints and opportunities related to NbS for enhancing blue carbon ecosystems and their multiple co-benefits.
- Build capacity, particularly for women and youth, in preparing grant applications and formulating business plans.
- Develop technical manuals for prospective NbS opportunities.
- Provide training, including for women and youth, to enhance technical and business management skills.
- Establish a Grant Strategy and Grant Manual to provide early-stage financial support for identifying and supporting eligible NbS initiatives, demonstrating proof-of-concept.
- Disseminate lessons learned and materials developed throughout the process.

Through these efforts, the project aims to foster community and private sector investment in NbS initiatives that contribute to the conservation and enhancement of blue carbon stocks and biodiversity in Kien Giang province.

**Output 3.3:** Finance provided to implement priority NbS by communities, particularly women-led solutions, and the private sector that reduce adverse impacts and maximize conservation and enhancement of blue carbon stocks with biodiversity and climate adaptation co-benefits.

The project aims to provide financial support (grants) for the implementation of priority NbS by communities, particularly women-led solutions, and private sector entities, with a focus on maximizing the conservation and enhancement of blue carbon stocks and biodiversity. Priority will be given to innovations that also mitigate adverse impacts on coastal ecosystems and deliver additional co-benefits, such as improved income and livelihoods, and protection from extreme events.

Under the guidance of the TAF, several key aspects will be considered:

- **Transparent and Fair Project Selection:** The project will ensure the transparent and fair identification and prioritization of NbS projects proposed by local communities or private sector entities. This process will involve thorough consultation and assessment to review the feasibility, scalability, and potential impact of each grant investment within the ecological and socio-economic context of the target area.
- **Equitable Access to Financing:** Efforts will be made to ensure equitable access to financing for NbS investments by diverse stakeholders. This includes designing funding mechanisms that are accessible to small-scale community groups, cooperatives, local businesses, and larger private sector organizations. Special attention will be given to women, women-headed households, ethnic minorities, the poor, and other vulnerable groups to promote their participation.
- **Facilitating Access to Funding:** Various financial mechanisms will be explored to facilitate access to funding, including external grants, loans, or innovative financing instruments. The project will support preparedness to access carbon markets in Viet Nam or internationally. Grants will be particularly suitable for community-led projects or initiatives with high social and environmental benefits but limited revenue-generating potential. Loans or other forms of carbon trading could be considered for larger-scale projects with commercial viability.
- **Leveraging Private Sector Investment:** The project will explore opportunities to leverage private sector investment through partnerships or incentive mechanisms. This may involve creating frameworks that encourage private sector participation in NbS initiatives through co-investment or incentive structures that align environmental goals with business objectives.

By addressing these aspects, the project aims to catalyse sustainable investments in NbS that contribute to environmental conservation, socio-economic development, and resilience-building in coastal blue carbon ecosystems of Kien Giang province.

Tentatively, the following ‘menu’ of NbS are proposed for demonstration. The full feasibility of these solutions will be further investigated, validated and detailed during the Project Preparation Grant (PPG) stage (see Annex I for more details).

| 1 | Protection of seagrass via community co-management, including intercropping of local species (e.g., seaworms/horsefish)                                | Phu Quoc National Park                                                     | ha | 300   | 847     |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----|-------|---------|
| 2 | Pilot community-based seagrass plantation with co-management modality to enhance carbon stocks for future blue carbon finance                          | Phu Quoc National Park                                                     | ha | 2     | 28      |
| 3 | Coral reef protection for conservation of carbon stocks in Phu Quoc MPA (with tour fee for coral reef plantation and community protection fund scheme) | Phu Quoc Marine Park (one to two sites with tourist line)                  | ha | 5     | n/a     |
| 4 | Upscaling community co-management of mangrove conservation/protection modality to increase carbon stock                                                | One district in Kien Giang (buffer zone of the BR site)                    | ha | 1,000 | 465,500 |
| 5 | Promote livelihoods (eco shrimp, crab, bees, etc.) in mangroves for revolving mangrove protection fund by communities                                  | One district in Kien Giang (buffer zone of the BR site)                    | ha | 250   | 871     |
| 6 | Restoration of existing mangroves                                                                                                                      | One district in Kien Giang (production zone of the BR site)                | ha | 30    | 368     |
| 7 | Plant mangroves on the aquaculture farms/lands                                                                                                         | One district in Kien Giang (production zone of the Biosphere Reserve site) | ha | 200   | 980     |

**Output 3.4:** Participatory MRV to quantify conserved and enhanced blue carbon stocks from implementation of priority NbS.

The project will demonstrate how local stakeholders, particularly authorities, communities, women, and youth groups, can participate in the implementation of MRV of the results of NbS investments in blue carbon ecosystems supported under Output 3.3, using the digital tool developed under Output 2.2. This tool will enable local authorities and communities to monitor and report on the carbon stocks and GHG reduction performance of these interventions over time.

Key aspects will include:

- **Establishing Performance Indicators and Reporting Requirements:** The project will establish clear performance indicators and reporting requirements for quantifying GHG emission reductions, carbon sequestration, and enhanced carbon stocks achieved from NbS implementation in blue carbon ecosystems. These results will be reviewed for further adoption and integration into national/provincial GHG inventories and MRV systems throughout the project lifecycle.
- **Learning from Existing Initiatives:** Drawing from experiences such as the Mangrove MRV and inventory system established by UNDP with support from Climate Promise and GCF Coastal Resilience project, and tools introduced in Bac Lieu Province for tracking carbon footprints in shrimp-rice supply chains under the NDC Support Programme, the project will design a participatory monitoring tool tailored for tracking blue carbon stocks in Kien Giang province. This tool will serve as a model for upscaling to other coastal provinces in Viet Nam.
- **Informing Adaptation Planning:** The experience gained from upscaling NbS in blue carbon ecosystems will inform provincial, regional, and national adaptation planning processes, including the NAP, NDC and M&E systems. This integration will help enhance climate resilience and support SDGs at various governance levels.

By engaging local stakeholders and leveraging digital tools for MRV, the project aims to enhance transparency, accountability, and effectiveness in managing and scaling NbS initiatives for blue carbon ecosystems in Viet Nam.

Envisioned deliverables under Outcome 3 include:

- Conduct coastal zone spatial assessment in four districts, including mapping and valuating carbon stock potential, assessment of ecosystem and livelihood climate risk and vulnerability.
- Technical support mechanisms in place to guide design, finance and monitor of grants issued.
- Fifteen grants (average \$50,000) issued to community groups, with preference to women- and youth-led groups, cooperatives, households, public and private sector organizations to demonstrate NbS in coastal blue carbon ecosystems.
- At least two MRV reports issued from participatory carbon quantification of supported NbS.

Overall, activities implemented under Outcome 3 will contribute to addressing Barrier 3 *lack of proof-of-concept for localized NbS delivering quantifiable climate change mitigation with co-benefits, hampering the mobilization of engagement and investments from the private sector and local communities for upscaling NbS in coastal and marine blue carbon ecosystems* (Output 3.2 and Output 3.4), Barrier 4 *Lack of financial incentives, particularly at the local level, for investments in NbS* (Output 3.2 and Output 3.3), and Barrier 5 *Limited knowledge and scientific evidence to quantify blue carbon potential* (Output 3.1, Output 3.2, and Output 3.4).

Combined, project activities under Outcome 3 will contribute to addressing root causes of a lack of information and awareness, limited participation, limited sustainable financing, and poverty, which will help addressing all threats to blue carbon ecosystems identified.

#### **Component 4: Communication, and knowledge management.**

#### **Outcome 4: Project best practices and innovations on NbS in priority sectors documented and disseminated.**

The project will capture and disseminate experiences, best practices, and lessons learned on NbS applied to enhance carbon stocks and biodiversity in blue carbon ecosystems at all levels, from national to local demonstration. This entails documenting successful approaches, innovative solutions, and challenges encountered throughout the project lifecycle by the project team, as well as gathering diverse opinions and stories from local project stakeholders.

To achieve this, the project will engage stakeholders at all levels, including government agencies, civil society organizations, academia, and local communities, to foster a culture of learning and continuous improvement in drafting technical reports, policy briefs, and other knowledge products aimed at distilling key insights and recommendations. Dedicated resources will be allocated through various platforms accessible to both public and private stakeholders, facilitating knowledge exchange and replication of successful interventions.

By systematically capturing and sharing experiences, the project aims to contribute to informed decision-making, regulatory reform, and the scaling up of successful NbS interventions across priority sectors.

**Output 4.1:** Experiences, best practices and lessons learned from gender-sensitive NbS across priority sectors are systematically documented and disseminated. Specific emphasis will be given to documenting and sharing lessons learned and best practices on women and youth empowerment, ensuring accessibility through various platforms for public and private stakeholders.

Envisioned deliverables under Outcome 4 include:

- At least five best practices and lessons learned reports, and policy briefs prepared, including a focus on women and youth.
- Online publicly accessible database and documentation repository operational, on mappings of climate risks, vulnerabilities, impacts and blue carbon potentials for information sharing.
- At least three national/provincial seminars facilitate dissemination of implementation results and lessons learned, with a focus on women and youth, to inform relevant regulations related to NbS.

To ensure that expected project outcomes are enduring and resilient, they will be owned by relevant line ministries and stakeholders after the project's termination, who will be better equipped to ensure the sustainability of its impacts due to project interventions such as a strengthened enabling environment; enhanced national, regional and provincial policies; an improved cross-sectoral coordination mechanism; and training and capacity-building activities. Project interventions will also be designed with financial viability/sustainability of the project in mind. Through job creation, local resourcing, incentives for participation (such as certified emission reductions [CERs]), and enhanced private sector investments, cash flow will increase, which will further contribute to the sustainability and durability of the project for long-term impacts.

Activities implemented under Outcome 4 will contribute to addressing Barrier 3 *lack of proof-of-concept for localized NbS delivering quantifiable climate change mitigation with co-benefits, hampering the mobilization of engagement and investments from the private sector and local communities for upscaling NbS in coastal and marine blue carbon ecosystems*, Barrier 4 *lack of financial incentives, particularly at the local level, for investments in NbS*, and Barrier 5 *limited knowledge and scientific evidence to quantify*

*blue carbon potential*, which combined will support addressing the root causes of lack of information and awareness, and limited participation, which in turn will help addressing all threats to blue carbon ecosystems identified.

The interrelationships between project outcomes, outputs and results with regards to addressing identified barriers, root causes and threats is presented in the flowchart in Annex J.

### Generating Global Environment Benefits

The proposed project aims to deliver multiple Global Environmental Benefits (GEBs) in biodiversity, climate change and land degradation through the implementation of NbS in coastal ecosystems in Kien Giang Biosphere Reserve in the Mekong Delta region for scaling up to other coastal provinces in Viet Nam. Specific additional GEBs achieved from the GEF-financed interventions that would not have been accrued without the project relate to:

- GEBs from biodiversity finance:
  - Conservation of globally significant biodiversity, including globally threatened terrestrial and marine species, in mangrove, seagrass and coral reef ecosystems, through 1,757 hectares of terrestrial and marine protected areas created or under improved management for conservation and sustainable use (CI-1 & CI-2), as well as 30 hectares of mangroves restored (CI-3).
  - Sustainable use of the components of globally significant biodiversity, through 5,000 hectares of mangroves, seagrass meadows and coral reefs landscapes and habitats under improved practices (excluding protected areas) from demonstrated proof-of-concept of NbS for the conservation and restoration of natural coastal blue carbon ecosystems, specifically mangrove, coral reefs, seagrass meadows and tidal mudflats, and NbS in the aquaculture sector (CI-4 & CI-5).

GEBs from investments under the climate change mitigation focal area: Increased adoption of innovative technologies and management practices for GHG emission reduction and carbon sequestration, achieving 468,594 tCO<sub>2</sub>e emission avoided and/or sequestered through the conservation of blue carbon mangrove and seagrass ecosystems, over 20 years (CI-6). Of this 468,594 tCO<sub>2</sub>e, 2,223 tCO<sub>2</sub>e comes specifically from community-based management and restoration, and strengthened law enforcement.

- GEBs from investments under the land degradation focal area:
  - Improved provision of agro-ecosystem and forest ecosystem goods and services, through mobilization of private sector and local community participation and investments in NbS initiatives in support of better conserved and enhanced mangrove forests delivering important ecosystem goods and services for vulnerable nature-dependent livelihoods.
  - Mitigated/avoided GHG emissions and increased carbon sequestration in production landscapes, through investments in NbS initiatives in the aquaculture sector, achieving 980 tCO<sub>2</sub>e enhanced carbon removal from planting mangroves on aquaculture farms/land, over 20 years.

Overall, GEBs are achieved through a complimentary approach of mobilizing private sector and community participation for NbS that integrate improved biodiversity conservation of globally important blue carbon ecosystems (within and outside protected areas) with the sustainable livelihood and commercial use of natural resources and biodiversity, and strengthened management of mixed-use mosaic coastal land/seascapes.

Combined with systemic reforms to integrate NbS in provincial and national policies, improved cross-sectoral planning and coordination, awareness raising and capacity building, it is envisioned that the project will achieve a broadening of impact beyond project completion in biodiversity conservation, ecosystem restoration, sustainable natural resources use, and local economic development in the target province and other coastal provinces in Viet Nam.

### Project Stakeholder Engagement<sup>[4]98</sup>

The project was developed in close consultation with the proposed Implementing Partner, the Department of Climate Change (formerly of the Ministry of Natural Resources and Environment, now under the Ministry of Agriculture and Environment [please see footnote 98 for further details]), as well as provincial leaders from Kien Giang. This includes the Department of Natural Resources and Environment of Kien Giang.

Furthermore, UNDP also carried out technical consultations with the Department of Agriculture and Rural Development of Kien Giang, as well as the Departments of Agriculture and Rural Development of several neighbouring provinces, namely Ca Mau, Bac

Lieu and Soc Trang. These consultations helped inform project scoping and preliminary design based on lessons learned from mangrove regeneration and sustainable livelihood models and solutions.

The project formulation team also consulted with the Netherlands Development Organization (SNV), the World-Wide Fund for Nature (WWF), the IUCN and the German Corporation for International Cooperation GIZ for rapid assessment and mapping of existing NbS programme interventions in the region, particularly in Kien Giang Biosphere Reserve.

At the provincial level, the project received regular inputs and feedback between October 2022 and November 2023, particularly from:

1. Mr. Đoàn Hữu Thắng, Deputy Director, Department of Natural Resources and Environment of Kien Giang;
2. Ms. Đoàn Thị Thanh Tú, Deputy Head of Climate Change, Department of Natural Resources and Environment of Kien Giang;
3. Representatives from the Department of Agriculture and Rural Development of Kien Giang;
4. Provincial technical departments and mass organisations, who were consulted by the Department of Natural Resources and Environment and the Department of Agriculture and Rural Development for key technical information;
5. Independent technical experts from the Nha Trang Oceanology Institute and the Viet Nam Forest Certification Office (VFCO) under the Viet Nam Academy of Forestry Science; and
6. Technical experts from SNV and GIZ field offices in the Mekong Delta region.

At the national level, the project concept and PIF were consulted from September 2023, and has incorporated comments made by the following experts and advisories:

7. Mr. Vũ Sĩ Tuấn, Deputy Director General, Viet Nam Administration of Seas and Islands, Ministry of Natural Resources and Environment;
8. Mr. Nguyễn Hưng Thịnh, Deputy Director General, Environment Agency, Ministry of Natural Resources and Environment;
9. Mr. Phan Tuấn Hùng, Director, Legal Department, Ministry of Natural Resources and Environment;
10. Mrs. Trần Thị Thâm, Deputy Director, Planning Department, Ministry of Natural Resources and Environment;
11. Mrs. Nguyễn Giang Thu, Deputy Director General, Department of Science and Environment, Ministry of Natural Resources and Environment;
12. Mr. Nguyễn Đức Toàn, Viet Nam Administration of Seas and Islands, Ministry of Natural Resources and Environment;
13. Mr. Nguyễn Đình Thọ, Institute of Policy and Strategy on Natural Resource and Environment; and
14. Mr. Tô Xuân Bảo, Director General, Industrial Safety Techniques and Environment Agency, Ministry of Industry and Trade.

Throughout the formulation of the PIF, UNDP has worked very closely with the proposed Implementing Partner, the Department of Climate Change of Ministry of Natural Resources and Environment. Specifically, UNDP has liaised with:

1. Mr. Tang The Cuong, Director General, Department of Climate Change, Ministry of Natural Resources and Environment;
2. Mr. Nguyen Tuan Quang, Deputy Director General, Department of Climate Change, Ministry of Natural Resources and Environment;
3. Ms. Tran Thanh Nga, Head of Climate Change Adaptation Unit, Department of Climate Change, Ministry of Natural Resources and Environment;

During the Project Preparation Grant (PPG) phase, UNDP will consult closely with relevant stakeholders who will contribute to the development and implementation of the project. Key stakeholders to be consulted, as well as their respective roles, are as follows:

|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Ministry of Natural Resources and Environment and authorised agencies | The Ministry of Natural Resources and Environment is a government ministry in Viet Nam that is responsible for land, water resources, mineral resources, geology, environment, hydrometeorology, climate change, surveying and mapping, and the management of seas and islands. The Ministry of Natural Resources and Environment has also been appointed by the Government as the national focal point for the Convention on Biological Diversity (CBD) implementation in Viet Nam. The Ministry is responsible for the implementation of the NBSAP and coordinating all CBD-related activities in Viet Nam. |

|                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                     | The Department of Climate Change will oversee the implementation of the project, supporting policy development and implementation and regulatory support, as well as allocating resources for project implementation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Ministry of Agriculture and Rural Development and authorised agencies                                                                                                                                               | <p>The Ministry of Agriculture and Rural Development is a government ministry responsible for rural development and the governance, promotion and nurturing of agriculture and the agriculture industry in Viet Nam. It performs state management functions in the fields of agriculture, forestry, salt production, fishery, irrigation/water services and rural development nationwide.</p> <p>The Ministry of Agriculture and Rural Development will be engaged and consulted with in the implementation of project activities related to its mandate.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Kien Giang Provincial People's Committee (PPC) and provincial authorities, particularly the Department of Agriculture and Rural Development (DARD), and the Department of Natural Resources and Environment (DONRE) | <p>The PPC and local authorities in Kien Giang province, particularly DARD and DONRE, will play an instrumental role in the project formulation and implementation of the project, including providing strategic guidance in the project approach in close collaboration with UNDP and the Department of Climate Change.</p> <p>The PPC will be primarily responsible for project development and approval of interventions in Kien Giang following ODA procedures. Further, the PPC will hold provincial ownership of the project demonstration results, and authorise DONRE and DARD as per their mandate, in coordinating and implementing support to all project activities at the provincial, district and community levels, including related to the implementation of NbS, training, capacity building and awareness raising interventions.</p> <p>The project will seek technical advice from and inputs of DONRE and DARD into the policy and practice consultations related to relevant NbS, policy incentive and technical designs, including innovation to MRV blue carbon measures, learning, monitoring and sustainable development of NbS in the province, with the whole biosphere landscape.</p>                      |
| Kien Giang National Biosphere Reserve Management Board (led by Kien Giang Provincial People's Committee)                                                                                                            | <p>The Management Board is primarily responsible for ensuring the long-term sustainability and protection of the Kien Giang Biosphere Reserve, including conserving biodiversity, implementing sustainable management strategies, facilitating research, promoting environmental education, collaborating with stakeholders, and monitoring ecosystem health.</p> <p>The project will seek out technical advice and inputs of the Board for the regulation and practice consultations related to relevant NbS, incentives and technical designs, including innovation to safeguard the Biosphere Reserve's ecological integrity and promote learning, monitoring and sustainable development of NbS for blue carbon sequestration of the whole Biosphere landscape.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Management Boards of Phu Quoc National Park <sup>[5]<sup>99</sup></sup> and Phu Quoc Marine Protected Area (under DARD)                                                                                             | <p>The Management Board of Phu Quoc National Park focuses on safeguarding terrestrial biodiversity in Phu Quoc Islands, implementing management plans, conducting research, and raising awareness about the importance of conservation. The project will collaborate with the Board to improve solutions to address challenges of habitat degradation and biodiversity loss.</p> <p>The Management Board of Phu Quoc Marine Protected Area oversees the protection and sustainable management of marine ecosystems, including coral reefs and seagrass beds. They enforce regulations, monitor marine health, engage with local communities, and promote international cooperation to ensure the long-term preservation of marine resources.</p> <p>The two Management Boards will play key roles in providing regular technical advisory, design review and appraisal, as well as monitoring and evaluation of the project feasible design, implementation of the key NbS that help to conserve and manage the related ecosystems of Phu Quoc and future replication in the park/protected area. Further roles, including capacity building and research and data collection, etc. will be further explored during the PPG stage.</p> |
| Coastal provinces in the Mekong Delta (as well as 27 other coastal provinces throughout Viet Nam)                                                                                                                   | Interventions related to NbS, biodiversity conservation and sustainable land and sea management are widespread in Viet Nam. The project will liaise with local authorities and communities from other coastal provinces in the Mekong Delta region, as well as wider Viet Nam, to benefit from their relevant good practices and lessons learned from past and ongoing NbS initiatives. Moreover, they can participate in relevant policy actions that enforce NbS better for their own regions and ecosystems.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Research and academic institutes and universities                                                                                                                                                                   | As appropriate, the project will work with research and academic institutions and universities (including, potentially, the Ho Chi Minh City University of Agriculture and Forestry, the Institute for Agricultural Environment, the Nha Trang Oceanology Institute and the Viet Nam Forest Certification Office [VFCO] under                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

|                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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|                                                                                                                          | the Viet Nam Academy of Forestry Science, etc.) and other relevant bodies to source technical expertise. Further, partnerships with training institutions will be explored to support the training and capacity building outputs of the project to help ensure sustainability of project impacts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Viet Nam Women's Union                                                                                                   | <p>The Viet Nam Women's Union is a socio-political organization that represents and defends the legal and legitimate rights and interests of women in Viet Nam. It operates at four administrative levels in Viet Nam – central, provincial, district and commune.</p> <p>Viet Nam's Women's Union, at the local levels, will provide technical expertise, community mobilization, and advocacy for environmental conservation throughout project implementation. Moreover, it will contribute to assessments, monitoring, and evaluation of NbS effectiveness, as well as ensure that gender and social considerations are integrated into project activities.</p>                                                                                                                                                                       |
| Local communities in the Kien Giang Biosphere (including youth, women, and other traditionally marginalized populations) | Local communities will be engaged throughout project implementation as primary agents for managing NbS and engaging in sustainable livelihood models introduced by the project. Moreover, local communities will benefit from technical assistance and receive financial grants to help develop and establish proof-of-concept for an integrated NbS approach to support sustainable community development. They will play a participatory role in workshops, trainings, consultations, capacity building activities, and mapping.                                                                                                                                                                                                                                                                                                        |
| Ethnic minority groups                                                                                                   | Key groups in the project area of influence (to be firmed up during the PPG stage) will play a key role in planning and implementation at the site level, from effective management and traditional knowledge; adoption of NbS and new, sustainable livelihood models; conservation; and tourism. As well, they will play a participatory role in workshops, trainings, consultations, capacity building activities, mapping, and nature-based solutions' implementation, to communication, as examples. Ethnic minority groups will be actively engaged throughout the project design and implementation, and will be consulted with regularly. The Free, Prior and Informed Consent (FPIC) process will be closely adhered to so that their rights are preserved, and so that they have opportunities to voice any concerns.            |
| NGOs                                                                                                                     | <p>There are numerous NGOs in Viet Nam that are doing important work on climate change, biodiversity conservation, natural resource management, environmental protection, and environmental awareness and education. These include, inter alia, WWF, SNV, CARE International. Under the Viet Nam Union of Friendship Organizations (VUFO), most of key NGOs participate in the coordination network of Climate Change Working Group (CCWG) and use the CCWG as key coordination vehicle.</p> <p>NGOs will be engaged in the project, particularly via CCWG platform, including through consultations during the PPG stage. They will moreover be consulted during the design and implementation of the project, including in community mobilization, training and capacity building, communication, education, and awareness raising.</p> |
| Private sector actors                                                                                                    | <p>Private sector actors will be key stakeholders of the province, including by investing in NbS, participating in relevant trainings and policy dialogues and the development of NbS investment plans with co-management of the local community.</p> <p>The private sector will therefore play a crucial role in improving access to financing mechanisms; increasing capacity for local communities to participate in carbon credit schemes; and supporting improved confidence of the long-term profitability of NbS through investment bin demonstrations.</p>                                                                                                                                                                                                                                                                        |
| International development partners (e.g., USAID, World Bank, IFC, ADB, IUCN, etc.)                                       | There are a number of international development partners that are supporting initiatives related to climate change, biodiversity conservation and environmental management in the region; they will therefore be important stakeholders. The project will seek out substantive inputs and guidance from development partners, as well as complement and build on best practices and lessons learned from their past and ongoing efforts.                                                                                                                                                                                                                                                                                                                                                                                                  |
| UNDP                                                                                                                     | As the GEF Implementing Agency, UNDP will oversee the successful design and implementation of the project, providing oversight, technical coordination and monitoring.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## Knowledge Management

Across all its Components, the project aims to generate knowledge in several key areas related to the design and implementation of NbS in coastal ecosystems, which have co-benefits in terms of biodiversity conservation, sustainable land management, climate change mitigation and community resilience.

Under Component 4 the project will capture, systematize, and disseminate project experiences, best practices and lessons learned from the implementation of NbS to both private and public sector actors in key target sectors. This will be done through the

development of reports and policy briefs; an online, publicly accessible database and documentation repository on climate risk mapping, vulnerability, impacts and blue carbon potential; and the organization of both national and subnational seminars. Such efforts by the project will facilitate the scaling up and replication of the proof-of-concept established by the project in the Mekong Delta region and nationally.

The project will conduct scientific and technical studies to assess the effectiveness of NbS in carbon sequestration, biodiversity conservation, and climate resilience. These studies may include ecological inventories, carbon stock assessments, and climate vulnerability assessments, evaluate the economic viability and scalability of NbS approaches, including blue carbon restoration in coastal ecosystems and sustainable aquaculture practices. At the same time, the project will ensure that traditional knowledge and experiences contribute to understanding the socio-cultural aspects of NbS and their impacts on livelihoods.

The project will document all research findings, technical assessments, and community engagement activities. This documentation will include reports, databases, and case studies. The project will explore a centralized knowledge repository or database to store and organize project-related information, data, and reports (e.g., Viet Nam's NAP Portal, established by the former Ministry of Natural Resources and Environment to transparently report on country progress for climate change).

Regular monitoring and evaluation activities will track the progress and impacts of the project. This data will be crucial for assessing the effectiveness of NbS and identifying areas for improvement. Stakeholder feedback will be actively sought throughout the project, as prescribed by the Stakeholder Engagement Plan.

The project will organize workshops, policy dialogues and training sessions to disseminate knowledge and share best practices. These events will bring together stakeholders from various sectors and regions to facilitate knowledge exchange. Relevant publications, research, policy briefs and technical guidelines will be publicly available on the websites of both UNDP and the Department of Climate Change of the Ministry of Agriculture and Environment, and stories and key publications will be shared and communicated on GEF platforms.

### **Project Policy Coherence**

The project will provide technical guidance on incorporating coastal blue carbon into future updates of Viet Nam's NDC to the Paris Agreement, in support of raising the country's climate mitigation ambition while also achieving tangible biodiversity and adaptation co-benefits.

The project will be aligned with and contribute to updating Viet Nam's NDC from enhanced transformative policies, demonstration of proof-of-concept of coastal NbS with clear potential for replication and scale up, and mobilizing engagement and investments of the private sector and local communities. The project will work closely with national, regional and provincial authorities to strengthen these regulations, ensuring they incorporate NbS. Practical instruments will be developed for policymakers, planners, and implementers to integrate NbS into their climate and environmental strategies.

Under Outcome 1, Output 1.3, the project also emphasizes the development of a collaborative MRV approach to transparently report on quantified mitigation, biodiversity, and livelihood co-benefits from NbS in Viet Nam.

Further, the project will contribute to achieving the targets of the Mekong Master Plan for the period from 2021- 2023, with outlook to 2050 (adopted in 2022)<sup>[6][100](#)</sup>, including targets for the development of the Mekong Delta towards sustainability, green growth and climate change adaptation, and protection of natural ecosystems. The total investment of the state budget for the period from 2021-2025 is estimated at VND 460,000 billion VND (about USD 20 billion).<sup>[7][101](#)</sup>

### **Project Transformation and Innovation**

The project design incorporates multiple transformative and innovative elements in promoting NbS in the coastal zones of Viet Nam. Innovations will contribute to strengthened governance and management of NbS, as well as ensure their financial viability and sustainability.

Although the role of mangroves is now recognized in national climate policies, the role of remaining, critically important blue carbon ecosystems is often overlooked and has not yet received investments for biodiversity and climate interlinked benefits. For instance, since 1990, a decline of 46.5 percent or 13,549 hectares of seagrass was found in Viet Nam, while only in a few protected and difficult-to-reach areas was an increase observed (Nguyen et al, 2022).<sup>[8][102](#)</sup> This issue is not exclusive to Viet Nam; at the global

level, there is relatively limited scientific evidence on blue carbon due to challenges such as the high complexity and dynamic nature of marine and coastal ecosystems and difficulties in developing standardized methods for measuring and monitoring carbon storage in blue carbon ecosystems due to the diversity of ecosystem types and conditions. The project will be innovative in that it will promote investment in blue carbon stocks specifically, including through strategizing the development and conservation of seagrass meadows and coral reefs while efficiently increasing natural carbon sinks in Viet Nam.

With their expansive potential for generating blue carbon credits, it is crucial that marine and coastal ecosystems are properly conserved, restored and sustainably managed. The application of community-based, co-management models of seagrass ecosystems can contribute to the management of natural resources in the coastal provinces, leading to gradual enhancement of communities' adaptive capacity in the future and accelerated contributions to the NDC and updated NBSAP aligned with the KMGBF. At the same time, conservation of these ecosystems provides biodiversity benefits which support Global Biodiversity Framework Targets.

The development of a collaborative MRV approach is another innovative element of the project. This approach ensures that the project's outcomes are transparently reported and quantified, providing valuable data for decision-making and policy assessment related to blue carbon.

Furthermore, the project is transformative in that it will demonstrate proof-of-concept for transformative NbS in high-carbon coastal ecosystems and the aquaculture sector. It moves beyond pilot-scale interventions and aims to upscale, engage the private sector, and enhance community participation. This approach is innovative because it addresses the gap between small-scale demonstrations and large-scale implementation. NbS implemented and scaled up by the project will adhere to the IUCN Global Standard for NbS, launched in July 2020.<sup>[9]</sup><sup>103</sup> Specifically, demonstrations/pilots will be carried out in four districts of Kien Giang province, and will include coastal zone spatial assessment, mapping and valuating carbon stock potential, and assessment of ecosystem and livelihood climate risk and vulnerability.

The market for all forms of carbon credits is expected to grow rapidly to help raise national action to meet GHG emissions reduction ambition. The project will be innovative and transformative for Viet Nam as it will assess how the potential of coastal ecosystems – including mangroves, coral reefs, saltmarshes/mudflats and seagrass meadows – could inform efficient NbS for the conservation, restoration and sustainable use of coastal blue carbon ecosystems, which contributes to high potential for local communities to benefit from sustaining their blue carbon business models in the future.

In all, the project has identified and seeks to mitigate existing barriers to the implementation of NbS in Viet Nam, including insufficient policy frameworks for NbS; limited cross-sectoral coordination, multi-stakeholder engagement and capacities to support the implementation of NbS; and a lack of proof-of-concept for localized NbS delivering quantifiable climate mitigation with co-benefits. It is envisioned that the success of this approach, in particular best practices and lessons learned, will be well documented and disseminated under Component 4 to promote the scaling up of project interventions.

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[1] The NbS will be systematically prioritized based on their multiple climate, socio-economic, and environmental co-benefits. Viet Nam's NDC (2020 & 2022) has applied a co-benefit assessment framework for NDC measures, both for mitigation and adaptation actions, yet the measures have not been fully tailored into NDC investment criteria for identifying pipeline projects or integrated into sectoral solutions in the NDC measures themselves.

[2] In line with Prime Minister Decision 148/QĐ-TTg dated 28 January 2022 on the Promulgation of the Monitoring and Evaluation System of Climate Change Adaptation at the National Level.

[3] Please see footnote 11 for reference.

[4] Please note that since the time of engagement with the stakeholders listed below, the Government of Viet Nam has undergone a comprehensive institutional reform and restructuring. As a result, several ministries have merged, including the former Ministry of Natural Resources and Environment and the former Ministry of Agriculture and Rural Development, which have been consolidated into the new Ministry of Agriculture and Environment. However, numerous other changes have also taken place. The information below reflects the institutional landscape as it was at the time of stakeholder engagement and consultation.

[5] <https://vqgppq.kiengiang.gov.vn/trang/TinTuc/38/509/SO-do-CO-CAU-TO-CHUC-VUON-QUOC-GIA-PHU-QUOC.html>

[6] Prime Minister Decision 287/QĐ-TTg, dated 28 February 2022. Retrieved from <https://thuvienphapluat.vn/van-ban/EN/Thuong-mai/Decision-287-QD-TTg-2022-planning-for-development-of-the-Mekong-Delta-region-2021-2030/506758/tieng-anh.aspx>

[7] CIFOR. (2023). *A low-emission food system in the Mekong Delta: Trends, policies and practice*. Occasional Paper 13. Bogor, Indonesia. <https://doi.org/10.17528/cifor-icraf/009050>

[8] Please see footnote 29 for reference.

[9] IUCN (2020). *Global Standard for Nature-based Solutions. A user-friendly framework for the verification, design, and scaling up of NbS*. First edition. Gland, Switzerland: IUCN. Retrieved from <https://portals.iucn.org/library/sites/library/files/documents/2020-020-En.pdf>.

## Coordination and Cooperation with Ongoing Initiatives and Project.

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

No

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

At this stage, the implementation modality is proposed to be National Implementation Modality (NIM).

Policy guidance will be obtained through the National Project Steering Committee established by the Ministry of Agriculture and Environment. At the national level, the Department of Climate Change will be responsible for overall oversight of the project implementation. The National Project Director will be responsible for the overall implementation and coordination of the project with all stakeholders. At the provincial level, the Provincial People's Committee will appoint respective leadership and set up a local Project Support Unit which will include representatives of key government sectors to support needed policy guidance and coordination to implement the project activities in Kien Giang province and its districts and communes.

The proposed GEF project will coordinate with ongoing initiatives to ensure sharing of information and lessons learned, as well as foster collaboration in related activities as described below:

### Complementarity with existing projects and programmes

| Ongoing Initiatives                                                                                                                                                                                                                      | Complementarity with GEF 8 project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The UNDP-Green Climate Fund (GCF) Project 'Improving the resilience of vulnerable coastal communities to climate change-related impacts in Viet Nam,' implemented from 2017-2024.</p> <p>Value: US\$29,500,000 (the donor is GCF)</p> | <p>The project is strengthening storm and flood protection for coastal communities in Viet Nam through resilient housing, plantation and rehabilitation of mangrove forests, and improved access to climate risk information for the public and private sectors. In order to create storm surge buffers, more than 4,000 hectares of mangroves have been planted and rehabilitated, which will also support sustainable coastal livelihoods.</p> <p>The proposed project will adapt and replicate the model and lessons for mangrove conservation in Ca Mau (next to Kien Giang), including the model for community co-management and sustainable livelihoods in the mangroves.</p>                                                                                                                                                                                                                                                 |
| <p>UNDP-Canada Project "Viet Nam Climate Smart Coastal Communities" (VNCSCC), implemented from 2024-2029.</p> <p>Value: CA\$20,000,000 (the donor is Global Affairs Canada)</p>                                                          | <p>The project aims to improve the resilience to climate change of coastal communities and enrich marine and coastal biodiversity in Viet Nam by empowering nature-dependent communities, particularly women, to scale up nature-based climate solutions. The objective is to enhance their resilience, strengthen the sustainable use of coastal natural resources, and protect the biodiversity of mangrove and coral reef ecosystems in Hue City, Binh Dinh province in the North-Central Coastal region, and Soc Trang province in the Mekong Delta region.</p> <p>The proposed project will benefit from synergized efforts for accelerating local NbS models in the Mekong region, particularly with Soc Trang province. This will enable increasing interest from the local community and enhanced incentives for private sectors to engage in blue economy opportunities as a new model of change in the Mekong region.</p> |

|                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GEF Project 11943 - Supporting sustainable fisheries development through the promotion of initiatives, environmentally friendly technology application, and climate adaptation (GEF Agency FAO)                                    | Given the shared thematic and geographic scope, this project envisages opportunities to build synergies during the implementation phase, particularly in relation to knowledge exchange, stakeholder engagement, and alignment of activities in the target areas. UNDP will coordinate closely with FAO and the project design team as the project design advances, and will seek to identify practical collaboration mechanisms during the PPG stage to avoid duplication and maximise impact.        |
| The Mekong Delta Habitat Conservation Project is being implemented in Kien Giang and Soc Trang provinces by the IUCN, with United States Agency for International Development (USAID) finance (2021-2024).<br>Value: US\$2,900,000 | The proposed project can learn from the Mekong Delta Habitat Conservation Project's management practices of marine resources to reduce illegal, unreported and unregulated fishing activities, and conserve and expand coastal and marine biodiversity of the Mekong Delta.<br><br>The other interventions of the Mekong Delta Habitat Conservation Project on piloting measures to conserve and restore natural resources promoting sustainable fisheries would align well with the proposed project. |
| The "Climate and Mangrove Protection Combined with Income Improvement for Vulnerable Communities" project, funded by Bread for the World (BftW) (2021-2024) in Ca Mau province.                                                    | This project's goal is to enhance mangrove carbon storage through forest conservation efforts, forest development and improved livelihoods for poor and vulnerable communities living in mangrove areas, without affecting environmental protection and mangrove forests. The proposed project can benefit from lessons learned from this project.                                                                                                                                                     |
| The project 'Strengthening resilience to climate change of coastal communities in the Mekong Delta - Phase 1' is funded by the Ministry of Climate, Environment and Energy of the Republic of Austria (2022-2024).                 | The proposed project will benefit from synergized efforts for accelerating local NbS models in the Mekong region, particularly with Soc Trang province. The GEF 8 project can learn from and build on the good practices from this project to improve the livelihoods of communities living in buffer zones through contracting mangrove protection forests to people with the management of the State to deploy aquaculture in a sustainable and environmentally friendly manner.                     |
| The planned Asian Development Bank (ADB) project 'Restoring and sustainable management of coastal forests in the Mekong Delta to increase adaptation to climate change,' envisioned to be financed by the GCF (2023-2029)          | The project aims to protect and develop coastal forests, and at the same time, support localities in the Mekong Delta region to adapt to climate change and rising sea level.<br><br>The proposed project can build synergies with this ADB-GCF project for utilization of large government schemes for coastal forest protection.                                                                                                                                                                     |
| GEF Small Grants Programme in Viet Nam (2017 ++)                                                                                                                                                                                   | The proposed project will bring along various blueprints and community small grants to conserve blue and coastal resources. It will replicate suitable guidelines for implementing co-management in the protection of fisheries resources in coastal areas, and as possible, adapt these models for eco-tourism for ethnic minority communities in connection with biodiversity protection and sustainable forest development.                                                                         |
| UNDP Biodiversity Finance Initiative (BIOFIN) (2018 ++)                                                                                                                                                                            | The proposed project will take forward the model and lessons in <a href="#">setting up tourism fees</a> in Hon Cau and Khanh Hoa provinces as a resource to reinvest into conservation, restoration and protection locally. The approach could be a part of the innovative solutions introduced in the proposed project site(s).                                                                                                                                                                       |

Please find further information regarding baseline projects/interventions related to application of NbS in the coastal and marine regions of the Mekong Delta, especially in Kien Giang province and more specifically, Phu Quoc island of Kien Giang province, in Annex H.

#### Core Indicators

| Project Core Indicators |                                                                                                                         | Expected at PIF |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------|
| 1                       | <b>Terrestrial protected areas</b> created or under improved management for conservation and sustainable use (Hectares) | 1,450           |

|    |                                                                                                                    |                   |
|----|--------------------------------------------------------------------------------------------------------------------|-------------------|
| 2  | <b>Marine protected areas</b> created or under improved management for conservation and sustainable use (Hectares) | 307               |
| 3  | Area of <b>land restored</b> (Hectares)                                                                            | 30                |
| 4  | Area of <b>landscapes under improved practices</b> (excluding protected areas) (Hectares)                          | 3,000             |
| 5  | Area of <b>marine habitat under improved practices</b> (excluding protected areas) (Hectares)                      | 2,000             |
| 6  | <b>Greenhouse Gas Emissions Mitigated</b> (metric tons of CO <sub>2</sub> e)                                       | 468,594           |
| 11 | Number of <b>direct beneficiaries disaggregated by gender</b> as co-benefit of GEF investment.                     | 1,500 (45% women) |

**C.I.1: Total target: 1,450 hectares.** 1,000 hectares of mangrove areas will adopt a community co-management modality for mangrove forest conservation/protection to increase carbon stocks. 250 hectares of mangrove areas will be conserved using a community-based conversion modality with income co-benefits from aquaculture livelihood models. 200 hectares of aquaculture (eco-shrimp) land areas will increase mangrove density using an intercropping modality. Linked to Outcome 3.

**C.I.2: Total target: 307 hectares.** 300 hectares of seagrass will be protected using community co-management, intercropping, and restoration of local species (e.g., seaworms and black horsefish). 5 hectares of coral reef will be protected for the conservation of carbon stocks in Phu Quoc MPA, with tour fees supporting coral reef plantation and community project fund protection. 2 hectares of new plantation will be piloted to increase seagrass coverage using a local community management model. Linked to Outcome 3.

**C.I.3: Total target: 30 hectares.** 30 hectares of mangroves will be restored (increased tree density) to improve forest quality and carbon stock. Linked to Outcome 3.

**C.I.4: Total target: 3,000 hectares.** An estimated 3,000 hectares of coastal mangroves will follow the good practices demonstrated in the project, as regulated by provincial planning and management instruments in the next development cycles, to restore blue carbon stocks and implement green financing support schemes. Linked to Outputs 1.2, 1.3, 2.1, 2.2, 2.3, 2.4, and 3.1.

**C.I.5: Total target: 2,000 hectares.** An estimated 2,000 hectares of seagrass and coral reef will follow the good practices demonstrated in the project, as regulated by provincial planning and management instruments in the next development cycles, to restore blue carbon stocks and implement green financing/eco-tourism modalities. Linked to Outputs 1.1, 1.3, 2.1, 2.3, 3.1, and 3.4.

**C.I.6: Total target: 468,594 tCO<sub>2</sub>e.** 468,594 tCO<sub>2</sub>e stored in existing blue carbon ecosystems (mainly mangroves and seagrass) will be conserved, of which 2,223 tCO<sub>2</sub>e will be reduced from carbon emissions and enhanced carbon removal through community-based management, restoration, and strengthened law enforcement over 20 years. The detailed assessment and assumptions can be found in Annexes I and K.

**C.I.11: Total target: 1,500 people (675 women, 825 men).** Approximately 400 households (estimated at 1,500 people) will benefit from various project interventions at the community level, mainly through enhancing co-management or community-based management of coastal and marine resources, as well as training on various topics, including business start-up. The project will prioritize inclusive participation of youth, women, and ethnic minorities in the design and implementation of the activities. Given the low gender baseline of Kien Giang Biosphere Reserve and the province itself, and noting that men tend to dominate forest, aquaculture, and marine activities, the project aims to ensure that at least 45 percent of direct beneficiaries are women. Linked to Outcome 3. There are an estimated 450,000 indirect beneficiaries, 45 percent of whom are women. The gender targets will be further examined during the PPG stage to explore opportunities for increase.

*Please refer to Annexes I and K for a breakdown of Core Indicator contributions. The calculations were prepared by Vu Tan Phuong et al. in 2022 and updated in 2024 based on the existing evaluation of GHG emissions reduction and carbon sequestration applied in Viet Nam's NDC, following UNFCCC guidelines, and adapted to the national development context and factors.*

*Indicator contributions, including climate benefits from carbon sequestration/GHG emissions reduction and other socio-economic and environmental co-benefits are based on certain assumptions and subjected to modifications after field assessments and further consultations with stakeholders during the PPG stage. The actual project interventions, including climate benefits from carbon sequestration/GHG reduction and other socio-economic and environment co-benefits are based on certain assumptions and may subject to modifications after field assessment and further consultations with stakeholders at the PPG stage. Additional sites will be assessed during the PPG phase to maximise cost-effectiveness.*

*As well, during the PPG stage, whether the METT or other protected area management tools are locally applied will be re-assessed. It will be ensured that project interventions contribute to relevant protected area management performance indicators while*

strengthening existing management frameworks. Where opportunities arise, we will advocate for the adoption of the METT tool in protected areas and marine protected areas.

## 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) |
|----------------------|----------------------------------|----------------------|---------------------|
| 1450                 | 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) |
|----------------------|----------------------------------|----------------------------|---------------------------|
| 1450                 | 0                                | 0                          | 0                         |

| Name of the Protected Area | WDP A 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) |
|----------------------------|----------|----------------------------------------------------------|----------------------|----------------------------------|----------------------------|---------------------------|------------------------------------------|------------------------------|-----------------------------|
| Kien Giang Protected Areas | 478284   | Protected area with sustainable use of natural resources | 1,450.00             |                                  |                            |                           |                                          |                              |                             |

### 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) |
|----------------------|----------------------------------|----------------------|---------------------|
| 307                  | 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) |
|----------------------------|----------------------------------------|----------------------------|---------------------------|
| 307                        | 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) | METT score (Baseline at CEO Endorsement) | METT score (Achieved at MTR) | METT score (Achieved at TE) |
|----------------------------|---------|----------------------------------------------------------|----------------------------|----------------------------------------|----------------------------|---------------------------|------------------------------------------|------------------------------|-----------------------------|
| Kien Giang Protected Areas | 478284  | Protected area with sustainable use of natural resources | 307.00                     |                                        |                            |                           |                                          |                              |                             |

## 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) |
|----------------------|----------------------------------|----------------------|---------------------|
| 30                   | 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) |
|----------------------|----------------------------------|----------------------|---------------------|
| 30.00                |                                  |                      |                     |

### 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) |
|----------------------|----------------------------------|----------------------|---------------------|
|                      |                                  |                      |                     |

## 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) |
|----------------------|----------------------------------|----------------------|---------------------|
| 3000                 | 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) |
|----------------------|----------------------------------|----------------------|---------------------|
| 3,000.00             |                                  |                      |                     |

#### 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) |
|----------------------|----------------------------------|----------------------|---------------------|
| 2,000.00             |                                  |                      |                     |

#### 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) |
|-------------------|---------|----------------------------|----------------------------------------|----------------------------|---------------------------|
|                   |         |                            |                                        |                            |                           |

### Indicator 6 Greenhouse Gas Emissions Mitigated

| Total Target Benefit                                      | (At PIF) | (At CEO Endorsement) | (Achieved at MTR) | (Achieved at TE) |
|-----------------------------------------------------------|----------|----------------------|-------------------|------------------|
| <b>Expected metric tons of CO<sub>2</sub>e (direct)</b>   | 468594   | 0                    | 0                 | 0                |
| <b>Expected metric tons of CO<sub>2</sub>e (indirect)</b> | 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) |
|-----------------------------------------------------------|----------|----------------------|-------------------|------------------|
| <b>Expected metric tons of CO<sub>2</sub>e (direct)</b>   | 467,719  |                      |                   |                  |
| <b>Expected metric tons of CO<sub>2</sub>e (indirect)</b> |          |                      |                   |                  |
| <b>Anticipated start year of accounting</b>               | 2025     |                      |                   |                  |
| <b>Duration of accounting</b>                             | 20       |                      |                   |                  |

### 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) |
|-----------------------------------------------------------|----------|----------------------|-------------------|------------------|
| <b>Expected metric tons of CO<sub>2</sub>e (direct)</b>   | 875      |                      |                   |                  |
| <b>Expected metric tons of CO<sub>2</sub>e (indirect)</b> |          |                      |                   |                  |
| <b>Anticipated start year of accounting</b>               | 2025     |                      |                   |                  |
| <b>Duration of accounting</b>                             | 20       |                      |                   |                  |

### 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) |
|---------------------------------|----------------------|----------------------------------|-------------------------------|------------------------------|
| <b>Target Energy Saved (MJ)</b> |                      |                                  |                               |                              |

### 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) |
|--|--------------------------|--------------------------------------|--------------------------|-------------------------|
|  |                          |                                      |                          |                         |

|               |             |          |          |          |
|---------------|-------------|----------|----------|----------|
| <b>Female</b> | <b>675</b>  |          |          |          |
| <b>Male</b>   | <b>825</b>  |          |          |          |
| <b>Total</b>  | <b>1500</b> | <b>0</b> | <b>0</b> | <b>0</b> |

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

C.I.1: Total target: 1,450 hectares. 1,000 hectares of mangrove areas will adopt a community co-management modality for mangrove forest conservation/protection to increase carbon stocks. 250 hectares of mangrove areas will be conserved using a community-based conversion modality with income co-benefits from aquaculture livelihood models. 200 hectares of aquaculture (eco-shrimp) land areas will increase mangrove density using an intercropping modality. Linked to Outcome 3.

C.I.2: Total target: 307 hectares. 300 hectares of seagrass will be protected using community co-management, intercropping, and restoration of local species (e.g., seaworms and black horsefish). 5 hectares of coral reef will be protected for the conservation of carbon stocks in Phu Quoc MPA, with tour fees supporting coral reef plantation and community project fund protection. 2 hectares of new plantation will be piloted to increase seagrass coverage using a local community management model. Linked to Outcome 3.

C.I.3: Total target: 30 hectares. 30 hectares of mangroves will be restored (increased tree density) to improve forest quality and carbon stock. Linked to Outcome 3.

C.I.4: Total target: 3,000 hectares. An estimated 3,000 hectares of coastal mangroves will follow the good practices demonstrated in the project, as regulated by provincial planning and management instruments in the next development cycles, to restore blue carbon stocks and implement green financing support schemes. Linked to Outputs 1.2, 1.3, 2.1, 2.2, 2.3, 2.4, and 3.1.

C.I.5: Total target: 2,000 hectares. An estimated 2,000 hectares of seagrass and coral reef will follow the good practices demonstrated in the project, as regulated by provincial planning and management instruments in the next development cycles, to restore blue carbon stocks and implement green financing/eco-tourism modalities. Linked to Outputs 1.1, 1.3, 2.1, 2.3, 3.1, and 3.4.

C.I.6: Total target: 468,594 tCO<sub>2</sub>e. 468,594 tCO<sub>2</sub>e stored in existing blue carbon ecosystems (mainly mangroves and seagrass) will be conserved, of which 2,223 tCO<sub>2</sub>e will be reduced from carbon emissions and enhanced carbon removal through community-based management, restoration, and strengthened law enforcement over 20 years. The detailed assessment and assumptions can be found in Annexes I and K.

C.I.11: Total target: 1,500 people (675 women, 825 men). Approximately 400 households (estimated at 1,500 people) will benefit from various project interventions at the community level, mainly through enhancing co-management or community-based management of coastal and marine resources, as well as training on various topics, including business start-up. The project will prioritize inclusive participation of youth, women, and ethnic minorities in the design and implementation of the activities. Given the low gender baseline of Kien Giang Biosphere Reserve and the province itself, and noting that men tend to dominate forest, aquaculture, and marine activities, the project aims to ensure that at least 45 percent of direct beneficiaries are women. Linked to Outcome 3. There are an estimated 450,000 indirect beneficiaries, 45 percent of whom are women. The gender targets will be further examined during the PPG stage to explore opportunities for increase.

Please refer to Annexes I and K for a breakdown of Core Indicator contributions. The calculations were prepared by Vu Tan Phuong et al. in 2022 and updated in 2024 based on the existing evaluation of GHG emissions reduction and carbon sequestration applied in Viet Nam's NDC, following UNFCCC guidelines, and adapted to the national development context and factors.

Indicator contributions, including climate benefits from carbon sequestration/GHG emissions reduction and other socio-economic and environmental co-benefits are based on certain assumptions and subjected to modifications after field assessments and further consultations with stakeholders during the PPG stage. The actual project interventions, including climate benefits from carbon sequestration/GHG reduction and other socio-economic and environment co-benefits are based on certain assumptions and may subject to modifications after field assessment and further consultations with stakeholders at the PPG stage. Additional sites will be assessed during the PPG phase to maximise cost-effectiveness.

## Key Risks

|                          | Rating      | Explanation of risk and mitigation measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CONTEXT</b>           |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Climate                  | Moderate    | <p>Project outputs (such as income-generating activities) and outcomes (restoration of degraded coastal and marine ecosystems) will be highly sensitive to the impacts of climate change and climate-change induced disasters such as typhoons, storms and seasonal tidal surges. As a result, coastal and marine degradation may not be alleviated and alternative livelihoods may be unable to deliver tangible benefits to communities, thereby increasing their vulnerability and possibly leading to maladaptive coping mechanisms.</p> <p>A Rapid Climate Risk Assessment (at least applying the GEF-STAP guidance for climate risk assessment) will be undertaken during the PPG stage, and a Climate Action Plan will be developed to inform design of the project interventions.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Environmental and Social | Substantial | Please refer to the pre-SESP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Political and Governance | Low         | Viet Nam's political and governance arrangements are stable, and no major challenges related to national security or governance are foreseen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>INNOVATION</b>        |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Institutional and Policy | Moderate    | <p>There is strong support of the central and local governments given the urgency to protect the Kien Giang Biosphere Reserve from the rapidly increasing impacts of climate change and unsustainable practices in the region. Nevertheless, there is some institutional and policy risk to the project. For one, in Viet Nam, development priorities are guided by a ten-year Socio-Economic Development Strategy and five-year Socio-Economic Development Plan (both at the national level). Based on these national plans, provinces and subnational authorities develop their own short-, medium- and long-term plans, budgets, and investment plans. Changes in the Government's investment priorities and planning at the national and subnational levels (including land use plans) may result in unanticipated changes to project activities, and by extension, the achievement of project indicator targets. In cases where shifting government priorities or plans have potential implications on the attainment of Indicator targets, the project will explore alternative solutions to ensure that the targets are nevertheless met. The project will build on and align with the existing Province Master Plan, Socio-Economic Development Strategy, Socio-Economic Development Plan, and their investment priorities. During the PPG stage, consultations with the local government on their investment/co-financing plans will be undertaken. Co-financing agreement will be sought and secured to ensure the highest commitment of government finance. Second, the procedural appraisal of the project may result in unanticipated delays. The Government of Viet Nam has introduced an ODA regulation that requires detailed appraisal of activities before a development project can be officially approved for implementation, which has resulted in lengthy processes for project approval, with cumbersome requirements for documents and inter-agencies approval. This is</p> |

|                              |          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              |          | likely to adversely impact the timeliness of project results and reporting. All efforts will be made to avoid any unnecessary delays; for example, the Government's Project Document in the Government's standard template will be prepared in parallel with the GEF Project Documents.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Technological                | Moderate | The project will take an innovative approach to coastal and marine ecosystem restoration, which includes piloting a variety of NbS. Most expected project results will be achieved by interventions related to mangrove restoration and regeneration, which has historically proven highly successful in Viet Nam (project interventions will be built on lessons learned and best practices from past projects). Coral reef conservation and seagrass plantation, however, have a very limited track record, and so such interventions may not achieve intended environmental outcomes (or not at the pace or scale anticipated). During the PPG stage, comprehensive assessments will be undertaken to inform site selection, as well as a methodology (e.g., for seagrass plantation, seed collection and propagation, preparation of restoration sites, planting techniques, etc.) to ensure optimal design of project interventions.                                                                                                                                                                                                                  |
| Financial and Business Model | Moderate | While the project aims to fund activities that maximize conservation and enhancement of blue carbon stocks and biodiversity, there is the potential for uncertainties regarding the financial viability of the business models that will be led or co-managed by the community in the long term if they lack revenue-generating potential, posing sustainability challenges once the grant funding ceases. At the PPG stage, the feasibility of setting up financial and business models will be examined, and they will be designed building on existing good practices (e.g., from the BIOFIN project). During implementation, there is also risk tied to the provision of blue NbS grants, in that the funds may be misused or not utilised effectively and transparently. During the PPG stage, and upon the selection of detailed models/methods, risk control measures will be integrated into the design itself. The project will ensure that measures are in place to maximise the feasibility of the financial and business models by creating ownership, capacity and advocacy for policy enabling conditions during the project implementation. |

#### EXECUTION

|          |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Capacity | Low | UNDP and the Department of Climate Change of the Ministry of Agriculture and Environment will deploy a strong team with high technical capacity and extensive experience with GEF and other ODA practices and standards. The Department of Climate Change of the Ministry of Agriculture and Environment, the anticipated Implementing Partner, is a long-standing partner of UNDP, and has effectively operated as an Implementing Partner for several projects in different areas such as chemicals and waste, biodiversity, climate change, and coastal and marine management, among others. Previous Harmonized Approach to Cash Transfer (HACT) Assessments and Partner Capacity Assessment Tool (PCAT) Evaluations of the Department of Climate Change showed overall "low risk rating." UNDP |
|----------|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                     |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     |             | will continue to carry out regular assessments of Implementing Partner capacity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Fiduciary           | Moderate    | Following the latest ODA rules, regulations and practices, the Department of Climate Change of the Ministry of Agriculture and Environment may experience barriers to delivering the project interventions effectively and efficiently at the provincial level. Furthermore, there may be some constraints in terms of financial management and procurement within the proposed Implementing Partner that may delay project formulation and implementation. Ministry of Agriculture and Environment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Stakeholder         | Substantial | UNDP and the Department of Climate Change of the Ministry of Agriculture and Environment both have strong networks and coordination mechanisms in place to mobilize stakeholder engagement in the project. Preliminary evidence and consultations that there is strong local support for the project, which will also implement training and capacity building activities for implementation of NbS, further incentivizing community and stakeholder participation in the project. During the PPG stage, extensive stakeholder consultations will be undertaken. A detailed stakeholder analysis will be completed to support the development of a comprehensive Stakeholder Engagement Plan (SEP) which will identify and outline potential stakeholders that may be affected by the project, either positively or adversely. These may include, inter alia, governmental organizations (at the national, provincial, district, and commune levels), local communities (e.g., natural resource-dependent groups, women, youth, ethnic minorities, NGOs, mass organizations, and private sector actors (e.g., local small- and medium enterprises, tourism companies, hotels, etc.)). Based on the assessment results, applicable social and environmental risk management plans of action and measures will be proposed to ensure that different social groups, including ethnic minorities, poor and near-poor households, and other vulnerable communities, are engaged through just and culturally appropriate channels. This will ensure engagement at all levels so that affected stakeholders' feedback on the proposed project activities will be incorporated during their design and implementation. |
| Other               |             | NA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Overall Risk Rating | Substantial | Previous lessons from GEF and other donor-supported projects will inform the design / formulation and implementation of this project so as to effectively manage and mitigate risks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

### 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)

The project aims to tackle critical environmental challenges by enhancing the implementation of NbS in coastal ecosystems, specifically targeting the Mekong Delta region of Viet Nam. It aligns closely with the programming strategies of GEF-8, particularly in addressing the 'levers' proposed by GEF-8—governance and policies, financial leverage, multi-stakeholder dialogues, and innovation and learning—to advance systems transformation.

The project is fully aligned with GEF-8 Climate Change Mitigation focal area element CCM 1-4. The project promotes NbS with high mitigation potential by restoring and conserving blue carbon ecosystems, including mangroves, seagrasses, and coral reefs. Relevant project components support GHG mitigation through policy and regulatory reforms (Outputs 1.1, 1.4), technical tools for financing and implementing NbS (Outputs 1.2, 2.2), and participatory MRV aligned with UNFCCC guidance (Outputs 2.2, 3.4). Climate mitigation outcomes are further realised through financing priority NbS implemented by communities and the private sector (Output 3.3), supported by spatial planning (Output 3.1), technical assistance (Output 3.2), and targeted capacity-building (Output 2.1). Together, these interventions enable systemic change, catalyse scalable NbS models, and enhance carbon sequestration, while delivering biodiversity, adaptation, sustainable land management, and livelihood co-benefits in vulnerable coastal ecosystems.

Furthermore, the project aligns with the GEF-8 Biodiversity Focal Area Strategy, specifically contributing to Objective BD-1 *improve conservation, sustainable use, and restoration of natural ecosystems* by supporting integrated area-based management approaches to scale up NbS for blue carbon ecosystems. This approach minimizes adverse impacts while maximizing the conservation and enhancement of blue carbon stocks and globally important biodiversity. The project strengthens frameworks at the national, provincial and local levels to ensure environmentally, socially, and economically sustainable restoration and conservation efforts, while also contributing to the avoidance and reduction of land degradation in coastal landscapes.

Specifically, under BD-1-2 *sustainable use of biodiversity*, relevant project components support financing priority NbS that integrate biodiversity and climate adaptation co-benefits (Output 3.3), guided by inventories (Output 3.1) and best practices with community engagement and gender mainstreaming (Output 2.5). Technical guidelines and tools for formulating and implementing provincial action plans to address climate change and prioritize NbS also contribute significantly (Output 1.2, Output 2.2). Moreover, the project contributes to BD-1-3 (ecosystem restoration) by enhancing national and provincial policy dialogues, multi-stakeholder coordination, and partnerships to mainstream NbS into national, sectoral, and provincial plans, thus improving environmental considerations in economic sectors affecting high blue carbon ecosystems and globally significant biodiversity.

In addition, under LD-1, the project supports avoiding and reducing land degradation through sustainable land management (SLM) practices embedded in NbS for coastal ecosystems. Project components promote improved land use and spatial planning (Output 3.1), restoration of degraded mangrove areas (Output 3.3), and integration of SLM principles into policy frameworks and provincial climate response plans (Outputs 1.1, 1.4). Technical guidelines developed under the project (Outputs 1.2, 2.2) incorporate approaches to manage coastal landscapes sustainably, balancing conservation with productive uses such as eco-aquaculture. Participatory planning and co-management mechanisms (Outputs 3.2, 3.3) ensure inclusive and long-term stewardship of land and natural resources by local communities and private actors, particularly women and youth. These efforts strengthen resilience of coastal land-use systems, enhance ecosystem services, and contribute to long-term land degradation neutrality in the Mekong Delta.

The proposed project is in conformity with the NBSAP, NDC, NAP, and other national instruments as discussed below:

| Strategy/Plan                                 | Conformity with the proposed project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Viet Nam's Nationally Determined Contribution | <p>The project targets strengthening blue carbon ecosystems (mangroves, coral reefs, seagrasses and tidal mudflats) in the Mekong Delta Region that, when healthy, increase carbon sequestration.</p> <p>The NDC clearly sets the targets for climate change mitigation and adaptation for the sector LULUCF sector (Reducing emissions from land use, land use change and forestry). There are seven GHG mitigation measures proposed in Viet Nam's NDC, of which the project applies the following mitigation measures: F2 (conservation of mangrove forests), F3 (reforestation of mangroves) and F4 (restoration of mangroves through enrichment planting).</p> <p>Further, demonstration of conservation and restoration of seagrass meadows and coral reefs will inform the feasibility of upscaling carbon sequestration, once restored. As such, the project will support the attainment of Viet Nam's mitigation targets supporting the implementation of Viet Nam's NDC.</p> |

|                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                         | Lessons and methodology to measure and track carbon stocks will contribute to future updating of Viet Nam's NDC from enhanced transformative policies, demonstration of proof-of-concept of coastal NbS with clear potential for replication and scale up, and mobilizing engagement and investments of private sector and local communities, while opening the potential for blue carbon credits.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| National Climate Change Strategy (NCCS)                                 | Similar to the above, the project will support the implementation of climate targets stated in the NCCS. The NCCS particularly emphasizes that before 2030, Viet Nam need to develop and promote the application of NbS and EbS models for building resilience and mitigation benefits, as well as establish and expand operations of marine protected areas and nature reserves.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| National Adaptation Plan (NAP)                                          | <p>Upscaling NbS has been clearly stipulated and prioritised in Viet Nam's NAP and has been further accelerated as a strategic approach in the revised NAP which is under the final stage of approval by Prime Minister for submission to the UNFCCC.</p> <p>The project supports achieving the targets of Viet Nam's NAP to reduce vulnerability and enhance the resilience of communities, economic sectors, and ecosystems to the impacts of climate change. NbS is one of the prioritized strategic approaches adopted, which helps elevating the transformative changes of adaptation solutions, and supports effectively addressing the potential long-term climate loss and damage that Viet Nam is unlikely to adapt to through technical solutions solely.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| National Strategy on Green Growth for the period 2021-2030, vision 2050 | The project aims to contribute to a greener and more resilient economy in Viet Nam, which is still reeling from the impacts of the COVID-19 pandemic. It will do so through enhanced transformative policies, demonstration of proof-of-concept of coastal NbS with clear potential for replication and scale up, and mobilizing engagement and investments of the private sector and local communities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| National Biodiversity Strategy and Action Plan (NBSAP)                  | <p>Viet Nam's updated NBSAP is aligned with the Kunming-Montreal Global Biodiversity Framework (KMGBF).</p> <p>The project will contribute to the vision of the NBSAP, which targets to protect and restore ecosystems in Viet Nam, and enhance their integrity and connectivity. The implementation of the NBSAP will help ensure that biodiversity is preserved and sustainably used in order to contribute to socio-economic development in the direction of a green economy, while proactively adapting to climate change.</p> <p>The NBSAP lays out concrete national targets that the project will contribute to, including:</p> <ul style="list-style-type: none"> <li>Protected terrestrial areas shall account for nine percent of the country's land area;</li> <li>Protected marine and coastal areas shall add up to three to five percent of the total sea area;</li> <li>Forest coverage is to be maintained at 42-43 percent, in line with the Forest Development Strategy; and</li> <li>20 percent of degraded ecosystems are to be restored.</li> </ul> <p>Moreover, the NBSAP emphasizes the conservation of biodiversity, particularly endangered, rare and precious plant and animal species, which the project will contribute to as well.</p> |
| National MRV and M&E regulations                                        | <p>The project will design a collaborative MRV approach to transparently report on the quantified mitigation, biodiversity and livelihood co-benefits of NbS initiatives.</p> <p>Currently the MRV system of Viet Nam's NDC is under development by the Department of Climate Change of MONRE as the national focal point, including alignment with the Enhanced Transparency Framework (ETF) of the Paris Agreement, with various support from international organisations, including the UNDP-CBIT project. The Viet Nam NAP Portal hosted by the Department of Climate Change of MONRE also tracks progress in provinces in NbS and EbS measures. Results and tools from further strengthening blue carbon MRV will be integrated by DCC into the MRV/M&amp;E system of Viet Nam following international good practices.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Voluntary land degradation neutrality (LDN) targets                     | Through its efforts to improve stakeholder capacity, improve the policy and regulatory frameworks, foster a robust enabling environment for the implementation of NbS in coastal and marine ecosystems, and increase investment in NbS in coastal and marine ecosystems of Viet Nam, specifically including mangrove forests, the project will support achieving Viet Nam's voluntary LDN targets. Particularly, it will support the attainment of the targets related to forest protection (1,000,000 hectares with local resources and 2,000,000 hectares with international support) and natural forest restoration (160,000 hectares with local resources and 250,000 hectares with international support).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

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|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mekong Master Plan for the period of 2021-2023 with outlook to 2050 | The project will contribute to achieving the targets of the Mekong Master Plan, including targets for the development of the Mekong Delta towards sustainability, green growth, climate change adaptation and protection of natural ecosystems.                                               |
| Kien Giang Provincial Master Plan for 2021-2030                     | The project is well-aligned with strategic development policies of Kien Giang where there is strong emphasis on community-based ecosystem protection and community-based tourism development, particularly related to marine and coastal economic development, and the Green Growth Strategy. |

In terms of global programmes, the project is in conformity with the following:

| Programme                                              | Programme targets/goals                                                                                                                                                                                                                               | Project conformity with targets/goals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable Development Goals                          | SDG 2: End hunger, achieve food security and improved nutrition, promote sustainable agriculture                                                                                                                                                      | Engagement of the private sector, who at the local level are typically small businesses or micro/small enterprises, and communities in the implementation of NbS, through participation in relevant trainings, e.g., on climate-responsible business development, participatory tracking and reporting on carbon footprint reduction or carbon sequestration, social and ecological sustainable business start-ups for women, and youth-led businesses, etc., will facilitate strengthening of nature-positive small-scale enterprises and livelihood operations to help improve nutrition and food security. |
|                                                        | SDG 5: Gender Equality                                                                                                                                                                                                                                | The project has designed specific interventions to ensure gender equality and the incorporation of gender mainstreaming approaches throughout the implementation process. This includes promoting women's participation in planning and implementing investments in NbS to restore ecosystems, conserve and enhance blue carbon stocks, and biodiversity conservation. Women will also be engaged in policy development, national and provincial cross-sectoral planning and coordination, and capacity building.                                                                                             |
|                                                        | SDG 13: Climate Action                                                                                                                                                                                                                                | The project's integrated approach of strengthening NbS to conserve, restore and enhance blue carbon ecosystems, through improved policies and planning at the national and provincial levels, strengthened cross-sectoral planning and coordination capacities, improved capacities, and effective participation and investments by private sector and local communities, will contribute to strengthening ecosystem and community resilience and adaptive capacity to climate-related hazards.                                                                                                               |
|                                                        | SDG 14: Conserve and sustainably use oceans, seas, and marine resources for sustainable development                                                                                                                                                   | Through its focus on coastal blue carbon ecosystems, the project contributes to achieving the sustainable management and protection of coastal ecosystems, through avoiding or minimizing significant adverse impacts from human development, through strengthening their resilience, including by taking action for their restoration.                                                                                                                                                                                                                                                                       |
|                                                        | 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 project's focus on applying NbS to restore coastal ecosystems, specifically including mangrove forests supports reducing adverse impact and maximize conservation and enhancement of, among others, globally important biodiversity.                                                                                                                                                                                                                                                                                                                                                                      |
| Kunming-Montreal Global Biodiversity Framework (KMGBF) | GOAL A - Protect and Restore: The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored; human induced extinction of known threatened species is halted; genetic diversity within populations is maintained. | The project supports an integrated area-based management approach for high blue carbon ecosystems that reduces adverse impact and maximizes conservation and enhancement of blue carbon stocks as well as globally important biodiversity.                                                                                                                                                                                                                                                                                                                                                                    |

|  |                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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|  | GOAL B - Prosper with Nature: 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. | The project's approach for strengthening NbS in blue carbon ecosystems, through strengthening national and regional policy frameworks, improved national and provincial cross-sectoral planning, knowledge and coordination capacities, and effective participation and investments by private sector and local communities, will lead to the conservation and enhancement of blue carbon stocks and globally important biodiversity, and the improvement of ecosystem functions and services valued by local nature-dependent communities. |
|  | Goal D - Invest and Collaborate: Adequate means of implementation, including financial resources, capacity-building, technical and scientific cooperation, and access to and transfer of technology to fully implement the KMGBF are secured and equitably accessible.                                   | The project is structured approach through the implementation of four components will strengthen knowledge development on best practices and innovations on NbS, from improved capacities, cooperation and finance, embedded in enhanced policy and institutional regulations. The project's experience, best practices and lessons learned on NbS in priority sectors are captured, systematized and made available for public and private stakeholders.                                                                                   |
|  | Target 1: Plan and manage all areas to reduce biodiversity loss                                                                                                                                                                                                                                          | The project will adopt NbS actions to protect, conserve, restore, sustainably use and manage blue carbon ecosystems, which will, among others, provide biodiversity conservation benefits.                                                                                                                                                                                                                                                                                                                                                  |
|  | Target 2: Restore 30% of all degraded Ecosystems                                                                                                                                                                                                                                                         | The strengthening and scale up of NbS will support ecosystem restoration in support of better conserved and enhanced blue carbon stock as well as biodiversity conservation.                                                                                                                                                                                                                                                                                                                                                                |
|  | Target 3: Conserve 30% of land, waters and seas.                                                                                                                                                                                                                                                         | The focus of project implementation is the Kien Giang Biosphere Reserve where the conservation, restoration and management of coastal ecosystems is strengthened through the implementation of priority NbS by communities and private sector.                                                                                                                                                                                                                                                                                              |
|  | Target 8: Minimize the impacts of climate change on biodiversity and build resilience.                                                                                                                                                                                                                   | By improving policy and institutional regulations, strengthening planning and coordination mechanisms, capacities, and participation by private sector and local communities, the project will strengthen NbS investments that achieve improved resilience of natural ecosystems and local livelihoods to the impacts of climate change.                                                                                                                                                                                                    |
|  | Target 10: Enhance biodiversity and sustainability in agriculture, aquaculture, fisheries, and forestry.                                                                                                                                                                                                 | Through strengthening NbS implementation in fisheries, aquaculture, and other livelihood activities within coastal blue carbon ecosystems, the project will support sustainable ecosystem management with benefits for enhancing biodiversity.                                                                                                                                                                                                                                                                                              |
|  | Target 11: Restore, maintain and enhance nature's contributions to people.                                                                                                                                                                                                                               | Conserving, restoring and enhancing coastal blue carbon ecosystems will enhance the ecosystem functions and services of intrinsic and economic benefit for local communities.                                                                                                                                                                                                                                                                                                                                                               |
|  | Target 20: Strengthen capacity-building, technology transfer, and scientific and technical cooperation for biodiversity.                                                                                                                                                                                 | The project's Components 2 and 3 have a specific focus on strengthening national and provincial cross-sectoral planning and coordination, knowledge capacities, and participation for implementing NbS to, among others, improve biodiversity.                                                                                                                                                                                                                                                                                              |
|  | Target 21: Ensure that knowledge is available and accessible to guide biodiversity action.                                                                                                                                                                                                               | The implementation of project activities under Component 4 will ensure that experiences, best practices and lessons learned on NbS in priority sectors are captured, systematized and made available through various platforms for public and private stakeholders, including for the guidance of biodiversity action in Viet Nam.                                                                                                                                                                                                          |

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|--|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Target 22: Ensure participation in decision-making and access to justice and information related to biodiversity for all. | The overall intent of the project is to ensure full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making and investment opportunities, access to justice and information, and benefit sharing from project interventions related to, among others, biodiversity by ethnic minorities and local communities (including women, youth and ethnic groups).        |
|  | Target 23: Ensure gender equality and a gender-responsive approach for biodiversity action.                               | Through targeted interventions, the project will ensure a gender-responsive approach where all women and girls have equal opportunity and capacity to participate in nature-based initiatives, blue carbon policy development, and investment choices. Gender equality principles will be integrated and mainstreamed into the project results framework, with specified budget, targets, indicators and timeframe. |

## 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: Yes

Civil Society Organizations: Yes

Private Sector: Yes

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

During the PIF stage, in keeping with the Government of Viet Nam's arrangements and consultation process, the UNDP Viet Nam CO liaised and consulted directly with the proposed Implementing Partner, the Department of Climate Change of the former Ministry of Natural Resources and Environment, now the Ministry of Agriculture and Environment. While UNDP did not directly consult with stakeholders, including Indigenous Peoples (referred to in Viet Nam as "ethnic minorities," civil society organizations, or private sector actors at this stage, the proposed Implementing Partner held meetings with provincial representatives and community leaders, as outlined above, which preliminarily confirmed that there is strong local support at the community level for the project, particularly in the target province of Kien Giang. There have also been numerous discussions with the former Ministry of Agriculture and Rural Development, as well as experts and academics.

As well, the development of the PIF for the proposed project has built on existing consultation channels with local communities, ethnic minorities, and provincial civil society organizations and private sector actors in the Mekong Region from existing UNDP

programmes and projects (including the Green Climate Fund [GCF]-funded Coastal Resilience Project,<sup>[1]104</sup> the GCF-financed Smallholder Farmer Resilience Project,<sup>[2]105</sup> and a project on Accelerating Private Sector Engagement in Climate-Resilient and Low-Emission Investment Opportunities in Viet Nam's NDC).<sup>[3]106</sup>

UNDP recognizes the critical importance of stakeholder consultation and is committed to ensuring that stakeholder engagement is at the core of this project. A Stakeholder Engagement Plan will be developed at the PPG stage to identify specific roles and responsibilities of stakeholders and means of engagement. A Stakeholder Engagement Expert will be on the PPG Team, and broad, comprehensive consultation with the above-defined stakeholders will be carried out throughout, inter alia, the development of the Results Framework, the validation of the draft Theory of Change for the project, and safeguards-related discussions. In particular, it will be ensured that traditionally marginalized stakeholders, including women, youth, persons with disabilities and ethnic minorities are engaged extensively throughout project design and implementation.

[1] GCF and UNDP Viet Nam. (Accessed March 2024). *Improving the resilience of coastal communities to climate change in Viet Nam*. Retrieved from <http://gcfundp-coastalresilience.com.vn/>

[2] GCF and UNDP Viet Nam. (Accessed March 2024). *Strengthening the resilience of smallholder agriculture to climate change-induced water insecurity in the Central Highlands and South-Central Coast Regions of Viet Nam*. Retrieved from <http://gcf2.undp.org.vn/>

[3] UNDP Viet Nam. (Accessed March 2024). *Accelerating Private Sector Engagement in Climate-Resilient and Low-Emission Investment Opportunities in Viet Nam's NDC 2019-2023*. Retrieved from <https://www.undp.org/vietnam/projects/accelerating-private-sector-engagement-climate-resilient-and-low-emission-investment-opportunities-viet-nams-ndc-2019-2023>

(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<br>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/<br>Regional/<br>Global | Focal Area          | Programming<br>of Funds            | Grant /<br>Non-<br>Grant | GEF Project<br>Grant(\$) | Agency<br>Fee(\$) | Total GEF<br>Financing (\$) |
|---------------------------------|------------|---------------------------------|---------------------|------------------------------------|--------------------------|--------------------------|-------------------|-----------------------------|
| UNDP                            | GET        | Viet Nam                        | Biodiversity        | BD STAR<br>Allocation: BD-1        | Grant                    | 708,544.00               | 67,312.00         | 775,856.00                  |
| UNDP                            | GET        | Viet Nam                        | Climate<br>Change   | CC STAR<br>Allocation: CCM-<br>1-4 | Grant                    | 2,666,570.00             | 253,324.00        | 2,919,894.00                |
| UNDP                            | GET        | Viet Nam                        | Land<br>Degradation | LD STAR<br>Allocation: LD-1        | Grant                    | 127,854.00               | 12,146.00         | 140,000.00                  |
| <b>Total GEF Resources (\$)</b> |            |                                 |                     |                                    |                          | <b>3,502,968.00</b>      | <b>332,782.00</b> | <b>3,835,750.00</b>         |

### Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount (\$)

150000

PPG Agency Fee (\$)

14250

| GEF Agency | Trust Fund | Country/<br>Regional/<br>Global | Focal Area   | Programming<br>of Funds     | Grant /<br>Non-<br>Grant | PPG(\$)   | Agency<br>Fee(\$) | Total PPG<br>Funding(\$) |
|------------|------------|---------------------------------|--------------|-----------------------------|--------------------------|-----------|-------------------|--------------------------|
| UNDP       | GET        | Viet Nam                        | Biodiversity | BD STAR<br>Allocation: BD-1 | Grant                    | 35,748.00 | 3,396.00          | 39,144.00                |

|                              |     |          |                |                             |       |                   |                  |                   |
|------------------------------|-----|----------|----------------|-----------------------------|-------|-------------------|------------------|-------------------|
| UNDP                         | GET | Viet Nam | Climate Change | CC STAR Allocation: CCM-1-4 | Grant | 114,252.00        | 10,854.00        | 125,106.00        |
| <b>Total PPG Amount (\$)</b> |     |          |                |                             |       | <b>150,000.00</b> | <b>14,250.00</b> | <b>164,250.00</b> |

Please provide justification

### Sources of Funds for Country Star Allocation

| GEF Agency                 | Trust Fund | Country/<br>Regional/ Global | Focal Area       | Sources of Funds   | Total(\$)           |
|----------------------------|------------|------------------------------|------------------|--------------------|---------------------|
| UNDP                       | GET        | Viet Nam                     | Biodiversity     | BD STAR Allocation | 815,000.00          |
| UNDP                       | GET        | Viet Nam                     | Climate Change   | CC STAR Allocation | 3,045,000.00        |
| UNDP                       | GET        | Viet Nam                     | Land Degradation | LD STAR Allocation | 140,000.00          |
| <b>Total GEF Resources</b> |            |                              |                  |                    | <b>4,000,000.00</b> |

### Indicative Focal Area Elements

| Programming Directions    | Trust Fund | GEF Project Financing(\$) | Co-financing(\$)     |
|---------------------------|------------|---------------------------|----------------------|
| BD-1-2                    | GET        | 495,980.80                | 10500000             |
| BD-1-3                    | GET        | 212,563.20                | 4500000              |
| CCM-1-4                   | GET        | 2,666,570.00              | 3500000              |
| LD-1                      | GET        | 127,854.00                | 4500000              |
| <b>Total Project Cost</b> |            | <b>3,502,968.00</b>       | <b>23,000,000.00</b> |

### Indicative Co-financing

| Sources of Co-financing | Name of Co-financier  | Type of Co-financing | Investment Mobilized | Amount(\$) |
|-------------------------|-----------------------|----------------------|----------------------|------------|
| Donor Agency            | Global Affairs Canada | Other                | Investment mobilized | 3000000    |
| Donor Agency            | GCF                   | Other                | Investment mobilized | 1000000    |
| GEF Agency              | IUCN                  | Other                | Investment mobilized | 4000000    |

|                                 |                                  |         |                           |                      |
|---------------------------------|----------------------------------|---------|---------------------------|----------------------|
| Recipient Country<br>Government | Kien Giang People's<br>Committee | In-kind | Recurrent<br>expenditures | 15000000             |
| <b>Total Co-financing</b>       |                                  |         |                           | <b>23,000,000.00</b> |

Describe how any "Investment Mobilized" was identified

Not Applicable

## ANNEX B: ENDORSEMENTS

### GEF Agency(ies) Certification

| GEF Agency Type        | Name           | Date      | Project Contact Person | Phone | Email                  |
|------------------------|----------------|-----------|------------------------|-------|------------------------|
| GEF Agency Coordinator | Nancy Bennet   | 8/20/2024 | Bipin Pokharel         |       | nancy.bennet@undp.org  |
| Project Coordinator    | Bipin Pokharel | 8/20/2024 | Bipin Pokharel         |       | bipin.pokharel@unp.org |

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

| Name             | Position                                       | Ministry                                | Date<br>(MM/DD/YYYY) |
|------------------|------------------------------------------------|-----------------------------------------|----------------------|
| Nguyen Duc Thuan | Director, Viet Nam Environment Protection Fund | Ministry of Agriculture and Environment | 3/19/2025            |

## ANNEX C: PROJECT LOCATION

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

**Kien Giang:** The proposed target province is Kien Giang, which is among 13 Mekong Delta provinces. Kien Giang has a total area of 6,296 square kilometres and a 200 kilometre-long coastline, with 105 small and big islands with high potential for blue carbon. The estimated population of Kien Giang is approximately 1,700,000.

**Kien Giang Biosphere Reserve:** The Kien Giang Biosphere Reserve is located in the southwestern region of Viet Nam. It comprises 105 islands, the biggest of which is Phu Quoc Island. The Kien Giang Biosphere Reserve was established in 2006 and encompasses much of the coastline and adjacent marine areas of Kien Giang province as well as U Minh Thuong National Park and Phu Quoc National Park.



**Figure 3.** Map of Kien Giang province and the Kien Giang Biosphere Reserve.

The three main landscapes of the Kien Giang Biosphere Reserve have the following general features:<sup>[1]107</sup>

- Phu Quoc National Park (WDP 10398, 29,625 hectares) stretches from mountain forests to coral reefs. It encompasses one of the last remaining dipterocarp forests in Viet Nam, Melaleuca forests and mangroves forest, important seagrass beds and coral reefs. In 2020, Kien Giang province revised the marine conservation area of Phu Quoc National Park.<sup>[2]108</sup>
- Phu Quoc National Park is 31,422 ha, comprising a strict protection area of 8,786 ha, a forest rehabilitation area of 22,603 ha and an administration and services area of 33 ha. The flora in Phu Quoc National Park is diverse. The vegetation here is mainly evergreen forest growing on low mountainous terrain with a total number of up to several hundred species, including: species of rustic trees (Melaleuca, beans, sesame, sesame oil, sand oil, sand oil, civets, chestnuts, omnis cores, skin, grapefruit), precious orchid species (Lan Van Hai, Ai Lan Lan Dep, Lan Lan), precious medicinal herbs (Ha Thu O, male mysterious, licorice, kernels, eucalyptus, cardamom, etc.) and some other parasitic species (orchids, ferns, white cotton vines). Besides a rich flora, the fauna here is also very diverse including: 30 mammal species, of which 5 species are recorded in the Viet Nam Red Book such as wolves, white monkeys, gibbon, 200 species of birds with 4 species recorded in the IUCN Red list and 3 species recorded in the Viet Nam Red Book; 50 reptiles, of which 9 are listed in the IUCN list and 18 species are listed in the Red Data Book in the country. Although the most important economic activity on the island is fishing not agriculture shifting cultivation as a major threat to biodiversity in the buffer zone of the national park<sup>[3]109</sup>.
- The Phu Quoc Marine Protected Area (MPA) covers 40,909 hectares, including coral reefs and seagrass ecosystems, divided into four functioning zones: (i) strictly protected areas (7,087 hectares, of which 6,658 are seagrasses and 429 hectares are coral reefs); (ii) ecological restoration areas (11,573 hectares, of which 11,363 hectares are seagrasses and 175 hectares are coral reefs); (iii) administration zones (9,817, including 1,212 hectares of seagrass and 8,605 hectares of coral reefs); and (iv) buffer zones (12,467 hectares).<sup>[4]110</sup> The MPA is home to coral reefs, seagrass ecosystems and mangrove swamps, all of which provide habitat to a large variety of flora and fauna species. In 2020, the Kien Giang PPC revised the boundary and area of Phu Quoc MPA<sup>[5]111</sup>.

- U Minh Thuong National Park (WDPA 555626104, 8,038 hectares) supports one of the last significant areas of peat swamp forest remaining in Viet Nam and is recognized as one of the three highest priority sites for wetland conservation in the Mekong Delta. The Melaleuca forests in the core zone of the park play an important role in maintaining soil and water quality in the buffer zone. Melaleuca forests filter the recharge of ground water and store freshwater during the dry season.
- Kien Luong Terrestrial and Inland Wetlands Protected Areas (WDPA 303086, 7,624 hectares) is located in Kien Luong district, Kien Giang province. The area is part of the Ha Tien plain, the last remaining extensive area of seasonally inundated grassland in the Mekong Delta. The area consists of grassland dominated by spike rush (*Eleocharis ochrostachys*) with some brackish water characteristics, on acid-sulphate soil. The area is fragmented by a series of new canals, but still holds significant populations of threatened wetland birds<sup>[6]</sup><sup>112</sup>, including past observations of Sarus Crane (*Grus Antigone*; VU), White-shouldered Ibis (*Pseudibis davisoni*; CR), Spot-billed Pelican (*Pelecanus philippensis*; NT), the globally near-threatened Painted Stork (*Mycteria leucocephala*; LC), Woolly-necked Stork (*Ciconia episcopus*; NT), Chinese Francolin (*Francolinus pintadeanus*; LC), Bengal Bushlark (*Mirafra assamica*; LC), and Bengal Florican (*Houbaropsis bengalensis*; CR).

The coastal zone of mainland Kien Giang province encompasses 200 kilometres of coastline, with rich mangroves in places. This mangrove belt is essential for mitigation of the effects of sea level rise associated with climate change.

The Kien Giang Biosphere Reserve covers a total area of 1,188,106 hectares, divided over three functional zones:

- Three core areas covering 25,899 hectares (terrestrial: 12,037 hectares and marine: 13,862 hectares), overlapping with three national parks and one nature reserve;
- Buffer zone(s): 172,578 hectares (terrestrial: 116,791 hectares; marine: 55,787 hectares); and
- Transition zone(s): 978,591 hectares (terrestrial: 189,439 hectares; marine: 789,152 hectares).<sup>[7]</sup><sup>113</sup>

The Kien Giang Biosphere Reserve has a maritime equatorial and monsoon climate, which condition the occurrence of various tropical forest ecosystems including primary and secondary forests with dominant *Dipterocarpaceae* families, terrestrial limestone and karst forests with dominant species of *Trestania merguensis* and *Dacrydium pierrei*, seasonally flooded *Melaleuca cajuputi* forests, mangrove ecosystems with typical genera including *Rhizophora*, *Aegiceras*, *Bruguiera* and *Avicennia*, coastal mudflats, coral reefs, and seagrass ecosystems.

The Kien Giang Biosphere Reserve has significant biodiversity, with about 1,500 vascular plants, 77 mammals, 222 birds, and 107 reptiles and amphibians.

The marine environment of the Kien Giang Biosphere Reserve serves as a critically important habitat for a large variety of aquatic flora and fauna species, including 89 hard coral species, 19 soft corals, 125 coral reef fish, 132 molluscs, 32 echinoderms and 62 seaweed species. Specifically, the coastal and marine ecosystems are important for marine turtles, including the critically endangered Hawksbill Turtle (*Eretmochelys imbricata*; CR)<sup>[8]</sup><sup>114</sup> and endangered Green Turtles (*Chelonia mydas*; EN), Dugongs (*Dugong dugon*; VU), Irrawaddy Dolphins (*Orcaella brevirostris*; EN), Indo-pacific finless porpoise (*Neophocaena phocaenoides*; VU), Scaly clams (*Tridacna squamosa*), and Trochus shells (*Trochus niloticus*).

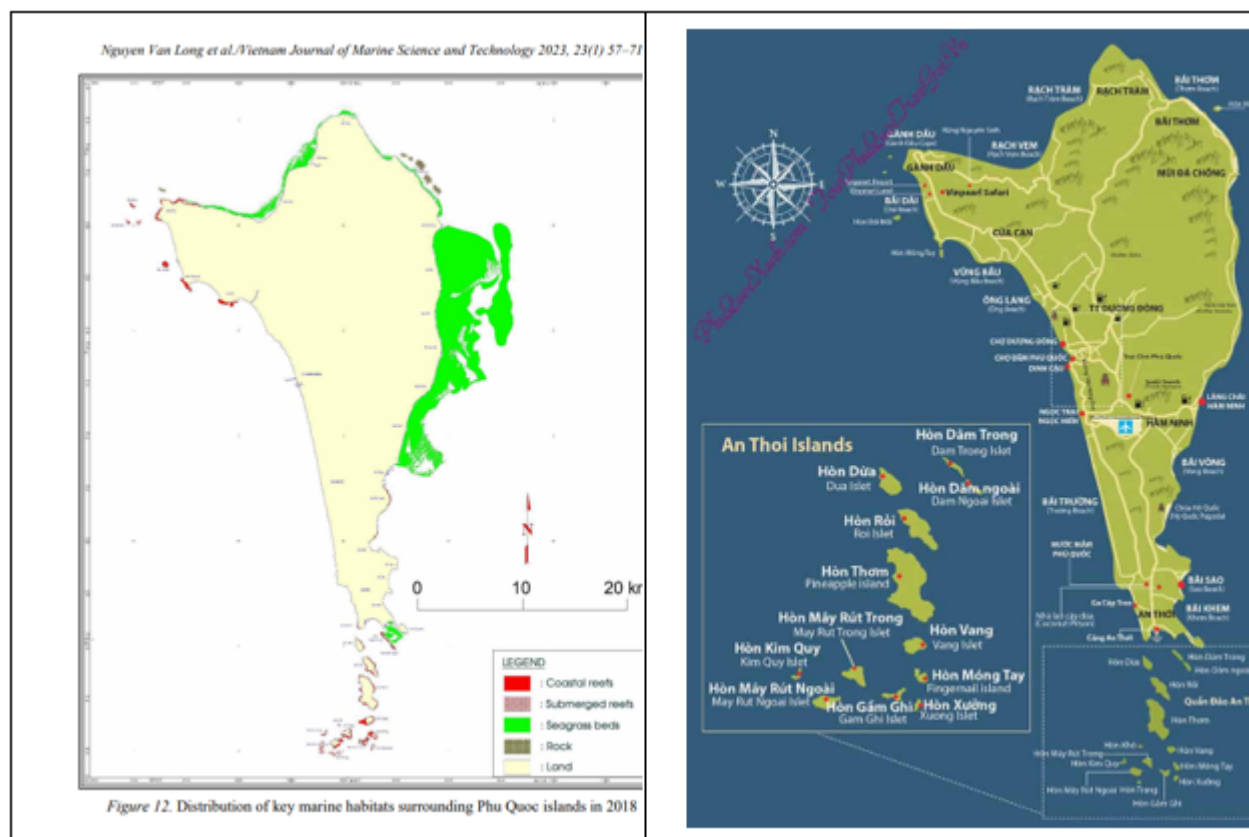
The terrestrial areas of the Kien Giang Biosphere Reserve are home to 43 mammal species, including several endangered species - Indochinese Silvered Langur (*Trachypithecus germaini*; EN), Greater Slow Loris (*Nycticebus coucang*; EN), Pygmy loris (*Nycticebus pygmaeus*; EN), Crab-eating macaque (*Macaca fascicularis*; EN), Stump-tailed macaque (*Macaca arctoides*; VU), Small-clawed otter (*Aonyx cinereus*; VU), and Lyle's Flying Fox (*Pteropus lylei*; VU).

Others identified as having special conservation priority include the Roundleaf Cycad (*Cycas litoralis*; EN); Hairy-nosed Otter (*Lutra sumatrana*; EN); Jungle Cat (*Felis Chaus*; LC); Fishing Cat (*Prionailurus viverrinus*; VU); Large-spotted Civet (*Viverra megaspila*; EN); Indochinese Silvered Langur (*Trachypithecus germaini*; EN); Large Flying Fox (*Pteropus vampyrus*; EN); Sarus Crane (*Grus Antigone*; VU); Oriental Darter (*Anhinga Melanogaster*; NT); Lesser Adjutant (*Leptoptilos javanicus*; NT); Great Hornbill (*Buceros bicornis*; VU); Reticulated Python (*Python reticulatus*; LC), King Cobra (*Ophiophagus Hannah*; VU), Yellow-headed Temple Turtle (*Heosemys annandalii*; CR), Southeast Asian Box Turtle (*Cuora amboinensis*; EN), Mekong Snail-eating Turtle (*Malayemys subtrijuga*; NT), and Asiatic Softshell Turtle (*Amyda cartilaginea*; VU).<sup>[9]</sup><sup>115</sup>

The very rich marine resources of the Kien Giang Biosphere Reserve play an important role in the livelihoods of local people, as well as the economy of the coastal districts of Kien Giang province. Fishery production ranks top among all provinces in Viet Nam. Agriculture is another key economic activity, followed by tourism, which has increased markedly in recent years. Economic pressure, poverty and a lack of knowledge result in the unsustainable use of the coastal resources. Kien Giang province is located in the Mekong Delta, and about 85 percent of the land area is less than one meter above sea level. Accordingly, most of the people live in low-lying areas which are at particular risk from rising sea levels and the increased frequency and intensity of disasters such as typhoons, storms and floods.

Tentatively, three zones have been identified – Phu Quoc National Park, Phu Quoc Marine Park and Kien Luong Protected Area. Specific districts and communes have not yet been finalized; this will be done during the PPG stage and will be informed by field visits and a comprehensive analysis.

Below is the status and temporal change in the distribution of seagrass beds and coral reefs in the waters of Phu Quoc island, Kien Giang province.



**Figure 4.** Status and temporal change in the distribution of seagrass beds and coral reefs in the waters of Phu Quoc islands, Kien Giang province.

As examined by Nguyen and Tong Phuoc (2023), [10116](#) the coastal waters of Phu Quoc islands are home to 513 hectares of coral reefs and 10,035 hectares of seagrass beds. Of these, 290 hectares of coral reefs (56.54 percent of the total) and 9,185 hectares of seagrass beds (91.52 percent of the total) were located within the boundaries of Phu Quoc MPA. The coral reefs are mostly found around the islands in the southern region of An Thoi, while seagrass beds are mainly concentrated on the eastern side of Phu Quoc Island, stretching from Da Chong to Bai Vong. However, the period from 2005 to 2018 saw a decline of over 652 hectares of seagrass beds (6.1 percent of the total) in several locations, including Dam Ngoai Island (55 hectares; 0.52 percent), Mot Island and Vinh Dam (42 hectares each; 0.4 percent), and Da Chong Cape (12 hectares). The decline is attributed to infrastructure development and dredging of creeks for marine transportation in these areas.

Data specific to Kien Giang Province, particularly concerning the proposed target areas—Phu Quoc National Park, Phu Quoc MPA, and Kien Luong Protected Area—remain limited and not readily accessible. Field visits scheduled for the PPG phase will facilitate the collection of detailed, location-specific data regarding the drivers of mangrove and seagrass degradation, unsustainable

practices, and rates of degradation. These visits will further enable consultations with key local stakeholders, including provincial authorities, community members, and ethnic minority groups, thereby augmenting initial findings from the literature review included in the present PIF.

Once this information is gathered, it will serve as a basis to guide, assess, and prioritise appropriate NbS for each target area. Furthermore, it will enable accurate estimation of potential blue carbon impacts, thereby informing the development of targeted, high-impact interventions aligned with project objectives.

<sup>[1]</sup> GIZ. (2011). *Conservation and development of the Kien Giang Biosphere Reserve*. Retrieved from <https://www.dfat.gov.au/sites/default/files/cccep-kien-giang-lessons-learned-pd.pdf>

<sup>[2]</sup> Please see footnote 58 for reference.

<sup>[3]</sup> <https://documents1.worldbank.org/curated/en/404801591100608781/pdf/Concept-Environmental-and-Social-Review-Summary-ESRS-Phu-Quoc-Sustainable-Water-Management-Project-P173588.pdf>

<sup>[4]</sup> Onbird: Phu Quoc Island Insider. (Accessed March 2024). #SAVEPHUQUOC – THE MARINE PROTECTED AREA OF PHU QUOC. Retrieved from <https://onbird.vn/savephuquoc-the-marine-protected-area-of-phu-quoc/>

<sup>[5]</sup> Decision 1890/QĐ-UBND dated 13 August 2020 of Kien Giang People Committee on approving revision of boundary and area of Phu Quoc Sea conservation, Kien Giang

<sup>[6]</sup> [https://thienhienviet.org.vn/sourcebook/report\\_pdf/report12.pdf](https://thienhienviet.org.vn/sourcebook/report_pdf/report12.pdf)

<sup>[7]</sup> UNESCO. (2018). *Kien Giang Biosphere Reserve, Viet Nam*. Retrieved from <https://www.unesco.org/en/mab/kien-giang?hub=66369>

<sup>[8]</sup> IUCN. (2024). *The IUCN Red List of Threatened Species*. Retrieved from <https://www.iucnredlist.org/>

<sup>[9]</sup> Please see footnote 98 for reference.

<sup>[10]</sup> Nguyen, V.L., and Son, T.P.H. (2023). *Status and temporal change in the distribution of seagrass beds and coral reefs in the waters of Phu Quoc islands, Kien Giang province*. Viet Nam Journal of Science and Technology, 23(1). <https://doi.org/10.15625/1859-3097/16621>

## 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\_Revised Pre-SESP\_9818-\_24Mar25

## ANNEX E: RIO MARKERS

| Climate Change Mitigation | Climate Change Adaptation | Biodiversity            | Land Degradation      |
|---------------------------|---------------------------|-------------------------|-----------------------|
| Significant Objective 1   | Principal Objective 2     | Significant Objective 1 | Principal Objective 2 |

## ANNEX F: TAXONOMY WORKSHEET

| Level 1                                                | Level 2                                                                                   | Level 3                                                                   | Level 4 |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|---------|
| <input checked="" type="checkbox"/> Influencing models |                                                                                           |                                                                           |         |
|                                                        | <input checked="" type="checkbox"/> Transform policy and regulatory environments          |                                                                           |         |
|                                                        | <input checked="" type="checkbox"/> Strengthen institutional capacity and decision-making |                                                                           |         |
|                                                        | <input type="checkbox"/> Convene multi-stakeholder alliances                              |                                                                           |         |
|                                                        | <input type="checkbox"/> Demonstrate innovative approaches                                |                                                                           |         |
|                                                        | <input type="checkbox"/> Deploy innovative financial instruments                          |                                                                           |         |
| <input checked="" type="checkbox"/> Stakeholders       |                                                                                           |                                                                           |         |
|                                                        | <input type="checkbox"/> Indigenous Peoples                                               |                                                                           |         |
|                                                        | <input type="checkbox"/> Private Sector                                                   |                                                                           |         |
|                                                        |                                                                                           | <input type="checkbox"/> Capital providers                                |         |
|                                                        |                                                                                           | <input type="checkbox"/> Financial intermediaries and market facilitators |         |
|                                                        |                                                                                           | <input type="checkbox"/> Large corporations                               |         |
|                                                        |                                                                                           | <input type="checkbox"/> SMEs                                             |         |
|                                                        |                                                                                           | <input type="checkbox"/> Individuals/Entrepreneurs                        |         |
|                                                        |                                                                                           | <input type="checkbox"/> Non-Grant Pilot                                  |         |
|                                                        |                                                                                           | <input type="checkbox"/> Project Reflow                                   |         |
|                                                        | <input type="checkbox"/> Beneficiaries                                                    |                                                                           |         |
|                                                        | <input checked="" type="checkbox"/> Local Communities                                     |                                                                           |         |
|                                                        | <input checked="" type="checkbox"/> Civil Society                                         |                                                                           |         |
|                                                        |                                                                                           | <input type="checkbox"/> Community Based Organization                     |         |
|                                                        |                                                                                           | <input checked="" type="checkbox"/> Non-Governmental Organization         |         |
|                                                        |                                                                                           | <input checked="" type="checkbox"/> Academia                              |         |
|                                                        |                                                                                           | <input type="checkbox"/> Trade Unions and Workers Unions                  |         |
|                                                        | <input checked="" type="checkbox"/> Type of Engagement                                    |                                                                           |         |
|                                                        |                                                                                           | <input checked="" type="checkbox"/> Information Dissemination             |         |
|                                                        |                                                                                           | <input type="checkbox"/> Partnership                                      |         |
|                                                        |                                                                                           | <input checked="" type="checkbox"/> Consultation                          |         |
|                                                        |                                                                                           | <input type="checkbox"/> Participation                                    |         |
|                                                        | <input checked="" type="checkbox"/> Communications                                        |                                                                           |         |
|                                                        |                                                                                           | <input checked="" type="checkbox"/> Awareness Raising                     |         |
|                                                        |                                                                                           | <input type="checkbox"/> Education                                        |         |

|                                                                      |                                                                       |                                                                            |                                                             |
|----------------------------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------|
|                                                                      |                                                                       | <input type="checkbox"/> Public Campaigns                                  |                                                             |
|                                                                      |                                                                       | <input type="checkbox"/> Behavior Change                                   |                                                             |
| <input checked="" type="checkbox"/> Capacity, Knowledge and Research |                                                                       |                                                                            |                                                             |
|                                                                      | <input type="checkbox"/> Enabling Activities                          |                                                                            |                                                             |
|                                                                      | <input checked="" type="checkbox"/> Capacity Development              |                                                                            |                                                             |
|                                                                      | <input checked="" type="checkbox"/> Knowledge Generation and Exchange |                                                                            |                                                             |
|                                                                      | <input type="checkbox"/> Targeted Research                            |                                                                            |                                                             |
|                                                                      | <input checked="" type="checkbox"/> Learning                          |                                                                            |                                                             |
|                                                                      |                                                                       | <input type="checkbox"/> Theory of Change                                  |                                                             |
|                                                                      |                                                                       | <input type="checkbox"/> Adaptive Management                               |                                                             |
|                                                                      |                                                                       | <input checked="" type="checkbox"/> Indicators to Measure Change           |                                                             |
|                                                                      | <input type="checkbox"/> Innovation                                   |                                                                            |                                                             |
|                                                                      | <input checked="" type="checkbox"/> Knowledge and Learning            |                                                                            |                                                             |
|                                                                      |                                                                       | <input checked="" type="checkbox"/> Knowledge Management                   |                                                             |
|                                                                      |                                                                       | <input type="checkbox"/> Innovation                                        |                                                             |
|                                                                      |                                                                       | <input checked="" type="checkbox"/> Capacity Development                   |                                                             |
|                                                                      |                                                                       | <input checked="" type="checkbox"/> Learning                               |                                                             |
|                                                                      | <input checked="" type="checkbox"/> Stakeholder Engagement Plan       |                                                                            |                                                             |
| <input checked="" type="checkbox"/> Gender Equality                  |                                                                       |                                                                            |                                                             |
|                                                                      | <input checked="" type="checkbox"/> Gender Mainstreaming              |                                                                            |                                                             |
|                                                                      |                                                                       | <input type="checkbox"/> Beneficiaries                                     |                                                             |
|                                                                      |                                                                       | <input type="checkbox"/> Women groups                                      |                                                             |
|                                                                      |                                                                       | <input checked="" type="checkbox"/> Sex-disaggregated indicators           |                                                             |
|                                                                      |                                                                       | <input checked="" type="checkbox"/> Gender-sensitive indicators            |                                                             |
|                                                                      | <input checked="" type="checkbox"/> Gender results areas              |                                                                            |                                                             |
|                                                                      |                                                                       | <input type="checkbox"/> Access and control over natural resources         |                                                             |
|                                                                      |                                                                       | <input type="checkbox"/> Participation and leadership                      |                                                             |
|                                                                      |                                                                       | <input type="checkbox"/> Access to benefits and services                   |                                                             |
|                                                                      |                                                                       | <input checked="" type="checkbox"/> Capacity development                   |                                                             |
|                                                                      |                                                                       | <input type="checkbox"/> Awareness raising                                 |                                                             |
|                                                                      |                                                                       | <input checked="" type="checkbox"/> Knowledge generation                   |                                                             |
| <input checked="" type="checkbox"/> Focal Areas/Theme                |                                                                       |                                                                            |                                                             |
|                                                                      | <input type="checkbox"/> Integrated Programs                          |                                                                            |                                                             |
|                                                                      |                                                                       | <input type="checkbox"/> Commodity Supply Chains (Good Growth Partnership) |                                                             |
|                                                                      |                                                                       |                                                                            | <input type="checkbox"/> Sustainable Commodities Production |
|                                                                      |                                                                       |                                                                            | <input type="checkbox"/> Deforestation-free Sourcing        |
|                                                                      |                                                                       |                                                                            | <input type="checkbox"/> Financial Screening Tools          |
|                                                                      |                                                                       |                                                                            | <input type="checkbox"/> High Conservation Value Forests    |
|                                                                      |                                                                       |                                                                            | <input type="checkbox"/> High Carbon Stocks Forests         |
|                                                                      |                                                                       |                                                                            | <input type="checkbox"/> Soybean Supply Chain               |
|                                                                      |                                                                       |                                                                            | <input type="checkbox"/> Oil Palm Supply Chain              |
|                                                                      |                                                                       |                                                                            | <input type="checkbox"/> Beef Supply Chain                  |
|                                                                      |                                                                       |                                                                            | <input type="checkbox"/> Smallholder Farmers                |
|                                                                      |                                                                       |                                                                            | <input type="checkbox"/> Adaptive Management                |
|                                                                      |                                                                       | <input type="checkbox"/> Food Security in Sub-Sahara Africa                |                                                             |
|                                                                      |                                                                       |                                                                            | <input type="checkbox"/> Resilience (climate and shocks)    |

|  |                                       |                                                                 |                                                                      |
|--|---------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------|
|  |                                       |                                                                 | <input type="checkbox"/> Sustainable Production Systems              |
|  |                                       |                                                                 | <input type="checkbox"/> Agroecosystems                              |
|  |                                       |                                                                 | <input type="checkbox"/> Land and Soil Health                        |
|  |                                       |                                                                 | <input type="checkbox"/> Diversified Farming                         |
|  |                                       |                                                                 | <input type="checkbox"/> Integrated Land and Water Management        |
|  |                                       |                                                                 | <input type="checkbox"/> Smallholder Farming                         |
|  |                                       |                                                                 | <input type="checkbox"/> Small and Medium Enterprises                |
|  |                                       |                                                                 | <input type="checkbox"/> Crop Genetic Diversity                      |
|  |                                       |                                                                 | <input type="checkbox"/> Food Value Chains                           |
|  |                                       |                                                                 | <input type="checkbox"/> Gender Dimensions                           |
|  |                                       |                                                                 | <input type="checkbox"/> Multi-stakeholder Platforms                 |
|  |                                       | <input type="checkbox"/> Food Systems, Land Use and Restoration |                                                                      |
|  |                                       |                                                                 | <input type="checkbox"/> Sustainable Food Systems                    |
|  |                                       |                                                                 | <input type="checkbox"/> Landscape Restoration                       |
|  |                                       |                                                                 | <input type="checkbox"/> Sustainable Commodity Production            |
|  |                                       |                                                                 | <input type="checkbox"/> Comprehensive Land Use Planning             |
|  |                                       |                                                                 | <input type="checkbox"/> Integrated Landscapes                       |
|  |                                       |                                                                 | <input type="checkbox"/> Food Value Chains                           |
|  |                                       |                                                                 | <input type="checkbox"/> Deforestation-free Sourcing                 |
|  |                                       |                                                                 | <input type="checkbox"/> Smallholder Farmers                         |
|  |                                       | <input type="checkbox"/> Sustainable Cities                     |                                                                      |
|  |                                       |                                                                 | <input type="checkbox"/> Integrated urban planning                   |
|  |                                       |                                                                 | <input type="checkbox"/> Urban sustainability framework              |
|  |                                       |                                                                 | <input type="checkbox"/> Transport and Mobility                      |
|  |                                       |                                                                 | <input type="checkbox"/> Buildings                                   |
|  |                                       |                                                                 | <input type="checkbox"/> Municipal waste management                  |
|  |                                       |                                                                 | <input type="checkbox"/> Green space                                 |
|  |                                       |                                                                 | <input type="checkbox"/> Urban Biodiversity                          |
|  |                                       |                                                                 | <input type="checkbox"/> Urban Food Systems                          |
|  |                                       |                                                                 | <input type="checkbox"/> Energy efficiency                           |
|  |                                       |                                                                 | <input type="checkbox"/> Municipal Financing                         |
|  |                                       |                                                                 | <input type="checkbox"/> Global Platform for Sustainable Cities      |
|  |                                       |                                                                 | <input type="checkbox"/> Urban Resilience                            |
|  | <input type="checkbox"/> Biodiversity |                                                                 |                                                                      |
|  |                                       | <input type="checkbox"/> Protected Areas and Landscapes         |                                                                      |
|  |                                       |                                                                 | <input type="checkbox"/> Terrestrial Protected Areas                 |
|  |                                       |                                                                 | <input type="checkbox"/> Coastal and Marine Protected Areas          |
|  |                                       |                                                                 | <input type="checkbox"/> Productive Landscapes                       |
|  |                                       |                                                                 | <input type="checkbox"/> Productive Seascapes                        |
|  |                                       |                                                                 | <input type="checkbox"/> Community Based Natural Resource Management |
|  |                                       | <input type="checkbox"/> Mainstreaming                          |                                                                      |
|  |                                       |                                                                 | <input type="checkbox"/> Extractive Industries (oil, gas, mining)    |
|  |                                       |                                                                 | <input type="checkbox"/> Forestry (Including HCVF and REDD+)         |
|  |                                       |                                                                 | <input type="checkbox"/> Tourism                                     |
|  |                                       |                                                                 | <input type="checkbox"/> Agriculture & agrobiodiversity              |
|  |                                       |                                                                 | <input type="checkbox"/> Fisheries                                   |
|  |                                       |                                                                 | <input type="checkbox"/> Infrastructure                              |
|  |                                       |                                                                 | <input type="checkbox"/> Certification (National Standards)          |
|  |                                       |                                                                 | <input type="checkbox"/> Certification (International Standards)     |

|  |                                           |                                                            |                                                                           |
|--|-------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------|
|  |                                           | <input type="checkbox"/> Species                           |                                                                           |
|  |                                           |                                                            | <input type="checkbox"/> Illegal Wildlife Trade                           |
|  |                                           |                                                            | <input type="checkbox"/> Threatened Species                               |
|  |                                           |                                                            | <input type="checkbox"/> Wildlife for Sustainable Development             |
|  |                                           |                                                            | <input type="checkbox"/> Crop Wild Relatives                              |
|  |                                           |                                                            | <input type="checkbox"/> Plant Genetic Resources                          |
|  |                                           |                                                            | <input type="checkbox"/> Animal Genetic Resources                         |
|  |                                           |                                                            | <input type="checkbox"/> Livestock Wild Relatives                         |
|  |                                           |                                                            | <input type="checkbox"/> Invasive Alien Species (IAS)                     |
|  |                                           | <input type="checkbox"/> Biomes                            |                                                                           |
|  |                                           |                                                            | <input type="checkbox"/> Mangroves                                        |
|  |                                           |                                                            | <input type="checkbox"/> Coral Reefs                                      |
|  |                                           |                                                            | <input type="checkbox"/> Sea Grasses                                      |
|  |                                           |                                                            | <input type="checkbox"/> Wetlands                                         |
|  |                                           |                                                            | <input type="checkbox"/> Rivers                                           |
|  |                                           |                                                            | <input type="checkbox"/> Lakes                                            |
|  |                                           |                                                            | <input type="checkbox"/> Tropical Rain Forests                            |
|  |                                           |                                                            | <input type="checkbox"/> Tropical Dry Forests                             |
|  |                                           |                                                            | <input type="checkbox"/> Temperate Forests                                |
|  |                                           |                                                            | <input type="checkbox"/> Grasslands                                       |
|  |                                           |                                                            | <input type="checkbox"/> Paramo                                           |
|  |                                           |                                                            | <input type="checkbox"/> Desert                                           |
|  |                                           | <input type="checkbox"/> Financial and Accounting          |                                                                           |
|  |                                           |                                                            | <input type="checkbox"/> Payment for Ecosystem Services                   |
|  |                                           |                                                            | <input type="checkbox"/> Natural Capital Assessment and Accounting        |
|  |                                           |                                                            | <input type="checkbox"/> Conservation Trust Funds                         |
|  |                                           |                                                            | <input type="checkbox"/> Conservation Finance                             |
|  |                                           | <input type="checkbox"/> Supplementary Protocol to the CBD |                                                                           |
|  |                                           |                                                            | <input type="checkbox"/> Biosafety                                        |
|  |                                           |                                                            | <input type="checkbox"/> Access to Genetic Resources Benefit Sharing      |
|  | <input type="checkbox"/> Forests          |                                                            |                                                                           |
|  |                                           | <input type="checkbox"/> Forest and Landscape Restoration  |                                                                           |
|  |                                           |                                                            | <input type="checkbox"/> REDD/REDD+                                       |
|  |                                           | <input type="checkbox"/> Forest                            |                                                                           |
|  |                                           |                                                            | <input type="checkbox"/> Amazon                                           |
|  |                                           |                                                            | <input type="checkbox"/> Congo                                            |
|  |                                           |                                                            | <input type="checkbox"/> Drylands                                         |
|  | <input type="checkbox"/> Land Degradation |                                                            |                                                                           |
|  |                                           | <input type="checkbox"/> Sustainable Land Management       |                                                                           |
|  |                                           |                                                            | <input type="checkbox"/> Restoration and Rehabilitation of Degraded Lands |
|  |                                           |                                                            | <input type="checkbox"/> Ecosystem Approach                               |
|  |                                           |                                                            | <input type="checkbox"/> Integrated and Cross-sectoral approach           |
|  |                                           |                                                            | <input type="checkbox"/> Community-Based NRM                              |
|  |                                           |                                                            | <input type="checkbox"/> Sustainable Livelihoods                          |
|  |                                           |                                                            | <input type="checkbox"/> Income Generating Activities                     |
|  |                                           |                                                            | <input type="checkbox"/> Sustainable Agriculture                          |
|  |                                           |                                                            | <input type="checkbox"/> Sustainable Pasture Management                   |
|  |                                           |                                                            | <input type="checkbox"/> Sustainable Forest/Woodland Management           |
|  |                                           |                                                            | <input type="checkbox"/> Improved Soil and Water Management Techniques    |
|  |                                           |                                                            | <input type="checkbox"/> Sustainable Fire Management                      |
|  |                                           |                                                            | <input type="checkbox"/> Drought Mitigation/Early Warning                 |

|  |                                               |                                                                                                  |                                                                                |
|--|-----------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
|  |                                               | <input type="checkbox"/> Land Degradation Neutrality                                             | <input type="checkbox"/> Land Productivity                                     |
|  |                                               |                                                                                                  | <input type="checkbox"/> Land Cover and Land cover change                      |
|  |                                               |                                                                                                  | <input type="checkbox"/> Carbon stocks above or below ground                   |
|  | <input type="checkbox"/> International Waters | <input type="checkbox"/> Food Security                                                           |                                                                                |
|  |                                               | <input type="checkbox"/> Ship                                                                    |                                                                                |
|  |                                               | <input type="checkbox"/> Coastal                                                                 |                                                                                |
|  |                                               | <input type="checkbox"/> Freshwater                                                              |                                                                                |
|  |                                               |                                                                                                  | <input type="checkbox"/> Aquifer                                               |
|  |                                               |                                                                                                  | <input type="checkbox"/> River Basin                                           |
|  |                                               |                                                                                                  | <input type="checkbox"/> Lake Basin                                            |
|  |                                               | <input type="checkbox"/> Learning                                                                |                                                                                |
|  |                                               | <input type="checkbox"/> Fisheries                                                               |                                                                                |
|  |                                               | <input type="checkbox"/> Persistent toxic substances                                             |                                                                                |
|  |                                               | <input type="checkbox"/> SIDS - Small Island Dev States                                          |                                                                                |
|  |                                               | <input type="checkbox"/> Targeted Research                                                       |                                                                                |
|  |                                               | <input type="checkbox"/> Pollution                                                               |                                                                                |
|  |                                               |                                                                                                  | <input type="checkbox"/> Persistent toxic substances                           |
|  |                                               |                                                                                                  | <input type="checkbox"/> Plastics                                              |
|  |                                               |                                                                                                  | <input type="checkbox"/> Nutrient pollution from all sectors except wastewater |
|  |                                               |                                                                                                  | <input type="checkbox"/> Nutrient pollution from Wastewater                    |
|  |                                               | <input type="checkbox"/> Transboundary Diagnostic Analysis and Strategic Action Plan preparation |                                                                                |
|  |                                               | <input type="checkbox"/> Strategic Action Plan Implementation                                    |                                                                                |
|  |                                               | <input type="checkbox"/> Areas Beyond National Jurisdiction                                      |                                                                                |
|  |                                               | <input type="checkbox"/> Large Marine Ecosystems                                                 |                                                                                |
|  |                                               | <input type="checkbox"/> Private Sector                                                          |                                                                                |
|  |                                               | <input type="checkbox"/> Aquaculture                                                             |                                                                                |
|  |                                               | <input type="checkbox"/> Marine Protected Area                                                   |                                                                                |
|  |                                               | <input type="checkbox"/> Biomes                                                                  |                                                                                |
|  |                                               |                                                                                                  | <input type="checkbox"/> Mangrove                                              |
|  |                                               |                                                                                                  | <input type="checkbox"/> Coral Reefs                                           |
|  |                                               |                                                                                                  | <input type="checkbox"/> Seagrasses                                            |
|  |                                               |                                                                                                  | <input type="checkbox"/> Polar Ecosystems                                      |
|  |                                               |                                                                                                  | <input type="checkbox"/> Constructed Wetlands                                  |
|  | <input type="checkbox"/> Chemicals and Waste  |                                                                                                  |                                                                                |
|  |                                               | <input type="checkbox"/> Mercury                                                                 |                                                                                |
|  |                                               | <input type="checkbox"/> Artisanal and Scale Gold Mining                                         |                                                                                |
|  |                                               | <input type="checkbox"/> Coal Fired Power Plants                                                 |                                                                                |
|  |                                               | <input type="checkbox"/> Coal Fired Industrial Boilers                                           |                                                                                |
|  |                                               | <input type="checkbox"/> Cement                                                                  |                                                                                |
|  |                                               | <input type="checkbox"/> Non-Ferrous Metals Production                                           |                                                                                |
|  |                                               | <input type="checkbox"/> Ozone                                                                   |                                                                                |
|  |                                               | <input type="checkbox"/> Persistent Organic Pollutants                                           |                                                                                |
|  |                                               | <input type="checkbox"/> Unintentional Persistent Organic Pollutants                             |                                                                                |
|  |                                               | <input type="checkbox"/> Sound Management of chemicals and Waste                                 |                                                                                |
|  |                                               | <input type="checkbox"/> Waste Management                                                        |                                                                                |
|  |                                               |                                                                                                  | <input type="checkbox"/> Hazardous Waste Management                            |
|  |                                               |                                                                                                  | <input type="checkbox"/> Industrial Waste                                      |
|  |                                               |                                                                                                  | <input type="checkbox"/> e-Waste                                               |
|  |                                               | <input type="checkbox"/> Emissions                                                               |                                                                                |

|  |                                                    |                                                                                   |                                                                               |
|--|----------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
|  |                                                    | <input type="checkbox"/> Disposal                                                 |                                                                               |
|  |                                                    | <input type="checkbox"/> New Persistent Organic Pollutants                        |                                                                               |
|  |                                                    | <input type="checkbox"/> Polychlorinated Biphenyls                                |                                                                               |
|  |                                                    | <input type="checkbox"/> Plastics                                                 |                                                                               |
|  |                                                    | <input type="checkbox"/> Eco-Efficiency                                           |                                                                               |
|  |                                                    | <input type="checkbox"/> Pesticides                                               |                                                                               |
|  |                                                    | <input type="checkbox"/> DDT - Vector Management                                  |                                                                               |
|  |                                                    | <input type="checkbox"/> DDT - Other                                              |                                                                               |
|  |                                                    | <input type="checkbox"/> Industrial Emissions                                     |                                                                               |
|  |                                                    | <input type="checkbox"/> Open Burning                                             |                                                                               |
|  |                                                    | <input type="checkbox"/> Best Available Technology / Best Environmental Practices |                                                                               |
|  |                                                    | <input type="checkbox"/> Green Chemistry                                          |                                                                               |
|  | <input checked="" type="checkbox"/> Climate Change |                                                                                   |                                                                               |
|  |                                                    | <input checked="" type="checkbox"/> Climate Change Adaptation                     |                                                                               |
|  |                                                    |                                                                                   | <input type="checkbox"/> Climate Finance                                      |
|  |                                                    |                                                                                   | <input type="checkbox"/> Least Developed Countries                            |
|  |                                                    |                                                                                   | <input type="checkbox"/> Small Island Developing States                       |
|  |                                                    |                                                                                   | <input type="checkbox"/> Disaster Risk Management                             |
|  |                                                    |                                                                                   | <input type="checkbox"/> Sea-level rise                                       |
|  |                                                    |                                                                                   | <input type="checkbox"/> Climate Resilience                                   |
|  |                                                    |                                                                                   | <input type="checkbox"/> Climate information                                  |
|  |                                                    |                                                                                   | <input type="checkbox"/> Ecosystem-based Adaptation                           |
|  |                                                    |                                                                                   | <input type="checkbox"/> Adaptation Tech Transfer                             |
|  |                                                    |                                                                                   | <input type="checkbox"/> National Adaptation Programme of Action              |
|  |                                                    |                                                                                   | <input type="checkbox"/> National Adaptation Plan                             |
|  |                                                    |                                                                                   | <input checked="" type="checkbox"/> Mainstreaming Adaptation                  |
|  |                                                    |                                                                                   | <input type="checkbox"/> Private Sector                                       |
|  |                                                    |                                                                                   | <input type="checkbox"/> Innovation                                           |
|  |                                                    |                                                                                   | <input type="checkbox"/> Complementarity                                      |
|  |                                                    |                                                                                   | <input type="checkbox"/> Community-based Adaptation                           |
|  |                                                    |                                                                                   | <input type="checkbox"/> Livelihoods                                          |
|  |                                                    | <input checked="" type="checkbox"/> Climate Change Mitigation                     |                                                                               |
|  |                                                    |                                                                                   | <input checked="" type="checkbox"/> Agriculture, Forestry, and other Land Use |
|  |                                                    |                                                                                   | <input type="checkbox"/> Energy Efficiency                                    |
|  |                                                    |                                                                                   | <input type="checkbox"/> Sustainable Urban Systems and Transport              |
|  |                                                    |                                                                                   | <input type="checkbox"/> Technology Transfer                                  |
|  |                                                    |                                                                                   | <input type="checkbox"/> Renewable Energy                                     |
|  |                                                    |                                                                                   | <input type="checkbox"/> Financing                                            |
|  |                                                    |                                                                                   | <input type="checkbox"/> Enabling Activities                                  |
|  |                                                    | <input type="checkbox"/> Technology Transfer                                      |                                                                               |
|  |                                                    |                                                                                   | <input type="checkbox"/> Poznan Strategic Programme on Technology Transfer    |
|  |                                                    |                                                                                   | <input type="checkbox"/> Climate Technology Centre & Network (CTCN)           |
|  |                                                    |                                                                                   | <input type="checkbox"/> Endogenous technology                                |
|  |                                                    |                                                                                   | <input type="checkbox"/> Technology Needs Assessment                          |
|  |                                                    |                                                                                   | <input type="checkbox"/> Adaptation Tech Transfer                             |
|  |                                                    | <input checked="" type="checkbox"/> United Nations Framework on Climate Change    |                                                                               |
|  |                                                    |                                                                                   | <input checked="" type="checkbox"/> Nationally Determined Contribution        |
|  |                                                    |                                                                                   | <input checked="" type="checkbox"/> Paris Agreement                           |