



Part I: Project Information

GEF ID

10518

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

CBIT No

NGI No

Project Title

Implementation of the Fangaʻuta Lagoon Stewardship Plan and Replication of Lessons Learned to Priority Areas in Vavaʻu (Tonga R2R Phase 2)

Countries

Tonga

Agency(ies)

UNDP

Other Executing Partner(s)

Department of Environment, Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC)

Executing Partner Type

Government

GEF Focal Area

Biodiversity

Sector

AFOLU

Taxonomy

Demonstrate innovative approaches, Influencing models, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making

Rio Markers

Climate Change Mitigation

Significant Objective 1

Climate Change Adaptation

Significant Objective 1

Biodiversity

Land Degradation

Submission Date

Expected Implementation Start

1/1/2024

Expected Completion Date

12/31/2028

Duration

60In Months

Agency Fee(\$)

367,144.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

| Objectives/Programs | Focal Area Outcomes | Trust Fund | GEF Amount(\$) | Co-Fin Amount(\$) |
|-------------------------------|--|-------------------|-----------------------|--------------------------|
| BD-1-1 | BD 1-1 Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors (spatial and land-use planning) | GET | 750,000.00 | 2,430,000.00 |
| BD-2-7 | BD-2-7 Address direct drivers to protect habitats and species and improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate | GET | 3,114,685.00 | 9,955,000.00 |
| Total Project Cost(\$) | | | 3,864,685.00 | 12,385,000.00 |

B. Project description summary

Project Objective

To implement the Fangaʻuta Stewardship Plan (FSP) for strengthened integrated management of the Fangaʻuta Lagoon and to replicate lessons learned from the Tonga R2R Phase I to priority areas in Vavaʻu.

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing(\$ \$) | Confirmed Co- Financing(\$) |
|------------------------------|---------------------------|------------------------------|-----------------------------|-----------------------|---|---|
|------------------------------|---------------------------|------------------------------|-----------------------------|-----------------------|---|---|

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|--|----------------|---|---|------------|---------------------------|----------------------------|
| Component 1. Conservation of critical lagoon ecosystems and management of the catchment to improve ecological services of the Fanga?uta and replication in priority areas in Vava?u. | Investment | <p>Outcome 1. improved management of the Fanga?uta Lagoon marine reserve for biodiversity conservation and its replication in Vava?u. This will be measured by the following indicators:</p> <p>(i) Updated FSP (2023-2033) approved and priority actions under implementation</p> <p>(ii) At least 120 hectares of degraded marine ecosystem rehabilitated (including 80 hectares mangroves, 20 hectares coral reefs and 20 hectares sea grass)</p> <p>(iii) 1,800 hectares of the Fanga?uta</p> | <p>Output 1.1. Updating the Fanga?uta Stewardship Plan building on lessons and best practices generated from its implementation under the R2R Phase I project</p> <p>Output 1.2. Natural ecosystems within the Fanga?uta Lagoon Marine Reserve rehabilitated to preserve biodiversity and ecosystem services</p> <p>Output 1.3. Existing Special Managed Areas within the Fanga?uta Lagoon evaluated and lessons learnt identified to provide guidance for replication in</p> | GET | 2,473,000.00 | 7,300,000.00 |

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|-------------------|----------------|---|---|------------|---------------------------|----------------------------|
| | | Lagoon managed by communities as Special Management Areas | other parts of the country | | | |
| | | (iv) At least 15% increase in incomes for sustainable livelihood activities for at least 50% of participating community members | Output 1.4 Alternative livelihoods identified and implemented in close consultation with communities towards to reduce exploitation of lagoon resources | | | |
| | | (v) 4,560 hectares of Marine Protected Areas created or under improved management with at least 20 point increase in management effectiveness | Output 1.5. Lessons learned from Tonga R2R Phase 1 project replicated in Vava'u to support marine biodiversity conservation | | | |
| | | (vi) At least 45,985 people benefiting from project activities, including 22,898 men | | | | |

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|-------------------|----------------|--|------------------|------------|---------------------------|----------------------------|
| | | <p>and 23,087 women, including from sustainable resource management such as fisheries, agriculture, waste management, tourism and livelihood improvement</p> | | | | |

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|---|----------------------|---|--|------------|---------------------------|----------------------------|
| Component 2. Governance : Policies, institutions and capacity building for sustainable and adaptive management and biodiversity conservation. | Technical Assistance | Outcome 2. Strengthened integrated management through streamlined policies, proactive institutions and improved human capacity. This will be measured by: (i) At least 20 point increase in institutional capacity for wetland conservation and sustainable use as measured by UNDP capacity development scorecard (ii) Functionality of Multi-stakeholder Management Committee for Vaipua Channel (iii) At least 3 policy | Output 2.1. Strengthened institutional arrangement for the Fanga?uta Lagoon that builds on the Community Management Committees and is inclusive of gender and social diversity Output 2.2 Review of policy and legislative framework to identify gaps and overlaps in institutional mandates; streamlined policy framework to effectively support the strengthened implementation of the FSP Output 2.3 Capacity of government staff and communities and key stakeholders strengthened | GET | 507,160.00 | 1,540,000.00 |

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|-------------------|----------------|---|--|------------|---------------------------|----------------------------|
| | | instruments streamlined to facilitate implementation of FSP | on integrated approaches for biodiversity conservation and enforcement procedures. | | | |

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|--|----------------------|--|---|------------|---------------------------|----------------------------|
| Component 3. Awareness raising and knowledge management of the ecosystem functions and services of the Fanga?uta Lagoon and the priority Vava?u biodiversity sites | Technical Assistance | <p>Outcome 3. Upscaled awareness and information management program to enhance appreciation of the biodiversity values of the Fanga?uta Lagoon and priority sites in Vava?u. This will be measured by:</p> <p>(i) At least 50% of sampled project stakeholders (50:50 men and women) aware of conservation benefits and threats and adverse impacts</p> <p>(ii) At least 10 project best practices and lessons (including on gender and youth mainstreaming and socio-cultural benefits) are</p> | <p>Output 3.1 Accessible information system developed in the context of existing national systems, to facilitate informed decision making.</p> <p>Output 3.2 Education and awareness programs using a range of media expanded to support marine conservation</p> <p>Output 3.3 South-South cooperation and exchanges implemented in the area of integrated management of lagoon ecosystems that is most applicable in Pacific SIDS and beyond</p> | GET | 700,500.00 | 2,090,000.00 |

| Project Component | Financing Type | Expected Outcomes | Expected Outputs | Trust Fund | GEF Project Financing(\$) | Confirmed Co-Financing(\$) |
|-----------------------|----------------|--|--|------------|---------------------------|----------------------------|
| | | accessed and applied throughout <i>Tonga</i> | Output 3.4 M&E system supports project impact including GESI mainstreaming | | | |
| | | (iii) At least 10 initiatives of information exchange and sharing of knowledge in Pacific on wetland biodiversity conservation and special area management platforms | | | | |
| Sub Total (\$) | | | | | 3,680,660.00 | 10,930,000.00 |

Project Management Cost (PMC)

| | | |
|-------------------------------|---------------------|----------------------|
| GET | 184,025.00 | 1,455,000.00 |
| Sub Total(\$) | 184,025.00 | 1,455,000.00 |
| Total Project Cost(\$) | 3,864,685.00 | 12,385,000.00 |

Please provide justification

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

| Sources of Co-financing | Name of Co-financier | Type of Co-financing | Investment Mobilized | Amount(\$) |
|--------------------------------|--|-----------------------------|-----------------------------|-------------------|
| Recipient Country Government | Department of Environment, MEIDECC | In-kind | Recurrent expenditures | 300,000.00 |
| Recipient Country Government | Department of Environment, MEIDECC | Grant | Investment mobilized | 500,000.00 |
| Recipient Country Government | Ministry of Finance | In-kind | Recurrent expenditures | 500,000.00 |
| Recipient Country Government | Ministry of Finance | Grant | Investment mobilized | 4,000,000.00 |
| Recipient Country Government | Ministry of Lands and Natural Resources | In-kind | Recurrent expenditures | 300,000.00 |
| Recipient Country Government | Ministry of Lands and Natural Resources | Grant | Investment mobilized | 5,000,000.00 |
| Recipient Country Government | Ministry of Fisheries | In-kind | Recurrent expenditures | 300,000.00 |
| Recipient Country Government | Ministry of Fisheries | Grant | Investment mobilized | 200,000.00 |
| Recipient Country Government | Vava?u Environmental Protection Association (VEPA) | In-kind | Recurrent expenditures | 110,000.00 |
| Recipient Country Government | Vava?u Environmental Protection Association (VEPA) | Grant | Investment mobilized | 500,000.00 |

| Sources of Co-financing | Name of Co-financier | Type of Co-financing | Investment Mobilized | Amount(\$) |
|-------------------------------|--------------------------------------|----------------------|------------------------|----------------------|
| Recipient Country Government | Ministry of Tourism | In-kind | Recurrent expenditures | 150,000.00 |
| Recipient Country Government | Tonga Development Bank (Public Bank) | In-kind | Recurrent expenditures | 500,000.00 |
| Donor Agency | UNDP | Grant | Investment mobilized | 25,000.00 |
| Total Co-Financing(\$) | | | | 12,385,000.00 |

Describe how any "Investment Mobilized" was identified

Department of Environment, MEIDECC (USD 800,000) of which (i) USD 300,000 covers staff time for updating FSP action plan, participating in mangrove restoration, M&E and undertaking stakeholder and community consultations and (ii) USD 200,000 as Investment mobilized through Tonga Climate Resilience Sector Project for mainstreaming climate resilience into development planning, focusing on most vulnerable sectors and communities, promoting SMA establishment, sustainable fishing and management of coral reefs., supporting mangrove planting and development of best practices and supporting field demonstrations on the use of mangroves as natural infrastructure in areas identified for investment, USD 200,000 through Pacific Climate Resilience Sector Project to cover incorporate climate change adaptation into national policy and improving professional capacity to manage and monitor adaptation actions and USD 100,000 through the Marine Partnership program to share and establish information on sustainable management and development of fisheries for food security and economic growth Ministry of Finance (USD 4,500,000): This includes in-kind contribution of \$500,000 in the form of staff salaries and associated expenditures of related government agencies to support the project. A total of USD 4,000,000 is in the form of Public Investment, of which USD 3,500,000 is for the promotion of accessibility to population living on Tongapatu in event of major climatic events (storms surges, flooding, etc.) and includes land compensation costs, civil works and other related activities and USD 500,000 for a floating solar project in Tongapatu and includes costs of environmental and social assessments, land compensation, etc. Ministry of Lands and Survey (USD 5,300,000) covers USD 5,000,000 or part of the USD 21,320,000 program to strengthen resilience to natural events and threat from Climate Change. The co-financing would specially address flood risk management to communities living around the lagoon, waste management, drainage, improve public and environmental health through septage and solid waste management and strengthen community resilience to natural and climate impacts. It will also improve capacity building and technical knowledge for land use planning. The \$300,000 in-kind contribution will be in the form of staff time for GIS mapping, developing master plan and demarcation of PAs and mangrove conservation areas and enforcing Parks and reserves Act in Fanga'uta Lagoon. Ministry of Fisheries (USD 500,000) of which

(i) USD 300,000 in-kind contribution in the form of staff time to assist in establishing SMAs, drafting coastal community development plans and M&E; and (ii) USD 200,000 through Tonga sustainable Oceans Project for updating SMA management plans, improving SMA establishment, training SMA staff and CMCs as well as addressing landlocked communities. Vava'u Environmental Protection Association (VEPA) (USD 610,00) of which (i) USD 110,000 is for Staff time in assisting SMA establishment in Vaipua Channel, assisting in drafting CMC management plans, M&E of coral reef systems and marine biodiversity in Vava'u and supporting community and private sector engagement in coastal resource engagement, and (ii) \$USD 500,000 in the form of Investment mobilized from the Vava'u Ocean Initiative to support marine spatial planning, SMA planning and alternative livelihood improvements and marine biological surveys Ministry of Tourism (USD 150,000) as in-kind contribution in the form of staff time for supporting infrastructure, legislation and policies to support tourist activities such as snorkeling and diving, providing training and support to communities and businesses for obtaining license for eco-tourism activities. Tonga Development Bank (USD 500,000) as follows: USD 500,000 in -kind contribution from TDB in terms of staff time and resources for delivery of final support to local communities UNDP: Grant of USD 25,000 to cover part costs of PMU staff

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

| Agency | Trust Fund | Country | Focal Area | Programming of Funds | Amount(\$) | Fee(\$) | Total(\$) |
|----------------------------------|-------------------|----------------|-------------------|-----------------------------|---------------------|-------------------|---------------------|
| UNDP | GET | Tonga | Biodiversity | BD STAR Allocation | 3,864,685 | 367,144 | 4,231,829.00 |
| Total Grant Resources(\$) | | | | | 3,864,685.00 | 367,144.00 | 4,231,829.00 |

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount (\$)

150,000

PPG Agency Fee (\$)

14,250

| Agency | Trust Fund | Country | Focal Area | Programming of Funds | Amount(\$) | Fee(\$) | Total(\$) |
|--------------------------------|-------------------|----------------|-------------------|-----------------------------|-------------------|------------------|-------------------|
| UNDP | GET | Tonga | Biodiversity | BD STAR Allocation | 150,000 | 14,250 | 164,250.00 |
| Total Project Costs(\$) | | | | | 150,000.00 | 14,250.00 | 164,250.00 |

Core Indicators

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) |
|----------------------|----------------------------------|----------------------|---------------------|
| 4,560.00 | 4,560.00 | 0.00 | 0.00 |

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) |
|----------------------------|--|----------------------------|---------------------------|
| 1,530.00 | 1,530.00 | 0.00 | 0.00 |

| 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) |
|--|-----------|--|----------------------------|--|----------------------------|---------------------------|
| Lualoli, Taula and Maninita Islands (expansion of existing protected area) | 555645256 | | 1,157.00 | 1,157.00 | | |
| Vaipua Channel | na | Protected area with sustainable use of natural resources | 373.00 | 373.00 | | |

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) |
|----------------------------|--|----------------------------|---------------------------|
| 3,030.00 | 3,030.00 | 0.00 | 0.00 |

| Name of the Protected Area | WDP A 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) |
|--|--|--|----------------------------|--|----------------------------|---------------------------|--|------------------------------|-----------------------------|
| <input type="checkbox"/> Fang a'uta Lagoon | <input type="checkbox"/> 4241 | Protected area with sustainable use of natural resources | 2,835.00 | 2,835.00 | | | 43.00 | | |
| <input type="checkbox"/> Lualoli, Taula and Maninita Islands (existing protected area) | <input type="checkbox"/> 5556 <input type="checkbox"/> 4525 <input type="checkbox"/> 6 | | 195.00 | 195.00 | | | 32.00 | | |

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) |
|----------------------|----------------------------------|----------------------|---------------------|
| 0.00 | 120.00 | 0.00 | 0.00 |

Indicator 3.1 Area of degraded agricultural lands under restoration

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

Indicator 3.2 Area of forest and forest land under restoration

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

Indicator 3.3 Area of natural grass and woodland under restoration

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

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

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

| |
|--------|
| 120.00 |
|--------|

Indicator 11 People benefiting from GEF-financed investments

| | Number (Expected at PIF) | Number (Expected at CEO Endorsement) | Number (Achieved at MTR) | Number (Achieved at TE) |
|---------------|--------------------------|--------------------------------------|--------------------------|-------------------------|
| Female | 23,087 | 22,898 | | |
| Male | 22,898 | 23,087 | | |
| Total | 45985 | 45985 | 0 | 0 |

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

Core Indicator 2 includes: (i) creation of Vaipua Channel PA of 1,530 hectares; (ii) extension of existing Lualoli, Taula and Maninita Islands MPA by 1,157 hectares; (iii) improved management of Fanga?uta Lagoon MPA of 2,875 hectares (iv) improved management of existing Lualoli, Taula and Maninita Islands MPA Core Indicator 3 includes: Restoration of 80 hectares of mangroves, 20 hectares of coral reefs and 20 hectares of sea grass Core Indicator 11: 45,985 persons, including 22,898 men and 23,087 women. This includes the people living in the 26 villages around the Fanga?uta lagoon and 4 villages around the Vaipua Channel, who will be part of the Community Management Committees that will provide a community mechanism for decision making on development and resource use

priorities (including restoration of natural habitats, special area management activities, livelihood and ecotourism activities, waste management, sustainable fisheries, mangrove and marine resource uses etc.) . Direct benefits will include awareness, outreach and solutions for sustainable marine and land resource use such as fisheries, agriculture, waste management, tourism, livelihood improvement and improved wetland water quality and indirect benefits of improved marine water quality and ecosystem services. Additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided.

Part II. Project Justification

1a. Project Description

describe any changes in alignment with the project design with the original pif

Changes made since the PIF are marginal and are reflected in Annex H to this document below. The few significant changes are as follows: (i) a new Output has been added to Component 1, namely Output 1.1 the "Updating of the Fanga-uta Stewardship Plan" which is a critical first step to the implementation of activities within the Fanga-uta Lagoon and the replication of lessons to Vava'u?, (ii) the enhanced of ecotourism activities are treated as an integral part of alternative livelihood development (Output 1.3) rather than an independent Output; (iii) The Output 1.5 now captures all of the activities associated with replication in Vava'u, including creation of PAs, improved PA management and implementation of baseline and management interventions: and (iv) a new Output (3.4) has been added to focus on monitoring and evaluation activities. There are no significant changes in the GEF core indicator targets. There are minor changes in budget allocations for the different Components, with the exception that the budget allocation for Component 3 has been increased to effectively capture the costs of M&E, including the recruitment of a M&E Officer to coordinate and monitor all aspects of the project, including the RFA, SESP, ESMF, GESI, SEP and GRM.

| Summary of changes made | PIF | GEF CEO ER/ Prodoc | Rationale |
|-------------------------|---|--|--|
| Outcomes | Outcome 1.1 Fanga-uta Lagoon Stewardship Plan implemented: improved management of the Fanga-uta Lagoon Marine Reserve for biodiversity conservation Outcome 1.2 Lessons learned from Tonga R2R Phase 1 project replicated: two priority areas on Vava'u protected for marine biodiversity conservation | Outcome 1. improved management of the Fanga-uta Lagoon marine reserve for biodiversity conservation and its replication in Vava'u. | Outcomes 1.1 and 1.2 combined into a single Outcome (namely Outcome 1) to demonstrate complementarity and linkages of Outputs across Component 1 |

| | | | |
|---------|--|--|--|
| Outputs | None | Output 1.1. Updating the Fanga?uta Stewardship Plan building on lessons and best practices generated from its implementation under the R2R Phase I project | Given the importance and centrality of the FSP to all aspects of the project, it was felt that the updating of the FSP should be treated as a separate Output as well as all subsequent Outputs in Component 1 and some in Components 2 and 3 depend on the updating of the FSP. The updating of the FSP will involve an assessment of the effectiveness of the FSP (2017-2021), identify success and failures and best practices that would influence other activities and replication in Vava?u under this project |
| | 1.1.3 Eco-tourism sites in the Fanga?uta Lagoon established and enhanced to highlight lagoon biodiversity and ecosystem values. 1.1.4 Alternative livelihoods identified and implemented in close consultation with communities towards to reduce exploitation of lagoon resources | Output 1.4 Alternative livelihoods identified and implemented in close consultation with communities towards to reduce exploitation of lagoon resources | Given the clear linkage between ecotourism and livelihood improvement, it was felt that these two Outputs in the PIF should be combined into a single Output. This would ensure that a deliberate effort is made during project planning and implementation to integrate ecotourism and livelihoods, rather than implement them in isolation of this clear linkage. The PPG team felt that ecotourism would only be successful and sustainable if communities derive monetary benefits from ecotourism activities. Also linking these two topics will help ensure that training, technical and marketing support will be effectively channeled. |
| | 1.2.1 New marine protected area designated for conservation of biodiversity within the Vaipua Channel of ?Uta Vava?u covering 373 hectares; management plan prepared and priority measures initiated, surveys for water quality, birds, fisheries, benthic, and monitoring of mangroves coastal ecosystems. 1.2.2 Existing protected area surrounding the Lualoli, Taula and Maninita Islands expanded to 1,352 ha for conservation of biodiversity; management plan prepared and priority measures initiated including surveys for water quality, birds, fisheries, benthic, and monitoring of coastal ecosystems. | Output 1.5. Lessons learned from Tonga R2R Phase I project replicated in Vava?u to support marine biodiversity conservation | The PPG team felt that it would be more practical to combine the two PIF Outputs under the GEFCEO ER Output 1.5, so as not only to focus on protected area management, but broaden its scope to additionally include: (i) creation and management of Special Management Areas (SMA) building on lessons from R2R Phase I experiences in Fanga?uta Lagoon; (ii) creation of alternative and sustainable incomes for local communities; (iii) baseline biological surveys; (iv) development of a stewardship plan for the Vaipua Channel; (v) establishing of multi-stakeholder governance over the Vaipua Channel; and (vi) supporting establishment/strengthening Community Management Committees for participatory management of the Vaipua Channel |

| | | | |
|-----------------|---|---|--|
| | 2.1.2 Measures delivered to fully engage the Vaipua Channel communities in lagoon ecosystem management including establishment of a multi-stakeholder Community Management Committee for governance over the Vaipua Channel new protected area and implementation of the management plan (replication of the Tonga R2R Phase I approach). | None | The PPG team felt that this activity should be an integral part of the effort to replicate activities in Vava?u island, including in particular in the Vaipua Channel, that the governance and participatory structures be established as part of the planning for the Vaipua Channel that is covered in the GEFCEO ER Output 1.5 as described above. |
| | 3.1.2 Awards and recognition schemes established to promote local action to conserve and improve the lagoon environment for Fanga?uta Lagoon and Vaipua Channel, including recognition of women and youth in conservation | None | This activity is included in the GEFCEO ER as part of Output 3.2 to avoid an unnecessary large number of Outputs under Component 3 |
| | None | Output 3.4 M&E system supports project impact including GESI mainstreaming | A new Output on M&E was added given the importance of M&E for ensuring continuous monitoring and adaptive management |
| Component Costs | <i>Component 1: USD 2,750,000</i> <i>Component 2: USD 600,000</i> <i>Component 3: USD 330,660</i> | <i>Component 1: USD 2,473,000</i> <i>Component 2: USD 507,160</i> <i>Component 3: USD 700,500</i> | Changes in Components 1 and 2 are less than 10%. Component 3 has significantly increased on account of the following: (i) inclusion of a stand-alone M&E Output to cover continuous monitoring of RFA, SESP, ESMP, SEP etc to provide guidance for adjustment and adaptive management; and (ii) recommendation of the UNDP HACT assessment to include a full-time M&E Officer within the PMU, so that M&E will be adequately covered |
| Co-financing | USD 11,960,000 | USD 12,385,000 | A slight increase from PIF values. |

1a. *Project Description.*

(3) **Global Environmental problems, root causes and barriers that need to be addressed**

The Kingdom of Tonga is located in the central South Pacific and has a combined land and sea area of 720,000 km². It is an archipelago of 172 coral and volcanic islands with a land area of 748 km² of which 36 islands are inhabited with an area of 649 km². The country supports a wide diversity of flora

and fauna. Tonga's fourth national report on biodiversity (NBSAP, 2010) stated that the country supported a total of 2,264 species of fauna and flora, but only 357 species had been assessed. Out of the species assessed, six were found to be endemic. Tonga supports 581 species of plants and is a home for 45 birds, 2 of which are endemic to Tonga and Near Threatened (NT), such as the Tongan whistler (*Pachycephala jacquinoti*) and Polynesian Megapode. About 80% of the plant species, 65% of reptiles and less than 5% of birds and mammals are threatened. Additionally, out of 457 species of invertebrates described, roughly 15% are threatened. There are also over 50 species of sacred or fragrant plants, known as 'akau kakala, that are central to the spiritual and economic fabric of Tongan society and that are planted or protected as integral components of Tongan agroforestry. The 2020 International Union for Conservation of Nature (IUCN) Red List counts a total of 90 threatened species including 7 plant species and 20 fish species. Tonga is also home to 20 species of terrestrial and sea birds with two of which are endemic to Tonga and Near Threatened (NT), such as Tongan whistler (*Pachycephala jacquinoti*) and Polynesian Megapode. In the species rich marine environment, 38 species of pelagic fish were identified in both deep sea and coastal zone[1]¹. Marine fish unique to Tonga include the Black fin Damselfish (*Amblyglyphidodon melanopterus*), the Swallowtail (*Fangblenny Meiacanthus procne*), the Green Canary Blenny (*Meiacanthus tongaensis*), the Black Foxface (*Siganus niger*), the Tonga Grouper (*Epinephelus chlorocephalus*), the Tongan Spiny Basslet (*Acanthoplesiops naka*), a pufferfish (*Canthigaster flavoreticulata*), the Tiger Pygmy Goby (*Eviotatigrina* sp), the Blackstreaked Blenny (*Salarias nigrocinctus*), the Linedfin Rockskipper (*Praealticus multistriatus*), and the Coralbrotulas (*Diancistrus alatus*) and (*Diancistrus manciporus*). 12 species of whales and 6 species of marine turtles were also recorded. Humpback whales and bottlenose whales are considered endangered and together with hawksbill turtles are all protected under Tongan legislation. Tunas, sea turtles and other deep water predators concentrate in hotspots, found at intermediate latitudes close to coral reef habitats, shelf breaks and seamounts. The protection of some of these ecosystems is crucial in conserving biodiversity at these hot spots, especially during spawning times. Coral reefs are common and widely distributed around the islands. There are three types recognized: fringing, barrier and submerged reefs. They offer the best choice for fishing due to the variety and abundance of fishes in this environment. However, their proximity to land means they are exploited. The common reef fishes were recorded at about 158 species, 150 species of Mollusks, 33 species of Echinoderms and 26 species of Crustaceans.[2]²

About 55% of the fishing population are concentrated in four constituencies in Tongatapu, Ha'apai and Vava'u. A wide range of harvested species support subsistence livelihoods and small-scale commercial fisheries. Almost the entire catch is harvested from the reefs and lagoons with only minor quantities of coastal pelagics harvested. These fisheries are heavily exploited and many are depleted with declines in fish density, biodiversity and size[3]³. Finfish catches are dominated by herbivores (parrotfishes, rabbitfish (Siganids) and surgeonfish indicating depletion of predators. Overfishing is the principal cause of depletion, though destructive practices (such as sand/ coral mining, mangrove cutting) and pollution also contributes to habitat degradation, leading to the decline in catch rates and

catches. In common with many other Pacific Island Countries (PICs), Tonga is heavily dependent on its fisheries and ocean resources for food, transport, economic development and culture. Rural communities are particularly dependent on fisheries (in addition to agriculture) and many are highly vulnerable to extreme weather events. Tonga and its fishing communities are also in the front line of climate change - threatened by erratic rainfall, extreme weather events, sea-level rise, and loss of coral reefs from rising oceans temperatures, ocean acidification and local environmental degradation. Isolation and scale also means that Tonga and rural communities face challenges in access to markets, high costs of transport and energy. About 15% of households own fishing gear and about 5% own a boat, or canoe. About 25% of households in Tonga are estimated to currently live below the basic needs and poverty is most prevalent in the more isolated island communities heavily reliant on subsistence and cash fishing and farming.

Despite, the high dependency on the coastal and marine environment, these environments are facing challenges such as overfishing that is reducing stocks in the inshore waters, illegal fishing is taking place in Special Management Areas (SMAs), there is over-exploitation of live rock and coral for export, the health of the main lagoon of Fanga'uta that is of significant value to the Tongan people has declined in recent years along with the dumping of waste, leakage of raw sewage, unsustainable land reclamations and clearing of mangroves and more broadly significant erosion of the coasts by sea level rise, unsustainable sand mining and land reclamation and natural disasters such as cyclones.

Root Causes, Threat and Impacts

The primary threats to biodiversity and direct causes of ecosystem degradation are described below:

Habitat destruction and loss of marine biodiversity:

Specifically, in the case of the Fanga'uta lagoon in Tongatapu island group, the health of the lagoon and its catchment has been in decline for some years, due to a combination of natural and human-induced environmental changes. This has been largely attributed to inadequate land development approaches that has led to the use of septic tanks in urban areas as there is no sewage drain network^[4]. The septic tanks leak raw sewage into the groundwater and the coastal regions. There is also no stormwater reticulation system to retain and detain runoff during storm events. While this is the case for Tongatapu, other islands are also urbanizing, as a result of which, the lagoon will face significant challenges including: pollution from poorly-managed sewage and run-off from agriculture pesticides and fertilizers; waste dumped in or near the water; changes in tidal flows and water circulation; fragmented land-use decision-making; increased competition between competing land-use practices;

increased fishing pressure; and unsustainable urban and agricultural practices that cause habitat loss and degradation; and mangrove clearing and illegal land reclamation. Fangaʻuta lagoon is enclosed with a unique shallow entrance and only the tide generates a significant current in its vicinity. Its water circulation is complex as tide, wind and wave-induced currents have significant roles in water movement[5]⁵. The annual Fangaʻuta Lagoon status reports prepared under the GEF Tonga R2R Phase I project compared earlier 1999 water quality monitoring data with two recent monitoring periods in 2015 and 2016. This comparison has confirmed that the depth of water in the lagoon has decreased in some sections of the lagoon (Fanga, Kakau, Fungaʻuta and Vaini) and water quality has deteriorated since 1999. The Pea and Fangakakau sections in the inner lagoon were found to have the most water quality concerns, with high fecal coliform counts (indicators of sewage pollution) as well as high phosphate concentrations (over international standards). In contrast the Mouth and Muʻa Sections are the cleanest parts of the lagoon. Levels of dissolved oxygen and acidity were relatively stable between the two recent monitoring periods. Nitrate (NO₃) levels declined dramatically from 2015 to 2016, but the reduction of nitrate levels has not yet led to reversal of the symptoms of eutrophication, including algal overgrowth. In 2015, the level of coliform counted in different springs and wells showed significant readings (in ʻUmusi, Halaleva, Havelu and Vaini, indicating excessive leakages of septic sewage into the lagoon.[6]⁶ The apparent improvement in water quality was not observed in surveys of benthic (bottom-dwelling) animals and plants which have continued to decline, particularly since 2015.[7]⁷ Corals are virtually absent from the entire lagoon system and have remained so since 1998, while average seagrass covers in all sections of the lagoon dropped to 4.5% in 2016, declining from a high of 29% in 1999 and algal cover dropped to 13% in 2016 from a high of 25.5% in 1999.[8]⁸ At the same time, the amount of mud, sand, rubble and rock has increased and now covers 73% of the lagoon floor.[9]⁹ The increase in non-living sediments may be contributing to the shallowing of the lagoon. Monitoring undertaken for the 2016 Fangaʻuta Lagoon Status Report showed a significant shallowing in most of the lagoon since 1998 apart from the Mouth and Mua survey sections. In particular, this has obstructed the movement of large fish and sea animals due to heavy sedimentation near the Nukunukumotu-Nukuleka area that would require the removal of sediments to maintain depth of up to 3-4m so that fish and other sea animals could easily visit lagoon[10]¹⁰.

Mangrove cutting and dieback: The cutting of mangroves and the reclamation of mangrove areas on the edges of the Fangaʻuta lagoon has continued to occur despite being prohibited under legislation. Drivers for development on the edge of the lagoon include the pressure for land allocation (town allotments) as a result of population growth on Tongatapu, together with a failure to observe and implement the legislation. Unsustainable stripping of the mangroves for tannins for the tapa making and medicine, and cutting the mangroves for firewood and building materials, as well over exploitation of crabs and fishes pose additional threats to the remaining mangroves in Tonga. The harvest, use, and sale of mangrove wood in Tonga is not measured or monitored. Urban expansion has led to mangrove clearing and illegal coastal reclamations along the fringe of the Fangaʻuta Lagoon and its extents have reduced due to limited land availability and the subsequent sub-division and housing encroaching on

once mangrove-laden land e.g. Popua development. The encroachment of housing to the seawater level has meant damage to housing from flooding and storm surges is more common. The flooding impacts will only increase as the mangroves that once provided a barrier to storm surge waves are reduced, and more housing is adding to these impacts (SOE, 2019). Community members (male and female) and relevant stakeholders need to work closely together to find means of stopping illegal land reclamations along the lagoon fringes. As a consequence of reduced mangrove cover, there is loss of habitats and decrease in fish catch rate and loss of resources for buildings, crafts and medicine, in addition to damage to coastal ecosystems and foreshore protection. The resulting impacts of threats to mangroves are the loss of habitats for native marine species and the declining of essential ecosystems functions and services including normal marine hydrological cycle such as high and low tide flows. The degraded and disturbed lagoon ecosystems also provide conditions conducive to the spread of invasive marine and coastal species. Further, mangrove cutting is aggravated by mangrove dieback, particularly in the largest area of mangroves at Nukuhetulu, but the cause is uncertain. The 2013 MESCAL report observed that the large-scale dieback in the Nukuhetulu area that might likely be due to a combination of factors including cyclones and/or the construction of a road connecting Nuku Island to Tongatapu. It was previously proposed to establish the Nukuhetulu mangrove forest as a conservation area, but most of the land in the Nukuhetulu area has been allocated to lease land prior to the work of IUCN sponsored 'Mangrove Ecosystems for Climate Change and Livelihood' (MESCAL) project that aimed at promoting the joint management and conservation of mangrove ecosystems that concluded in 2014. It would require significant time and resources for land compensation to return these allocated land areas to the government to enable mangrove planting with permission from the landowners. The lack of control of free range pigs has been a hinderance to replanting mangroves by destroying seedlings. In terms of the Vava'u group, in particular the Vaipua Channel, its catchment is less populated than that of the Fanga'uta lagoon. In Vava'u, the conversion of lands on very steep slope for settlement and development is becoming a common practice. These areas have forests that provide supporting services for the protection of lagoon and marine resource from pollution. Mangrove harvesting is also a threat to the biodiversity of the Vaipua Channel lagoon.

Demand for marine resources: The status of the marine ecosystem has yet to be fully explored even though there are information available on fisheries and coral reefs. Lack of resource assessment due to financial constraints and limited expertise is the key issue for the marine ecosystem, however only few selected fisheries are known i.e. sea cucumbers, seaweed, and etc. The overharvest and overexploitation of the marine resources remain the major causes of the changed to the marine ecosystem. The main fisheries in Tonga are offshore tuna, snapper, groupers and inshore fisheries, which in the case of the Fanga'uta lagoon (refer to table 3 below). The Fanga'uta Lagoon has been known for centuries to support a large mullet fishery and prolific edible mussels which have served the needs for the inhabitants of Nuku'alofa and other villages in the northern part of Tongatapu. In recent years, however, the populations of mullet and edible mussels have declined at an alarming rate to the present stage that is threatening the food security and income opportunities for local communities. Edible mussels have disappeared from some locations of the lagoon where known to be colonies for them. This decline has resulted from habitat losses, increasing population and a subsequent higher demand for fish consumption, and increased urbanization in Nuku'alofa areas, putting pressure on the lagoon resources through overfishing, dredging for building aggregate, increased land reclamation and mangrove encroachment, and some indiscriminate discharges of domestic and industrial wastes into the lagoon. Fish stocks are now significantly reduced in mangrove areas, the lagoon and bays, and on near-shore coral reefs. However, there is little and ineffective management and conservation of inshore fishery resources with difficulties to implement minimum harvest size, or impose controls and closed seasons. The demand for marine resources has increased due to; Tonga growing population; change in diet towards a more marine protein-based products; and increase demand for marine products from overseas, (i.e. sea cucumbers fisheries resources, seaweeds, etc.). This impact is further exacerbated by some of the destructive fishing practices such as dynamite fishing, fish poisoning and using hookah are still ongoing even though they are illegal practices under the Fisheries Management Act 2002.

Concerted actions are therefore required to ensure sustainability and guarantee long-term benefits for the health of ecosystems and human wellbeing.

Pollution and eutrophication: Pollution and eutrophication also affect Tonga's coastal waters and reefs. Pollution is from sewage, fertilizers and pesticides that contain phosphates and nitrates that lead to explosive eutrophication. Tonga does not have adequate sewerage systems in place and eutrophication has been reported, particularly around Nuku'alofa areas. In Fanga'uta lagoon, urban runoff and eutrophication are the suspected causes for loss of hard corals, and the algal bloom reported in the past. There is no reticulated sewerage system on Tongatapu and the existing septic tanks are often poorly maintained and leak effluent to the groundwater system. The Tonga Building Code 2007 clearly states that the sides and bottoms of septic tanks must be impervious to water, but construction of many septic tanks does not meet this requirement. A further structural problem for septic tanks is the high incidence of earthquakes occurring annually in Tonga. More than 20% of Nuku'alofa residents do not have access to at least a household, septic tank sanitation facility. The majority of these non-septic sanitation facilities utilize an unlined dry or wet pit, which in almost all instances would be directly adjacent to underlying groundwater. While, solid waste management has improved in and around the Fanga'uta lagoon, through the efforts of the Waste Authority Limited in collecting waste and disposing of it in the Tapuhia Landfill, the lack of resources has resulted in solid waste not being sorted and there is a lack of government initiatives to support private entities in recycling which has led to recyclable materials being disposed-off at Tapuhia Landfill. In addition, people are still littering, particularly in the accessible mangrove areas and lack awareness of the serious long-term impacts of poor waste management practices. Runoff of agriculture fertilizers from plantations and sewage effluent are the major contributors to eutrophication. There are also concerns over wastes from boats a Pollution from solid waste is also an issue, especially in urban areas around the Fanga'uta lagoon. Overall pollution has resulted in the decrease of fish catch, loss of aquatic biodiversity, damage to coastal habitats and ecosystem health and reduced opportunities for generating sustainable community incomes.

Land Tenure and land use: Most of the land in Tonga belongs to the Royal Family and Nobles (chiefs) or is government land, while the remaining and is held under lease from the nobles by individual Tongan males who are granted a parcel of land for small scale agriculture (from 2 to 4 ha). On the more densely populated islands like Tongatapu, such as on the northern side of the Fanga'uta Lagoon, there is a shortage of land for households to practice agriculture or construct settlements. The non-tradability of land under the existing tenure system (except leasehold) may contribute to sub-optimal land distribution. The shortage of suitable land for residential and non-residential purposes in and around the Nuku'alofa urban area has led the large number of urban migrants of recent years to settle in the swampy and low-lying areas of Sopu and Popua, and the mangrove areas of the Fanga'uta Lagoon. The increased pressure on land use is mainly related to population growth and socio-economic developments including commercial agriculture. Land reclamation around the lagoon is the main threat to the mangrove ecosystem. A number of key environmental issues and problems have become apparent in the lagoon catchment as the Kingdom is facing a scarcity of land resources coupled with the increasing signs of land resources degradation such as underground water pollution, increased soil degradation due to the increase in commercial agriculture and increased uses of fertilizer and pesticide, loss of native forest and general deforestation, loss of habitat and biodiversity, and increased urban population with the problems of increasing waste generation. Rehabilitating degraded agricultural land is required to negotiate with many landholders to implement wide-scale improvements.

Climate Change: Changes in temperatures, shifts in rainfall patterns, a rise in sea levels, ocean acidification, and the occurrence of tropical cyclones are major concerns for the Kingdom of Tonga, where impacts are greater in low-lying coasts^[11]. Rises in temperature can have an impact on fish catch and degradation of corals, while increases in rainfall and flooding can cause degradation of coral reefs due to pollution and sedimentation and debris deposition in the lagoons. Climate change impacts compound other threats, particularly land and coastal degradation, with pronounced impacts on natural ecosystems and agricultural lands. Conversion of mangrove forests has made coastlines even more vulnerable to storms; prolonged dry seasons combined with loss of forests are affecting freshwater

biodiversity and water availability; and high rainfall washes sediment from poorly managed land. Climate change by reducing ecosystem resilience and invoking change in systems that have been mostly stable over the past several centuries can recalibrate both risk and impacts associated with IAS, permitting some novel arriving species to established, rapidly expanding their ranges and population and ultimately causing further impacts to these weakened natural systems and the associated human communities. Of major concern has been the frequency of cyclones that cause constricted entrance and reduced and less frequent flushing of the lagoons, destruction of coral reefs, have affected fisheries through damage to mangroves and fish habitats that negatively affect the lagoon ecosystems that would take years to re-establish and function normally. In addition, tropical cyclones contribute to soil erosion and salinization and affect the lagoon functions.

(2) Project Barriers that need to be addressed

The Tonga R2R Phase I project was successful in establishing the Fanga'uta Stewardship Plan (FSP) to support, maintain and enhance the ecosystem goods and services of the Fanga'uta Lagoon through integrated approaches to land, water, forest, biodiversity and coastal resource management so as to contribute to poverty reduction, sustainable livelihoods and climate resilience. The project also established a multi-stakeholder management governance structure to guide the planning and implementation of the FSP, developed an Environmental Management Plan (EMP) and designed and piloted a Special Area Management (SMA) program for participatory management of sustainable fishing and safeguarding marine biodiversity of the lagoon. The FSP is a mechanism through which Tonga can achieve improved compliance with, and enforcement of existing national laws and regulations, as they pertain to sustainable development of the Fanga'uta Lagoon and catchment area. The terminal evaluation for the Tonga R2R Phase I project recommended that the project should be upscaled and the lessons learned from this project should be replicated by GoT, UNDP and other agencies involved through a second phase. The project was commended for piloting community-based management approaches of the Fanga'uta Lagoon and catchment area, for generating a lot of practical knowledge and for actively involving women and youth.

The communities in the FLC have limited appreciation and capacity for ecosystem values and the conservation of attendant mangroves, seagrass beds and corals despite their high ecosystem values. This is evident through the mangrove clearing for land reclamation and dumping of effluent, waste and other sources of polluting substances into the lagoon that is causing eutrophication, siltation and destruction of lagoon habitats. The Vaipua Channel in Vava'u experiences less urban pressure but mangrove use and erosion are still present. The Phase I terminal evaluation recommended that the second phase should cover all areas of lagoon with a comprehensive suite of activities to improve the lagoon's ecosystem services. However, a number of barriers constrain the implementation of FSP and the replication of lessons learnt into priority areas on Tongatapu. These constraints, along with remedial actions to be undertaken by the Phase II project include:

Barrier 1: Limited technical knowhow, lack of appropriate models and insufficient demonstration of the benefits of ecosystem-based approaches to conserve biodiversity, adopt sustainable fisheries management practices and reduce risks and impacts associated with disruptive practices in Fanga?uta Lagoon and the Vaipua Channel lagoon.

While, the focus of the FLC ?follow-up? initiatives is intended to support achievements of the main FSP objectives, in particular to focus on addressing current unsustainable patterns of resource use, there is a need for additional technical knowledge, expertise and improved models for ensuring the conservation of attendant mangroves, seagrass beds and corals and the ecosystem services they provide despite their high ecosystem values. In particular, this is constrained by gaps in technical knowledge and knowhow that takes into full consideration and cognizance of the complexity of the geological and geomorphological reality of the landscape/seascape (including the various ecological systems within them) inter-relationships and the spatial dimensions in which these interactions take place. As a consequence, activities within and outside the lagoon are undertaken without full recognition of the intricate ecological relationships that occur within these ecosystems. Mangrove restoration has been undertaken without taking cognizance of the land based pollution and damage from pigs and other herbivores. Similarly seagrass and coral reef restorative efforts require consideration of hydrological processes, water quality, water circulation, tidal flows and other ecological issues. This is further compounded by the lack of mapping and zoning of the lagoon has limited the ability to identify appropriate locations for conservation and resource use practices and regulation for their effective implementation. There is thus a need for better integration of the relationships between the terrestrial, coastal, freshwater and marine ecosystems and the activities of people and communities within them and thereby strengthen the commitment of all stakeholders towards its conservation and sustainable management and use.

While, the establishment of Fisheries Management Areas (SMAs) can provide an appropriate tool for the effective management of the lagoon ecosystem, this effort has solely focused on improving the management of fisheries resources rather than the effective management of the entirety of the lagoon ecosystem. There is a need to better streamline the SMA process, improve the collection, analysis and monitoring of the biological, ecological and social aspects of the SMAs to inform management efforts and address the effects of SMAs more broadly on food supply and livelihoods, including for landlocked communities.

Barrier 2: Fragmented legal and policy framework and institutional capacity to enforce the Fanga?uta Stewardship Plan (FSP) and weak enforcement and compliance and its replication

The implementation of the FSP focuses on an integrated ecosystem management approach for the Fanga?uta Lagoon that recognizes that it must take into full cognizance the diverse, but inter-linked interactions that operate within this marine ecosystem. However, the compartmentalized nature of application of the legal and policy instruments through a largely sectoral lens (in particular related to fisheries, forestry, waste management, tourism, land use, agriculture and chemical usage, mining and infrastructure development) does not fully recognize the integrated relationships and coherence needed amongst the diverse interventions that operate within the lagoon ecosystem. Rather, the current practice seems to largely be applied as sector specific ?stand-alone? interventions. This is attributed to fragmented legal and policy instruments and limited understanding and functional coordination

mechanisms to build and benefit from the multi-dimensional aspects related to marine resources. This has resulted in developments that have had negative impacts to the ecology of the lagoon as follows:

- ? The Popua wetlands development in the FLC was undertaken without effective land-use planning and weak enforcement of existing legislation.
- ? The Fisheries and Environment Management Acts refer to obligations to protect Fanga?uta Lagoon and all the species it contains that are of commercial or conservation significance.
- ? The cutting and removal of timber which is prohibited within the foreshore under the Land (Timber) Regulations 1967 is poorly enforced and timber cutting and clearing of vegetation for infrastructure and development continue to occur in coastal fringes and mangroves[i].
- ? The Tonga National Forest Policy (2009) has specific provisions for the protection of mangroves and other wetland ecosystems, but there is no enforcement.
- ? The Birds Preservation Act provides for protected species of birds and fish and prohibits damaging activities, but its enforcement is not effective as evident by the cutting of mangroves and the reclamation of mangrove areas on the edges of the lagoon.
- ? The Environmental Impact Assessment Act requires environmental impact assessments (EIA) for development projects, including the removal of trees (including mangroves) or natural vegetation, but development and land reclamation around the lagoon continue to contribute to deforestation of mangroves and increased sedimentation.
- ? The Environment Management Litter and Waste Control Regulations requires only minor fines (not exceeding TOP\$50) and only if convicted.
- ? The regulatory framework for wastewater management (i.e. governing septic tanks) is lacking both prescriptive and punitive regulation. The building code specifies a septic tank design but there are no further requirements for vulnerable areas such as high groundwater or tanks adjacent to the lagoon. There is also no requirement to upgrade old deteriorating tanks to prevent leakage.

Given the above inconsistencies and deficiencies in legal and policy instruments and their enforcement, there is a need to ensure that competing sector-based priorities that operate in this ecosystem are managed effectively so as to ensure integrated management of the lagoon and other marine ecosystems. A legislative and policy review is required to ensure consistency of laws, policy and practice (in terms of sectors related to sewage disposal, fertilizer and chemical usage and leakage, water usage, run off, soil contamination, land reclamation and mangrove protection and other sectors) with conservation and protection of marine biodiversity and ecosystem services as envisaged through the implementation of the FSP. Following the legal and policy review, measures to ensure compliance should be designed and implemented. It should be noted that the Government of Tonga has made a strong commitment to systemically mainstream gender equality and social inclusion (GESI) in laws, policies and plans which provides a good foundation for project supported legislative review from a human-rights perspective in line with SDG commitments. The legal and policy review should build on this commitment to ensure that new legislations and policies are gender responsive and inclusive.

Barrier 3: Inadequate awareness and knowledge exchange and mainstreaming women, youth and persons with disabilities to conserve biodiversity and achieve management of marine ecosystems

The tremendous global significance of the biodiversity of coastal and marine ecosystems in Tonga, the threats (many of which may remain undocumented), and the wide range of ecosystem services provided by coastal and marine ecosystems remain poorly appreciated by most islanders, despite that they are dependent on these ecosystem services for their food security and livelihoods. Awareness and understanding about marine biodiversity, ecosystem service values and threats is limited at all levels and in all sectors, which constrains engagement and behaviour change. There is currently no communication strategy in place to raise awareness of the benefits and need for conservation of globally threatened and endemic species, ecosystem management and threat reduction. As a consequence, low value is accorded to these matters in fiscal policy instruments as reflected in the limited funding available to MEIDECC and MOF for exclusive promotion of conservation outcomes in the Fanga?uta Lagoon and Vaipua Channel, which limits the scaling up of awareness to assist the local community to adopt more sustainable lifestyles. There is also limited understanding of how men and women use ecosystem resources differently due to gendered roles and responsibilities and how workloads and relations are being affected by changes in natural resources. Low awareness of risks means that there is little investment in conservation and management of these ecosystems. Similarly, there is limited investment in awareness raising, training and capacity building on integrated conservation aspects either for staff or land users, including persons with disabilities (PWDs). PWDs are more vulnerable to the impacts of climate change as they are more reliant on personalized adaptive strategies to cope with their environment that requires cooperative assistance from others and are also likely to be injured or left behind after catastrophic weather events. The National Disability Policy is silent on CCA and DRR, but in a recent analysis of disability in Tonga, the researchers recommended that GoT ensure appropriate enabling policies and guidelines to ensure the incorporation of relevant climate change and disaster risk management (in keeping with TSDF Organizational Outcome 5.4).

Underlying these difficulties is the lack of, including with the private sector, to find appropriate and sustainable solutions for effective management of the marine ecosystems and its productive resources. There is limited understanding regarding the condition of these wetland resources, their carrying capacity limits, and best practices in habitat protection and management, along with the application of equitable, transparent and accountability procedures and practices related to the management of the Lagoon and Channel. Although there has been documentation of experiences from the past, there is a lack of regular review processes that involve community organizations, non-governmental and environmental organizations and research agencies, thus limiting the opportunities for replication and scaling up of best practices.

While the FSP articulate the need for ecosystem-based planning and management, there is usually a lack of critical baseline data on the extent, location, condition and threats on wetland resources and species. Consequently, there is an urgent need for a concerted and committed effort, with adequate

human resources, technical skills and funding to monitor the condition of different resources, distribute data, and build the institutional, technical, human and infrastructural capacity needed to support on-going biodiversity monitoring and decision-making. Consequently, the country's knowledge base on biodiversity and natural resources, and capacity for stewardship is limited. Drivers of, and vulnerabilities to climate change in is also little understood. Among the local community, there is little understanding of the value of biodiversity and natural systems in providing critical ecosystem services (including mitigation of climate change impacts) to those dependent on these resources and the impacts that wetland degradation could have on provisioning of such services. The need to ensure impact data is disaggregated by sex, area, age and disability (SAAD) has been stressed.

Project conceptual model: The complex interacting web of factors that threaten globally significant marine biodiversity in Tonga is illustrated in a situation analysis in Figure 1. This indicates the key areas (indirect and direct factors) and the points where project intervention can contribute towards a reduction in the level of threats, and therefore contribute towards the conservation of biological ecosystems and globally threatened species and the integrity of the ecosystems they inhabit. The main project intervention strategies are shown as yellow hexagons in Figure 1.

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[3] Tonga Fisheries Sector Plan (2016-2024)

[4] State of Environment Report 2018

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[8] Status of Fanga'uta Lagoon, R2R Project (2016)

[9] Status of Fanga'uta Lagoon, R2R Project (2016)

[10] Terminal Evaluation Report of Tonga R2R Project (2018)

[11] https://climateknowledgeportal.worldbank.org/sites/default/files/country-profiles/15823-WB_Tonga%20Country%20Profile-WEB.pdf

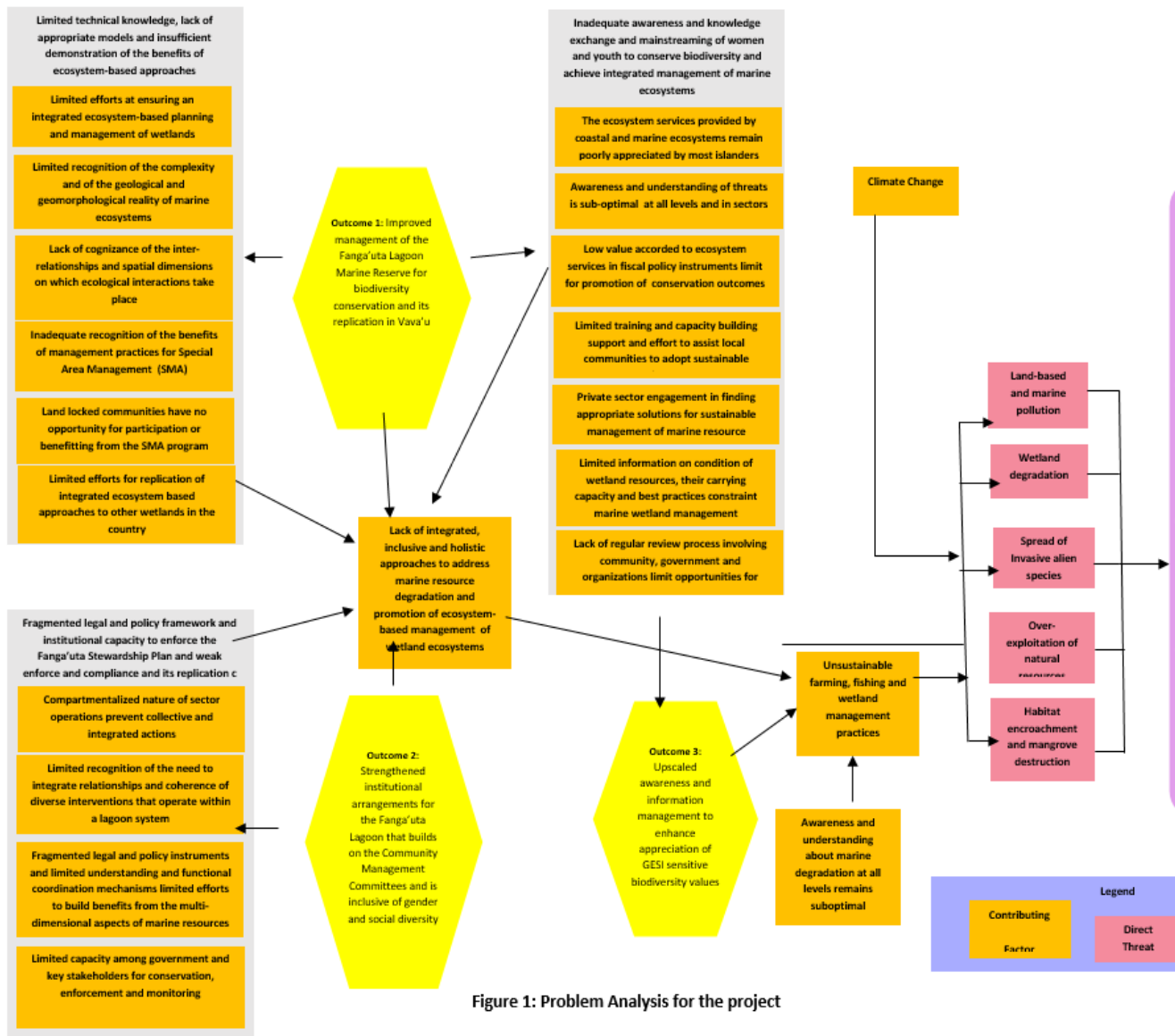


Figure 1: Problem Analysis for the project

Baseline scenario or any associated baseline projects

The extensive baseline activities provide a solid base to build on, based on the key lessons that have evolved over time. In particular, this includes the strong institutional structure that has been established for promotion of the sustainable management of the Fanga'uta Lagoon, the expertise already developed through the R2R Phase I project and the commitment of the government to manage the country's marine ecosystems. The baseline projects have helped develop a sense ownership with government and enhanced the participation of the stakeholders and communities as being the basis for driving the desirable outputs that are beneficial and relevant to the communities. Sustainability and ownership has been the core thinking in this process. Involvement of the communities in the planning process to its implementation has given people a sense of ownership and the incentive to drive the project in the direction they feel will be more beneficial to them to improve their standard of living in

the medium and long term. In addition, fundamental principles and guidelines from the NBSAP, POWPA, UNCBD, JNAP, other related action plans and legislations have aided efforts at promotion of the management of these marine ecosystems to ensure coherence and complementary of these efforts. The success developed on integrated ecosystem management through the R2R Phase I project and other baseline efforts provide a foundation for controlling pollution, degradation of wetland habitats and addressing other marine environmental issues, indicating that there is scope for this approach to Tonga that could be replicated more broadly to other vulnerable parts of the country. The integrated nature of the past efforts at policy-level mainstreaming, awareness generation on IEM and land and marine degradation, arrangement of knowledge base to inform policy makers, and capacity building of government agencies, promotion of increased enforcement, research and monitoring provide a solid model for success that has been the basis for design of this project.

Table 1: Summary of Baseline Activities and Additional Complementarity

| Baseline Project/Activities | Key Objectives of baseline project/activities related to the GEF project | Additional Complementarity with proposed GEF project |
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|-----------------------------|--|--|

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| <p>Integrated Environmental Management Plan of the Fanga?uta Lagoon Catchment project (GEF Grant)</p> <p>\$1,756,880 (2014-2017)</p> | <p>The Plan seeks to manage the ecosystem services of the Fanga?uta Lagoon Catchment through an integrated land, water and coastal management approach thereby protecting livelihoods and food production and enhancing climate resilience. It supports maintaining and enhancing the ecosystem goods and services of Tonga?s main lagoon catchment and marine reserve areas through integrated approaches to land, water, forest, biodiversity and coastal resource management that contribute to poverty reduction, sustainable livelihoods and climate resilience. It also makes a stronger linkage between sustainable development of freshwater catchment and coastal areas and promotes the implementation of holistic, integrated management of natural resources at the catchment level. The project defined creative ways to address the critical gaps in environmental and ecosystem services conservation in the Fanga?uta Lagoon catchment through the establishment of an effective governance system and sustainable management of the lagoon ecosystems; implement integrated environmental management approaches for improving conditions of critical habitats, productivity, water quality and fisheries in the lagoon catchment and strengthen knowledge and awareness of the Fanga?uta Lagoon ecosystem functions and associated socio-economic benefits within the national stakeholders and local communities.</p> | <p>This project outcomes provides the foundation and lessons for strengthening the implementation of the ?Integrated Environmental Management Plan of the Fanga?uta Lagoon Catchment Project (FLC)? that was developed through the Phase I project and its upscaling and the lessons learned in the R2R Phase II project. The Phase II project will expand the community-based management approaches piloted in Phase I and cover all areas of lagoon with a comprehensive suite of integrated ecosystem-based activities to improve the lagoon?s ecosystem services</p> |
| <p>GEF Small Grants Program (SGP)</p> | <p>The SGP supports complementary activities such as nursery development, address land degradation, biodiversity projects (honey bee keeping, mulberry farming, manioke and tapioca farming, vegetable gardens and native species revival), biogas projects, support for SMA establishment and Green Management Areas (GMA) in watersheds.</p> | <p>The SGP can support community activities that are aligned or complementary to the FSP objectives</p> |

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| <p>GEF Pacific Islands Ridge-to-Reef National Priorities ? Integrated Water, Land, Forest and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods? USD 1,386,513</p> | <p>The project aimed to maintain and enhance Pacific Island countries? (PICs) ecosystem goods and services (provisioning, regulating, supporting and cultural) through integrated approaches to land, water, forest, biodiversity and coastal resource management that contribute to poverty reduction, sustainable livelihoods and climate resilience. Overall, the Tonga sub-project support the implementation of a ridge to reef approach to protect biodiversity, ecosystem functions, and adapt to and mitigate climate change.</p> | <p>The project outcomes provide learning on improving management in existing protected areas and establishing new PAs, strengthened replanting of mangroves and protecting seagrass beds and coral reefs in Special Marine Areas, with the development of new PAs established to conserve threatened species in Fanga?uta Lagoon. Also of importance is the option for Peer-to-peer exchanges on LMMAs and sustainable adaptation methods for coastal communities and managing coastal resources in the face of climate change, plus building resilience to other serious risk factors such as cyclones and tsunamis.</p> |
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| <p>GEF Ridge to Reef: Testing the Integration of Water, Land, Forest & Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods in Pacific Island Countries. USD 10,317,454 (2015-2020)</p> | <p>The project aimed to test the mainstreaming of 'ridge-to-reef' (R2R), climate resilient approaches to integrated land, water, forest and coastal management in the PICs through strategic planning, capacity building and piloted local actions to sustain livelihoods and preserve ecosystem services. Specifically, project activities were aimed at pilot projects testing innovative solutions involving linking ICM, IWRM and climate change adaptation, strengthen National and Local Capacities for Ridge to Reef ICM/IWRM approaches, incorporating CC adaptation, mainstreaming of Ridge to Reef ICM/IWRM Approaches into National Development Frameworks and knowledge management and monitoring and regional cooperation</p> | <p>This project is specifically relevant to the GEF 7 project in that it brings a R2R approach is relevant to the planning and management of the 2 project sites. The capacity building and inclusion of the R2R approach in national policy and plans is critically relevant to the implementation of the GEF 7 project</p> |
| <p>GEF ? SPREP Enhancing the capacity to develop global and regional environmental projects in the Pacific USD 1 million (2013-2017)</p> | <p>The project goal was to build national capacities in 14 Pacific Island countries (including Tonga) to access GEF resources through strengthening of SPREP</p> | <p>The overall benefit to the GEF 7 project is that SPREP as a likely partner in providing technical and policy support during implementation</p> |
| <p>GEF Mainstreaming climate change and ecosystem-based approaches into the sustainable management of the living marine resources of the WCPFC, USD 10 million</p> | <p>Of particular relevance is the implementation of a proactive and adaptive ecosystem-based approach to regional fisheries management, Innovative technology development and implementation to support the adaptive ecosystem-based approach to regional fisheries management and development of a strategy for improved community subsistence and resilience to climate change effects on the ecology and fisheries of the region</p> | <p>The GEF 7 project will build and apply the lessons of measures to improve community subsistence and resilience to climate change as well as integrating this to strategies for maintenance of a sustainable fisheries in the Fanga'uta Lagoon</p> |

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| <p>Tonga Climate Resilience Sector Project (ADB Grant) ? USD 19 million</p> | <p>The project was to implement the Strategic Program for Climate Resilience by mainstreaming climate resilience into development planning and addressing country priorities focusing on the most vulnerable sectors and communities. Under Output 4: Ecosystem Resilience and Climate-Resilient Infrastructure Investments Developed, the project intended to (i) establish community managed special marine management areas (SMAs) to introduce sustainable fishing and management of corals reefs that will benefit the local community and support local livelihoods and strengthen ability of the ecosystem to recover after climate events; (ii) identify potential mangrove planting sites to provide shoreline protection, and (iii) develop best practice guidelines and support field demonstrations on the use of mangroves as natural infrastructure in areas identified for investment.</p> | <p>The project provides excellent lessons for promotion of SMAs, which will be one of the key activities of the GEF 7 project. In addition In MEIDECC will be able in the future to monitor changes in mangrove cover using this platform as a baseline.</p> |
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| <p>Integrated Urban Resilience Sector Project (IURSP) (ADB grant) ?USD 18.275 million (2019-2025)</p> | <p>The project intends to enhance Nuku?alofa urban living standards by improving urban services (water, wastes, drainage, and infrastructure plus building resilience to extreme natural events and climate change). Thus, this project addresses the root causes mentioned above. In the Fanga / Haveluloto / Tofoa drainage catchment there are existing drainage outlets to the Fanga?uta Lagoon and new outlets to be constructed. The IURSP will continue support established under the NUDSP to the newly formed National Spatial Planning Authority to improve its capacity in land use planning, this will contribute to the Phase II project?s objective to establish a land-use spatial plan</p> | <p>The IURSP would contribute to the objectives of the GEF 7 project through installation of stormwater treatment systems or nature based solutions to improve water quality from stormwater outlets into Fanga?uta Lagoon, . The land use planning envisaged under IURSP will he IURSP will contribute to the Phase II project?s objective to establish a land-use spatial plan. The IURSP will also contribute to the objectives of the GEF 7 project through increasing the capacity of the septage treatment plant at Tapuhia (which will enable increased emptying of septic tanks and safe disposal of the septage at the treatment site) and increasing the capacity of the Tapuhia landfill (which will improve waste collection and reduce littering).</p> |
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| <p>Tonga Pathway to Sustainable Oceans Project World Bank (2019-2025)</p> | <p>The objective of the Tonga Pathway to Sustainable Oceans Project is to improve management of selected fisheries and aquaculture within Tonga's territory. The Pathways project will strengthen 41 SMAs and establish 4 new SMAs and establish 30 Mab? pearl producer sites. The project will support fisheries management policy and legislation, capacity building, strategic resource management and development efforts as well as inclusive stakeholder collaboration across the selected fisheries. The most relevant sub-component is 2.3: Strengthening Tonga's Special Management Area Program. The objective of this sub-component is to support the Ministry of Fisheries in strengthening and expanding the SMA program. Activities include reviewing and updating SMA management plans; providing training and capacity building activities to Ministry of Fisheries staff and to coastal community SMA management committees to strengthen SMA management, improving SMA establishment procedures and improving monitoring and evaluation. It will also look at the potential adverse impacts on landlocked and/or neighboring non-SMA communities and identify options for mitigation to ensure that the effects of SMAs on the food supply and livelihoods of landlocked and/or non-SMA communities are adequately addressed. The total project budget is US\$10 million and the budget for Component 2.3 to strength the SMA program is US\$1.85 million, of which \$200,000 is counted as co-financing.</p> <p>The project is funding about 5 SMAs in addition to designated SMA staff in the outer islands to manage SMAs in Vava'u. However, there are still many requests from communities (23 altogether that have yet to be funded) and from this, 3 are from around the Vaipua channel (Taoa, Vaipua, Vaimalo) and 6 from around the Fanga'uta Lagoon (Tofoa, Haveluloto, Siesia/Oneata, Hoi, Pea and Patangata)</p> | <p>This project has direct relevance to the GEF 7 project in terms of updating SMA management plans, improving SMA establishment procedures and training SMA staff and CMCs as well as address landlocked communities. The GEF 7 project will directly build on these World Bank project activities.</p> |
| <p>Vava'u Ocean Initiative (joint program with funding from Waitt Institute) (2017 -)</p> | <p>The Vava'u Ocean Initiative (VOI) is a partnership between the Government of Tonga namely MEIDECC, Ministry of Fisheries and Ministry of Lands and Natural Resources, Waitt Institute and VEPA to strengthen and further develop sustainable ocean management programs in Vava'u. the project supports the development of three main focal areas: 1) National Marine Spatial Planning (MSP); 2) Special Management Areas (SMAs); and 3) Scientific Assessments. The SMAs focal area is a community based fisheries management program developed by the Ministry of Fisheries to designate coastal community areas including a fish habitat reserve. VOI is assisting with developing and implementing 7 SMAs in Vava'u including strengthening community management and alternative livelihood programs. Recent project work includes marine resource surveys undertaken in 2019 to support the development of three proposed SMA sites at Tefisi, Olo'ua and Taoa (Taoa is in the Vaipua Channel). The surveys created a baseline of benthos (habitat) cover, marine invertebrates and reef fish populations.</p> | <p>This project will contribute directly to the GEF 7 project in terms of marine spatial planning and SMA experience and alternate livelihood actions. The project also provides an useful methodology and baseline for conducting surveys of benthos, marine invertebrates and reef fish.</p> |

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| <p>Fanga?uta Lagoon Crossing Bridge ? proposed ADB Grant ? USD 55 million</p> | <p>The proposed project proposes to build a bridge across the Fanga?uta Lagoon, consisting of an approximately 700 meter long bridge and 4.5 kilometers of approach roads from Nuku?alofa to southern Tongatapu. A bridge over the Fanga?uta Lagoon was identified as a key piece of infrastructure to address constraints in the current road network and to ease traffic congestion on the southern and eastern sides of Tongatapu, including the route to the airport. The bridge and its approach roads will also provide an alternative evacuation and access route in case of disasters triggered by natural hazards. The project will play a key role in the eventual climate change-induced urban redevelopment of the island, as it will help drive land and spatial planning decisions. The bridge project management unit (PMU+ are currently consulting with stakeholders including the FSP CMC.</p> | <p>The proposed land-use spatial plan to be developed under the Tonga GEF 7 project will ensure that any changes in land use on the south side of the bridge take into consideration nearby mangrove areas in the lagoon. This project could contribute to the objectives of the GEF 7 project through support for mangrove rehabilitation and the underlying investigations required for the proposed land-use spatial plan. The project will contribute co-financing through financing complementary activities to mitigate any potential impacts of the proposed bridge on the ecology of the lagoon.</p> |
| <p>Pacific-European Union Marine Partnership program (multi-country ? EURO 50 million</p> | <p>The PEUMP) program that aims to improve the economic, social and environmental benefits for 15 Pacific-African Caribbean Pacific states through stronger regional economic integration and the sustainable management of natural resources and the environment. The PEUMP program will focus on supporting sustainable management and development of fisheries for food security and economic growth, while addressing climate change resilience and conservation of marine biodiversity. The program has six key result areas targeting gaps in fisheries science; fisheries development; coastal resources and livelihoods; illegal, unreported, and unregulated fishing; ecosystem-based management; biodiversity conservation; and capacity building at the national and community levels.</p> | <p>This program is very relevant to the GEF 7 project in that it will bring lessons from other countries, enable knowledge sharing and training in key aspects of fisheries management, coastal resources and livelihoods, ecosystem-based management and illegal fishing</p> |

(3) The Proposed Alternate scenario

The overall objective of the project is to *support the mainstreaming of biodiversity through the implementation of the Fanga?uta Stewardship Plan (FSP) and the replication of lessons learned to priority areas in Vava?u*. This will build on the baseline activities and the parallel co-financing and utilize GEF resources to implement strengthened integrated management for wetland biodiversity and ecosystem conservation, consistent with a ridge-to-reef approach as discussed in the baseline section (Paragraph 31 above). Specifically, the Tonga R2R Phase II project will facilitate the further improvement of the ecosystem services of the Fanga?uta Lagoon through implementing the FSP in the Fanga?uta Lagoon catchment area and replicate the success and lessons learned into priority marine areas in Vava?u. Through this process, the project aims to ensure that the marine biodiversity and ecosystems of the Kingdom of Tonga are at reduced risk from threats such as resource degradation, unsustainable resource, pollution and other threats while supporting sustenance of ecosystem services important for resilient and sustainable livelihoods; and are supported through effective and enabling governance mechanisms and capacity that ensures effective participation from local communities, including women, men, young people and elders . The project will equip and empower local communities to safeguard the country?s biodiversity, natural ecosystems and associated ecosystem services including marine food production systems from over-exploitation and unsustainable use. The project will also promote effective generation and dissemination of knowledge related to sustainable use and management of marine resources widely in the country. The project will be implemented over a 5-year period based on the following principles:

- ? Ensuring that at harmonized cross sectoral and holistic national policy, planning, coordination and capacities are in place to support implementation of the Fanga?uta Stewardship Plan (FSP);
- ? Furthering a *holistic and integrated Ridge to Reef Approach* for safeguarding native biodiversity, natural ecosystems and food security rather than an exclusive sector- centric approach;
- ? Supporting and implementing a *participatory, consultative bottom-up project planning and implementation approach* that maximizes community ownership and long-term sustainability; ?

? Supporting *decentralized planning and management by communities, local district administration using the existing traditional decision-making processes* as the building blocks for integration of conservation, sustainable resource use and livelihood improvement that is commensurate with climate risk management and inclusive of the needs and perspectives of the whole-of society; ?

? *Strengthening capacities* of communities, women and youth and persons with disabilities (PWDs), local administration and other key stakeholders (including the private sector) within a cross-sectoral and holistic planning framework to address related concerns;

? Improving *coordination and collaboration* between local administration and national sector agencies to deliver technical expertise extension and best practices for management of the lagoon;

? Mainstreaming marine resource and management into key development sectors (forestry, agriculture, fisheries, waste management, infrastructure development, etc.) and management of the interface between natural areas (terrestrial and marine) and surrounding community productive areas through strengthening of community-managed approaches;

? Ensuring that in its development and implementation, gender equality and social inclusion (GESI) is mainstreamed so that the project contributes to equality and equity, through the creation of equitable opportunities and benefits for both women and men, girl and boys, including those with disabilities;

? Creating an *effective knowledge base* that builds on successful lessons and experiences from previous and on-going programs and projects;

? Ensuring an *adaptive management approach* that considers ecological, demographic, social, safeguards, market, technological and economic factors for ecosystem management; and

? Selectivity with respect to interventions and locations within the lagoon and its catchments to demonstrate cost-effective management responses that at least in some cases may be replicated elsewhere

The above will deliver the following desired outcomes:

? The overall effectiveness of government efforts to conserve biodiversity, reduce and restore degraded marine areas and ensuring mainstreaming across other sectors;

? Enhanced capacity of government officials and staffs in all sectors will lead to improved delivery of mandates and greater implementation and enforcement of legislation and policy related to marine systems;

? Enhanced capacity of communities, including women, men, youth and vulnerable people in wetland biodiversity and ecosystem conservation techniques and approaches lead to greater engagement and participation in achieving enhanced food security and conservation outcomes;

? Improved awareness and knowledge on the links between biodiversity and sustainable marine resource use and economic wellbeing will help facilitate behavioural shifts and increase support for biodiversity and ecosystem conservation across communities, government ministries in the range of relevant sectors, NGOs and private sector;

? Sustained economic incentives, resilient and sustainable livelihoods can bring about desired shifts in behaviour and uptake in biodiversity and ecosystem conservation practices; and

? Improved benefits from marine economic opportunities through Small and Medium Enterprises (SME) and livelihood promotion can transform biodiversity and ecosystem impacting sectors) to be more biodiversity- and eco-friendly

The above expectations have informed the project's components and approach which is based on the premise that biodiversity loss and marine resource degradation are fundamentally inter-connected and can be successfully tackled by addressing them simultaneously in ways that deliver benefits to local communities.

Project Objective

The overall objective of the Tonga R2R Phase II project is to implement the Fanga'uta Stewardship Plan (FSP) for strengthened integrated management of the Fanga'uta Lagoon and to replicate lessons learned from the Tonga R2R Phase I to priority areas in Vava'u. To achieve this objective, the project recognizes that the demonstration marine ecosystems underpin the lives and livelihoods of many local communities, including vulnerable groups of people and that implementation of a coherent strategy to promote effective and sustainable marine resource use and development of a sustainable economy is an integral part of the solution. The project seeks to achieve this solution to improve management and conservation of agricultural, coastal and marine ecosystems and livelihoods using an integrated R2R approach as envisaged through the FSP. The intention of the project is also to effectively reduce risks and impacts associated with unsustainable resource use and other disruptive activities in that knowledge needs to be both built and shared effectively across government, stakeholders and local communities

The project objective will be achieved via three interrelated and complementary strategies (Project Components comprising Outcomes and Outputs) that focus on removing the three key barriers that constrain the accomplishment of the desired long-term solution (**Figure 1**) by means of intervention pathways shown in the theory of change diagram (**Figure 2**). Indicators and assumptions for the accomplishment of expected Outcomes under the respective Components are given in the Project Results Framework. The three planned Components of the project are:

- Component 1. Conservation of critical lagoon ecosystems and management of the catchment to improve ecological services of the lagoon and replication in priority areas in Vava'u.

Component 2. Governance: Policies, institutions and capacity building for sustainable and adaptive management and biodiversity conservation.

Component 3. Awareness raising and knowledge management of the ecosystem functions and services of the Fanga'uta Lagoon and the priority Vava'u biodiversity sites

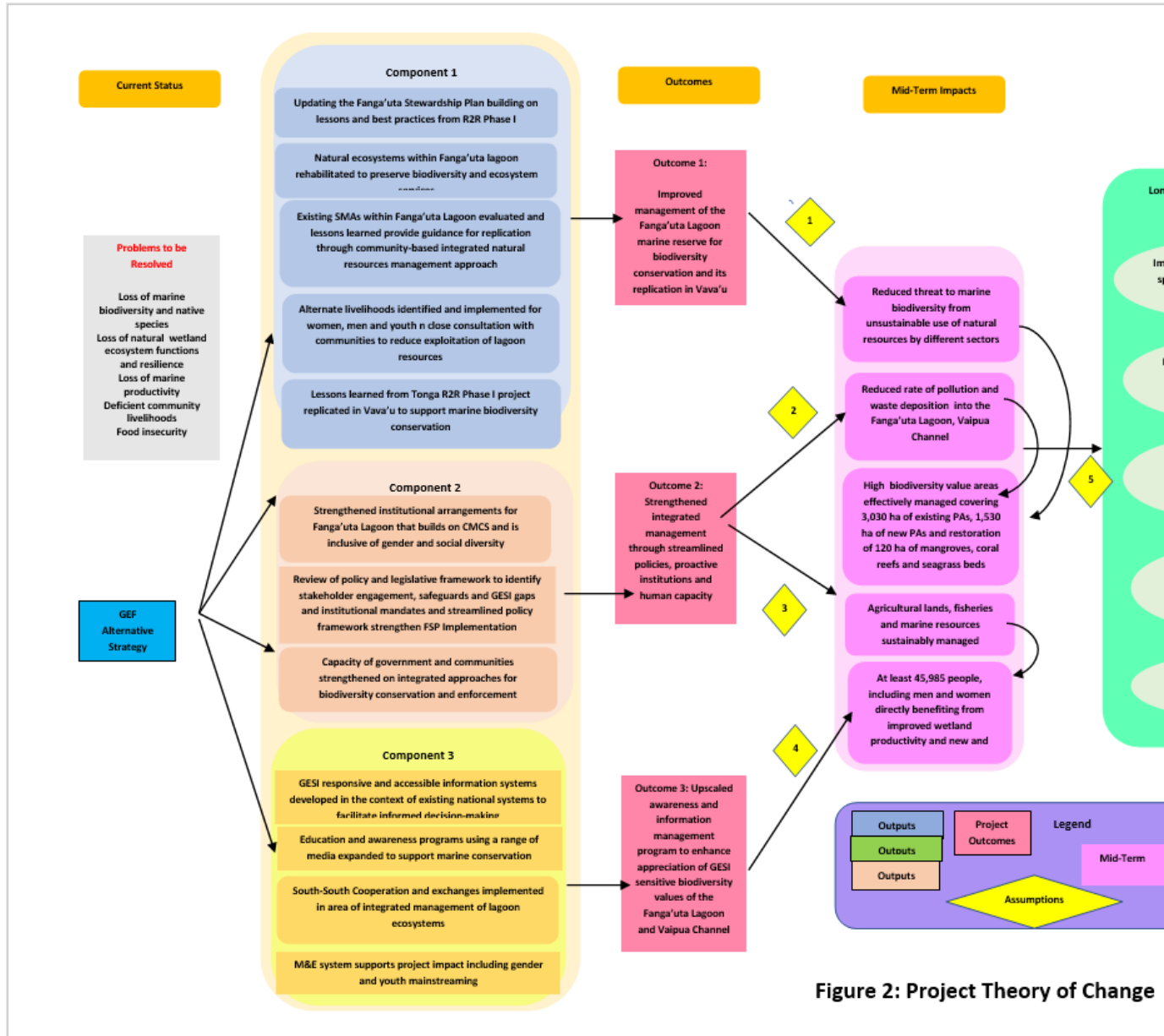


Figure 2: Project Theory of Change

Key assumptions underpinning the Theory of Change

| Number in Figure | Assumption | Notes and References |
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| 1 | <p>The increased capacities of local stakeholders, including fishers, farmers, and other marine resource dependents ensure sustainable and appropriate use and management of natural resources that results in reduction of threat to endemic species and ecosystems</p> | <p>The project will benefit from best practices of R2R planning from R2R Phase I project and the testing of innovative approaches for community engagement and management, and improving gender equality and social inclusion of coastal and marine areas under local community governance mechanisms. These approaches is innovative and build on existing practices from Phase I as well as best practices available from other parts of the country or regionally. The support for improved blue/green livelihood measures will build adequate incentives to enhance local community participation in ensuring conservation outcomes. The lessons learned including the feedback on R2R, SMA and livelihood planning will be channeled back into the collective knowledge base and will be used in other areas in the country.</p> |
| 2 | <p>There is political support for the strengthening GESI responsive legal, governance and institutional framework for SMAs, detection and control of IAS and unsustainable development activities</p> | <p>The Tonga government is placing a strong emphasis on ensure improved management of its land and seascapes as well as preventing, controlling, and managing unsustainable and destructive natural resource use in the country. This is to be achieved through improved coordination across different sectoral agencies and between national and district entities, establishing foundation for coordination and improved integrated marine resources management and improving information management systems. The government's commitment towards ensuring sustainable management of its seascapes is expressed in the NBSAP as part of the strategic priorities and supported by specific actions. Since the adoption of the NBSAP, a number of government and donor funded activities have been implemented in the country.</p> |

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| <p>3</p> | <p>The developed capacities of governmental (particularly agencies that would be responsible for fisheries, environment, agriculture, tourism and waste management), GESI (Internal Affairs) and supporting collaboration, coordination and technologies are sufficient to create a viable and effective means to prevent marine biodiversity and ecosystem degradation</p> | <p>In line with the above, there is an increasing realization that there is a need for an improved management of marine and coastal habitats in the country and strengthen integrated measures for its planning and management, monitoring and enforcement. To support this, a critical aspect of the project is to ensure that there is an improved action plan/management plans for the proposed project wetlands, improved Fisheries Regulations stipulating shared SMA processes and equitable access to marine resources, enhance community management committee capacities for resource conservation and sustainable use, reduction of pollution and wastes and prevention and management of IAS.</p> |
| <p>4</p> | <p>The raised awareness and increased knowledge management expand GESI, political understanding and actions supporting biodiversity and ecosystem conservation and management within the country</p> | <p>The importance of actively addressing natural resource management and is recognized as fundamental to ensure the maintenance of native species and marine ecosystems in the country. The project promotes increased awareness, a monitoring system and information and knowledge promotion. If this is achieved, it will provide the country with a tested approach to direct and support natural resource conservation efforts throughout the nation.</p> |

The project's incremental value lies in demonstrating the application of integrated R2R interventions to conserve the biological resources and ecosystem services of the marine sites and its sustainable resource use applying a community-based resource governance and management approach. This will entail that communities are actively engaged in planning and decision-making on best approaches to prevent and manage the threats in the marine ecosystems so as to help conserve native biodiversity and natural ecosystems, as well as to conserve and restore marine ecosystems and prevent resource degradation so as to safeguard marine food production systems. In these target marine ecosystems an information management and monitoring network will be strengthened to support the following: (i) provide detailed information on species and ecosystem health, pathways and underlying causes for threats to the ecosystem, impacts on native species and marine ecosystems and potential impacts under different climate scenarios; (ii) identification of threats and locations of severity so as to assess urgency of actions; (iii) decision making tools that would allow comprehensive diagnosis of threats and their underlying causes, improved priority setting for interventions and informed decision-making on sectoral policies and investments; and (iv) readily available data for decision makers, communities and others to respond to, and address the threats to these ecosystems. The information system will allow for defining which habitats and ecosystems within the priority sites should be effectively managed and restored in order to support retention of critical biodiversity, habitat and ecosystem integrity and support productivity of marine resources and use over the long term. It will also help develop capacities and the required enabling frameworks through "learning-by-doing" approaches in the selected sites and help develop and demonstrate a matrix of best practices, including sustainable resource use and habitat restoration practices for scaling up and replication in other marine locations in the country. A series of knowledge management publications, national dialogue platforms and awareness events will support the achievement of these targets.

Component 1. Conservation of Critical Lagoon Ecosystems and Management of the Catchment to Improve Biodiversity and Ecological Services of the Fanga'uta Lagoon and Replication in Priority Areas in Vava'u

(Total Cost: USD 9,773,000; GEF project grant requested: USD 2,473,000; Co-financing: USD 7,300,000)

Component 1 will address the barriers of the limited technical knowledge, lack of appropriate models and insufficient demonstration of the benefit of ecosystem-based approaches to conserve biodiversity and adopt sustainable management practices. It would build on the experience and learning from the R2R Phase I project to mainstream biodiversity into implementation of integrated on-the-ground measures for conservation and sustainable use of the resources of the Fanga?uta Lagoon and for upscaling in other vulnerable areas including the Vaipua Channel making effective use of the available manuals, policy documents and trained government staff and community members.

Outcome 1. improved management of the Fanga?uta Lagoon marine reserve for biodiversity conservation and its replication in Vava?u

Under this outcome, the project will build and demonstrate effective models such as capacity enhancement of central and local government and local communities, employ various measures for awareness and communication of project activities (through quarterly newsletters, social media and dedicated website), implement management measures including habitat restoration, management of waste and sanitation, soil erosion control, tree nursery management, etc. that were piloted in R2R Phase I project. The Fanga?uta Stewardship Plan (2017-2021) (FSP) that was developed based on the Environment Management Plan prepared for the Fanga?uta Lagoon established regular monitoring of Fanga?uta and conducted studies of soil, water, bird etc. The FSP was developed based on the following principles: (i) promoting governance through partnerships, information sharing, transparency and accountability of actions; (ii) recognizing the value of collective action; (iii) involving communities living around the lagoon in decision-making processes; and (iv) respecting the land, water and living organisms as drivers for integrated management approaches. These models were demonstrated successfully and other organizations have replicated the lessons in other areas within the Fanga?uta lagoon districts. One of the benefits of the effective capacity building delivered to local communities and government staff is that they become champions of integrated management of ecosystems. Their expertise and experience can be used to assist other districts in their efforts of mainstreaming ecosystem management in their district development planning processes. Tools such as training materials, planning approaches provided at the district and local levels for building local capacity for replicating and adapting the new community participatory management models of extension service will be useful for nation-wide dissemination. The livelihood components of the plan were designed to demonstrate how sustainable livelihoods and various income generating activities can be utilized to communities? lives and livelihoods. Scaling up and replication of viable techniques were facilitated through organized and informal farmer-to-farmer interactions. Success stories were shared through various platforms including the Ministry?s website, UNDP and project websites as well as various electronic media to disseminate lessons to a wide audience.

Output 1.1. Updating the Fangaʻuta Stewardship Plan building on lessons and best practices generated from its implementation under the R2R Phase I project

The Tonga R2R Phase I project was successful in establishing the FSP and the governance structure for stewardship of the lagoon. The FSP was developed through a process of broad consultation with all stakeholder groups under the Phase I project with the intent of ensuring joint responsibility for the area, recognizing the interconnection between land, water and people. The 5-year FSP Action Plan (2017-2021) established the framework to organize and prioritize actions to achieve FSP targets and objectives. The Phase II project will evaluate the actions undertaken during the implementation of the FSP Action Plan (2017-2021) to identify key gaps and constraints for the effective implementation of the FSP, resulting in a new action plan for the period 2024-2034 to address these remaining gaps and constraints to fully achieve the objective and targets of the FSP. This output will enhance the inclusive management and development planning of the Fangaʻuta Lagoon reflecting on the integrated nature of terrestrial, coastal, freshwater and marine ecosystems and the activities of people and communities within them and thereby strengthen the commitment of all stakeholders towards the stewardship of the Fangaʻuta Lagoon and the catchment area. An indicative list of activities proposed include the following: (i) recruit a national consultant to **undertake an evaluation of the status of implementation of the FSP Action Plan (2017-2021) to assess effectiveness, gaps and barriers to its implementation.** This assessment will be undertaken in collaboration with the FSP Steering Committee and Technical Committee; (ii) based on the above-mentioned evaluation, **undertake consultation meetings with relevant sector agencies**, such as fisheries, environment, tourism, lands, agriculture, infrastructure and others, stakeholders and community groups **to identify priority activities for implementation** under the Phase II project; (iii) Based on the evaluation findings and consultations, develop a revised Fangaʻuta Lagoon Stewardship Action Plan (2024-2034), initial implementation of which will be supported under the Phase II project. The revised plan will prioritize investments in zoning, fisheries management, biodiversity conservation, waste and pollution management, mangrove, seagrass and coral restoration, erosion control and tourism and livelihood improvement. The plan will strengthen institutional arrangements, clarify roles and enhance monitoring and enforcement. In addition the plan will include timelines for capacity building, coordination needs and monitoring and reporting of priority actions, GESI mainstreaming together with corresponding assigned budgets. Annual reviews will guide amendments to reflect new knowledge and change in priorities. an evaluation of results achieved in the previous year as priorities and issues change and new knowledge is generated; (iv) **Government approval of the updated Fangaʻuta Lagoon Stewardship plan**, along with reporting and monitoring requirements, feedback loops and adaptive management mechanisms; (v) **agree on roles and responsibilities for specific activities** under the plan to guide individual sectors to undertake specific activities, such as catchment wide agricultural support to environmentally and climate smart agriculture, catchment wide prevention and management of invasive alien species, sewage, solid waste and agricultural pollution control and management; promotion of livelihood development, including tourism for local communities and mangrove conservation, restoration and sustainable use and others as deemed relevant; and (v) **review of the existing FSP monitoring and evaluation system** that currently consists of ad-hoc agencies to create an effective monitoring system for measuring the impacts/effectiveness of the activities using SAAD (sex, area, age

and disability) disaggregated data Monitoring is currently undertaken by FSP inter-sectoral monitoring teams, who operate under the Technical Committee. Monitoring is currently conducted by the FSP inter-sectoral monitoring teams under the Technical Committee. The Marine, Coastal and Socio-economic conduct monitoring according to the FSP Monitoring Manual. Monitoring covers water quality, soil contamination, mangrove and coastal vegetation density, fish creel, erosion, etc. The Monitoring manual will be reviewed midway and at the end of the project to identify additional needs, improvements and sustainability measures. The updated Fanga?uta Lagoon Action Plan will serve to inform the further elaboration of Outputs 1.2 onwards.

Output 1.2. Natural ecosystems within the Fanga?uta Lagoon Marine Reserve rehabilitated to preserve biodiversity and ecosystem services

The Fanga?uta lagoon is a vital ecosystem that sustains communities living around it, providing essential coastal, marine and intertidal services. These communities, including men, women and youth rely on the lagoon for their livelihoods and well-being. . However, the lagoon has been exploited, with areas reclaimed and mangroves depleted, making it necessary to implement activities that help maintain and improve the lagoon's ecosystem. To do so, the following activities are planned: (i) To implement the FSP action plan, additional mapping of the lagoon will be conducted to identify and map vulnerable habitats requiring conservation or rehabilitation. Restoration plans will be developed with technical specifications for: (a) improving coral cover at the mouth of the lagoon (around 20 hectares); (b) rehabilitation of degraded mangrove stands (around 80 hectares) with fencing to protect seedlings from pigs; and (c) rehabilitation of seagrass beds (20 hectares) . To select areas for restoration, agreed criteria such as past occurrences, topography, water balance, sedimentation rates, community interests, and potential to keep pigs away from mangrove restoration sites must be considered. Seagrass restoration sites should have low human pressure, adequate light, and past occurrences. Criteria for coral restoration should include water quality, local risks, coral health, and absence of invasive algae. (ii) **implementation of restoration plans** developed through the additional mapping exercise with community participation supported by written agreements with land owners and community management committees for protecting rehabilitated sites, including from pigs and other threats and its overall protection and maintenance; (iii) mapping of the lagoon will help in **identification of designated mangrove areas across the lagoon for sustainable use by local communities for local medicine and traditional uses**. Guidelines, rules and regulations with clear roles and responsibilities for conservation, sustainable use and harvesting, monitoring, reporting and enforcements of Memorandum of Agreements (MOAs) with communities will be developed; (iv) **provision of training and skills development to local communities** (women and man) for nursery development, mangrove, coral and seagrass planting, management, protection and monitoring; and (v) support to local institute or NGO to **assess causes of mangrove die-off and identify remedies to prevent/reduce die-back**. Pilot remedial actions to test and validate solutions

Output 1.3. Existing Special Managed Areas within the Fanga'uta Lagoon evaluated and lessons learnt identified to provide guidance for replication in other parts of the country following the community-based natural resource management approach

The Fisheries Act of 2002 allows for the declaration Special Management Area (SMA) for conservation and management, of fisheries resources. The SMAs in turn allow , local communities to manage the fishing and marine resources with regulations in place to limit over harvesting such as limits on fishing gear, catch and also support conservation measures. The creation of a SMAs makes open-access system for fishing inappropriate. Regulations for SMAs are also contained in the Fisheries Management (Conservation) Regulations of 2008 and Fisheries (Coastal Communities) Regulations of 2009. As part of R2R Phase I, six SMAs have been created in Fanga'uta Lagoon to cover the communities of Lapaha, Nukuleka, Holonga, Makaunga, Talafo'ou, and Navutoka. Requests have been made to establish six more FMAs in Fanga'uta Lagoon, covering the communities of Tofoa, Havelulota, Siesia/?Oneata, Hoi, Pea, and Patangate. Additionally, the communities of Taoa and Vaipua have expressed interest in forming SMAs in the Vaipua Channel. Currently, there are 59 SMAs throughout Tonga, but the goal is to establish SMAs to cover the entire coastal space in the country in the long term.

64. The current situation regarding SMAs in the country involve the government granting exclusive use rights to a community and thereby becomes a valuable asset for the community. There is hence huge enthusiasm among participating communities supported by the fisheries management tool, which allows banning fishing by outsiders.. However, a major concern is whether the process should be solely focused on improving the management of marine resources or whether it should contribute towards the larger goal village development. The SMA concept originally intended enable greater community control over fishing activities in nearby waters but it has later expanded to include alternative livelihood activities both within and outside the fisheries sector (e.g. promotion of pandanus culture), including in some cases, development of infrastructure such as community buildings. The SMA process can be improved by: (i) streamlining and improving the process for establishment of the SMAs; (ii) enhancing the capacity of the Ministry of Fisheries to support the SMA program; (iii) improving the collection, analysis and monitoring of the biological, ecological and social aspects of the SMAs to inform management efforts and (iv) addressing the effects of SMAs on the food supply and livelihoods of landlocked communities. Discussions in the country suggest that establishing a single SMA for a specified area could be more beneficial than the current practice of several community-level SMAs. The project should consider this, including potential revisions to the fisheries legislation, policies and monitoring procedures to ensure the program's success and effectiveness. This Output will include the following indicative activities: (i) **Support the on-going evaluation** (building on the FAO Review of the SMA Program in 2016) **to enhance the effectiveness of the SMAs within Fanga'uta Lagoon.** This includes the update of the SMA manual and SMA strategy to address gaps and challenges and improve monitoring effectiveness and scaling of the SMA program. This will include staff and capacity improvement within the SMA Unit in Ministry of Fisheries to cover all communities within the lagoon, improvement of data management and monitoring effectiveness; proposals for dealing with landlocked communities. This activity will also explore options for enhancing coverage of the SMAs to go beyond fisheries taking an integrated community-based natural resource management approach (including livelihood improvements); (ii) **provision of technical support and training** to (a) streamline the establishment of SMAs; (b) provide training and equipment to improve capacity of Ministry of Fisheries SMA staff in enabling gender-responsive integrated community-based natural resources management approach to the SMA program; and (c) enhance information sharing and management, GESI inclusion, reporting, monitoring of the effectiveness of the SMA program and compliance; (iii)The SMA Unit (Ministry of Fisheries) The SMA Unit (Ministry of Fisheries) should partner or coordinate with non-fisheries agencies, such as the Ministry of Internal Affairs, to promote gender equality and social inclusion. This will support integrated community-based natural resources management approach for the SMA program, including agriculture, tourism, waste management, and

industry. Identifying alternative activities that reduce unsustainable exploitation of marine species and habitats is crucial. The goal is to improve coordination, collaboration and communication between communities and government including nominating a communication officer from each SMA community with direct communication facilities for providing correct and timely information. Partnerships should address both fisheries and non-fisheries related activities, such as sand mining, pollution, littering, toxic substances disposal, and climate change impacts. (iv) **review SMA regulations to enhance opportunities for shared management of marine and coastal ecosystems to cover all communities dependent or impacting these ecosystems**, including adjacent land-locked communities. The review will inform recommendations for the need of Regulations to support the Birds and Fish Preservation Act and Parks and Reserves Act to govern the Fanga'uta lagoon and reinforce measures to address illegal activities, improve enforcement of current SMA activities, including punishment of violations and better management planning for fisheries activities; (v) **Conduct baseline surveys for each SMA, covering biological, social and environmental impacts, gender equality and social inclusion.** This survey will also assist with the zonation of the SMA and inform clear guidelines for sustainable use, monitoring and enforcement. The proposed biological surveys will study mangrove, fish, and invertebrate species to identify ecologically important areas, as well as cultural or historical sites based on community feedback. Social studies will involve surveys to determine community reliance on Fanga'uta Lagoon, identify hotspots for traditional activities, and map out the use of marine resources within and between communities. This baseline information will inform control measures and management plans to minimize conflicts and environmental impacts from proposed SMA activities.; (vi) **improve the monitoring and evaluation system for SMAs** with use of appropriate indicators that allow communities to assess the effectiveness of their SMA actions,. Indicators might include the abundance and sizes of fishes, catch volumes, reduction in mangrove quantity and quality, volume of waste and litter, etc. and (vii) **Conduct training** for CMCs to improve community management of SMAs on planning, compliance monitoring, enforcement and implementation of restocking and alternative livelihood development (reference Output 1.4 below). Training will include the use of GPS and SMA catch data, compliance, and boundary markers. Additional national and regional workshops will be supported with co-funding as needed to enable effective assessment and application of lessons learned in other areas.

Output 1.4 Alternative livelihoods identified and implemented in close consultation with communities towards to reduce exploitation of lagoon resources

Output 1.4 will demonstrate how diversification into blue/green (nature-based) livelihoods can support the emergence of new business opportunities (e.g. sustainable agriculture, fisheries, ecotourism, circular economy, etc.), while at the same time contribute to ecosystem services provision and species and habitat recovery. During the PPG opportunities for accelerating new blue and green-based businesses and resilient livelihood options were discussed with communities, based on the framework, guidance and lessons learned under the USAID's Conservation Enterprise approach[1]. These will be prioritized for implementation in Fanga'uta Lagoon and Vaipua Channel, considering feasibility and resilience given the impacts of the COVID-19 pandemic and volcanic eruption. The project will prioritize empowering women and youth to drive community participation and development through leadership and influencing roles. Sustainable financing mechanisms, including blended financing solutions such as women's and youth saving clubs, partnership with Tonga Development Bank, and local funds supported via public-private partnerships, will be established to incentivize green/blue livelihoods. Market assessments, training, capacity building, and support for green/blue business development will be provided, engaging multiple stakeholders such as government ministries, private

sector, and civil society organizations. Technical training will also be provided to partners, including CMCs, to ensure they have the necessary skills and processes to implement activities effectively. In each of the project sites, two or more value chains have been identified based on their potential to develop new products and services or scale up existing products and services for the benefit of a larger group of people. The project will support the design and implementation of interventions to pilot and scale-up products and services having commercial potential, promote credit, marketing and cooperative agreements. This will be done in partnership with specialized agencies such as line departments, CSOs, research institutions and individual experts. As needed, the project will also seek to strengthen existing community-based organizations (CBOs) and village level entrepreneurs to address gaps in the value chain. New and improved value chain products and services are implemented by local communities to increase incomes and reduce unsustainable resource uses. A preliminary list of potential blue/green economic activities in the project target sites might include, but not be limited to organic and value added agricultural businesses, seedling nurseries, the production and sale of handmade crafts that use local plant species, and the production and sale of pandanus leaf woven containers/bags to replace the use of single use plastics and environmentally sensitive tourism operations. Potential agroforestry species to provide fruit, medicinal supplies and cultural materials include citrus, hibiscus, Garcinia, breadfruit, coconut and sandalwood. Potential NGO partners for seedling nurseries include the Tonga Community Development Trust and the Civil Society Forum of Tonga. the Tonga National Youth Congress, disability people's organizations (DPOs) etc. In terms of tourism, the project will evaluate the viability of improving the existing eco-tourism site at Vaini enhanced to highlight mangrove and lagoon ecosystem values, identify additional sites on Tongatapu and support eco-tourism activities within the lagoon especially those that offer flexible employment for youth, women and people with disabilities. The project will foster the participation of the private sector, NGOs and other stakeholders where appropriate. Possible ecotourism options include support for canoe tours and sea kayaking tours on lagoon (e.g. slipway for launching boats), agro-forestry planting at the Ancient Tonga site in Vaini and constructing a mangrove trail for visitors with information signage highlighting mangrove ecosystem values and support community led clean-ups of coastal environment near the eco-tourism sites. The following are indicative activities planned under this Output: (i) **review of on-going livelihood-based activities in the two project sites to assess constraints, barriers and opportunities** for promotion of improved alternative livelihood programs; (ii) **identify potential biodiversity-friendly enterprises and value chains.** based on market potential, economic and environmental feasibility and labor availability. Two sets of criteria will be considered when undertaking a preliminary value chain selection, namely: (a) value chain growth potential (current/potential unmet market demand, competitive advantages etc.) and (b) livelihood development potential (e.g. percentage of the village that can be engaged in the value chain, and additional income that can be generated from value chain); (iii) During early project implementation, **value chain mapping and analysis** will be conducted for preselected value chains, with a focus on market potential, customer requirements, and challenges faced by marketers/customers. Gaps in the value chain will be assessed to identify opportunities for sustainable livelihoods for rural producers and service providers. Interventions will be designed and implemented to complement ongoing interventions by other stakeholders. (iv) project implementation support will be focused on these to six areas, namely: capacity building of stakeholders, including women, youth, PWDs and men in the value chain: Training and skill development will be provided to producers and service providers to (a) help them understand customer requirements, (b) increase productivity, (c) learn necessary business skills and (d) other specific needs

as per the value chain, including developing new products and services. Systems and processes will be developed to capture adequate data and monitor the functioning of the value chain; small-scale infrastructure: the project will work with relevant stakeholders and national, state and private sector institutions to provide producers and service providers with both technical and infrastructure (small processing, storage and marketing facilities). In particular, support will be provided for a women's group hall for weaving and handicraft making. The groups are currently using community halls but would prefer a space dedicated to their handicraft and weaving; marketing: A marketing strategy will be developed and implemented to help male and female producers and service providers gain maximum value for their goods and services. This will include building communication material, developing a communication strategy, identifying distribution channels, and partnering with relevant stakeholders. blue/green livelihood program: establishing a GESI responsive responsive blue/green livelihood program at the national level. A network that involve all the relevant stakeholders working at the rural areas and at island level will be put in place serving as a platform to share information, learn from each other and play the role as frontier for business endeavors.. This will contribute to enhancing the economic empowerment of women and youth in rural areas. public-private partnerships to support blue/green businesses, including developing relevant regulations and policies for such partnerships. The responsible government agencies such as Ministry of Environment, Fisheries and Tourism would work with the private sector, and the roles of those in the market chains will be described and sustainable financing mechanisms : Identify and support sustainability financing mechanisms as incentives for promoting blue/green enterprises. The project will explore financing mechanisms suitable for the Tongan Islands, such as levies and admission fees for recreational areas and applying the "polluter pays" principle. Seedling production and aquaculture activities will be reviewed for production costs, and pricing for selling seedlings will be considered to generate sustainable income. Opportunities for partnerships with the private sector to promote green and blue economy will also be explored.

The interventions will be designed and implemented in a manner to ensure self-sustainability of the value chain by the end of the project period. This will allow the activity to continue beyond the life of the project reducing the risk of dependence on other forms of funding. Primary and secondary level informal or formal organizations/collectives will be encouraged to participate in these livelihood activities. To the extent feasible, the project will attempt to link new investments to national, private and public sector programs.

Output 1.5. Lessons learned from Tonga R2R Phase 1 project replicated in Vava'u to support marine biodiversity conservation

This output aims to apply the lessons and knowledge gained from the R2R Phase I project to the Vava'u Archipelago. It will focus on promoting the creation and management of SMAs (Output 1.3), creation of alternative and sustainable livelihoods for local communities (Output 1.4) and

implementing measures for improved management of protected areas (Output 1.5). The project will support the designation of a new marine protected area within the Vavaʻu Channel covering 373 hectares and expanding the existing Lualoli, Taula and Maninita Islands Protected Area to 1,352 hectares. This will be done to conserve biodiversity, building on the recommendations of the BIORAP assessment (2014). The Vaipua Channel is an important fish spawning grounds with shallow reefs and extensive mangroves areas that provide firewood and other services to local villages living adjacent to it. Lualoli, Taula and Maninita Islands serve as important nesting habitat for seabirds.. Maninita is ranked high in reef fish species richness with 63 hard coral species diversity and Taula having 70 species of hard coral [2]. Sea turtles, hawksbill (*Eretmochelys imbricata*) and green (*Chelonia mydas*) have been recorded nesting on Maninita and Taula indicating the importance of ensuring connectivity.. This Output will include the following indicative activities: (i) The Ministry of Fisheries (SMA officers), DOE marine monitoring team and VEPA will **undertake baseline surveys in Vaipua Channel and support the completion of the establishment/expansion of Lualoli, Taula and Maninita Islands as Marine Protected Areas**. The surveys will assess coral reef health, biodiversity, and current threats. They will build on previous surveys in 2014 and 2019 and support the development of proposed SMAs, including one at Taaoa. (ii) **consultations with key stakeholders** to establishment of the protected areas, demarcation of boundaries and establishing GPS coordinates for the protected areas; (iii) **Cabinet submission** prepared providing background details, reports and recommendations to approve the designation of new and expanded protected areas, followed by Cabinet approval, final gazette issuance and Royal assent; (iv) **establishing a participatory and consultative process to develop management or stewardship plans or action plans for the new Vaipua Channel and expanded Lualoli, Taula and Maninita Islands Marine Protected Area**. Consult with relevant government departments, eco-tourism businesses and local communities to assess their use of the area for recreation and fishing practices and explore options for their conservation and sustainable use practices; (v) **provision of technical support, equipment and financial support for initiating priority conservation measures** identified in the respective management plans. In terms of the Vaipua Channel Protected Area the project will support the rehabilitation of existing mangroves, fisheries management and monitoring of water quality parameters, bird and marine species, and mangrove and benthic cover. In terms of the expanded Lualoli, Taula and Maninita Islands Protected Area, the project will support priority biodiversity conservation measures of the management plan including water quality, benthic cover and fish, turtles and bird species monitoring; (vi) **replication of lessons learned on SMAs in Fangaʻuta Lagoon to Vavaʻu towards integrated management of the MPAs**, in particular the proposed Vaipua Channel Marine Reserve, through establishing SMAs, training and capacity building to strengthen active whole-of-community engagement and participation in the SMA program, the establishment of institutional coordination structures, technical support from Ministry of Fisheries and other inter-connected sector institutions, monitoring, enforcement and compliance (as reflected in *Output 1.3*) and (vii) **establish a Community Management Committee (CMC) for the Vaipua Channel protected area** with balanced gender/age representation to oversee the implementation of the management plan developed under Output 1.5 (Activity 1.5.4). The CMC will engage and represent all community interest groups. have balanced gender/age participation. The project will consider replicating the the institutional structure developed for the Fangaʻuta Lagoon depending on cost constraints.

Component 2. Governance: Policies, Institutions and Capacity Building for Sustainable and Adaptive Management and Biodiversity Conservation

(Total Cost: 2,047,160; GEF project grant requested: USD 507,160; Co-financing: USD 1,540,000)

Component 2 aims to overcome the fragmented legal and policy framework and limited knowledge of sustainable marine resource management. An integrated and inclusive ecosystem management approach for the Fanga'uta Lagoon and other marine ecosystems will be developed, recognizing the inter-linked interactions within this marine ecosystem. This component will address the current barriers related to fragmented legal and policy instruments, lack of coordination across sectors, and limited focus on gender equality and social inclusion.

Outcome 2. Strengthened integrated management through streamlined policies, proactive institutions and improved human capacity

This Outcome aims to improve the management of the Fanga'uta Lagoon, Vaipua Channel, and other marine ecosystems in the country by addressing inconsistencies and deficiencies in legal and policy instruments, as well as competing sector-based priorities. To achieve this, a review of policies and laws will be conducted to identify inconsistencies with conservation and protection of marine biodiversity and ecosystem services as envisaged through the implementation of the FSP. The Outcome will be achieved through four Outputs, described below.

Output 2.1. Strengthened institutional arrangement for the Fanga'uta Lagoon that builds on the Community Management Committees and is inclusive of gender and social diversity

Under the R2R Phase I project, the Fanga'uta Stewardship Plan (FSP) was developed to support sustainable development through partnership-based decision-making. Three Committees, representing all stakeholder groups, were established to make decisions in collaboration. These Committees were the Community Management Committee, Technical Committee, and Steering Committee, supported by the FSP Secretariat. The Secretariat, comprising the Director of DOE, Head of Biodiversity Division, and Head of EIA Division, facilitates coordination and provides the committees with the necessary information to make well-informed decisions. They act as a liaison between stakeholder groups, support the development of new initiatives, and oversee monitoring and evaluation. The FSP management structure provides a mechanism for equitable, gender-sensitive decision-making on priority issues. This output will revitalize the institutional structures, knowledge, and capacity developed under the R2R Phase I project, which have not been fully operational during the interim period following its closure.

This Output will support the following indicative activities: (i) **Provision of additional technical expertise and staffing to the FSP Secretariat** which serves as effective function for the management and decision-making system and oversight of the three Committees for the implementation of the planned FSP action plan. The project will support the FSP secretariat to improve coordination,

collaboration and reinforce communication between the CMCs and the government and support it with technical oversight for evaluation and action planning and monitoring and evaluation; (ii) **strengthening functionality of existing R2R Phase 1 Fanga?uta Management Framework**, including including the FLC Steering Committee, Community management committees, and various district and community action groups through training, capacity development, and improved coordination. The project will enhance the skills of District and Town Officers to improve their interaction with local communities and provide guidance on decision-making and planning for sustainable development. Community and district level committees and action groups will also be strengthened to ensure effective communication of community participation and interests and improve the organization and management of actions at the ground level.; (iii) **reactivating and reinforcing the Technical Committee to provide strategic guidance and technical support** to the CMCs for ensuring stewardship of the Fanga?uta Lagoon. Capacity building and training will help the Technical Committee oversee the Fanga?uta Lagoon monitoring teams and provide guidance to help them undertake effective monitoring as well as reactivate committee meetings to discussion and analysis of monitoring and evaluate the effectiveness of on-the-ground initiatives, so as to enable timely and collective actions to be taken for resource management and achievement of proposed action plan targets and outcomes; and (iv) **assessing and promoting alternative arrangements to ensure the existing Community Management Committee is inclusive of gender and social diversity including representation from the private sector**. This can be achieved through CMC regulations that require a quorum of each group being represented (youth, private sector, men, women and PWD, where possible) in decision making. In addition, major decisions on development within their SMA management plans will require statement of agreement and reasons in support or in opposition of the proposed development or change from each group member representation prior to decision making.

Output 2.2 Review of policy and legislative framework to identify gaps and overlaps in institutional mandates; streamlined policy framework to effectively support the strengthened implementation of the FSP

The implementation of the FSP is intended to manage the Fanga?uta Lagoon using an integrated approach that considers the diverse and inter-linked interactions within it. This output focusses on streamlining policy and legislation to create coherence among the diverse sector interventions operating within the lagoon ecosystem. Specifically, it aims to align the Fisheries Management Act, Environment Management Act, National Spatial Planning Act and Environmental Impact Assessment Act and their corresponding regulations. It also seeks to address overlapping ministry mandates such as those of the Department of Climate Change, Ministry of Lands and Natural Resources, DOE and MAFFF. The policy and legal review will ensure consistency in laws, policies and practices related to sectors such as sewage disposal, fertilizer and chemical usage and leakage, water usage, run off, soil contamination, land reclamation and mangrove protection and other sectors in line with conservation and protection of marine biodiversity and ecosystem services envisaged under the FSP. The Technical Working Group and the National Environment Committee comprising members from various ministries support the process of resolving conflicting and overlapping issues, including monitoring and evaluation functions. This Output will support the following indicative activities; (i) This output will support a team of national consultants to review the policy and legislative framework, identify gaps and overlaps, and recommend a streamlined framework to support FSP objectives. This includes addressing gaps in mangrove rehabilitation work mandates and coordinating activities between DCC and DOE. Development consent permits for proposed projects around the Fanga?uta lagoon area also need to be coordinated between PUMA under MLNR and EIA Act and Regulations under DOE to avoid conflicts and overlaps. Additionally, there are discrepancies and inconsistencies between SMA and MPAs that require coordination between the Ministry of Fisheries and DOE. The Technical Working Group will provide oversight to the project; (ii) **draft amendments to policy**

frameworks and strengthen the implementation of the FSP, action plans and other relational national plans related to the management of the Fanga?uta Lagoon. These amendments might include joint SMA policies for the Fanga?uta Lagoon management, regulations for benefit sharing arrangements and monitoring and enforcement policies. Additionally, the project will seek to develop regulations for management of the Fanga?uta Lagoon Marine Reserve using appropriate policy and legal mechanisms (e.g. Environment Management Act or Birds Act) to strengthen enforcement; (iii) **review of the district development plans and changes to mainstream biodiversity actions and align them to the updated FSP Action Plan and Vaipua Channel Management Plan.** This includes reviewing existing plans within the fisheries sector and any existing SMA plans within the Fanga?uta Lagoon and Vaipua Channel. Collaboration with the MOF is crucial to identify lessons learnt to improve processes for updating or formulating new management plans that aligned with the FSP and proposed Vaipua Channel Management Plan; (iv) **recommend streamlined monitoring and evaluation** of project sites in the Fanga?uta Lagoon and Vaipua Channel with defined roles and responsibilities, standardized methods for monitoring and for data collection, information sharing and adaptive management; (v) **Recommend measures for protection of mangroves and other wetland vegetation**, including strengthening enforcement and compliance under various legislations such as the Land (Timber) Regulations, National Forestry Policy, Bird Preservation Act, EIA Act and Environment Management Litter and Waste Management Act. Preventing destruction and degradation of mangroves and wetland areas will be a key focus of this activity; (vi) **Train Environment Enforcement Officers** to oversee enforcement of the FSP and relevant legislation, and coordinate with other relevant sectors. Additional staff is needed to support the implementation of R2R phase 2, but government operations are currently constrained, so the project will explore ways to recruit and finance additional personnel. DOE will in turn make efforts to retain the project staff after the project for continued implementation of the Fanga?uta lagoon and Vaipua Channel activities, and (vii) **evaluating sustainable financing mechanisms for post-project sustainability**, including accessing the tClimate Change Trust Funds and other measures such as imposing tourism levies and payment for eco-tourism services. The project will assess the ecosystem services to determine the pricing levels for local and international market.

Output 2.3 Capacity of government staff and communities and key stakeholders strengthened on integrated approaches for biodiversity conservation and enforcement procedures.

Output 2.3 aims to enhance the capacity of government and other key stakeholders at national and local levels to enforce key mandates related to marine species conservation, prevention and management of invasive alien species (IAS), sustainable agriculture and mariculture, management of SMAs and livelihood development. To ensure sustainability post-project, training will be provided to key staff in environment, fisheries, agriculture, and infrastructure development, as well as town and district officers, CSOs, community leaders, TWG staff, and CMCs. The training will focus on priority areas such as species conservation, IAS management, and sustainable marine resource management, including sustainable mariculture, fisheries management, climate-smart agriculture, and mangrove conservation. The following are the indicative list of activities under this output: (i) **conduct of a capacity needs assessment for integrated R2R approaches** inclusive of existing and future capacity, training, resource needs, protocols, regulations and legal drivers to support sustainable activities. A consultant with regional experience in integrated R2R approaches will be recruited to conduct a capacity needs assessment. The assessment will identify existing gaps and needs in the environment, fisheries, agriculture, tourism, and infrastructure development sectors, as well as among town and district officers, key NGOs, community leaders, TWG staff, and CMCs. It will also make

recommendations for training, resource needs for integrated R2R approaches; (ii) **organize meetings with key stakeholders** to integrate strategic planning, wetland resource-use methods, marine habitat degradation, and climate change into internal training programs. Develop a GESI-responsive five-year capacity development plan covering techniques and mechanisms for integrated marine resource planning, effective planning and implementation of management plans, and improving monitoring, evaluation, and enforcement. (iii) **implement the five-year training plan** on integrated approaches for biodiversity conservation (see Activity 2.3.1) focusing on the TWG and members of the Fanga?uta Lagoon CMC. TWG training will cover ecosystem-based and sustainable development approaches, GESI and outcome-based monitoring techniques and approaches, data analysis and adaptive management, reporting and communication tools. The CMC training will include communication and consensus building, collective decision-making, monitoring and evaluation, cooperation with private sector and enforcement of rules; (iv) **replication of training programs at Vaipua Channel to build the CMC and district and town officers capacity** for applying integrated approaches to marine ecosystem planning and management. Training will be tailored to the needs of youth, women, and men, including those with disabilities, to enhance their roles in Vaipua Channel management. For example, men can train youth in traditional fishing practices, while older women can teach younger women sustainable harvesting practices for tapa production and medicinal uses. The project aims to integrate scientific knowledge with traditional knowledge to support the sustainability of marine resources in the Vaipua Channel; (v) **establish a confidential reporting mechanism** to enable concerned citizens to report breaches of the law. A consultant will be hired to develop an appropriate mechanism which may consist of a website, design format and procedures for reporting, identify feedback loops and response actions. The project will establish a Grievance Redress Mechanism (GRM) and Consultation and Communication Plan (CCP) to address community concerns. This will include a landline for older people and an online system for younger generations to provide feedback. Complaints will be documented, and actions will be taken until a resolution is reached. The CCP will include registration and complaint forms. The GRM will address serious and sensitive matters, including GBV, VAC, SEA/H, human trafficking, and drug trafficking, with referral pathways.

Component 3. Awareness raising and knowledge management of the ecosystem functions and services of the Fanga?uta Lagoon and the priority Vava?u biodiversity sites

(Total Cost: USD 2,790,500; GEF project grant requested: USD 700,500; Co-financing: USD 2,090,000)

Component 3 will address barriers related to inadequate awareness, knowledge and mainstreaming of women, youth and PWD to conserve biodiversity and achieve integrated management of marine ecosystems, as well as limited opportunities for south-south cooperation and exchanges. Component 3 activities will foster sharing of knowledge and information in user-friendly formats regarding management of marine ecosystems and causes of its degradation, the effects of such degradation and the implication on water and hygiene (WASH), community health and livelihoods. . Activities will result in a set of visual and written knowledge materials that serve as a collation of best practices and lessons learned by local marine resource users, government ministries (fisheries, Environment, Tourism, Agriculture and Forestry) and from regional institutions such as SPREP and SPC? and jointly defined and implemented monitoring activities and tools for key authorities and marine resource users.

These d information materials will be produced to reach a wide audience of men, women and youth in Tonga and the Pacific Region as well as other maritime communities.

Output 3.1 Accessible information system developed in the context of existing national systems, to facilitate informed decision making.

While the FSP articulate the need for ecosystem-based planning and management, this Output will seek to address the lack of critical baseline data on the extent, location, condition and threats on wetland resources and species. It will support a concerted and committed effort, with adequate manpower, skills and funding to monitor the condition of the resource, distribute data, and build the institutional, technical, human and infrastructural capacity needed to support on-going biodiversity monitoring and decision-making. Consequently, the country's knowledge base on biodiversity and natural resources, and capacity for stewardship will be increased. Drivers of, and vulnerabilities to climate change would be better articulated and understood along with solutions to address these vulnerabilities. The project will aim to obtain adequate information on key parameters to inform management decision making. This will be achieved through: (a) developing new, or strengthening of existing national information systems to provide for a simplified, standardized and dedicated information management system and operationalization; (b) strengthening information support system for consortium of government, regional, private and other stakeholders for sharing good practices; (c) setting up of standardized information collection standards; and (d) promoting cross-agency and cross-sector efforts to collect and digitally catalog existing information to support replication. The following are key indicative activities: (i) seek to **assess trends, drivers and hotspots of marine degradation**. A team of national consultants would be recruited to evaluate and assess the functionality of existing information platforms or systems retained by different government departments and authorities and ascertain to what extent these can be brought together into an accessible information system pertaining to the Fanga'uta Lagoon for all relevant staff to access. This information management system also needs to be expanded to include data relating to at least the priority sites in Vava'u (Vaipua Channel and Lualoli, Taula and Maninita Islands). An example is the Excel based information system that the Waste Authority Limited use to record the location and volume of septage emptied from septic tanks and transported for discharge to the septage lagoon on Tongatapu; (ii) **update its existing website** (based on assessment conducted under (i) **above to include a simplified, standardized and dedicated information management system** (including website and social media platforms) either within an existing national information platform (preferred) or create a new system for agreed parameters related to the marine wetland, based on outcomes from Outputs 1.1 and 1.3, including standards for information collection and sharing. This will entail transferring all existing information from the Fanga'uta Lagoon and Vava'u sites into a digital format as well as regular updating. This database will support the collection and documentation of detailed information on species, habitats, threats, water quality and conservation actions, ultimately improving the overall national and sub-national capacity and the ability to effectively target threats and risks. Relevant information and knowledge will also be made available to existing key information systems of the Department of Environment to enhance opportunities for collaboration and cooperation in conservation efforts; (iii) **operationalization of a Wetland Information Management System/platform**, including data collection, input, on-line website and dissemination. This will entail efforts to work collaboratively between the ministries responsible for environment, fisheries, forestry, agriculture and others, including NGOs and conservation organizations (national and regional). A national Information Technology consultant will be hired to establish the information system and input available data; (iv) **establishing information collection standards, formats and procedures** that are gender, age and ability aware and environmentally and socially inclusive, facilitate standardized inputting and recording of information; and provide for digital access and sharing, including compatibility with existing databases to the extent feasible and (v) **promoting a cross-agency and cross-sector effort to collect and digitally catalog existing information** on marine resource planning, biodiversity and

marine resources management best practices, resulting in a highly accessible, usable, and catalogued bibliography of available resources in support of replication and upscaling.

Output 3.2 Education and awareness programs using a range of media expanded to support marine conservation

Output 3.2_ will develop, test and implement an education and communications strategy and action plan, based on an analysis of lessons learned from other GEF projects in the country to raise public awareness of the crucial importance of marine biodiversity and ecosystem services, the risks and impacts from unsustainable resource use and degradation and the broad benefits of ecosystem-based management. The plan will be developed in Year 1 for testing and implementation in coordination with the relevant sector entities and NGOs/CBO partners on the ground, as well as news media, radio and local newsprint media and social media. Effectiveness of the strategy and plan will be evaluated internally at the end of Year 2, and adaptive measures/lessons incorporated. Specific approaches, tools and materials will be needed in the local language, low levels of literacy in rural areas and challenges with absence of electricity, thus internet and mobile access (e.g. by working through local shortwave radio, extension services and face to face-meetings supported by local teachers, church leaders or nurses, women, youth and PWD in the target areas. Communication products and approaches included in the strategy might include posters or videos of threatened and endemic marine species, pollution and unsustainable use risks and the benefits of community based integrated ecosystem conservation approaches along with supported technologies which contribute to halting and reversing marine species and ecosystem degradation, as well as targeted campaigns for iconic species conservation or to address particular threats. Community chiefs and church leaders will be engaged as important advocates in the demonstration communities. Sustainability mechanisms will be explored to ensure that MEIDECC and Ministry of Fisheries can maintain a communications function beyond the end of the project.

The education and communications strategy and action plan is intended to ensure that the Project is well understood, accepted, and implemented effectively and equitably; knowledge management products are shared and used; understanding of integrated R2R planning is increased; understanding and implementation of best practices is improved; and the public has an increased understanding of marine issues, support for marine ecosystem and species conservation and its management actions. Ultimately the public and communities should champion the unique marine biodiversity of the Tongan Islands at both national and local levels, implementation of the Gender Mainstreaming Action Plan (and other Vulnerable Populations) so that a gender and socially inclusive perspective is applied to every set of activities; research on gender and social roles in the marine space informs resulting plans and ensures equitable distribution of benefits; and information is collected and shared across gender and social lines. Specific topics of learning and success that might evolve from the project sites might include the participatory sustainable fisheries or sustainable tourism, livelihood improvement, waste management, outcomes or impacts of sector specific actions, resilient mariculture development, and

participatory monitoring, as well integration of livelihood development planning, soil, land and water management, etc. The initial documentation of these lessons will be included as part of the participatory monitoring process, that would be complemented by additional national technical support to distil and document lessons and experiences. The project will support regular workshops at the national and local level (Year 3 onwards) to share lessons and experiences and a national workshop at the end of Year 6 to facilitate the sharing of lessons more widely and enable replication nationally.

This Output would support through the following indicative activities: (i) **developing a GESI-sensitive national communication program/plan to expand and continue that education and awareness** established under the R2R Phase I project for promoting lagoon ecosystem services and marine litter reduction using a range of media including church and school education programs; school curriculum; video, radio and television; social media, annual Fanga?uta Lagoon festival, annual information outreach for Vava?u priority areas during Environment week (potentially in collaboration with existing/on-going events) and support for project website. This will also include activities aimed at increasing awareness of marine biodiversity and biodiversity and sustainable resource use among young people, via youth groups in the demonstration wetlands and through formal and informal education / churches nation-wide. The effectiveness of the communication plan will be periodically monitored through household and youth surveys to enable adaptive management. The education and awareness communication plan will assess the effectiveness of the R2R Phase I actions to ensure that the public (and in particular local communities) has an increased understanding of marine biodiversity and ecosystem functions, support community-based marine resources conservation and management through promotion of sustainable resource use, management of fisheries activities and actions to reduce threats to these ecosystems, including control and management of waste, pollution, marine litter and plastic reduction, over exploitation of fisheries resources and mangroves and the prevention and management of invasive alien species. Ultimately, the public (at the national level), in particular the local communities (at the site levels) should champion the unique marine biodiversity of the Tongan Islands and be strongly engaged through personal actions, preventing and reporting unsustainable and illegal and activities and localized management of marine habitats through both personal actions and community-based activities; (ii) **implementation of the GESI Mainstreaming Action Plan** so that (a) a gender equality and social inclusion perspective is applied to all activities; (b) research on gender and social roles in the marine wetlands informs project plans and ensures equitable distribution of benefits; (c) SAAD data is routinely collected and shared across gender and social lines; (d) specific investments are aimed at women, youth and PWDs, and (e) capacity for GESI mainstreaming is increased within communities and districts and with project partner organizations; (iii) **organize national and site-specific workshops to facilitate dissemination of field lessons and help inform legal and policy reform** relevant to marine conservation practice. Specific topics of learning and success that might evolve from the pilot sites might include the participatory sustainable fisheries or agriculture, sustainable tourism, livelihood improvement, planning, outcomes or impacts of sector specific actions, resilient agriculture development, and participatory monitoring, as well as integration of livelihood development planning, land and water management, etc. The initial documentation of these lessons will be included as part of the participatory monitoring process, that would be complemented by additional national technical support to distil and document lessons and

experiences. The project will support regular workshops at the national and site level (Year 3 onwards) to share lessons and experiences and a national workshop at the end of Year 5 to facilitate the sharing of lessons more widely and enable replication nationally. As part of this activity, the project will support lessons sharing forums in Tongaat to share lessons in relation to the Fanga?uta Stewardship Plan and produce video documentaries in both the English and Tongan language to be aired nationally and regionally in knowledge sharing platforms; (iv) **support the development of a low-cost interactive learning facility in Tongaat** on the multiple benefits provided by the Fanga?uta Lagoon and its wetland ecosystem. The project will support the re-establishment of the Environment Resources Information Centre (ERIC) through the provision of information and media awareness materials and storage of all information and data from both project sites (including survey reports, data analysis etc.) that will be maintained by DOE and made accessible to students and researchers interested in marine resource and sustainability projects; (v) **establish an annual awards and recognition scheme for local action** on Tongatapu and Vava?u to conserve and improve the lagoon environment for Fanga?uta Lagoon and Vaipua Channel, including recognition of women, youth and people with disabilities in conservation. This could tie in with the annual Environment week outreach. This would require establishing a set of criteria for the awards, selecting a team of judges and securing sponsors from the private sector or bilateral agencies to provide annual prizes that will motivate and encourage community participation and engagement in conservation activities around the Fanga?uta lagoon and Vaipua channel and (vi) **support a citizen science program for locals including youth focused on environmental issues, monitoring and marine conservation good practices**. This can include activities such as site visits, short trainings on mangrove planting, coral reef surveying and monitoring with the youth, conducted on a quarterly basis by district around the VC and FL. In addition, a science fair or exhibition day to showcase projects and recycling of waste found in the Fanga?uta lagoon and Vaipua Channel can also be established to further enhance scientific interest in biological, chemical and physical processes that take place within these ecosystems.

Output 3.3 South-South cooperation and exchanges implemented in the area of integrated management of lagoon ecosystems that is most applicable in Pacific SIDS and beyond.

To bring the voice of the Kingdom of Tonga to global and regional fora, the project will explore opportunities for meaningful participation in specific events where UNDP could support engagement with the global development discourse on marine conservation issues. The project will furthermore provide opportunities for regional cooperation with countries and other regional partners that are implementing initiatives on integrated marine conservation and management in geopolitical, social and environmental contexts relevant to the proposed project in Tonga. In particular, this would include close collaboration, knowledge sharing and exchange visits with Pacific Small Island Development States (PSIDS) that are implementing similar projects. The GEF 7 project will seek opportunities for collaboration with SPREP, SPC, Global Coral Reef Monitoring Network (GCRMN), Pacific Climate Change Centre (PCIC), Global Ocean Acidification Observing Network (GOA-ON), Pacific Islands Blue Foundation (PIBF), Pacific Island Development Forum (PIDF), International Maritime Organization (IMO), Locally Managed Marine Area (LMMA) Networks and others in the region. This

Output would support through the following indicative activities: (i) **host South-South cooperation and exchanges** in the area of integrated management of lagoon ecosystems that is most applicable in Pacific SIDS and beyond. Visitation between countries to support dialogue and Knowledge Sharing platforms on lessons learnt and best practices to support transfer of knowledge for improved implementation of relevant project activities; (ii) **participate in relevant regional and global events for information and lessons sharing and learning**. The project will explore options for financial support to allow women and men from project communities to attend regional meetings or COP events to share grassroots level experiences at these high level meetings to highlight vulnerabilities of communities to climate change impacts to strengthen ecosystem-based adaptation and opportunities for sustainable financing to implement FSP and Vaipua Channel Management plan once completed; (iii) **promote knowledge sharing and best practices through formal and informal networks, study visits and improved communication channels**. Collaboration between Pacific Island countries that implement similar SMAs or LMMAs is paramount in establishing partnerships to promote these knowledge exchange programs. Initial activities can include the identification of a regional body such as SPREP or FAO that can support and collaborate with UNDP in delivering and championing this as an annual program depending on success of previous study visits.

Output 3.4 M&E system supports project impact including GESI mainstreaming

Output 3.4 will deliver a M&E system that supports project impact including gender and youth mainstreaming and adherence to social and environmental safeguards, building on baseline best practices and lessons from other projects in the Tongan Islands and across the Pacific. As part of this effort, Output 3.4 will support: (i) the development and implementation of monitoring framework, based on the Results Framework Agreement to validate baselines and monitor progress in achieving project outcomes and impacts will be undertaken; (ii) a review and regular update of M&E plan, including results framework baselines, tracking tools, Theory of Change to subsequently adopt these findings to implement all aspects of the project; and (iii) a mid-term and terminal evaluation will be conducted in line with UNDP/GEF requirements and incorporate and adapt recommendations of MTR to revised project plans and monitor their implementation. This output will support the following indicative activities: (i) **development and implementation of monitoring framework**, based on the Results Framework Agreement to validate baselines and monitor progress in achieving project outcomes and impacts on an annual basis to be in line with corporate plans, annual management plans and annual reporting; (ii) **review and regular update of M&E plan**, including results framework baselines, tracking tools, Theory of Change to subsequently adopt these findings to implement all aspects of the project.. Implement a quarterly meeting schedule for the TWG, Steering committee and CMC and circulation of newsletter to update on activities and track progress of the project as well as identify urgent follow up actions to ensure the negative project impacts are mitigated; and (iii) **conduct mid-term and terminal evaluations** in line with UNDP/GEF requirements and incorporate and adapt recommendations of MTR to revised project plans and monitor their implementation. This will be complemented by an effective fortnightly or monthly reporting system to be developed in order to

facilitate evaluation periods of the project and allow easy identification of outstanding issues that require follow up and urgent actions to address project challenges.

(3) Alignment with GEF focal area and/or Impact Program strategies

The proposed project is consistent with the GEF 7 Focal Area Strategies, in particular the Biodiversity Strategy and two of its objectives, which are:

- ? BD Objective 1: Mainstream biodiversity across sectors as well as landscapes and seascapes;
- ? BD Objective 2: Address direct drivers to protect habitats and species

More specifically, in terms of GEF program BD-1-1 (*to mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors*), the project contributes to this focal area program by: (i) demonstrating how seascapes can be sustainably managed in a holistic and integrated manner across the full spectrum of stakeholders (i.e. agriculture/fisheries/tourism, etc.), while focusing specifically on safeguarding the natural functions of marine ecosystems as well as food production systems; (ii) improving focus on working with local communities through the existing Special Management Area (SMA) approach and building on participatory and traditional customary system, towards enhancing activities that contribute to biodiversity conservation, sustainable resource use and new and sustainable income opportunities. Mainstreaming will be delivered through improved inter-sectoral coordination, integration into priority sectors (agriculture, fisheries, forestry and infrastructure development) through zoning to ensure that resource use support production does not undermine biodiversity or ecosystem services. It will also support sharing of information and improved tools for decision-making, technical support and capacity building, demonstration and knowledge sharing and provisions of incentives to change marine management practices that degrade biodiversity and ecosystem services. Without the GEF project, it is likely that there will be limited effort at integration of biodiversity in sectoral development activities and will result in further loss of biodiversity and associated habitats through pollution, waste disposal, over-fishing, land reclamation and sediment deposition in the lagoon. This will be corrected through improved coordination across a multitude of agencies developing regulations, guidelines and protocols for R2R planning and management and institutional and coordination structures; improving capacity of agencies to facilitate mainstreaming of biodiversity and ecosystem services and strengthening monitoring and information management systems. Overall, the project will contribute to this focal area objective by: a) supporting government to mainstream the conservation of biodiversity into priority sectors (particularly agriculture, forestry, waste management and tourism) through improved inter-sectoral governance, planning and information management within the framework of the FSP; and b) improving R2R management to be more biodiversity-positive, with a focus on working with communities to diversify towards sustainable resource uses and livelihoods that deliver new income while also contributing to biodiversity conservation and maintenance of ecosystem services. Mainstreaming will be delivered through improved intersectoral coordination that will require the identification of entry points in revision cycle of relevant corporate plans, policies, sectoral plans, and national strategies and action plans, improved regulations, sharing of information and improved tools for decision-making, technical capacity building, demonstration and knowledge sharing and provision of incentives for communities to change current practices that are degrading biodiversity.

In terms of the GEF program BD-2-6 (*address drivers to protect habitats and species*), the project will support the implementation of the FSP that provides a comprehensive management tool for conservation and protection of the biological resources within the lagoon and other marine systems, address threats to these resources and comprehensive prevention of underlying causes for the degradation of the marine environments. The GEF increment will: (i) support the implementation of the FSP and strengthening of effective governance for coordination and management of use of the lagoon resources; (ii) develop tools and practices for reduction of threats from unsustainable agricultural practices and expansion, fisheries, tourism and infrastructure development, technical capacity, demonstration of threat assessment, prevention and response, including monitoring to feed back into adaptive management; (iii) accredited training and guidance provided to community members to empower them in safeguarding the productive and natural marine ecosystems from threats; (iv) improved management of PAs (including community managed marine areas) through Special Management Area programs, demonstration of best practices in resource use and threat management and management and skill development; (v) safeguard measures will be demonstrated in the two target Islands to protect and rehabilitate biodiversity and marine food production systems; and (vii) awareness raising and knowledge sharing including with other marine ecosystem-based initiatives across the Pacific Islands.

5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

Table 2: Incremental Cost Reasoning

| Baseline | Alternative to be put in place | Project impact including GEBs |
|--|---------------------------------------|--------------------------------------|
| Conservation of Critical Lagoon Ecosystems and Management of the Catchment to Improve Biodiversity and Ecological Services of the Fanga?uta Lagoon and Replication in Priority Areas in Vava?u | | |

| | | |
|---|--|--|
| <ul style="list-style-type: none"> -Significant long-term efforts needed to build on the learning and experiences from the R2R Phase I project to implement the FSP -Limited and incomplete efforts at addressing current unsustainable patterns of resource use in Fanga?uta Lagoon -Limited appreciation among communities for uptake of the Special Area Management approach -Many households unaware of the ecosystem and community benefits that emanate from protection and restoration of mangroves, seagrass beds and coral reefs -Marine PAs not effectively managed for lack of best management practices and skills -Mangrove exploitation continues on an unsustainable basis -Limited concerted efforts to ensure sustainable and environmentally-friendly practices for improving community incomes - | <ul style="list-style-type: none"> -Effective implementation of updated Fanga?uta Stewardship Plan -Improved management of Fanga?uta Lagoon marine reserve for biodiversity conservation -Effectiveness of Special Managed Areas improved through co-management arrangements with local communities -Improved restoration of degraded marine habitats enhance ecosystem services -Communities sustainably manage, protect and use mangrove resources -Ecotourism opportunities and alternative livelihood operations enhance local incomes and community engagement in conservation activities | <ul style="list-style-type: none"> - 1,530 hectares of new Protected Areas created, including the following: (i) 373 hectares Vaipua Channel PA and (ii) 1,157 hectares added to existing Laualoli, Taula and Maninita Islands Marine Reserve -3,030 hectares of marine PAs under improved management effectiveness, including the following: (i) existing Fanga?uta Lagoon Marine Reserve of 2,835 hectares and (ii) existing Laualoli, Taula and Maninita Islands Marine Reserve of 195 hectares -At least 20 point Increase management effectiveness for Fanga?uta Lagoon Marine Reserve and Laualoli, Taula and Maninita Islands Marine Reserve -120 hectares of wetlands restored, including 20 hectares of coral reefs, 20 hectares of sea grass and 80 hectares of mangroves -1,800 hectares of Fanga?uta Lagoon effectively managed as Special Managed Areas (SMAs) by local communities for conservation and sustainable use -101.5 hectares of mangroves under sustainable harvest and use regimes by local communities - At least 15% increase in incomes from communities engaged in livelihood activities (tourism, organic agriculture, fisheries, mangrove products, permaculture, agro-forestry etc. thus increasing their incentives to participate in conservation outcomes |
|---|--|--|

Governance: Policies, Institutions and Capacity Building for Sustainable and Adaptive Management and Biodiversity Conservation

| | | |
|---|---|--|
| <p>-Institutional arrangements for the Fanga?uta Lagoon (and Vaipua Channel) needs strengthening and improved coordination</p> <p>-Compartmentalized application of policy and legislation lack recognition of the diverse interactions that operate in the marine environment</p> <p>-Incomplete understanding of the status and health of the marine ecosystems on account of the limited monitoring and public support</p> | <p>-Strengthened institutional arrangement for the Fanga?uta Lagoon</p> <p>-Gaps in policy and legislative framework for management of Fanga?uta Lagoon addressed</p> <p>-Capacity for integrated approaches for wetland biodiversity conservation and sustainable use of marine resources strengthened</p> <p>-Monitoring and reporting systems, including public engagement for reporting of conservation outcomes strengthened</p> | <p>-Increase in capacity of institutions for wetland conservation and sustainable use</p> <p>-At least three policy instruments for support improved conservation of marine biodiversity and ecosystems through effective FSP implementation streamlined</p> <p>- Functionality of Multi-stakeholder Management Committees for Fanga?uta Lagoon marine reserve and Vaipua Channel marine reserve enhanced enabling effective coordination and decision-making for implementation of marine conservation actions</p> <p>-Monitoring and reporting systems track status of marine biodiversity and ecosystem health</p> <p>- Improved Change adaptation benefits (CCA) to local communities through improved management of the Fanga?uta Lagoon and Vaipua Channel, diversified livelihoods,. improved ecological benefits from mangrove and other marine ecosystems restoration, etc.</p> |
|---|---|--|

Awareness raising and knowledge management of the ecosystem functions and services of the Fanga?uta Lagoon and the priority Vava?u biodiversity sites

| | | |
|--|--|---|
| <ul style="list-style-type: none"> -Marine ecosystems remain poorly appreciated due to lack of baseline information for decision-making - Awareness and understanding about marine biodiversity, ecosystem service values and threats is limited at all levels and in all sectors, which constrains engagement and behavior change. -No comprehensive efforts to raise awareness of the benefits and need for conservation of globally threatened and endemic species, ecosystem management and threat reduction. | <ul style="list-style-type: none"> -Accessible information platforms for facilitating informed decision-making established -Award and recognition schemes promote local action for conservation and improving environments in marine wetland habitats -Increased awareness and knowledge sharing promote community conservation actions -Monitoring and evaluation enable adaptive management of marine ecosystems | <ul style="list-style-type: none"> -Improved awareness among local communities on importance of marine ecosystems and value to their livelihoods among 50% of beneficiaries -Ten lessons of best practices in marine biodiversity conservation and sustainable use available for public access - Ten 10 initiatives demonstrate active participation and knowledge exchange in Pacific wetland biodiversity conservation and special area management platforms |
|--|--|---|

6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The GEF investment will maximize this opportunity by introducing an integrated Ridge to Reef or landscape/seascape management approach that will mainstream marine biodiversity and marine ecosystem considerations in the overall vision for the country. It will also remove systemic and institutional barriers to mainstreaming integration of biodiversity consideration, land and marine ecosystem management, backed by incentives for community-based marine natural resource management to make sustainable land, and marine management compatible with effective marine biodiversity and marine ecosystem management. The support of the further operationalization and continuation of the Fanga?uta Stewardship Plan that was developed in the R2R Phase I project in general terms, the integration of marine conservation considerations into key sectors (i.e., agriculture, fisheries and tourism) will help to improve the management effectiveness of the marine ecosystems, prevent species extinctions, sustainably conserve globally significant biodiversity, and protect and improve marine ecosystem function in the country; thereby strengthening the national economy and local livelihoods, and generating global environmental benefits. Specific measures to manage unsustainable marine resource uses as well as protection of marine habitats and ecosystems that will benefit from project interventions within the two marine seascapes will help improve conservation of indigenous biodiversity and reduction of threats from unsustainable marine resource use and damaging and unsustainable impacts of pollution, over-exploitation of marine resources and land based waste inflows. The emphasis of promotion of sustainable marine resource use, special management areas, pollution and waste reduction, reduction of mangrove cutting and restoration of degraded marine ecosystems across the two globally important marine seascapes, supported by more resilient and engaged communities demonstrating the value of a nature-based economy will deliver climate change mitigation and adaptation co-benefits.

The project will generate global environmental benefits for biodiversity and ecosystem services over approximately 4,680 hectares of marine areas that includes a mix of community resource use areas, natural habitats and area of marine habitat that includes mangroves, coral reefs and seagrass beds. The global biodiversity significance of the Fangaʻuta lagoon is reflected in its value for protection of fish species and for protection of mangroves as the key nursery habitat for finfish including snapper and mullet. The biodiversity values of the lagoon is noted in the IUCN Directory of Protected Areas in Oceania published in 1991 and the Tongaʻs NBSAP Stocktaking Report of 2004 which record the number of species in the lagoon. The Fangaʻuta Lagoon marine reserve fits into IUCN Category VI i.e. a protected area with sustainable use of natural resources. The Fangaʻuta Lagoon is also important culturally as a place of beauty and enjoyment, and it has a rich archaeological history dating back over 2,850 years to early Lapita settlement. The project benefit the globally significant biodiversity that depends on them and contribute to the GEF core indicators as follows: 3,030 ha of marine protected areas under improved management for conservation and sustainable use and 1,530 ha of newly created marine protected areas (Core Indicator 2) and 120 hectares of marine wetland habitat restored (mangroves, coral reefs and sea grass bed) (Core Indicator 3); The project offers strong potential for climate change mitigation and adaptation co-benefits through nature-based solutions in coastal and marine ecosystems as well as improved protection from severe weather events ? floods, storms, droughts etc. These co-benefits will be integrated into project activities as far as possible. Project implementation will provide direct benefits to 45,985 people (50% female) in the two demonstration seascapes (Core Indicator 11) who depend on the functioning of these ecosystems for the rich ecosystem services they provide. The project will demonstrate livelihood benefits (diversification and improved income) through business support for blue/green livelihoods options to improve or replace existing unsustainable livelihoods (including fishers and marine resource dependents), with the potential for wide replication. This will result in reduced conflicts between communities over natural resources and with the government and private sector, as well as reducing threats to marine biodiversity and attendant ecosystem services.

7) innovativeness, sustainability and potential for scaling up

Innovation

The project will build on and try to replicate proven ?best practices? from the R2R Phase 1 project and other examples from the Pacific region to support an integrated ecosystem-based focus on conserving the endemic and globally threatened wetland biodiversity of Tonga, on addressing watershed degradation, unsustainable marine resource use and on the addressing the impacts of IAS across the marine ecosystem ? in a way that also supports blue-green economy opportunities for local communities that is linked to the governmentʻs broader development strategy and longer-term COVID-19 recovery potential. While, the proposed integrated landscape/seascape approach will benefit greatly from increased and high levels of ownership of existing community managed SMAs and establishment and improved management of marine protected areas, it will further try to integrate non-fisheries activities into a broader and holistic integrated resource management approach through innovative coordination mechanisms and platforms that involve a wider range of government, non-governmental

and community partnerships. This move from a local fisheries planning approach to a more holistic integrated multi-sector resource management approach is an innovative and modern approach to mainstreaming marine biodiversity into economic and sectoral planning. The strengthening and improved functionality of existing innovative FSP governance and institutional structures will provide an enhanced national multi-stakeholder and multi-sector coordination mechanism for marine biodiversity conservation, threat management and promotion of best practices will ensure that resources and capacity are being used as effectively as possible. This governance structure will be extended during Phase II to be more inclusive of women and youth through connecting with additional established women's groups such as the Tonga Community Development Trust and the Women's Council for Tonga, and through involving the country's aspiring young leaders from the Tongan Youth Parliament in addition to the Tonga National Youth Congress. The project is also innovative in that it will develop the first land-use spatial plan in Tonga. Innovative modelling approaches are proposed: an integrated water quality assessment of the lagoon catchment using a groundwater numerical model to improve understanding of the behaviour of lagoon side aquifers and transport of pollutants through groundwater; and assessment of rehabilitation options through a coupled hydrodynamic-ecological model. There is also potential for innovation in establishing alternative blue/green livelihoods to mitigate the impact of the fishing restrictions in the SMAs and the protection of mangroves which might otherwise be used for firewood or dye for tapa cloth. Innovative examples of alternative livelihoods include urban agriculture initiatives and woven pandanus leaf containers to provide an alternative to single use plastics (recent training has been provided in Tonga for weaving pandanus leaf containers through a Global Green Grant coordinated through the Civil Society Forum of Tonga). The proposed interactive learning facility to demonstrate the benefits of the mangroves and lagoon ecosystem services will be innovative and encourage more education visits from within Tonga and overseas. The project will actively seek to identify how citizen science data collection methods and techniques can be used to leverage additional data on species distribution and land condition (including traditional knowledge and information on species and resource condition), while also raising awareness and engagement of communities.

Sustainability

The long-term commitment of the Government of Tonga to protecting its natural marine and coastal endowments provides very positive signs for sustainability of project impact. The Tonga R2R Phase I project has already proven to be sustainable with the Angulate Lagoon governance framework established during Phase I continuing to the present including the regular meetings of the CMC. The Phase II project proposes to strengthen this institutional arrangement and provide capacity building to governance staff. The Phase I project manager was employed by the Department of Environment after the conclusion of Phase I and provides a key sustainability role in project coordination for Phase II. The public awareness programme, the project website and the community initiatives such as mangrove planting and coastal clean-ups have also proved to be sustainable beyond their implementation during Phase I. The estimated government budget allocated to support the continuing implementation of the FLSP will be a minimum of \$250,000 per year to cover water quality monitoring and implementation

of the land-use spatial plan. This will ensure the financial sustainability of the Tonga R2R Phase II project. VEPA are also providing co-financing to support the proposed activities in Vava'u

114. To facilitate long-term sustainability of marine conservation activities, including in the Fanga'uta Lagoon, the project will ensure the following: (i) support tailored training and capacity building through an capacity assessment at the beginning of the project implementation period to strengthen functionality and capability of existing institutional structures and CMCs; (ii) strengthened collaborations across sectors and stakeholders for improved management of marine systems; (iii) outreach and awareness programs delivered at national, district and village levels in parallel to build local community and stakeholder support for sustainable marine resource use and conservation; (iv) Identification of the best option for livelihood improvement to support alternative incomes for marine resource dependent communities, and (v) absorption of key contact positions supported by the project, including the project coordinator, technical coordinator (Vava'u), and Operations Support Officer into government service at the end of the project.

Potential for scaling up

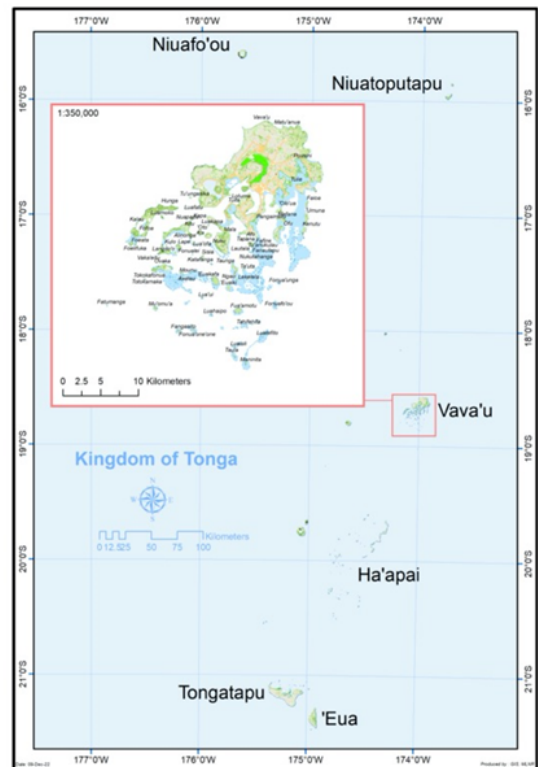
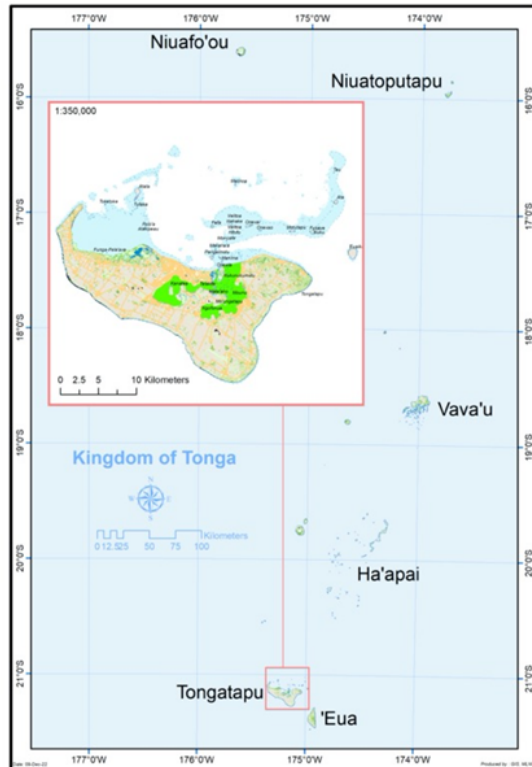
The project is also designed to provide demonstration models for up-scaling in the country. In particular, the capacity building and the development of best practices to control and manage marine resource degradation, sustainable fisheries management, waste management and alternative livelihoods will strongly support up-scaling. Ensuring that activities, impacts and lessons learnt from the demonstration sites are disseminated widely helps generate a bottom-up demand for similar activities throughout the country. The project's investment component will seek to develop synergies among sector actors and programs with an objective of raising additional emphasis on marine conservation. The Tonga R2R Phase II project, in itself is an upscaling project by applying the lessons learned from Fanga'uta lagoon to Vava'u. As the approaches and tools in biodiversity conservation through participatory approaches are further refined in this project, the lessons learned may be replicated in other island groups within Tonga. It is noted that Output 3.3 will ensure that scaling up will not only happen nationally but also regionally in the Pacific and globally in SIDS in other parts of the world.

[1] <https://rmportal.net/biodiversityconservation-gateway/learning-groups/conservation-enterprises/ce-documents>

[2] 2014 ? SPREP Rapid Assessment of the Biodiversity of the Vava'u.

1b. Project Map and Coordinates

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



1c. Child Project?

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

2. Stakeholders

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

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above, please explain why:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

- ✘ During the PPG phase, the project objectives, and potential activities/interventions were introduced to identified stakeholders, including CMC communities, district and national agencies, and private sector representatives. In addition, extensive field consultations were undertaken within the two marine sites which involved 700 people, 57% of who were female, who would potentially be affected persons/stakeholders. A consultation report has been developed and results are also summarized in the GESI Mainstreaming Action Plan (GAP), which is contained in Annex 10 of the ProDoc. A full list of stakeholders consulted during project design has been recorded via attendance lists.[1]

The project also developed a preliminary Stakeholder Engagement Plan (SEP) (see Annex 8 of the ProDoc), to ensure that all groups of people, including those who are marginalized and underrepresented, participate in and benefit from the Project, including their contributions to assess potential social and environmental impacts and the development of adequate management measures. As necessary, the Stakeholder Engagement Plan will be updated during Project implementation based on project experience and lessons learned.

✘

The project will develop a Communication and Knowledge Management Plan in the early part of project implementation. The objective of this plan will be: (a) to reach out to the project's main stakeholders, including in particular local communities to inform them about the project and the expectation of their basic roles and responsibilities; (b) to take advantage of their experience and skills; and (c) to secure and safeguard their active participation in different project activities to reduce obstacles in its implementation and in its sustainability post-completion. The approach is based on the principles of fairness and transparency in selection of relevant stakeholders and, through consultation, engagement and empowerment, ensure: (i) better coordination between them from planning to monitoring and assessment of project interventions; (ii) access to relevant information and results; accountability; (iii) application of the grievance redress mechanism as required; and (iv) sustainability of project interventions after its completion.

Identification, Roles and Responsibilities of Stakeholders:

Stakeholders are identified in Annex 8 of the UNDP Project Document, along with their potential roles and responsibilities. The Communication and Knowledge Management Plan will identify goals and guiding principles, target audiences, community needs, tools and key messages. The following initiatives below will be taken to ensure participation of stakeholders in project activities.

Project inception workshop:

Project stakeholders will participate in the multi-stakeholder inception workshop within three months of the start of the project. The purpose of this workshop will be to create awareness amongst stakeholders of the objectives of the project and to define their individual roles and responsibilities in project planning, implementation and monitoring. The workshop will be the first step in the process to build partnership with the range of project stakeholders and ensure that they have ownership of the project. It will also establish a basis for further consultation as project implementation commences. The inception workshop will address a number of key issues including: assisting all partners to fully understand and take ownership of the project; detail the roles, support services and complementary responsibilities of project partners in terms of implementation of R2R planning and management; discussion of gender equity and social inclusion principles and how they will be applied during implementation, and discussion of the roles, functions, and responsibilities within the project structure, including reporting and communication lines, monitoring and conflict resolution mechanisms.

Awareness and Engagement Strategy and Action Plan:

This Plan will facilitate improved awareness and engagement of stakeholders (in particular local communities) of the project and its contents; and it includes details on best practices to use with particular stakeholder groups. The project will regularly review and update the Plan to ensure that all stakeholders are informed on an ongoing basis about the project's objectives, activities, progress, and opportunities for involvement. The project will develop and maintain public pages and other locally adaptable communication means (Output 3.2) for sharing and disseminating information on marine biodiversity and ecosystem conservation, good fisheries, marine resource use and agricultural and waste management practices, IAS prevention and management. Activities in the Communication and Knowledge Management Strategy to engage stakeholders and stakeholder groups include:

- ? **Quarterly meetings with key stakeholders.** On a quarterly basis, the Project Board will hold meetings that involve key stakeholders to discuss achievements, challenges faced, corrective steps taken, and future corrective actions needed for the implementation of planned activities. Results-based management and reporting will be informed by stakeholder inputs during such meetings.
- ? **Sharing progress reports and work-plans.** Copies of annual and quarterly progress reports and work plans will be circulated to stakeholders to inform them about project planning, implementation and outcomes, as well as through public forums, including web based.
- ? **Participatory approach for involving local communities.** Such an approach will be adopted to facilitate the active participation of local communities, either as a group or through their CMCs, including men women, and youth group representatives as well as people's disability organizations (DPOs) in the planning, implementation and monitoring of project activities. Facilitation training for state planning teams will be supported. To ensure participation of local communities, the project will develop Memorandum of Understanding (MOU) with CMCs before implementing key project activities.
- ? **Stakeholder consultation and participation in project implementation.** The national awareness and engagement plan will be developed and implemented immediately and reviewed at quarterly meetings with stakeholders to assess its effectiveness.

Table 3: Stakeholder Engagement Plan

| Stakeholder | Roles and Responsibilities / Mandate | Engagement During Implementation |
|---|--|---|
| Government Entities | | |
| <p>[Executing Agency] Department of Environment, MEIDECC</p> | <p>The MEIDECC, through the DOE is mandated with overseeing environmental management including the administration of the Environment Act and the objectives of CBD (1992). The DOE's responsibilities include the conservation and management of: (i) the environment and biodiversity; (ii) the protected areas network. The MEIDECC supports synergy between biodiversity, climate change, and disaster risk management. A project coordination office supports synergies between donor-funded projects.</p> | <p>The DOE is responsibility for project execution and will be involved in all aspects of governance and implementation as well as potentially hosting the project management office</p> <p>Lead the FSP Secretariat which is the central point of contract for all initiatives in the FLC area.</p> <p>CEO of MEIDECC will be the Chair of the Project Board</p> |

| | | |
|--|---|---|
| <p>Ministry of Fisheries</p> | <p>Responsible entity for the Sustainable management of Tonga's fisheries; establishment of community based SMAs; foster sustainable and profitable commercial fisheries and aquaculture.</p> <p>Coordination of co-financing project for Tonga Pathway to Sustainable Oceans</p> | <p>Part of the Project Board Directly participates in the Technical working Group Coordinates the planning and implementation of the SMA program Participates actively in the development of the FSP action plan and in policy and legal reviews</p> |
| <p>Department of Agriculture, Ministry of Agriculture, Food and Forestry and Fisheries (MAFFF)</p> | <p>Coordination of development activities to maximize the contribution of the agriculture sector towards sustainable economic growth and food security with sustainable livelihoods.</p> | <p>Participates in the Technical Working Group Supports moving to sustainable agriculture and agricultural related livelihood programs under the project Develops and support pesticide and chemical application program in agricultural lands. They also provide chicks for communities to establish and manage chicken coups for small scale commercial use within the communities.</p> |
| <p>Department of Forestry/MAFFF</p> | <p>Promotion of sustainable management and efficient use of forestry resources including mangroves.</p> | <p>Participates in the Technical Working Group Supports the mangrove restoration program in the project sites and providing seedlings for terrestrial replanting programs. With the focus on Green managed areas (GMA) this department would play a key role in regulating and supporting green growth for food security and alternative livelihoods.</p> |

| | | |
|---|---|---|
| <p>Ministry of Lands, Survey and Natural Resources</p> | <p>Ensure that the laws of the Kingdom of Tonga relating to the management and protection of lands and natural resources are implemented, enforced and reviewed, in accordance with national and international obligations to global conventions and laws.</p> <p>Prepare plans, policies and legislations to ensure efficient service delivery to the people and effectively carry out the monitoring of impacts on the lands, and natural resources and devise protection measures.</p> | <p>A member of the Project Steering Committee and directly participates in the Technical working Group. MLNR plays a key role and works closely with DOE in establishing marine protected areas and SMAs. This includes support for cabinet approval, GIS support for providing GPS coordinates and demarcating MPA and SMA boundaries.</p> <p>The Ministry holds the mandate for zoning and drafting master plans for protected areas and would be key in developing the Popua Master plan Participates actively in the revision and implementation of the FSP action plan and in policy and legal reviews</p> |
| <p>Ministry of Infrastructure</p> | <p>The mandate of MOI is specifically determined by their existing parliamentary acts, regulations and all international commitments under different conventions relating to transport and infrastructure. This includes the TSDF2, National Infrastructure Investment plan to improve infrastructure (roads in communities), building standards etc.</p> <p>Ensures that community infrastructural needs are not left out and helps ensure that plans are integrated and aligned at the community level.</p> | <p>Member of the Project Technical Committee .Specifically, MOI will collaborate with the project to manage support infrastructural plans for the community and their maintenance. MOI will also provide support in identifying future infrastructural development in the Fanga?uta lagoon area that may affect the implementation of phase 2 project.</p> |
| <p>Waste Authority</p> | <p>A Government owned Public Enterprise mandated with managing the safe disposal of waste throughout the country</p> | <p>Will support the project in finding suitable solution to solid and liquid waste disposal and management. Will support community clean ups and provide advise</p> |
| <p>Prime Minister?s Office National Planning Division</p> | <p>Responsible for TSDF II project. SDG and Samoa Pathway alignment</p> <p>Responsible for corporate planning and budget processes in consultation with the Ministry of Finance</p> | <p>Part of the Project Board</p> <p>Will enable the strengthening of coherence ti sector plans, oversight and review of corporate plans to ensure synergies</p> |

| | | |
|---|---|--|
| Department of Women's Affairs, Ministry of Internal Affairs | Promotes GESI policies and stakeholder coordination with women, youth and disability development groups and ensuring whole of society approach to achieving equity and inclusion. | Participate in the Technical Working Group. Facilitate GESI mainstreaming, coordination, reporting and coherence. Will provide oversight to ensure GESI Action Plan is implemented and results are achieved. MIA could also assist with training and capacity development of project staff and partners. |
| Ministry of Tourism | Responsible for tourism development in Tonga to ensure support, development and increased inclusive, sustainable and resilient tourism in partnership with local and international stakeholders | Will directly support planning and implementation of community and private sector led tourism development in the project areas |
| Tonga Tourism Authority | The main mandate is marketing and promoting Tonga as a tourism destination. At the moment, they are looking for opportunities to support infrastructural development and boost eco-tourism with communities particularly exploring snorkeling in SMA sites, developing villages for cultural tours, pearl farming which will focus on strengthening engagement with interested communities to promote their villages as an eco-tourism destination. | Since local communities do not see tourism as a reliable source of income TTA can provide training and support by the government to promote community-based tourist activities as well as providing co-financing for training, assets and market support. Possible ecotourism options include support for canoe tours and sea kayaking tours on lagoon (e.g. slipway for launching boats) etc. |
| Tonga Chamber of Commerce | Business interest and oversight of private sector involvement | Support the establishment of community business ventures in conservation enterprises and alternative livelihood programs |
| Prime Minister's Office District Officers and Town Officers | Responsible for Local development coordination and local actions on mainstreaming of biodiversity in development activities District and town interests in the Fanga'uta Lagoon and Vaipua Channel | Participate in the FSP Steering Committee Member of the Community Management Committees and will support community related activities in the project sites |

| | | |
|---|--|--|
| <p>Government Regional Development Committees -Vava?u Island Development Committee -Tongapatu District Development Committees - Tongapatu Constituency Development Committees -Community Committees</p> | <p>Local area/island management units helping to ensure a) that community wide interests are effectively represented by Town and District Officers in the CMC; b) that discussions and decisions made at CMC meetings are effectively communicated back to individuals within communities and c) the organization and management of action on the ground at community and district levels.</p> | <p>Participate in project steering committee and member of the Vava?u Island Development Committee Supports coordination, coherence, functional partnerships of stakeholders for improving livelihoods and promotion of impactful project interventions</p> |
| <p>Ministry of Tourism</p> | <p>The Ministry of Tourism in coordination with the Ministry of Trade and Economic Development issue licenses to private entities for tourist development in the Kingdom for accommodation, restaurants, travel agencies, tour guide licenses (certificate), transportation (taxis, shuttle, buses for visitors particularly from Cruise ships).</p> | <p>A major opportunity for supporting eco-tourism activities in communities is to cater to Cruise ship visitors requests for site tours in the villages and also promoting handicraft for sale and traditional dancing through floor shows at village sites. Most often these are hosted by resorts (Oholei), however communities can be supported in establishing sites within their communities to host visitors.</p> |
| <p>Tonga Development Bank</p> | <p>A significant provider of banking finance in Tonga to promote Tonga?s economic and social advancement.</p> <p>TDB is a member of the Regional Development committee as it is a key partner for integrating community resilience approach to society whole approach, prioritizing plans and finance.</p> | <p>Member of the Project Technical Committee.</p> <p>Partner for Financing of plans and activities for women and youth, sector plans for agriculture, fisheries, ocean and handicraft.</p> <p>It will help with financing strategies for community activities for women and youth, and men participation for mutual benefits and equity assurance.</p> <p>TDB will help as delivery partner for UNDP and Environment Department in ensuring that implementation will have no room for delay due to administrative/financial/procurement processes of UNDP. TDB is willing to support MEIDECC Environment Department with an effective banking and delivery financial services for efficient financial disbursement and delivery.</p> |

| Non-Government Organizations | | |
|--|--|--|
| Vava?u Environmental Protection Association (VEPA) | Group of local leaders concerned about environmental issues in Vava?u with focus on biodiversity and conservation, knowledge exchange and promotion of sustainable livelihoods. | VEPA will support conservation actions in coral reefs, mangroves and other natural habitats. Facilitate environmental awareness and educational activities |
| Waitt Institute | Creates and implements sustainable ocean plans in partnership with governments, local stakeholders and communities, facilitates policy making and helps build long-term success by providing expertise, funding and tools for spatial planning, development of blue economy, sustainable fisheries and marine protection | Could provide expertise for marine spatial planning, capacity building, assessment of potential for blue economy planning, enforcement planning, monitoring, communication and funding |
| Civil Society Forum of Tonga (CSFT) | The Civil Society Forum of Tonga (CSFT) is the overarching organization that coordinates NGOs and other NGOs are members of the CSFT. Each NGO has their area of specialty dealing with either environmental, social or humanitarian issues. | The CFST can help facilitate coordination with NGOs in the country and in identifying key NGOs that can supports specific project related activities, including participation of women, youth and people with disabilities, support livelihood activities, mangrove conservation, ecotourism, etc. |
| Tonga National Crisis Center and the Women Crisis Center | Lead agency for addressing GBV in the country | Can facilitate promotion of GESI for the project, capacity building training, decision-making skills, etc. |
| National Council for Women | Lead agency for handicraft training and marketing, cultural and heritage promotion, gender mainstreaming through traditional governance | Promotion of GESI through handicrafts in Tongapatu and potential for expansion to Vava?u to support women?s development |
| Women and Children Crisis Center | One of the lead agencies for gender mainstreaming in the country | Can facilitate promotion of GESI, capacity building for women and youth, particularly in decision-making and empowerment |
| Leiti Association | Deals with LGBT and people with disabilities | Key agency that can support the project to identify and address measures (including training, capacity development, empowerment and participation) of people with disabilities |
| Women?s Council for Tonga (WCT) | NGO for women's that support business of women, including for handicrafts and tourism development. WCT is under umbrella of Ministry of Internal Affairs and CSFT. | Potential member of the CMCs Support community business development opportunities, training and enhancement of role of women in planning and decision-making |

| | | |
|--|--|--|
| Tonga National Center for Handicrafts | Supports women's membership in small business development and loans for weaving and handicrafts | Can provide training and skills development in handcraft making as well as marketing within the country and overseas |
| Tonga National Youth Congress (TNYC) | Promotion of youth leadership and participation in mangrove conservation and restoration, soil conservation, waste management etc. | Potential partner for mobilization of youth groups to support conservation and restoration activities in the project areas, ecotourism promotion and organic farming. Can also support in accessing small grants from other financial sources to support conservation action |
| Tonga Community Development Trust | Tonga Community Development Trust has been the lead NGO agency on environmental issues and management with communities until recently as the staff numbers are considerably lacking. Involved in projects that support community mangrove nurseries | Directly partner with CMCs for mangrove planning and restoration |
| Nobles Fono | Traditional noble estate holders that can support EIA recommendations and monitoring for land use, mangrove conservation and use, and supporting community initiatives | Provides a mechanism for discussion on land allocation and private investments |
| Community Groups | | |
| Community Management Committees/FMA Committees | CMCs are local community institutions that have been engaged in community actions | Key players in the planning and management of SMAs |
| Private Sector | | |
| Ancient Tonga | This is a family run business offering personalized interactive cultural tours. An informative in-depth tour on Tongan traditions, livelihoods and way of living in a community. With lush Tongan gardens it has the amenities to cater for tours: cultural individual, group tours catering to cruise ship visitors. They also host events: buffet and Friday night functions | 64. Agro-forestry planting at the Ancient Tonga site in Vaini and constructing a mangrove trail for visitors with information signage highlighting mangrove ecosystem values and support community led clean-ups of coastal environment near the eco-tourism sites. |

[1] See Annex 8 of the UNDP Project Document (Stakeholder Engagement Plan)

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

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor; Yes

Co-financier;

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

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

In Tonga, traditional gender roles and expectations have a significant impact in the participation of women and men in agriculture, fisheries, livelihoods and rural development. Men are typically viewed as primary 'bread winners' and decision-makers, while women are expected to take care of the household chores and provide care for the children and other family members. Farming and fishing are generally considered men's responsibilities, and contribution of women farmers and fishers is often undervalued. However, recent sector policies acknowledge the crucial roles that women play in agriculture and fisheries, and also recognize the differential impacts that resource degradation and climate change can have on women. This traditional gender role is also reflected in the governance of natural resources including land ownership. The majority of land in Tonga is owned by the nobles and every male Tongan is entitled to access a town allotment and a bush allotment for farming once they reach the age of 16. Men can 'rent' land from a noble can inherit land use rights. Tongan women have no rights over land, cannot own land and can only have temporary access to land. While women can legally lease land, it is often difficult to do so. In addition to women being excluded from certain realms of Tongan culture, other marginalized people, such as persons with disabilities and those with diverse sexual orientations, can also face discrimination and barriers to equal opportunities and full participation in society.

Decision-making mechanisms within the community and villages are largely dominated by men^[1]. These mechanisms are reinforced by both cultural and social norms. Women are largely limited in their ability to participate in both informal and formal businesses despite the fact that they are actively engaged in the economy through subsistence production and in-kind and marine resource exploitation work. Barriers to women's participation in small businesses include time constraints due to

reproductive and caregiving responsibilities, subsistence food production and community expectations that women will provide free labor to prepare and serve food at community and church events. Women's involvement in subsistence, rather than commercial fisheries, appears due to gender norms, access to transport and fishing gear, in that this is considered 'men's work'. Another factor is that women are not as likely to own assets, including transport. Additionally, women's levels of education and lack of business literacy make it more difficult for them to identify and respond to opportunities and understand requirements of formalized business development. Geographic isolation, poor financial services, weak transportation and telecommunication networks and lack of knowledge on quality assurance and marketing are all barriers to women's engagement in employment. Financial inclusion programs and savings clubs are working to increase women's financial literacy and opportunities to save and learn basic business skills. However, power differentials within households and systems of traditional obligation often make it difficult. Tongans use ferries, small private boats, a nationally-owned airlines and roads to travel around the country. Transportation costs are generally high relative to incomes. This limits mobility, especially for poor women who have few income generation opportunities. Service delivery and the quality and safety of services are negatively impacted by isolation of rural communities and lack of infrastructure. Despite these challenges, the Tonga R2R Phase I Terminal Evaluation found that the project gave priority from the project development phase to implementation and made efforts to include women in all activities to enhance their knowledge and capacity, build leadership capacity, improve their economic situation, increase food production and decrease drudgery. The project also helped in increasing equity regarding access to and control over production resources, equity in sharing benefits and reducing inequities in gender distribution of labor. Both women and men benefited from the activities of the project. Women were also highly represented in the community groups formed with the support from the project and several of them were also led by women. Through support to CBOs, both women and men's capacity to manage their own groups was built

The Government of Tonga has committed itself to advancing gender equality and social inclusion of marginalized groups through the endorsement of a variety of international and regional conventions and agreements. It has also endorsed several major international development agreements, including 'The Small Island Developing States' (SIDS) Accelerated Modalities of Action (SAMOA) Pathway (2014), the Sustainable Development Goals (2015), and to implementing a more inclusive sustainable and empowering human development outcome by strengthening its commitments to SDG 1 (No Poverty), 3 (Good Health and Wellbeing), 4 (Quality Education), 5 (Gender Equality), 8 (Decent work and economic growth), 10 (Reducing Inequalities), 11 (Sustainable Cities and Communities), 13 (Climate Action), and 17 (Partnership for Goals). Tonga has agreed to conclusions of the Commission on the Status of Women. However, Tonga is one of only two Pacific countries that have not yet ratified the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). Its current women's policy and plan of action is *Women's Empowerment and Gender Equality Tonga (WEGET) 2019-2025* developed by the Ministry of Internal Affairs Social Protection and Disability (MIA), Women's Affairs Division (WAD). Tonga has endorsed key regional agreements on gender equality, more specifically, the Pacific Platform for Action (1994, 2004, 2017) and the Pacific Leaders Gender Equality Declaration (2012). These regional agreements identify priorities for the region and

provide guidance to countries in developing their own national gender policies, strategies, plans and programs. The MIA Youth Development Division oversees youth development. Tonga has ratified the Convention on the Rights of the Child (1995) and recently approved the Tonga National Youth Policy & Strategic Plan of Action 2021-2025. The GoT became a signatory to the United Nations Convention on the Rights of Persons with Disabilities (CRPD) in 2007 but has yet to ratify the Convention. Tonga has a national disability policy in place (Supreme Court of Tonga, 2020). The priorities are to eliminate discrimination, ensure realization of all human rights, including freedom from torture or cruelty, and access to opportunities for education and work, as well as providing the necessary services and public infrastructure to support people with different forms of disability to enjoy mobility and high quality of life. The National Disability Policy is silent on CCA and DRR, but in a recent analysis of disability in Tonga, the researchers recommended that GoT ensure appropriate enabling policies and guidelines to ensure the incorporation of relevant climate change and disaster risk management (in keeping with TSDF Organizational Outcome 5.4).

Tonga ranks 105 out of 189 countries in the 2021 Gender Inequality Index (GII—a composite measure reflecting inequality in achievement between women and men in reproductive health empowerment, and the labor market) with a score of 0.418 (2021). There are a number of underlying constraints to enhancing gender equality in the country. Overall, the legal and policy framework related to GESI is still weak and political will for mainstreaming GESI in agriculture and the rural sectors varies, but it is generally low. There is lack of recognition of the ways in which gender shapes diverse roles, needs and constraints of rural women and men and lack of acknowledgment that gender is a factor directly affecting people's agency. Progress on GESI mainstreaming is largely driven by externally-funded projects and overall, there is little to no collection of sex-disaggregated data by government staff, nor are information management systems in place to easily store and retrieve the required data. Technical capacity for GESI mainstreaming is limited across the government. While some technical support is being provided to the government, it is not sufficiently sustained to support consistent action between inputs. There is an urgent need for widespread GESI training of government staff at every level, as part of current non-performance can be attributed to lack of knowhow. Accordingly, there is an urgent need for sex, age, area, disability (SAAD) data collection, including the training required for best practices, to measure gains in GESI mainstreaming.

Overcoming GESI, in particular for rural women requires a number of actions, including improving the production and analysis of SAAD disaggregated data relevant to gender equality, strengthening the capacity to monitor on the impacts of policies, plans and services on rural population, strengthening GESI mainstreaming capacity in key natural resources agencies, providing training on GESI mainstreaming, strengthening monitoring and evaluation of policy implementation, supporting studies to identify economic opportunities for women in the context of blue and green economies, strengthening women's resilience to climate change impacts and their ability to sustain their natural resource based livelihoods, increasing access to extension and development support and enhance the quality of delivery of rural services.^[2] In relation to the above, gender and social inclusion considerations have been integrated into the project design (under Output 3.2) in line with the GESI

Mainstreaming Action Plan (Annex 10 of UNDP Project Document). As the project entails a multi-stakeholder approach in dealing with R2R planning, marine resource use and management and address of marine ecosystem degradation, integration of GESI concerns is critical to ensure equity and participation of both men and women. Rather than focus on women only, the project has adopted an approach that puts equality and inclusion at the center of planning, implementation and monitoring to ensure that 'no one is left behind' regarding of gender, age, ability, social or economic status or place of residence. The R2R planning approach may have significant long-term impacts on both gender and social groups, and thus the GESI Mainstreaming Action Plan includes specific actions for applying a gender and socially inclusive lens to every decision, expanding representation, filling in gender and social-based research gaps, and investing in approaches to gather and share information among a wider audience. It is the intent of this project to become a model for improved GESI mainstreaming for replication and expansion in government and community planning processes. GESI mainstreaming in the project will be addressed (refer Annex 10 of UNDP Project Document) through the following actions:

- ? Reducing the burden and drudgery of work on women and improving their livelihood opportunities through improved access to resources and services.
- ? Ensuring gender equality and social inclusion in opportunities for education, skill building, training and capacity building.
- ? Promoting the voice, participation and empowerment of women and are accessible to a range of abilities and reducing opportunities for elite misuse of benefits and leaders' sole decision making
- ? Ensuring that project materials, including meeting agendas, reporting templates, communications materials, and all written policies include gender and social mainstreaming and are accessible to a range of abilities;
- ? Creating and requiring minimum standards for community planning teams, including representation from multiple gender and social groups and/or tasking of planning team members to speak for vulnerable peoples;
- ? Capacity building and training for project staff and planning team facilitators to include the input of multiple groups into resulting plans;
- ? Investing in staff to enable adequate connections with multiple groups. Instead of general community meetings, meetings with (i) women's groups; (ii) men's groups; (iii) youth groups; (iv) PWD groups; and (v) individuals with access to or influence over vulnerable people (e.g., landowners or village leaders);
- ? Applying a gender and socially inclusive lens to every meeting, report, plan, and activity;
- ? Diversifying sustainable livelihood opportunities, specifically for women, youth and PWDs

? Implementing the Communications and awareness plan, including holding multiple, targeted meetings by disaggregated groups;

? Making better use of oral/audio content, with less emphasis on writing to better communicate with women and youth; and

Incorporating gender and socially sensitive indicators and collect gender and age disability-disaggregated data for monitoring and evaluating project results.

[1] Guttenbeil-Likiliki (2007) Advancing Women's Representation in Tonga

[2] Country Gender Assessment of Agriculture and Rural Sector in Tonga, FAO 2019

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

Yes

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

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

Yes

4. Private sector engagement

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

The private sector will be engaged in this project through the management framework set up during Tonga R2R Phase I. The private sector is represented through the Tonga Chamber of Commerce representative on the NECC.

As described under Section 3. Stakeholders, a number of private entities and non-governmental organizations will support local communities in ecotourism and income-generation activities. Ancient Tonga would like to be involved during Phase II through new eco-tourism offerings related to their Tinopai Farm on the Fanga'uta Lagoon. The Tinopai eco-tourism site supports the objectives of the Phase II project with extensive mangroves, many plantings of fruit, flowering, medicinal and timber trees. The site includes 13 acres of dense mature mangroves with a flourishing marine ecosystem. There are two proposed tour packages covering sustainable farming, mangrove ecosystems and the ancient Lapita pottery found onsite. Ancient Tonga are also interested in offering a kayaking tour on the Fanga'uta Lagoon in the future, for example from Popua to Captain Cooks landing. These eco-tourism tour offerings could also provide flexible employment opportunities for women youth. The

Women's Council of Tonga will support business development for women for handicrafts and ecotourism. The Tonga Development Bank will finance plans and activities for women and youth in agriculture, fisheries, tourism and handicraft development. The Tonga National Youth Congress will promote youth leadership and participation in mangrove conservation and restoration, soil conservation, waste management etc. Additionally, the project will seek support from small-private business investors and tourism operators and agents to support ecotourism activities for local communities, training and marketing for small-business development activities.

There is good potential to promoting small-scale community-private sector partnerships for the agriculture, fisheries and sustainable marine resource sectors through engagement between local producers, agricultural cooperatives and retailers to build stronger markets for local, healthy foods from well-managed ecosystems. Similarly, post-COVID, opportunities should re-emerge to engage the tourism sector and resorts for establishing financial mechanisms to support environmental improvements for example through the establishment of small rolling funds, managed by those enterprises.

5. Risks to Achieving Project Objectives

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

Risks will be monitored by the PMU with oversight from UNDP CO. Since the risks are not directly related to achievement of results, the risks innate to the co-financing relates largely to availability of staff time, office space and utilities and in terms of the 'Parallel Financing' these are existing commitments from international development agencies or NGOs that have limited risks and likely will not affect the implementation of the project. The key project risks, including social and environmental risks and measures for management and mitigation of these risks are presented in Table 4 below:

Table 4: Risk Matrix

| Risk | Rating | Mitigation Strategy |
|---|----------|---|
| General Risks | | |
| <i>Competing mandates and poor coordination between government agencies/line ministries and district authorities might interfere with the effective implementation of project activities</i> | Moderate | Coordination between government agencies will be strengthened through existing FSP coordination arrangements established under the auspices of the R2R Phase I project, to improve planning, implementation, reporting and monitoring. This will also include improving the functionality and capacity of the existing FLC s Steering Committee, Technical Committee, District and Community Actions Groups, CMCs and District and Town Offices through additional training, technical support, equipment and financial resources |
| <i>Political support for legal, governance and institutional framework for management of wetlands might be lacking</i> | Moderate | Improved coordination mechanism across sectoral agencies and between national and district entities, improved information management systems, and development of sector specific sub-management plans will follow on the successful measures employed under the phase 1 project |
| <i>The developed capacities of governmental (particularly agencies that would be responsible for resource planning and management) and supporting collaboration, coordination and technologies are not sufficient to create a viable and effective means to prevent marine resource degradation and its unsustainable use</i> | Moderate | In line with the above, there is an increasing realization that there is a need for a national capacity development plan (based on a capacity needs assessment) for strengthening the management of marine ecosystems in the country. To support this, a critical aspect of the project is to ensure that there is a national strategy for improving capacity of all stakeholders in the planning, management, monitoring and enforcement related to the marine environment |
| <i>Limited capacities of local stakeholders, including fishers, farmers, and other natural resource dependents ensure sustainable and appropriate use and management of natural resources that results in reduction of threat to endemic species and ecosystems</i> | Moderate | The project will benefit from best practices of R2R planning and the testing of innovative approaches for community management of coastal and marine areas under local community governance mechanisms. These approaches will be innovative and build on existing tested practices as well as best practices available from other parts of the country or regionally. The support for improved blue/green livelihood measures will build adequate incentives to enhance local community participation in ensuring conservation outcomes. The lessons learned including the feedback on R2R planning will be channeled back into the collective knowledge base and will be used in other areas in the country. |
| <i>Limited awareness and knowledge might result in limited political support for biodiversity and ecosystem conservation and management within the country</i> | Moderate | Awareness and knowledge management activities will aim to promote a better understanding and acceptance of supporting natural resource management and its sustainable use |
| <i>Instability in the economic and political global environment might impact on co-financing, government priority shift away from conservation goals</i> | Moderate | This impact would be addressed to an adaptive management approach to adjust and revise project implementation activities to take global concerns, including climate and Covid manifested impacts |

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| <p><i>The overall feasibility and likelihood of the long-term sustainability of the project might be constrained by the varied activities leading to the fragmentation of resources and impacts</i></p> | <p>Moderate</p> | <p>The design of project activities was made following an extensive review (and consultation) of institutional capacity, resources and skills to determine realistic targets and activities for project investment. On the basis of this, project design entailed (i) selection and focus of demonstration activities to ensure impacts and benefits to communities; (ii) planning at site level will be made in consultation with local communities and other stakeholders to ensure that these are meaningful and manageable within the community capacity; (iii) planning and implementation of on-the-ground activities to be made through existing community organizations (CMCs) rather than create new institutions; (iv) planning and implementation will be undertaken in consonance with efforts at enhancing community capacity and skills, demonstration and extension provided to enable uptake, with the support of the fisheries, district and town officers in cooperation with local agricultural, tourism, waste management and forestry staff; (v) enhanced coordination along key line agencies to ensure that activities in the 2 sites are planned and implemented taking into consideration the human, time and financial resources at the disposal of each site); (vi) ensure that activities and expectations were realistic given the capacity and institutional structures within the country; (vii) building on the work already done under the R2R Phase I project ensure that efforts are directed at investments that are cost-effective, likely to succeed and provide direct economic benefits to local communities, avoid overlap and enhance collaboration with sector activities and build on what has already been done; (viii) regular monitoring investments on the ground to enable adaptive management, as and when necessary; etc.</p> <p>The project design includes significant level of technical oversight, extensive training and extension services to build capacity within the country.</p> |
| <p>Social and Environmental Risks[1]</p> | | |
| <p><i>The restriction of access to specific areas for rehabilitation and planting of mangroves, seagrass beds and coral reefs could impinge on traditional livelihoods and potentially restrict access to some resources.</i></p> | <p>Substantial</p> | <p>The development of restoration plans will follow community consultations, and ensure written agreements are achieved with land owners and community management committees. A participatory approach detailed in the Stakeholder Engagement Plan will be applied to ensure that the project will avoid producing inequitable or discriminatory adverse impacts on affected populations, especially the most vulnerable, among them, women, those living in poverty and/or marginalized. To compensate for any restrictions imposed on traditional mangrove use, the project proposes to designate Specially Managed Mangrove Areas across the Fanga?uta Lagoon catchment and establishes Community Management Committees inclusive of gender and social diversity to oversee restrictions on use and participate on decision making. Additionally, a Grievance Redress Mechanism for the Project will be established.</p> |

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| <p><i>The project risks reinforcing current gender-inequalities and social exclusion related to access to natural resources and benefits</i></p> | <p>Moderate</p> | <p>Implementation of the Project GESI Action Plan that identifies strategies to promote equality and inclusion and address existing barriers. For instance, SMA governance committees will have representation from women and youth who will comprise at least one third of members. GESI targets will be established for activities and mainstreaming capacity will be built at national, sector, district and community level. These efforts will assist with closing equity and exclusion gaps in access to and control over the natural resources of fisheries.</p> |
| <p><i>The implementation of the restoration plans and the alternative livelihoods that will be identified during the implementation phase may have an adverse impact on the local ecosystems, as well as pose occupational and community safety risks.</i></p> | <p>Moderate</p> | <p>The scoped ESIA's to be conducted upon definition of the restoration plans will inform the assessment of impacts and risks and the definition of management measures. Alternative livelihoods will be identified and implemented in close consultation with communities and informed by a Livelihoods Action Plan and consultant livelihoods reports. The implementation of the restoration plans will follow an Environmental and Social Management Plan (ESMP) to avoid, mitigate and compensate impacts and risks.</p> |
| <p><i>Capacities of implementing agency and local stakeholders, competing mandates and poor coordination between government agencies/line ministries and district authorities, and weak overall governance systems might interfere with the effective environmental and social management of project activities.</i></p> | <p>Moderate</p> | <p>The project will ensure tailored training and capacity building in SES and environmental and social management, through capacity assessment at the beginning of the project implementation period to strengthen functionality and capability of existing institutional structures.</p> |

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| <p><i>Exposure of the country to the impacts of climate change including extreme weather events / climate anomalies may affect the success of mangrove and seagrass planting in coastal sites.</i></p> | <p>Moderate</p> | <p>A climate change risk screening has been conducted during the project preparation stage, to ensure that the project sufficiently considers risks associated with climate change impacts that may affect project planning and implementation. : Project activities have been developed in line with national climate plans/frameworks/actions/agendas. Activities have been designed with a climate lens applied. Ensuring increased cover of healthy mangroves is a risk reduction effort for storm surges. Climate risk will be factored in the planning process so that project level risk reduction activities will be emphasized. The project will carry out planting activities at the appropriate timing to allow for seedlings to get established before cyclone season.</p> |
| <p><i>The project may not effectively engage and ensure participation of all stakeholders, including women, youth and vulnerable community members during the project design and the implementation phases. Due to existing inequalities, rights holders may not have the capacity to claim their rights..</i></p> | <p>Moderate</p> | <p>The project uses a participatory approach for the definition of key activities and conservation areas, included in the Stakeholder Engagement Plan. The ESMF includes the details of the Grievance Redress Mechanism to be implemented, which will ensure access to all affected parties.</p> |
| <p><i>The project could contribute to cumulative environmental or social impacts in the area through unintended negative consequences from policy or legislative changes, such as those proposed under Output 2.2, or derived from upstream works, such as the proposed Fanga?uta Lagoon Crossing bridge project by ADB</i></p> | <p>Substantial</p> | <p>A Strategic Environmental and Social Assessment (SESA) will be conducted to evaluate potential cumulative environmental or social impacts derived from upstream works or from the implementation of policy or legislative changes.</p> |

During project development, the project was reviewed using UNDP's social and environmental screening procedure (SESP). The analysis identified a range of potential social and environmental impacts associated with the project activities. The SESP report (Annex 5) details the specific environmental and social risks that apply. The significance of each risk, based on its probability of occurrence and extent of impact, has been estimated as being Low, Moderate, Substantial or High. Where a risk is identified and assessed as being of Moderate, Substantial or High risk, it triggers the relevant standard or principle.

The UNDP's Social and Environmental Screening Procedure (SESP) has resulted in an overall 'substantial' risk rating for the project. According to the 2019 SESP guidelines, a project is considered to have 'substantial' social and environmental risk when it 'includes activities with potential adverse social and environmental risks and impacts that are more varied or complex than those of Moderate Risk projects but remain limited in scale and are of lesser magnitude than those of High Risk projects (e.g. reversible, predictable, smaller footprint, less risk of cumulative impacts)'.

The Project's design has integrated the requirements triggered by the UNDP Social and Environmental Standards (SES) in order to ensure that any potentially adverse effects can be avoided or mitigated during implementation, and that the anticipated positive social and environmental outcomes are achieved. Nevertheless, there are some specific project activities and locations that will not be fully defined until the Project is initiated. Therefore, the project's ESMF (Annex 9 of UNDP Project Document) establishes a framework that guides the screening and categorization, level of impact assessment, required institutional arrangements, and processes to be followed for components or activities of the project that will be further specified during project implementation.

A summary of the risk significance under each SES principle and standard, and the project-level safeguard standards triggered by the relevant project interventions/activities, are shown in Table 5 below.

[1] Social and Environmental Risks are rated as per the SESP: low, moderate, substantial or high.

Table 5: Summary of safeguard standards triggered based on screening conducted during preparation

| Overarching Principle / Project-level Standard | |
|---|---------------|
| Principle 1: Leave No One Behind | ✓ Moderate |
| Principle 2: Human rights | ✓ Moderate |
| Principle 3: Gender Equality and Women’s Empowerment | ✓ Moderate |
| Principle 4: Sustainability and resilience | ✓ Substantial |
| Principle 5: Accountability | ✓ Moderate |
| Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management | ✓ Substantial |
| Standard 2: Climate Change and Disaster Risks | ✓ Moderate |
| Standard 3: Community Health, Safety and Security | ✓ Moderate |
| Standard 4: Cultural Heritage | |
| Standard 5: Displacement and Resettlement | ✓ Substantial |
| Standard 6: Indigenous Peoples | |
| Standard 7: Labor and Working Conditions | ✓ Moderate |
| Standard 8: Pollution Prevention and Resource Efficiency | ✓ Moderate |
| Number of risks in each risk rating category | |
| High | 0 |
| Substantial | 2 |
| Moderate | 6 |
| Low | 0 |
| Total number of project risks | 7 |
| Overall Project Risk Categorization | Substantial |
| Number of safeguard standards triggered | 11 |

In line with the initial project SES categorisation, an ESMF was developed (Annex 9 of UNDP Project Document) during project preparation. The ESMF identifies the steps required for detailed assessment of the project’s potential social and environmental risks, and for preparing and approving the required management plans for avoiding, and where avoidance is not possible, reducing, mitigating and managing identified adverse impacts. It also sets out the additional safeguards measures that apply to the project during the inception phase, including but not limited to:

- i. Developing a **Strategic Environmental and Social Assessment (SESA)** assess impacts and risks from policy advice and reform, and from risks derived by upstream works;
- ii. Screening of project activities and specific interventions/outputs not yet fully specified, using the SESP, to ensure that associated impacts are adequately managed;

- iii. Developing scoped Environmental and Social Impact Assessments (SE, with their respective **Environmental and Social Management Plans (ESMP)** for implementation of restoration plans;
- iv. Ensuring adequate consultation and consensus with affected stakeholders; and,
- v. Livelihood's assessment to assess the project's impact on the socio-economic and livelihoods conditions of project affected peoples at the demonstration sites as outlined in Component 1 and 2 (to be incorporated into the **Livelihood Action Plans** ? part of the ESMPs to be developed in Year 1).

The relevance of the identified risks may vary across sites, and the significance or likelihood of the risks or impacts identified by the current SESP will not be uniform across all locations. Further screening is required to identify site-specific risk significance, and to effectively target any required further impact assessment or management.

6. Institutional Arrangement and Coordination

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

Implementing Partner: The Implementing Partner for this project is Department of Environment, Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC). The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document.

The Implementing Partner is responsible for executing this project. Specific tasks include:

- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Overseeing the management of project risks as included in this project document and new risks that may emerge during project implementation.
- Procurement of goods and services (below the \$5,000 threshold value)including human resources.
- Financial management of project advances, including overseeing financial expenditures against project budgets.
- Development, approval and signing the multiyear workplan.
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

Responsible Parties: The Responsible Partners for the project would be the Ministry of Fisheries that will provide technical and extension support, training and logistical support towards sustainable fisheries management and planning, implementation and monitoring the Special Management Area (SMA) program.

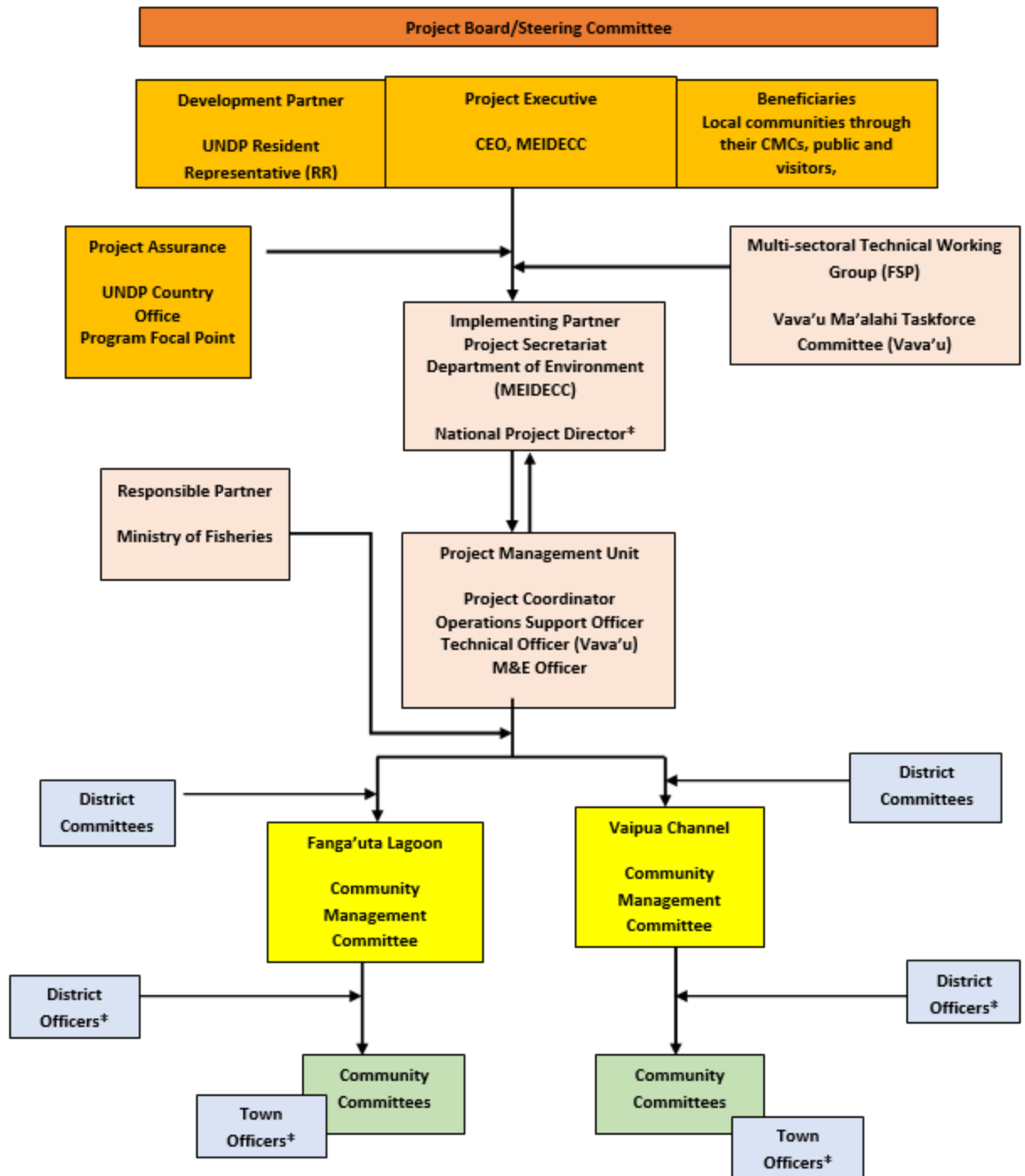
Project Governance: The governance structure for the project will continue with the same arrangements that was in place for the earlier GEF R2R Phase I project, except that it will also now be extended to include the Vava'u activities, in addition to the Fanga'uta lagoon activities. The FSP Secretariat (referred to the 'Secretariat') will be the management and decision making body related to both the Fanga'uta Lagoon and Vava'u activities. The Secretariat is based in the Department of Environment (DOE), and comprises the Director of DOE, Head of the Biodiversity Division and Head of the EIA Division. The Secretariat will act as liaison between stakeholder groups, support the development of new initiatives, and coordination between ongoing initiatives and oversee monitoring and evaluation process and provide core information and support to the various committees that operate in the target sites. The Community Management Committees (CMCs) brings together the communities living in the Fanga'uta and Vaipua catchment areas and provides a forum to enable communities across the area to share information, discuss issues and achieve consensus in decision making on development and resource use priorities. Each community is represented through their Town Officer. District wide interests are also represented through the District Officers. The Town and District Officers bring the views and interests of their communities to the table for consideration in decision making on issues relating to the stewardship and sustainable development of the FLC and Vaipua Channel areas. The CMC also has representation from NGOs through the Civil Society Forum of Tonga (CSFT), National Youth Congress and Women's Council for Tonga (Langafonua a Fafine). As national level organizations, these NGOs support grassroots organizations and also share experience, ideas and lessons learnt from other initiatives across Tonga. In bringing together representatives from all of the communities in the project areas, the CMC plays an important oversight and coordination role. It works to build partnerships within and between communities to ensure that community interests are brought to the attention of the Technical and Steering Committees, and that community recommendations are included and respected within decision making.

The Town and District Officers are responsible for calling community meetings to discuss community matters at the community or district level. Specific interest groups such as fishers, farmers, women or youth are represented through dedicated committees or action groups. District level committees and action groups provide fora for discussion, collaboration and coordination of action across districts within the target areas. Community and District level committees are key local area management units, helping to ensure that (i) community wide interests are effectively represented by Town and District Officers in the CMC; (ii) discussions and decisions made at CMC meetings are effectively communicated back to individuals within communities and (iii) the organization and management of action on the ground at community and district levels.

The project will supported by two technical committees, the Multi-sectoral technical working group for the Fanga'uta Lagoon and the Vava'u Ma'alahi Taskforce Committee for activities in Vava'u. These Committees will provide strategic guidance and technical support to the CMCs and the Steering Committee for effective stewardship of the target areas in Fanga'uta Lagoon and Vava'u. The knowledge and experience of its members is key in the assessment of issues affecting ecosystem based management and sustainable development across the target areas, and for the identification of opportunities to address issues and achieve targets and objectives. The Committees will also oversee monitoring teams, ensuring that they have the resources and guidance necessary to undertake effective monitoring. Committee meetings will provide an important forum for discussion and analysis of data from monitoring, to support evaluation of the effectiveness of initiatives, the identification and prioritization of issues, and of mechanisms to address them. In the case of the FSP, the Chair of the Technical Committee is the CEO of the Ministry of Meteorology, Energy Information, Disaster Management, Environment, Climate Change and Communication (MEIDECC). Public sector representation on the Technical Committee is by the Directors

of Departments whose remit covers areas relevant to the FLC area. This includes Departments of Environment; Climate Change; Agriculture; Fisheries; Forestry; Tourism; Public Health and Sanitation; Land Use Planning; Surveys; GIS; Education and Training; Community Development and Local Governance; Natural Resources; Urban Management; and the Waste Authority. The private sector is represented through the Tonga Chamber of Commerce, and NGO interests and expertise are represented through the Civil Society Forum of Tonga. Committee In terms of the Vava'u Ma'alahi Taskforce Committee includes four members (MEIDECC, Ministry of Police, Waste Authority Limited and Ministry of Health) as well as other members from NGOs, Church groups, private sector etc. The governor for Vava'u is the chairperson for this committee and their mandate includes environmental, health, waste and other projects and issues. R2R Phase 2 project will be integrated into workplan of the Vava'u Ma'alahi Taskforce Committee and the membership may be expanded to include other necessary stakeholders to manage the Vaipua channel project.

The Project Steering Committee will provide high level policy, strategic and regulatory guidance to the Technical and Community Management Committees, and support for cross-sectoral coordination and partnership in stewardship of the target areas. Membership of the Steering Committee is identical to membership of the National Environment and Climate Change Committee (NECC), except that the Steering Committee also has representation by the FLC and Vava'u communities, through their District Officers; the Noble land owners in the area; NGOs, through the Civil Society Forum of Tonga; the Private Sector through the Tonga Chamber of Commerce; and the Waste Authority. The FSP Secretariat also sits on the Steering Committee. The Steering Committee is chaired by the Minister of MEIDECC. It meets once a year and is responsible for calling the meeting, preparing the agenda and a meeting information package that includes: the Annual Evaluation Report; recommendations from the Technical and Community Management Committees; details on any major proposals (projects, initiatives or infrastructure developments); and the Action Plan proposed for the following year. The Steering Committee discusses progress towards the achievement of Targets and Objectives, based on the monitoring and evaluation information provided by the Secretariat, and the recommendations from the CMC and Technical Committees. They review any major projects put forward for submission to external funding agencies and endorse, or propose amendments to, those initiatives.



Composition of the Project Board: The composition of the Project Board must include individuals assigned to the following three roles

1. **Project Executive:** This is an individual who represents ownership of the project and chairs (or co-chairs) the Project Board. The Executive usually is the senior national counterpart for nationally

implemented projects (typically from the same entity as the Implementing Partner), and it must be UNDP for projects that are direct implementation (DIM). In exceptional cases, two individuals from different entities can co-share this role and/or co-chair the Project Board. If the project executive co-chairs the project board with representatives of another category, it typically does so with a development partner representative. The Chair would be the Implementing Agency (Minister for MEIDECC, or in his absence, it would be the CEO for MEIDECC); and the Secretariat would be the Department of Environment (PMU Staff).

2. Beneficiary Representative(s): Individuals or groups representing the interests of those groups of stakeholders who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. Often representatives from civil society, industry associations, or other government entities benefiting from the project can fulfil this role. There can be multiple beneficiary representatives in a Project Board. The Beneficiary representative are local marine resource dependents in two
3. Development Partner(s): Individuals or groups representing the interests of the parties concerned that provide funding, strategic guidance and/or technical expertise to the project. The Development Partner(s) is/are: UNDP Resident Representative or Deputy Resident Representative

A designated representative of UNDP playing the project assurance role is expected to attend all board meetings and support board processes as a non-voting representative. It should be noted that while in certain cases UNDP's project assurance role across the project may encompass activities happening at several levels (e.g. global, regional), at least one UNDP representative playing that function must, as part of their duties, specifically attend board meeting and provide board members with the required documentation required to perform their duties. The UNDP representative playing the main project assurance function is/are:

c) Project Management ? Execution of the Project: The Project Coordinator (PC) is the senior most representative of the Project Management Unit (PMU) and is responsible for the overall day-to-day management of the project on behalf of the Implementing Partner (50% of the time), including the mobilization of all project inputs, supervision over project staff, responsible parties, consultants and sub-contractors. The project coordinator typically presents key deliverables and documents to the board for their review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk registers. In addition, the PC would provide the balance 50% of the time for oversee specific technical aspects of the project. The PMU will also include a Operations Support Officer, M&E Officer, and a Technical Officer to be stationed and oversee the technical work in Vava'u. Terms of Reference for staff of the PMU are provided in Annex 7 on UNDP Project Document. The government intends considering the absorption of key contact positions supported by the project, including the project coordinator, technical coordinator (Vava'u), and Operations Support Officer into government service at the end of the project.

7. Consistency with National Priorities

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

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

- X National Action Plan for Adaptation (NAPA) under LDCF/UNFCCC
- X National Action Program (NAP) under UNCCD
- X National Biodiversity Strategies and Action Plan (NBSAP) under UNCBD
- X National Communications (NC) under UNFCCC

The Tonga R2R Phase II project will support the goals of various national development policies in Tonga, including Tonga Strategic Development Framework (2015-2025), National Biodiversity Strategy and Action Plan (2019) and Tonga's 2nd Nationally Determined Contributions (NDCs) under the Paris Agreement. The Tonga National Environmental Management Strategy is under preparation by the government and has not been assessed for consistency.

Tonga Strategic Development Framework (TSDF) 2015-2025, namely with the following:

- ? The proposed project will directly support the objectives of the TSDF 2015-2025, in particular national outcomes B, C, D and F:
- ? National Outcome B. a more inclusive, sustainable and balanced urban and rural development across island groups
- ? National Outcome C: human development with gender equality and more balanced and effective engagement of both men and women in decision-making and social, economic and political institutions
- ? National Outcome D. a more inclusive, sustainable and responsive good governance with law and order
- ? National Outcome F. a more inclusive, sustainable and effective land administration, environment management, and resilience to climate and risk.

The land-use spatial plan proposed under this Tonga R2R Phase II project will contribute to achieving Pillar 5, ?Outcome 5.1: Improved land use planning, management and administration with stronger and appropriate enforcement to ensure the better provision of public spaces as well as private spaces?. The proposed planting and rehabilitation of mangroves and seagrass beds and improving coral cover will contribute to achieving ?Outcome 5.2: Improved use of natural resources for long term flow of benefits?. Mangrove planting in coastal areas will also contribute to achieving ?Outcome 5.4: Improved resilience to extreme natural events and impact of climate change? through improving coastal protection.

Tonga's National Biodiversity Strategy and Action Framework to 2030 (Draft version from 2019):

Tonga's second NBSAP notes two major threats to biodiversity: indiscriminate expansion of commercial agriculture; and overharvesting of land and marine-based forests ecosystems, resulting from rapid population growth and people migrating to town centers. The Tonga R2R Phase II project's focus on lagoon ecosystem services and land-use spatial planning will at least partially address both of these threats. The Tonga R2R Phase II project is also aligned with all of the five strategic goals in the Draft NBSAP:

- ? Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society.
- ? Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use.
- ? Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity. Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services.
- ? Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building.

Tonga's Sixth National Report to the United Nations Convention on Biological Diversity (2014): Tonga's Fifth National Report to the UN CBD reported on Tonga's progress against the objectives of their National Biodiversity Strategy and Action Framework (NBSAF) under its overall vision of 'Tonga's biodiversity and genetic resources are protected, conserved and sustainably managed'. Tonga's NBSAF has 37 objectives under 8 themes. The most relevant themes to the Tonga R2R Phase II project are Theme 1 Forest ecosystem (including mangroves), Theme 2 Marine ecosystem, Theme 5 Local Community and Civil Society. The Tonga R2R Phase II project is aligned with many of objectives of the NBSAF and the most relevant are listed below:

- ? Objective 1.2 To ensure the optimal and sustainable allocation and use of Tonga's land and natural resources (The Phase II project will contribute through the proposed land-use spatial plan which matches the indicator 'An integrated land use plan adopted & implemented. Legislation and policies adopted & enforced').
- ? Objective 1.3 Community participation to ensure the sustainable management of Tonga's natural resources (through the proposed community planting and rehabilitation of mangroves, rehabilitation of seagrass beds and improving coral cover).
- ? Objective 1.4 To improve the management of existing parks and reserves and, consistent with the integrated land use plan, to expand the conservation area network to recover representative samples of all major terrestrial ecosystems (The Phase II project will contribute through strengthening the management of the Fanga'uta Lagoon marine reserve).
- ? Objective 1.5 To promote the effective and systematic collection and management of relevant information through scientifically designed research and surveys. (The Phase II project will contribute through continued ecosystem monitoring and the development of an accessible information system pertaining to the Fanga'uta Lagoon and the Vava'u priority biodiversity areas).
- ? Objective 2.2 - Marine conservation areas. To expand the existing network of protected areas to effectively conserve major coastal and marine habitats of biological and socio-economic value. (The Phase

II project will contribute through evaluating the effectiveness of and lessons learnt from SMAs for fisheries within the lagoon and by expanding and creating two marine protected areas in Vava'u).

? Objective 2.5 - Public awareness and education. To enhance public knowledge and understanding of Tonga's marine ecosystems and of issues related to their conservation as a mean of fostering public support for marine conservation objectives. (The Phase II project will contribute through its awareness program to enhance appreciation of the biodiversity values of the Fanga'uta Lagoon and the Vaipua Channel on Vava'u).

? Objective 5.1- Local communities and resource owners. To empower local communities and resource owners to effectively participate in the conservation and the sustainable management of biodiversity resources in areas under their control. (The Phase II project will contribute through its community based conservation area projects).

? Objective 5.2- Civil Society. To empower civil society and groups to be effective advocates of biodiversity & sustainable resource management. (The Phase II project will contribute through its community management committees tasked with implementing the FSP and improving governance on the Vaipua Channel on Vava'u).

? Objective 7.2- Multi-sectoral collaboration. To improve and strengthen multi-sectoral collaboration amongst all relevant sectors and stakeholders in support of biodiversity conservation and sustainable development. (The Phase II project will contribute through its cross sector collaboration between government agencies, NGOS, communities and local businesses).

Tonga Ocean Management Plan 2021: This plan provides overarching goals that guide the management, monitoring, and evaluation of the ocean plan including conservation outcomes and benefits to livelihoods and economic sectors. This is to be achieved through the following ocean management objectives, namely (1) Ensure sustainable socio-economic development and use: To ensure that Tonga benefits economically and socially but at the same time and at the same time ; (2) be able to ensure food security: To improve coherence, coordination and sustainability of Government activity on this issue by shaping and developing local data to optimize its use in decision making to improve food security in Tonga. (3) Conserve biodiversity: To promote the understanding, management, conservation and protection of the biological diversity of the Kingdom and to improve conservation of threatened species in Tonga and to encourage the development of different conservation approaches for the protection of both land and marine different flora and fauna.(4) Minimize conflicts between users: To coordinate actions and investments in space and time to ensure positive effects from those investments, both public and private, and to facilitate complementarity among jurisdictions as well as creating and stimulating opportunities for new users of marine areas. (5) Build climate change resilience and adaptation: To build (natural) resilience to extreme natural events and climate change and to implement actions that is designed towards the building of a resilient Tonga and (6) Protect and rehabilitate the environment: To protect nature, which has its own requirements that must be respected if long-term sustainable human development is to be achieved and if largescale environmental degradation is to be avoided or minimized.

Joint National Action Plan 2 on Climate Change and Disaster Risk Management (2018 - 2028): Targets include the following:

? Target 1: Resilient coastal development, infrastructures and integrated coastal ecosystems management including the sustainability and resiliency of offshore minerals exploration and mining

- ? Target 4: Resilient fisheries development and marine and coastal ecosystems (coral reefs, mangroves, sea grass etc) conservation including special management area.
- ? Target 8: Ecosystem based approach to development and conservation of biodiversity and any special management area such as cultural and historical sites
- ? Target 9: Resilient Tourism Development and tourism infrastructures
- ? Target 12: Strengthened capacity and awareness for all families and communities of climate change and disaster risk management with special attention and capacity for disaster preparedness, response, recovery, rehabilitation and building back better
- ? Target 13: Strengthened parliamentary and institutional capacities working towards achieving resilience targets
- ? Target 17: Gender equality and social inclusion (GESI) for resilient development
- ? Target 20: Sustainable funding for climate change and resilience building needs

Climate Change Policy: A Resilient Tonga by 2035: The intent of both this revised Climate Change Policy is that they will provide both the overarching framework and the action plan for the development of 'a Resilient Tonga' by 2035. It is therefore anticipated that all relevant sector policies and plans, as well as community development plans and island strategic development plans, will be aligned with this policy and the revised JNAP. The Policy suggests that (i) every coastal community has a SMA and protected coastal environment, resilient low chemical input or organic farming, native biodiversity is fully protected and enhanced, development and full implementation of a zero-waste policy; a gender responsive and equitable society and an economy that is in harmony with the need of a resilient economy and society.

8. Knowledge Management

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

Component 3 addresses knowledge and its management and is conceived as a key-crosscutting element of this project that will be addressed in all components. Key knowledge products will be identified in during the preparation of the communication and awareness strategy, along with their means of access and sharing among key stakeholders. Knowledge will be distributed and shared using the existing information systems within MEIDECC as well as other existing platforms to the extent possible. These will include national web-based platforms.

The costs for specific knowledge management activities for the project (excluding capacity building) is discussed in Table 6 below:

Table 6: Knowledge Management Products and Costs

| Knowledge Management Products | Costs USD |
|-------------------------------|-----------|
|-------------------------------|-----------|

| | |
|---|----------------|
| Design and implementation of awareness and communication programs | 60,000 |
| Website and Social Media Platforms (wetland platform) | 24,000 |
| Documentation of best practices | 12,000 |
| Dissemination events at provincial and local levels | 43,000 |
| Citizen science programs | 50,000 |
| Environment Resource Center programs | 40,000 |
| Workshops to disseminate results and promote replication | 33,000 |
| Launch Workshops | 5,000 |
| TOTAL | 267,000 |

9. Monitoring and Evaluation

Describe the budgeted M and E plan

The project results, corresponding indicators and mid-term and end-of-project targets in the project results framework will be monitored annually and evaluated periodically during project implementation. The Monitoring Plan (included in Section VI of the project document) details the roles, responsibilities, and frequency of monitoring project results. While project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements, additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the GEF Monitoring and Evaluation Policy. In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR. The GEF Core indicators included as Annex F will be used to monitor global environmental benefits and will be updated for reporting to the GEF prior to the TE. The updated monitoring data should be shared with TE consultants prior to required evaluation missions, so these can be used for subsequent ground truthing. The methodologies to be used in data collection have been defined by the GEF and are available on the GEF website.

An independent terminal evaluation (TE) will take place upon completion of all major project outputs and activities. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance for GEF-financed projects available on the UNDP Evaluation Resource Center. The evaluation will be independent, impartial and rigorous. The evaluators that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. Equally, the evaluators should not be in a position where there may be the possibility of future contracts regarding the project being evaluated.

The total indicative costs of the project's M&E are USD 202,500 with a break down in Table 7 as follows:

Table 7: Monitoring and Evaluation Plan

| Monitoring and Evaluation Budget for project execution: | | |
|--|-------------------------|---|
| GEF M&E requirements to be undertaken by Project Management Unit (PMU) | Indicative costs (US\$) | Time frame |
| Inception Workshop and Report | 5,000 | Inception Workshop within 2 months of the First Disbursement (at national and target site levels) |

| Monitoring and Evaluation Budget for project execution: | | |
|--|-------------------------|--|
| GEF M&E requirements to be undertaken by Project Management Unit (PMU) | Indicative costs (US\$) | Time frame |
| Preparation/Update and Monitoring of [SESP, ESMP GAP, SEP,] | 30,000 | Preparation of ESMP and management plans continuously as an on-going activity. |
| M&E activities | 97,500 | M&E full time consultant (\$75,000) to monitor Results framework SESP, ESMP GAP, SEP etc. Quarterly and regular consultation meetings to address M&E issues Community consultation meetings on ESMP and M&E framework Travel costs associated with M&E |
| GEF Project Implementation Report (PIR) | NA | Annually typically between June-August |
| Supervision/learning missions | NA | Annually |
| Independent Mid-term Review (MTR): | 30,000 | Includes international and national consultants and travel costs Date: June 30,2026 |
| Independent Terminal Evaluation (TE): | 40,000 | Includes international and national consultants and travel costs Date: September 30, 2028 |
| TOTAL indicative COST | 202,500 | Equivalent to TBWP component (M&E) |

10. Benefits

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

The socio-economic benefits in the project will be observed at the individual (household level) as well as at the collective community level for economic groups like farmers, fishers and forest dependents as follows:

- At least 45,895 people living, in and around the 2 demonstration marine areas will directly benefit through improved marine natural resource use, sustainable agriculture and fisheries activities, diversified livelihood improvements and improved ecosystem services.
- Improved conservation of marine seascapes and their watersheds, wetlands, marine habitats, fisheries and community marine production areas practices will enhance the ecological value of the respective marine ecosystems for community benefits.
- Implementation of strategies and mainstreaming of sustainable resource use via the community organizations will result into sustainable practices in fisheries, marine resource use, tourism and value chain products and services. This will collectively result in better conservation and livelihoods outcomes;
- Improved access to basic goods and technical services, technology and improved fisheries, waste management and marine resource use practices, as well as diversification of livelihoods including tourism and marine resource-based products will ensure more livelihood options and better prices and income.
- The focus on addressing gender inequality wherein various initiatives, such as promotion of alternative livelihood options, participation of women in various local conservation committees are proposed. The

project envisages more gender equality in context of sex ratio, decision making powers, ownership and control on marine sources and women leadership as well as participation;

- A reduction in the resource use conflicts and increase in effective implementation of sustainable marine resource use practices.
- Incremental funding through sustainable marine resource measures will protect critical marine biodiversity hotspots and provide for improved and diversified livelihoods and incomes and a sustainability of such investments beyond the life of the project;
- Incremental funding through new and innovative financial measures will protect critical marine ecosystems and provide for improved and diversified livelihoods and incomes and a sustainability of such investments beyond the life of the project;

Stable or improved populations of native marine species and improved marine environments will greatly enhance visitor experiences for increasing potential for ecotourism and community financial benefit.

11. Environmental and Social Safeguard (ESS) Risks

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

Overall Project/Program Risk Classification *

| PIF | CEO Endorsement/Approval | MTR | TE |
|---------------------|--------------------------|-----|----|
| High or Substantial | High or Substantial | | |

Measures to address identified risks and impacts

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

Supporting Documents

Upload available ESS supporting documents.

| Title | Module | Submitted |
|---------------------------------------|---------------------|-----------|
| Environmental & Social Mgmt Framework | CEO Endorsement ESS | |

| Title | Module | Submitted |
|--|--------------------------------|-----------|
| UNDP Social & Environmental Screening | CEO Endorsement ESS | |
| GEF7 Tonga_R2R_Phase_II_AnnexD_SESP_Final | Project PIF ESS | |

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

This project will contribute to the following Sustainable Development Goal (s): SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture, SDG 5: Gender equality, SDG 13: Climate action, SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development, and SDG 15: Protect, restore, and promote sustainable use of terrestrial ecosystems.

This project will contribute to the following country outcome (UNDAF/CPD, RPD, GPD): Climate Change, Disaster Resilience , and Environmental Protection (Outcome 1): People and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability, disasters and environment protection is strengthened

| | Objective and Outcome Indicators | Baseline | Mid-term Target | End of Project Target |
|---|--|--|---|--|
| Objective: Effective implementation of the Fanga?uta Lagoon Stewardship Plan and | Indicator 1: GEF Core Indicator 11 # direct project beneficiaries disaggregated by gender (individual people) | 400 people benefited from ecotourism-related activities in Phase 1. This will be further validated in Year 1 | At least 10,000 people directly engaged in activities related to fisheries, tourism, waste management, livelihood and value addition, etc., | At least 45,985 people benefiting from project activities, including 22,898 men and 23,087 women |

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| <p>replication of lessons learned from the Tonga R2R Phase I to priority area in Vava'u</p> | <p>Indicator 2: GEF Core Indicators 2: Marine protected areas created or under improved management for conservation and sustainable use</p> <p>-</p> | <p>METT baseline scores are follows:</p> <p>Fanga'uta Lagoon marine Reserve ---42</p> <p>Proposed Vaipua Channel Marine Reserve - 22</p> <p>Lualoli, Taula and Maninita Islands Marine Reserve --32</p> <p>PA management plans do not exist for Lualoli, Taula and Maninita Islands Marine Reserve</p> | <p>At least 4,560 ha of marine protected area under improved management with 5 point increase from baseline values</p> <p>Vaipua Channel PA created (373 hectares) and Lualoli, Taula and Maninita Islands Marine Reserve expanded to 1,352 hectares</p> <p>Management plans for Vaipua Channel and Lualoli, Taula and Maninita Islands Marine Reserve under preparation</p> | <p>4,560 hectares of protected areas created or under improved management with 20 point increase from baseline values and reflected as follows:</p> <p>(a) Indicator 2.1: 1,530 hectares of new Protected Areas created, including the following: (i) 373 hectares Vaipua Channel PA and (ii) 1,157 hectares added to existing Lualoli, Taula and Maninita Islands Marine Reserve</p> <p>(b) Indicator 2.2: 3,030 hectares of marine PAs under improved management effectiveness , including the following: (i) existing Fanga'uta Lagoon Marine Reserve of 2,835 hectares and (ii) existing Lualoli, Taula and Maninita Islands Marine Reserve of 195 hectares</p> <p>(c) Management Plans with priority conservation measures for Vaipua Channel and Lualoli, Taula and Maninita Islands Marine Reserve developed and approved</p> |
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| | <p>Indicator 3: GEF Core Indicator 3: Area of wetlands restored (3.4)</p> | <p>About 20 hectares of mangrove planted in past, but most replanted areas destroyed due to weak design, damage by pigs, limited protection from erosion and weak community ownership</p> | <p>At least 20 ha of wetlands habitats restored and planning efforts underway at restoration of a further 80 hectares</p> | <p>120 hectares of wetlands restored, including 20 hectares of coral reefs, 20 hectares of sea grass and 80 hectares of mangroves</p> |
| <p>Project component 1. Conservation of Critical Lagoon Ecosystems and Management of the Catchment to Improve Biodiversity and Ecological Services of the Fanga?uta Lagoon and Replication in Priority Areas in Vava?u</p> | | | | |
| <p>Project Outcome1 Fanga?uta Lagoon Stewardship Plan implemented with resulting improvement in the management of the Fanga?uta Lagoon Marine Reserve for biodiversity conservation</p> | <p>Indicator 4: Status of management of the Fanga?uta Lagoon Marine Reserve for biodiversity conservation</p> | <p>Although FSP has been implemented up to 2017 lack of resources meant limited achievement of on-the-ground activities</p> | <p>Updated FSP and f Fanga?uta Lagoon Action Plan (2023-2033) with strengthened institutional capacity for implementation. FSP Action Plan activities initiated, in particular operation of SMAs, habitat conservation and restoration, monitoring and enforcement</p> | <p>Improved management of Fanga?uta Lagoon as reflected in (i) functional FSP Steering Committee, FSP Secretariat and Working Group; (ii) Agreement reached on priorities for R2R Phase II project; (iii) formal approval of gender-sensitive FSP Action Plan (2024-2034); and (iv) at least 50% of priority activities in action plan completed and balance under implementation</p> |

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| | <p>Indicator 5: Status of Special Management Areas in Fanga?uta Lagoon</p> | <p>Currently 6 SMAs cover around 900 hectares of Fanga?uta Lagoon</p> | <p>Additional 6 SMAs in Fanga?uta Lagoon identified and underway for conservation and sustainable use covering a total of approximately 900 hectares.</p> | <p>12 SMAs covering around at least 1,800 hectares of Fanga?uta Lagoon effectively managed as SMA(s) for conservation and sustainable use as measured by: (i) formation of CMCs; (ii) SMA management plan completed; (iii) SMA management plan and regulations for enforcement approved and gazetted; (iv) priority actions identified; (v) surveillance and monitoring system developed; (vi) boundaries of SMAs established; (vii) communities trained and priority actions initiated; (viii) reporting and communication of effectiveness of SMA actions,</p> |
| | <p>Indicator 6: Status of GESI responsive sustainable community management and use of mangrove areas in Fanga?uta Lagoon</p> | <p>Around 200 hectares of mangrove strands along the Fanga?uta lagoon shoreline used by communities for fuel wood, resins and dyes, but management rules not enforced and practices are unsustainable</p> | <p>Mangrove areas for sustainable use mapped, CMCs established for management of these areas, rules of operation, engagement and enforcement agreed through MOUs covering around 200 hectares</p> | <p>Around 200 hectares of mangroves under sustainable harvest and use regimes by local communities as measured by: (i) improvement in mangrove condition and cover; (ii) monitoring of mangrove use; (iii) active engagement of CMCs in applying rules, regulations and ?enforcement measure</p> |

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| | Indicator 7: Number of female and males in target communities involved in alternative livelihood activities in Fanga?uta Lagoon and Vaipua Channel | Baseline for participating households established in Year 1 | At least 15% increase in number of participating households in alternative livelihoods | At least 50% increase in number of participating communities engaged in livelihood activities (tourism, organic agriculture, fisheries, mangrove products, permaculture, agro-forestry etc. At least 50% of beneficiaries are women |
| Outputs to achieve Outcome 1 | <p><i>Output 1.1. Updated Fanga?uta Stewardship Plan building on lessons and best practices generated from its implementation under the R2R Phase I project</i></p> <p><i>Output 1.2. Natural ecosystems within the Fanga?uta Lagoon Marine Reserve rehabilitated to preserve biodiversity and ecosystem services;</i></p> <p><i>Output 1.3. Existing Special Managed Areas for fisheries within the Fanga?uta Lagoon evaluated and lessons learnt identified for replication</i></p> <p><i>Output 1.4 Alternative livelihoods options prioritized and implemented for women, men and youth with reduced threats to lagoon resources</i></p> <p><i>Output 1.5. Lessons learned from Tonga R2R Phase I in marine biodiversity conservation replicated in Vava?u</i></p> | | | |
| Project component 2 Governance: Policies, Institutions and Capacity Building for sustainable and adaptive management and biodiversity conservation | | | | |
| Outcome 2: Strengthened and integrated management approach realized through streamlined policies, active and functional community institutions and improved human capacity | Indicator 8: Change in institutional capacity for Fanga?uta Lagoon and Vaipua Channel that builds on Community Management Committees and is inclusive of gender and social diversity as measured by UNDP capacity development scorecard | Capacity constraints in Fanga?uta Lagoon and Vaipua Channel as reflected in baseline capacity development score of 23 | At least 5 point increase in institutional capacity for wetland conservation and sustainable use as measured by UNDP capacity development scorecard | At least 20 point increase in institutional capacity for wetland conservation and sustainable use as measured by UNDP capacity development scorecard |

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| | <p>Indicator 9: Multi-stakeholder Management Committee for Vaipua Channel functional and actively engaged in decision-making regarding management of Vaipua Channel</p> | <p>There is no multi-stakeholder Management Committee for Vaipua Channel which limits coordination across stakeholders and sectors</p> | <p>Vaipua Channel Community Management Committee established with members from various sectors; clear rules and regulations agreed for mainstreaming biodiversity across all key sectors</p> | <p>Vaipua Channel Community Management Committee is functional as measured by: (i) at least 50% of membership include key multi-stakeholder groups, including gender and private sector represented in Committee; (ii) Management Committee governance structure is approved by Government with clear rules and responsibilities; and (iii) number of decisions taken by Management committee in terms of management of Vaipua Channel</p> |
| | <p>Indicator 10: Number of GESI sensitive policy instruments to support FSP implementation streamlined</p> | <p>Gaps and overlaps currently exists in key policy and legal instruments and gender gaps that constrain implementation of the FSP</p> | <p>Assessment and validation of measures necessary to ensure streamlining of identified existing policy and legal instruments and efforts underway to revise and update these instruments to facilitate implementation of the FSP</p> | <p>At least 3 instruments streamlined to facilitate implementation of FSP</p> |

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| <p>Outputs to achieve Outcome 2</p> | <p><i>Output 2.1. Strengthened institutional arrangement for the Fanga?uta Lagoon with strong emphasis on the Community Management Committees and inclusive of gender and social diversity</i></p> <p><i>Output 2.2 Policy and legislative framework reviewed to identify gaps and overlaps in institutional mandates for stakeholder engagement, safeguards and GESI based on which streamlined policy framework developed for FSP</i></p> <p><i>Output 2.3 Capacity of government staff, communities and key stakeholders strengthened to apply integrated approaches for biodiversity conservation and enforcement</i></p> | | | |
| <p>Project component 3 Awareness raising and knowledge management of the ecosystem functions and services of the Fanga?uta Lagoon and priority Vava?u biodiversity sites</p> | | | | |
| <p>Outcome 3</p> <p>Awareness program to enhance appreciation of GESI sensitive biodiversity values of the Fanga?uta Lagoon and the priority sites in Vava?u</p> | <p>Indicator 11. Percentage of sampled female and male aware of conservation threats and adverse impacts on wetland management in Fanga?uta Lagoon and Vaipua Channel as measured by Knowledge, Aptitudes and Practices (KAP) surveys</p> | <p>Little coordinated outreach on conservation threats and limited awareness on the impact of unsustainable practices and resource uses among the general public. Baseline KAP surveys to be undertaken in Year 1.</p> | <p>At least 25% of sampled project stakeholders (50:50 men and women) aware of conservation benefits and threats and adverse impacts. [KAP survey at mid-term]</p> | <p>At least 50% of sampled project stakeholders (50:50 men and women) aware of conservation benefits and threats and adverse impacts [KAP survey at end of project]</p> |
| | <p>Indicator 12: Number of best practices and lessons (including on gender and youth mainstreaming and socio-cultural benefits) accessed and applied throughout Tonga</p> | <p>Limited best practices and lessons available, with limited to no replication</p> | <p>At least 3 best practices and lessons (including on gender and youth mainstreaming and socio-cultural benefits) are documented and accessed</p> | <p>At least 10 best practices and lessons (including on gender and youth mainstreaming and socio-cultural benefits) are accessed and applied throughout Tonga</p> |

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| | Indicator 13. Number of initiatives of GESI responsive knowledge exchanges in Pacific biodiversity and SID platforms | Very limited participation and knowledge exchanges in Pacific platforms. | Linkages for participation and knowledge exchange established in at least three Pacific wetland and special area management platforms established | At least 10 GESI responsive initiatives of information exchange and sharing of knowledge in Pacific on wetland biodiversity conservation and special area management platforms |
|--|---|--|---|--|

[2] Direct benefits will include awareness, outreach and solutions for sustainable marine and land resource use such as fisheries, agriculture, waste management, tourism, livelihood improvement and improved wetland water quality and indirect benefits of improved marine water quality and ecosystem services. This includes the people living in the 26 villages around the Fanga?uta lagoon and 4 villages around the Vaipua Channel, who will be part of the Community Management Committees that will provide a community mechanism for decision making on development and resource use priorities

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

| Comment | Response | Relevant Section of UNDP Project Document and - GEF CEO ER. |
|---|----------|---|
| Comments from GEF Secretariat at PIF Stage | | |

| | | |
|---|---|---|
| <p>Focal area elements</p> <p>1. Is the project/program aligned with the relevant GEF focal area elements in Table A, as defined by the GEF 7 Programming Directions?</p> <p>Secretariat Comment:</p> <p>During PPG it is important to refine the approach and ensure that it focuses on globally important biodiversity and the GEF incremental role related to other initiatives</p> | <p>This is now reflected as follows:</p> <p>The project approach now focuses on the improved management of the biologically important Fanga?uta Lagoon, the Vaipua Channel and the Lualoli, Taula and Maninita islands, all of which are of critical importance for conservation of globally important biodiversity and the ecosystem services that they provide to the many Tongan population that depends on these marine systems for their survival .</p> <p>In particular, the project incremental values lies in interventions that are designed to safeguarding globally significant marine species ecosystems that are currently at risk from coastal and marine degradation and unsustainable resource uses, including the security of food production systems. First and foremost is the fundamental value of supporting an implementation of a management approach to transform sustainable management of native marine biodiversity and ecosystems and the</p> | <p>Refer UNDP Project Document</p> <p>Section II Development Challenges (Pages 8-10) for discussion of global value of the marine sites</p> <p>Section III (Strategy) for GEF alternative approach to manage these biologically important sites (Pages 30-33)</p> <p>Section V (Results and partnerships) that discusses specific actions to be implemented to achieve the proposed integrated alternative approach (pages 35-55) and in particular Output 1.2 (restoration), Output 1.3 (SMAs); Output 1.4 (alternate livelihoods to manage threats), Output 1.5 (extension of best practice approaches to Vava?u); Output 2 (institutional arrangements for community integrated management); Output 2.2 (policy and legislative support), Output 2.3 (capacity building for integrated management), Output 3.1 (information management and accessibility), Output 3.2 (awareness and communication) etc.</p> |
|---|---|---|

production systems they support from ridge to reef ? a relatively contained system. The intent is to strengthen the institutional, legislative and technical responses to reduce risk and impacts from unsustainable resource use and sector-based threats on a broad scale. Specific management actions are intended to improve protection of both marine biodiversity and ecosystem services and food production systems from unsustainable and destructive resource utilization practices. It will also actively engage local communities in planning and decision-making on best approaches to prevent and manage the threats in the marine ecosystems so as to help conserve native biodiversity and natural ecosystems, as well as to conserve and restore marine ecosystems and prevent resource degradation so as to safeguard marine food production systems.

Indicative project/program description summary

2. Are the components in Table B and as described in the PIF sound, appropriate, and sufficiently clear to achieve the project/program objectives and the core indicators?

Secretariat Comment:

During PPG undertake a careful review of the ToC particularly in regards to livelihood related activities. While, there have been many well-intentional initiatives that fall short because they do not consider the full breadth of what is needed for success and potential unintended consequences. It would be important to evolve and be reflective of the current situation in the country and in particular communities and groups targeted (noting the dramatic economic shifts are occurring resulting from COVID and it is difficult to know at this time what the situation will be in a year especially in the tourism industry). It will be also important to work together with the bridge project while maintain the GEF resources are not meant to mitigate impacts of such a project

A revised ToC is provided that recognizes the importance of improving the productivity of fisheries and marine resources use be sustainability managed and enhancement of wetland productivity (through threat management, community engagement in conservation and sustainable resource use and new and improved livelihoods. Assumptions to the ToC are also discussed. The project includes a specific output that focusses on a range of new/improved green/blue business development, including value chain development as well as sustainable financing involving partnerships with the private sector, Development Bank of Tonga and other support entities. A list of potential livelihood opportunities are also identified in Output 1.4.

While, the project includes specific activities aimed at enhancing tourism opportunities, including additional tourism sites and activities, and collaboration with the private sector,

Refer UNDP Project Document Figures 1 (page 18) and Figure 2 (Page 33) and ToC narrative (Table) Page 34 and

Output 1.4 (pages 42-44)

Table 4 Partnerships (discuss partnership arrangements with ADB Bridge Project) -page 57

Annex 5 SESP (discusses risk associated with ADB Bridge Project and mitigation)

the potential (post Covid) will have to be assessed during the implementation of the project to determine the extent of support

The project team has already had extensive discussions with the staff of the ADB Bridge Project and anticipate close coordination, in particular in relation to mangrove rehabilitation and support for land use planning Agreement has been reached that the ADB Bridge Project will finance extensive mangrove restoration work in the Fanga?uta Lagoon in collaboration with the Community Management Committees.

The Social and Environment Safeguard procedures (SESP) of the GEF 7 project recognizes that the mitigation of the impacts related to the bridge project will be managed by the ADB project

Core indicators

6. Are the identified core indicators in Table F calculated using the methodology included in the corresponding Guidelines?(GEF/C.54/11/Rev.01)

Secretariat Comment

We note that we do not require METT scores at PIF and that was not the request. However, we have received feedback that METTs can be difficult to apply and complete for small-scale, community-based PAs. In order for the PA hectares to "count" at the end of the project, there must be an increased METT score. Therefore, in some cases projects have chosen to report on such MPAs under the mainstreaming core indicator. It is also important to ensure that MPAs truly meet the criteria of PAs and would not better be classified as mainstreaming under international standards. IUCN recently published specific guidance on this subject.

METT's score have been revised at PPG stage and includes specific and increased targets to be achieved at the end-of-project.

The existing Fanga'uta Lagoon MPA (WDPA 4241) Category VI (PA with sustainable use) and the existing Lualoli, Taula and Maninita Islands MPA (WDPA 555645456) meet international criteria as these are recognized nationally and internationally (the latter under the WCMC network), and although there is some level of community sustainable use regimes, these two MPAs have legal status and management plan requirements, so these although, small in extent cannot be considered insignificant. A similar legal status will be afforded to the proposed Viapua Channel MPA as well as it would be nominated for inclusion within WCMC recognized PA listing

Refer METT's scorecards. The current baseline METT scores are:

Fanga'uta MPA- 43
Lualoli, Taul and Maninita Islands MPA ? 32
Proposed Vaipua MPA ? 22
A 20 point increase in METT scores is proposed by end of project

Refer WCMC PA database at <https://www.protectedplanet.net/en> for status of existing PAs in Tonga

| | | |
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| <p>3. Does the proposed alternative scenario describe the expected outcomes and components of the project/program?</p> <p>Secretariat Comment</p> <p>During PPG please consider the following -</p> <ul style="list-style-type: none"> - Enforcement - The comment about tight knit and small communities making enforcement challenging was not to encourage anonymous reporting system. If government and CSO representatives believe this will be effective, by all means move forward with it. However, it will be important to consider whether an approach more focused on awareness raising, support for taking good actions, permitting, and work to shift cultural norms might be more effective than an enforcement focused approach. It would be good to think through a specific theory of change for this area of work and discuss unintended consequences. It is worth noting that enforcement generally occurs after damage is done and requires people to enforce against those they might know, hold power, or otherwise have barriers to realizing actual enforcement. - Outputs and outcomes - It will be important to have clarity on the structure and approach. We expect there will be some revisions as this project adapts to the changing realities and projects. We note, for instance, that hectares of coral recovered is not an output but rather an outcome or indicator. | <p>Thank you for the comment</p> <p>We recognize that enforcement should pre-empt any damage to the ecosystem before it happens. For this reason, the project is very much focused on community planning, decision-making, monitoring and enforcement. The effort to update the FSP Phase II plan will include extensive consultation and participation of local communities, agreeing on the role and responsibilities of different stakeholders to plan and manage the lagoon, including review and revise the existing FSP monitoring systems (Output 1.1). Management of the FSP will be undertaken through the Community Management Committees (with awareness, extension and technical support provided by the Ministry of Fisheries and the Town and District Officers) through formation and community management of Special Management Areas (SMAs), the latter will define specific indicators to enable communities to assess the effectiveness of their</p> | <p>Refer UNDP Project Document Section IV (pages 35-55) as well as Outputs 1.1 and 1.3</p> |
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| | <p>management actions, reporting and analysis and enhanced training and capacity to ensure mutually and collective agreed terms of enforcement by the communities themselves. A specific activity is devoted (Activity 1.3.7) to enhancing CMC capacity to improve community management of the SMAs, compliance monitoring training, strengthening agreed procedures for enforcements etc.</p> <p>Revisions have been made to the Outputs from the PIF to provide a more realistic structure and approach. Targets in terms of mangrove, coral reef and seagrass rehabilitation are recognized as outcomes rather than outputs</p> | |
| <p>6. Are the project?s/program?s indicative targeted contributions to global environmental benefits (measured through core indicators) reasonable and achievable? Or for adaptation benefits?</p> <p>Secretariat Comment</p> <p>During PPG, please include a more significant consideration of the CCA benefits from this project.</p> | <p>The benefits of CCA is now reflected in terms of substantial enhancement of the ecological condition of the Fanga?uta Lagoon and Vaipua Channel, restoration of mangroves and marine ecosystems, diversification of livelihoods, community management of SMAs, and reduced threat to these ecosystems</p> | <p>Refer Section 5 ?incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCE, SCCF, and co-financing? of GEF CEO ER document</p> |

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| <p>7. Is there potential for innovation, sustainability and scaling up in this project?</p> <p>Secretariat Comment</p> <p>Greater consideration will be needed during PPG.</p> | <p>The section on Innovation, Sustainability and Scaling Up has been enhanced</p> | <p>Refer UNDP Project Document Pages 73-75</p> |
| <p>Stakeholders</p> <p>Does the PIF/PFD include indicative information on Stakeholders engagement to date? If not, is the justification provided appropriate? Does the PIF/PFD include information about the proposed means of future engagement?</p> <p>Secretariat Comment</p> <p>Yes, thank you for the additions and we look forward to seeing the results of further consultations during PPG.</p> | <p>Extensive consultations were conducted during the PPG stage</p> | <p>Refer UNDP Project Document Annex 21</p> |
| <p>Risks to Achieving Project Objectives</p> <p>Does the project/program consider potential major risks, including the consequences of climate change, that might prevent the project objectives from being achieved or may be resulting from project/program implementation, and propose measures that address these risks to be further developed during the project design?</p> <p>Secretariat Comment</p> <p>During PPG, please include a more substantial climate risk review and consideration for COVID and the need for adaptive management and approaches.</p> | <p>A detailed Climate Risk Analysis was conducted at PPG stage</p> | <p>Refer UNDP Project Document Annex 14</p> |

| | | |
|--|---|--|
| <p>Coordination</p> <p>Is the institutional arrangement for project/program coordination including management, monitoring and evaluation outlined ?Is there a description of possible coordination with relevant GEF-financed projects/programs and other bilateral/multilateral initiatives in the project/program area?</p> <p>Secretariat Comment</p> <p>Yes, this is adequate for now. During PPG, it would be good to look for other partners and possible collaborations with other Ministries such as Education.</p> | <p>A substantial review was during PPG stage and the stakeholder table further strengthened identify a number of NGOs and institutions that can provide support for awareness generation, education and training. Partnership arrangements are also listed</p> <p>Ministry of Education included in Stakeholder Engagement Plan</p> | <p>Refer UNDP Project Document Annex 8 (Stakeholder Engagement Plan) and Table ___ Stakeholder engagement plan</p> |
| <p>Knowledge Management</p> <p>Is the proposed ?knowledge management (KM) approach? in line with GEF requirements to foster learning and sharing from relevant projects/programs, initiatives and evaluations; and contribute to the project?s/program?s overall impact and sustainability?</p> <p>Secretariat Comment:</p> <p>Yes, though more work will be needed on this at CEO Endorsement.</p> | <p>Component 3 has been further elaborated during the PPG to enhance KM, including ensure accessible information, education and awareness, citizens programs, learning center, information sharing and documentation and dissemination of lessons etc.</p> | <p>Refer UNDP Project Document Component 3 (pages 50-55)</p> |
| <p>STAP Comments</p> | | |

Outcomes

(1) Do the planned outcomes encompass important adaptation benefits?

STAP Comments:

The project outcomes are described clearly, and they are nested consistently into a structured hierarchical order consisting of the following elements: Components, Outcomes and Outputs, which fit well with and complement one another. The project is not set up specifically to address adaptation but it identifies the benefits associated with the protection and rehabilitation of mangrove ecosystem

(2) Are the global environmental benefits/adaptation benefits likely to be generated?

STAP Comments:

The environmental benefits that will be generated by this project at the national level are well-defined and articulated reasonably enough (i.e. this section of the proposal is written in poor language, almost as if it was the result of a poor cut and paste job) that they can be identified clearly. The GEBs are not articulated as clearly and cannot be identified directly from reading the relevant section of the PIF, but they can be extrapolated from reading the proposal as a whole, viz rehabilitation of a small area of unique mangrove assemblages, improved coral reef (50ha) and marine protected area.

STAP recommends that the implementing agency reviews this aspect of the proposal with the aim of providing a clearer explanation of how the environmental benefits to be delivered by this project can be classified as GEBs as defined by the GEF.

(<https://www.thegef.org/documents/global-environmental-benefits>). **STAP also recommends** that, where relevant, GEBs are listed separately from environmental benefits that are local in nature and that the

(1). The Outcomes and Outputs are much elaborated and reflect complementarity with one another. The management and elaboration of adaptation benefits are provided in the climate risk analysis and include: mangrove restoration and sustainable use, improved condition of lagoon ecosystems, alternative livelihoods and sustainable resource use.

(2) The GEB?s are now clearly reflected in the document and include: (i) new PAs; (ii) improved management effectiveness of existing PAs; (iii) restoration of corals, mangroves and seagrass beds; (iv) mangroves under sustainable community use; (v) lagoon areas managed through sustainable approaches aby local communities through SMAs to enhance the ecosystem values; (vi) improved livelihoods and incomes from sustainable marine resource uses; (vii) increase in capacity of institutions for wetland conservation and

(1) UNDP Project Document Annex 14 Climate Risk Analysis

(2). Section 5 in GEF CEO ER

synergies and causal relationship between the two type of environmental benefits are described where relevant.

sustainable use;
(viii) policy instruments for support improved conservation of marine biodiversity and ecosystems; (ix) functional of Multi-stakeholder Management Committees for Fanga?uta Lagoon marine reserve and Vaipua Channel marine reserve; and (x) monitoring and reporting systems track status of marine biodiversity and ecosystem health

Part II: Project Justification

2) the baseline scenario or any associated baseline projects

STAP Comments:

Yes, the PIF includes a section, which lists and describes a number of pre-existing projects and the lessons learned from all of them. The description of the lessons learned is not quite as thorough as the descriptions of the actual projects themselves but is still just about adequate for the purpose it needs to serve

Thank you for the comment

In fact the entire design of the project is based on the lessons from the GEF R2R Phase 1 project (for the FSM institutional, policy and technical aspects); GEF Small Grants program for addressing responses for land degradation, income generation (honey bee keeping, mulberry farming, manioke and tapioca farming, vegetable gardens and native species revival), biogas projects, support for SMA establishment and Green Management Areas (GMA) in watersheds; Tonga Pathway to Sustainable Oceans Project for promotion of SMAs, Vava'u Ocean Initiative for marine spatial planning and SMA experience and alternate livelihood actions. The project also provides an useful methodology and baseline for conducting surveys of benthos, marine invertebrates and reef fish, etc.

Refer UNDP project Document Table 1 (pages 19-23)

3) the proposed alternative scenario with a brief description of expected outcomes and components of the project

STAP Comments

The published PIF for the project does not include a Theory of Change (ToC) section and the additional project documents uploaded on the GEF portal do not appear to include a separate ToC either. A previous version had a narrative description of the TOC in the main text and a diagrammatic representation of the TOC as Annex E. **STAP strongly recommends:** that the implementing agency includes a ToC section into the next version of the PIF for this project and welcomes the opportunity to review this further down the line if it were to be asked to do so. The draft TOC in the previous version identified the main barriers and provided a sequencing of events and the only weakness seemed to be some conflating of outputs, inputs and impacts.

The project now includes a problem analysis and ToC

Refer UNDP Project Document as follows:
Figure 1 Problem Analysis (page 18) and Figure 2 ToC (page 33)

5) incremental/additional cost reasoning and expected contributions from the baseline, the GEF trust fund, LDCF, SCCF, and co-financing

(1) Are the benefits truly global environmental benefits/adaptation benefits, and are they measurable?

STAP Comments:

The proposed incremental activities will certainly ensure the continuation of delivery for some Global Environmental Benefits (GEBs) such as the continuing protection and conservation of the Nukuhetulu mangrove forest, which has been designated by the IUCN Red list as a priority for conservation. In addition, this phase of the project will support the creation of additional marine protected areas in the Vaipua Channel and around the Lualoli protected areas, as well as the rehabilitation of some mangrove ecosystems.

It is however less clear whether all of the environmental benefits will be GEBs (please see previous comments on GEBs for additional details).

(2) Are indicators, or methodologies, provided to demonstrate how the global environmental benefits/adaptation benefits will be measured and monitored during project implementation?

STAP Comments:

The PIF includes a suite of indicators to measure various aspects of project performance, including environmental benefits. There is less focus on the methodologies that will be used to measure progress, although the PIF provides a broad sense of how activities will be monitored and evaluated. The PIF also includes a short section on adaptation co-benefits arising

(1) Additional details of GEBs are provided

(2) The monitoring plan indicates the targets and indicators, data sources and collection methods, frequency of monitoring, responsibilities for data collection, verification means and assumptions and risks

(3) A climate risk analysis was conducted at the PPG stage and identifies risk management measures

(1) Refer Section 5 in GEF CEO ER

(2) Table 10 (Monitoring Plan) of UNDP Project Document

(3) Refer Annex 14 (Climate Risk Analysis) of UNDP Project Document

from the management of coastal vegetation and mangrove forests.

(3) What activities will be implemented to increase the project's resilience to climate change?

STAP Comment:

The PIF did not include a section that covered this specific aspect, although it did include ample references to how the project activities will improve the climate resilience and adaptation capacity of the areas where it will operate. A scanning of additional document did not reveal any additional provisions in this specific field.

7) innovative, sustainability and potential for scaling-up

(1) Is the project innovative, for example, in its design, method of financing, technology, business model, policy, monitoring and evaluation, or learning?

STAP Comment:

There is also some potential for innovation in delivering economic development outcomes by establishing alternative livelihoods to mitigate the impact of the fishing restrictions in the protected areas and the protection of mangroves which might otherwise be used for firewood or dye for tapa cloth. An example of alternative livelihood strategies involve the production of woven pandanus leaf containers to provide an alternative to single use plastics.

(2) Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?

STAP Comment:

It was STAP assessment that this project will require incremental adaptation to achieve long-term sustainability, as opposed to fundamental transformational change. The same view seems to have been espoused by the implementing agency in the PIF

Thank you for the comments;

(1) The project recognizes the following approach to manage unsustainable activities, namely (i) restriction or improver/sustainable livelihood and resource use to prevent destruction of marine resources, such as mangroves. It recognizes means to protect mangroves and other marine resources through creation of community managed SMAs (with clear rules and regulation established), identification of specific areas for mangrove sustainable use under community management regimes and (ii) development of alternative livelihoods and value chains to shift dependencies on unsustainable marine resource use activities

(2) This is agreed, the project will be implemented through the development of a FSP plan that entails a transformation shift from adhoc and piece meal efforts to an integrated community based management approach that covers legislative and policy changes,

(1) Refer Output 1.4 of UNDP Project Document

(2) Refer Component 1 of Project Document that describes the long-term strategy for FSP and well as Section on ?Innovativeness, Sustainability and Potential for Scaling Up?

| | | |
|---|---|---|
| | <p>institutional reform, capacity enhancement, and a range of other activities that focus on measures that will support long-term sustainable practices</p> | |
| <p>1. Gender equality and women's empowerment</p> <p>STAP Comment:</p> <p>The PIF includes a gender analysis section, as well as ample references to gender and social equality issues, which are well-integrated throughout the PIF.</p> <p>Some of the measures listed in the PIF include: connecting with additional established women's groups such as the Tonga Community Development Trust and the Women's Council for Tonga and involving the country's aspiring young leaders from the Tongan Youth Parliament in addition to the Tonga National Youth Congress.</p> <p>Gender sensitive indicators will also be included in the project design,</p> | <p>A comprehensive gender (including youth) analysis and mainstreaming action plan was developed at the PPG stage following consultations with communities and other stakeholders, the findings of which are well integrated into the project Outputs. The implementation of the gender actions will be supported by the Tonga Community Development Trust, Women's Council for Tonga, Tongan Youth Parliament and Tonga National Youth Congress.</p> | <p>Refer Annex 10 (GESI) of the UNDP Project Document</p> |

5. Risks.

Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project's control?

Are there social and environmental risks which could affect the project?

STAP Comment

The PIF includes a section on risk assessment, which comprises an analysis and rating of a number of broad risk categories, as well as ratings and mitigation measures for each of those. The risk categories include climate related risks such as extreme weather events and climate anomalies and how these may affect the success of specific aspects of the project activities such as mangrove and seagrass planting in coastal sites. The current set of risks focuses on several aspects that should be under the control of the project (e.g. impacts of alternative livelihoods, or that SMAs could restrict access to resources). The only identified risk associated with climate change is the effect of extreme weather events on mangrove rehabilitation. SIDS are particularly vulnerable to climate change and the social and environmental risks would be expected to be far greater than just the effect of storms on mangrove sites, particularly on the durability of outcomes for the project. STAP recommends that the implementing agency reviews the risks during the next phase.

The risks section of the project has been substantially strengthened during the PIF stage and covers environment, social and gender related risks. An extensive climate risk analysis was undertaken during the PPG stage

Refer Annex 14 of the UNP project Document for Climate Risk Analysis

2. Coordination.

Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects?

STAP Comments:

The three areas where it will be important to learn from other projects and subsequent analyses of these projects is

(1) alternative livelihoods- the success of different interventions has been extensively debated; (2) mangrove rehabilitation noted that most mangrove restoration and rehabilitation projects have failed and it would be important to consider the social and ecological lessons learnt from previous projects and (3) knowledge management ? the intention to upscale to other SIDs and this would require learning from previous projects. There are guidelines for replication and upscaling that should be taken into consideration

This is an excellent point

(1) In terms of alternate livelihoods, the GEF 7 p[rojects will build on experiences from a number of GEF R2R projects, including the Tonga R2R Phase I project, the Tonga Climate Resilience Sector Project, the Tonga Pathway to Sustainable Ocean project all of which supported livelihood activities. To complement this, the project will finance consultancy services to review past experiences of livelihood activities to assess constraints, barriers and opportunities for improving livelihood options, based on which viable options would be selected for further mapping and in-depth analysis of value chains based on market potential, economic and environmental feasibility. The project will support training, infrastructure, marketing and promote public-private partnerships to support these livelihood ventures

(2) The project will build on mangrove restoration efforts

(1) Refer Output 1.4 of UNDP Project Document

(2) Refer Output 1.2 of UNDP Project Document

(3) Refer Outputs 3-1, 3.2 and 3.3 of UNDP Project Document

undertaken in Tonga R2R Phase I project and selection of rehabilitation sites will be undertaken through a mapping exercise and based on a set of agreed criteria. Implementation of restoration plans will be undertaken with community participation and written agreements for maintenance and protection of mangrove restoration sites from pigs (through fencing) with clear rules and responsibilities established, including monitoring, etc.

(3) The intention of KM and South-South Cooperation is to share experiences and learning within and outside of Tonga, the latter particularly among Pacific Island countries to learn and benefit from successes of other countries

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| <p>8. Knowledge management</p> <p>(1) What plans are proposed for sharing, disseminating and scaling-up results, lessons and experience?</p> <p>STAP Comments;</p> <p>The intention is to share experiences and knowledge through South South KE especially with other SIDS. In preparing the full proposal the proponents should give careful thought to what the purpose of the KE is as this will determine what information is critical, what forms of knowledge are useful, how this should be codified and shared, and what institutional arrangements are optimal for curating and sharing knowledge.</p> | <p>This is now integrated into Output 3.3 that details specific activities to be supported to promote South-South Collaboration, including with SIDS countries</p> | <p>Refer Output 3.3 of UNDP Project Document</p> |
| <p>GEF Council Comments</p> | | |
| <p>Germany Comments:</p> | | |

| | | |
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| <p>In implementing the project special attention needs to be paid to the establishment of ecotourism sites and activities. While ecotourism can contribute to livelihoods of local population, it can at the same time generate additional pressure on biodiversity and ecosystem services. The project should thus include environmental safeguards to ensure that improvements in biodiversity and ecosystem services are not offset by ecotourism activities.</p> | <p>The potential for ecotourism has been recognized under the project that includes financial solutions and partnerships with the Tonga Development Bank and public-private partnerships, including with tourism operators and investors. The project will support value chain analysis of livelihood opportunities, including for ecotourism ventures and substantial funds have been allocated for such analysis, capacity development, funds for small-scale ecotourism investments, marketing support etc.</p> <p>In terms of environmental safeguards, the safeguard assessment (SESP) identifies mitigation and management measures of alternative livelihood activities on local ecosystems as well as pose occupational and community safety risks</p> | <p>Refer Output 1.4 of UNDP Project Document</p> <p>Refer Annex 5 (SESP) for risk assessment (Risk 3)</p> |
|--|--|---|

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| <p>Furthermore, the creation of alternative livelihoods based on the usage of local plant species or establishment of additional agroforestry activities may also negatively impact biodiversity and ecosystem services. The project should thus consider a careful assessment of the positive and negative impacts expected from such activities.</p> | <p>This is fully recognized and reflected in the safeguard assessments. The project will also recruit an international safeguard consultant in the early part of project implementation to undertake further assessment of safeguard risks and prepare an Environment and Social Management Plan to further identify in detail specific risks and management measures. The project will hire a full-time national M&E officer to oversee, manage and monitor all safeguard risks related to the project.</p> | <p>Refer Annex 5 (SESP) and Annex (ESMF) for details of safeguard management approach</p> |
|--|--|---|

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| <p>The project also aims at reviewing and streamlining the legislative framework pertaining to the management of the lagoon. While this kind of enabling framework is essential in achieving the desired project outcomes, special attention needs to be paid to the effective implementation of legislative framework. We therefore suggest that the project describes how implementation and adoption of policies is going to be achieved long-term and which stakeholder will be responsible for implementation.</p> | <p>This is an important point. Output 2.2 will entail the review of policies and legislation to identify gaps and institutional mandates and recommend streamlining to support FSP objectives, as well as draft amendments to strengthen implementation. It will also review district development plans to align with requirement for effective implementation of FSP, monitoring and evaluation and measures for strengthening enforcement to ensure adequate compliance for various Acts. Existing Environment Enforcement Officers (and additional recruits) will be trained and provide skills to implement the FSP and relevant legislation, including coordination of enforcement with relevant sector agencies. The oversight for this would be provided by the Technical Working group that will report to the Project Steering Committee in terms of progress</p> | <p>Refer Output 2.2 of UNDP Project Document</p> |
|---|--|--|

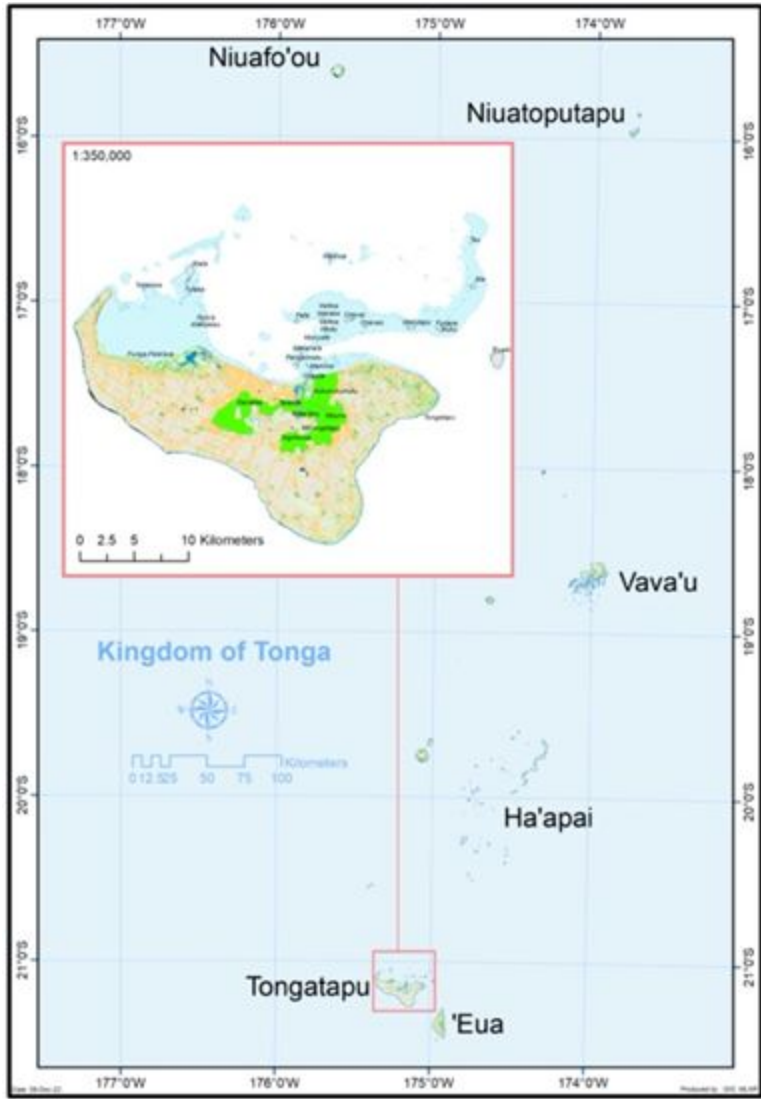
ANNEX C: Status of Utilization of Project Preparation Grant (PPG).
(Provide detailed funding amount of the PPG activities financing status
in the table below:

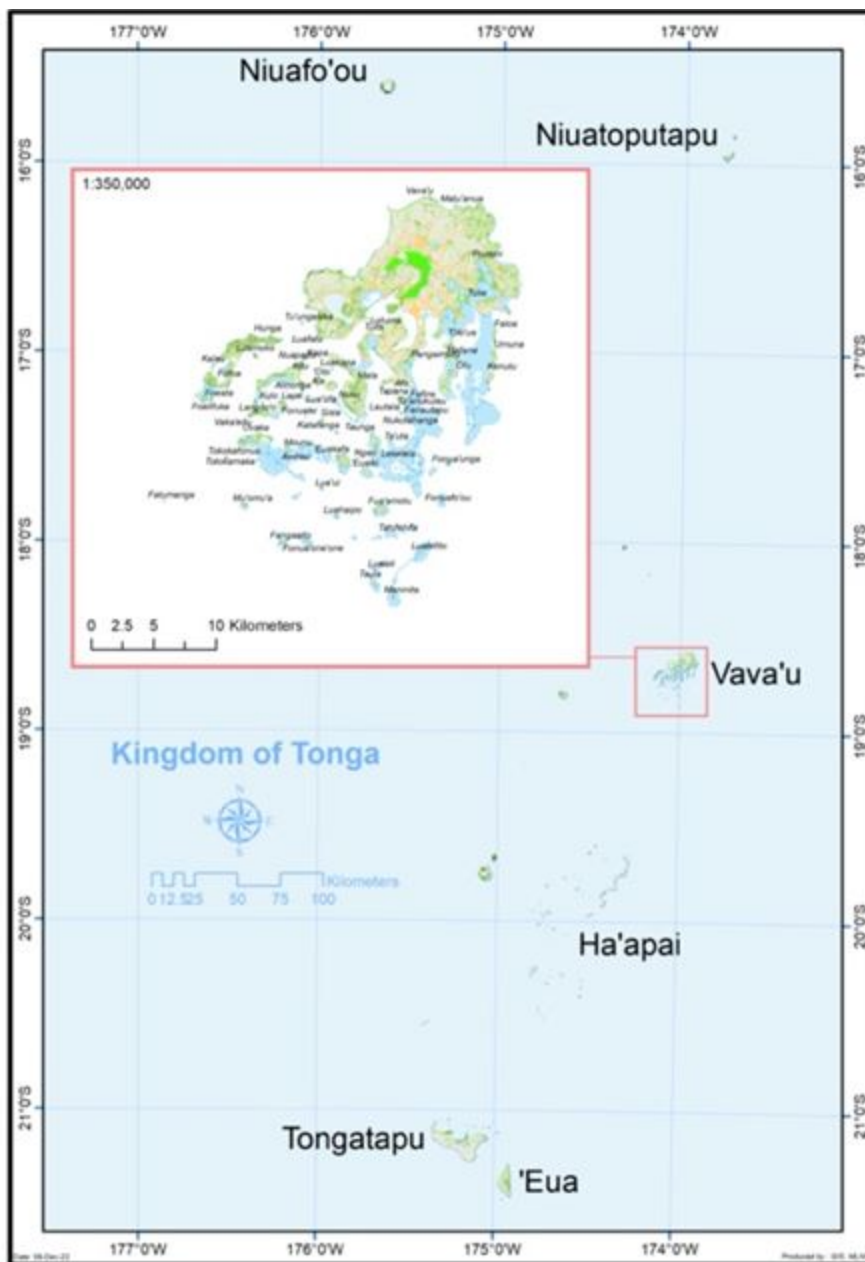
| PPG Grant Approved at PIF: 150,000 | | | |
|---|-----------------------------------|-----------------------------|-------------------------|
| <i>Project Preparation Activities Implemented</i> | <i>GETF/LDCF/SCCF Amount (\$)</i> | | |
| | <i>Budgeted Amount</i> | <i>Amount Spent To date</i> | <i>Amount Committed</i> |
| International consultants : 1. PPG Team Leader (Biodiversity expertise) 2. Safeguards/Gender Specialist (Environment, Social and Gender) | 64,000 | 57,152 | 6,848 |
| Local consultants : 1.PPG Coordinator (Biodiversity Expert) 2. National Safeguards, Gender and Stakeholder Engagement Expert 3. Field coordinator-Vavau island | 40,000 | 33,000 | 7,000 |
| Travel | 24,000 | 7,960 | 21,500 |
| Materials and goods for meeting , inc. COVID contingencies | 5,000 | 5,000 | 0 |
| Workshop and meeting | 17,000 | 17,000 | 0 |
| Total | 150,000 | 120,112 | 35,348 |

ANNEX D: Project Map(s) and Coordinates

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









Produced by the LMR Section
Ministry of Land and Marine Resources
Kingdom of Tonga
Date: 08-Dec-22

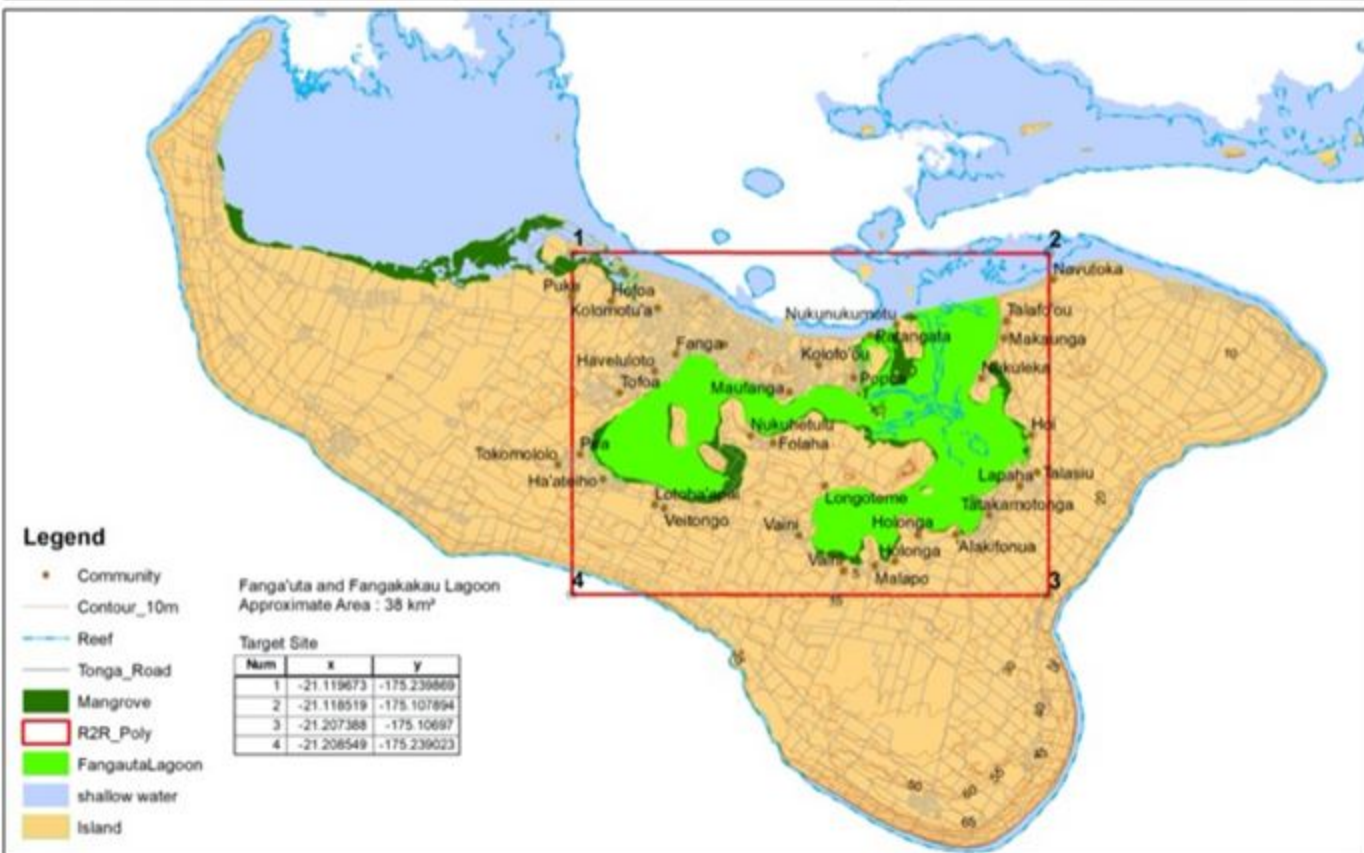


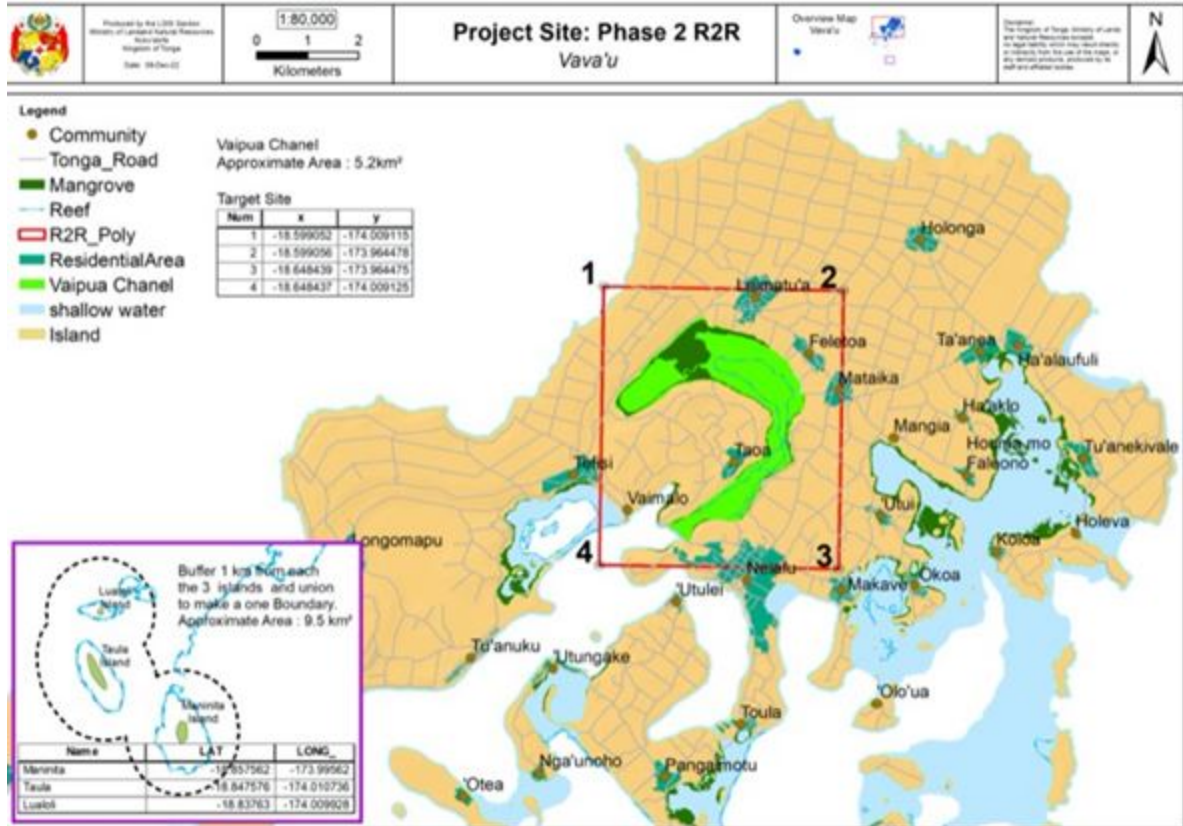
Project Site: Phase 2 R2R Tongatapu

Overview Map
Tongatapu



Disclaimer:
The project of Tonga consists of land and marine resources owned by the State, which may be used in various ways. The use of the map, or any other products, produced by the LMR are without liability.





ANNEX E: Project Budget Table

Please attach a project budget table.

| Expendi- ture Categor- y | bud- get not- e | Detailed Description | Component (USDeq.) | | | Sub- Total | M& E | PM C | Total (USD eq.) | Respon- sible Entity |
|-----------------------------------|--------------------------|-------------------------|--------------------|------------------|------------------|---------------|---------|---------|---|----------------------------|
| | | | Compo- nent 1 | Compo- nent 2 | Compo- nent 3 | | | | | |
| | | | | | | | | | (Execut- ing Entity receiv- ing funds from the GEF Agency) [1] | |

| | | | | | | | | | | |
|--|--|---|--------|--|--|--------|--|--|--------|-------------|
| | | <p>Equipment ? Total 70,000</p> <p>1. Laptops, (3) printers and workstations and drones for Tongatapu Drone for GIS mapping (including one hard drive for data storage and backup for field work in YR 1) - \$30,000 (Output 1.2)</p> <p>2. Camera for documentation , printer and laptop and hard drive for data storage and backup, desk, office chair and filing cabinet for technical officer Vavau in YR \$15,000 (Output 1.5)</p> <p>3. Desk, chairs and cabinets for technical Officer Vava?u - \$5,000</p> <p>4. Mobile communication devices (8 sets) for field- \$20,000</p> | 70,000 | | | 70,000 | | | 70,000 | UNDP |
|--|--|---|--------|--|--|--------|--|--|--------|-------------|

| | | | | | | | | | |
|-----------------------|----|---|------------|--|------------|--------------------------|--|--------------------------------------|---------------------------|
| Equipm ent | 7 | Materials & goods ? Total \$80,000 (lump sum) 1. Aerial and satellite maps and photographs, media support, banners and signage for all Outputs in Component 1 - \$80,000 | 80,00 0 | | | 80,00 0 | | 80, 000 | MEID ECC |
| Equipm ent | 17 | Materials & goods ? Total \$26,000 1. Materials to support IT capacity building trainings , data access, storage and management, media awareness , inc. materials for national dialogue in YRs 1-5 \$26,000 (Outputs 3.1, 3.2 and 3.3) | | | 26,00 0 | 26,00 0 | | 26, 000 | MEID ECC |
| Equipm ent | 24 | Equipment and Furniture ? Total \$5,000 1. PMU office furniture - desks, chairs, filing cabinets and equipment storage in YR1 -\$5,000 | | | | - | | 5, 000 5, 000 | MEID ECC |

| | | | | | | | | | | |
|---|------------------|---|--|--|--|----------|--|---------------|----------------------|--------------------|
| <p>Sub-contract to executing partner</p> | <p>29</p> | <p>Services to Project - \$49,105 for UNDP's execution support: facilitate procurement of PMU staff and international consultants, technical experts/specialists and procurement of equipment and furniture and conduct of audits, as listed in the draft LOA, Annex 12 (Contract issuance and management to be done by the IP and UNDP support to be provided in the recruitment process to ensure transparent and compliant process.)</p> | | | | <p>-</p> | | <p>49,105</p> | <p>49,105</p> | <p>UNDP</p> |
|---|------------------|---|--|--|--|----------|--|---------------|----------------------|--------------------|

| | | | | | | | | | | |
|---|-----------|--|--------|--|--|---------------|--|--|---------------|---------------------|
| Contractual services ? Imp Partner | 3A | Contractual services ? Imp Partner Partial costs for Project Coordinator provide technical input and oversight to the preparation of the updated FSP, ensuring that lessons from R2R Phase 1 are integrated, as well as arrangements for coordination across sectors in Year 1 and 2 - \$30,000 (Output 1.1) | 30,000 | | | 30,000 | | | 30,000 | MEID ECC |
|---|-----------|--|--------|--|--|---------------|--|--|---------------|---------------------|

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|--|------------------|---|----------------|--|--|---------------|--|--|----------------|----------------------------|
| <p>Contractual services ? Imp Partner</p> | <p>3B</p> | <p>Contractual services-Imp</p> <p>1. Conduct training to support establishment of SMAs in Fanga'uta lagoon in YR 2 and 3 at 3days @\$1000 per day for 2 proposed SMA sites \$12,000 (Output 1.3)</p> <p>2. Costs for FSP Secretariat to support the development of SMA strategy to ensure Fanga'uta lagoon and Vaipua are effectively represented in SMA strategy and support MoF in SMA oversight for SMAs in Fanga'uta YRs 1-5 : \$45,000 for the entire 5 years (YR=\$10,000, Y2= \$20,000 Y3-5 @ \$5K(Output 1.3)</p> <p>3. Technical Officer services for Vava'u at \$1,000/month for 5 years - \$60,000 (Output 1.5)</p> | <p>117,000</p> | | | <p>17,000</p> | | | <p>117,000</p> | <p>MEID ECC</p> |
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|--|----------|---|---------------|--|---------------|--|--|---------------|----------------------------|
| <p>Contractual services ? Imp Partner</p> | <p>9</p> | <p>Contractual services ? Imp Partners 1. Partial costs for National Project Coordinator to provide technical expertise and advise to enhance the functionality of the FSP Secretariat and improving TORs and provision of technical guidance to FLC Steering Committee, and CMCs and district and community committees to enhance their functionality, reporting and monitoring ? YRs 1-5 - \$15,000(Output 2.1) 2. Partial costs for National Project Coordinator to provide oversight and technical guidance for the policy and legislative review, drafting amendments, review of district development plans and enforcement mechanisms for YRs 1-5 \$15,000 (Output 2.2)</p> | <p>30,000</p> | | <p>30,000</p> | | | <p>30,000</p> | <p>MEID ECC</p> |
|--|----------|---|---------------|--|---------------|--|--|---------------|----------------------------|

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|--|------------|---|--|--|---------------|---------------|--|---------------|----------------------------|
| <p>Contractual services ? Imp Partner</p> | <p>14A</p> | <p>Contractual services ? Imp Partners Partial costs of Project Coordinator to participate in communication and Knowledge Management events and campaigns for decision-makers in YRs 1-5 \$15,000 (Output 3.2)</p> | | | <p>15,000</p> | <p>15,000</p> | | <p>15,000</p> | <p>MEID ECC</p> |
| <p>Contractual services ? Imp Partner</p> | <p>14B</p> | <p>Contractual services ? Imp partner 1. Media consultant to develop documentation videos of best practices for knowledge sharing in South-South meetings? 4 communities per year @\$1000 per community in YRs 3-5 \$12,000 (Output 3.3) 2. Communication specialist to develop communication and KM strategy to guide project implementation in YR 1 - \$20,000</p> | | | <p>32,000</p> | <p>32,000</p> | | <p>32,000</p> | <p>MEID ECC</p> |

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|--|-------------------|--|--|--|--|----------|---------------|---------------|----------------------|----------------------------|
| <p>Contractual services ? Imp Partner</p> | <p>20A</p> | <p>Consultancy to develop ESMF and M&E framework in Year 1 and thereafter review and update ME plan: 60days @\$300 per day in Year 1 and 20days @\$300/day in year 3 and year 5 at end of project \$30,000 (Output 3.4)</p> | | | | <p>-</p> | <p>30,000</p> | | <p>30,000</p> | <p>MEID ECC</p> |
| <p>Contractual services ? Imp Partner</p> | <p>20B</p> | <p>Contractual services ? Imp Partners : Full time M&E Officer to oversee and manage and implement M&E framework including regular quarterly meetings for monitoring SESP, ESMP GAP, SEP in YRS 1-5 \$75,000 (Output 3.4)</p> | | | | <p>-</p> | <p>75,000</p> | | <p>75,000</p> | <p>MEID ECC</p> |
| <p>Contractual services ? Imp Partner</p> | <p>23A</p> | <p>Contractual services ? Individuals Operations Support Officer at \$11,000/year for 5 years - \$55,000 (of which \$30,000 from project and \$25,000 covered by UNDP co-financing)</p> | | | | <p>-</p> | | <p>30,000</p> | <p>30,000</p> | <p>MEID ECC</p> |

| | | | | | | | | | |
|---|------------|--|--|--|---|--|--------|---------------|---------------------|
| Contractual services ? Imp Partner | 23B | 50% costs of Project Coordinator salary@\$2,500 per month for 60 months \$75,000 | | | - | | 75,000 | 75,000 | MEID ECC |
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| <p>Contractual services-Company</p> | <p>2</p> | <p>Consultancy Services ? Firm ? Total \$ 1,305,000</p> <p>1. Part costs for MLNR (GIS) and TWG led by PMU to conduct mapping of vulnerable habitats and zoning of the coral, seagrass beds etc. Y1 \$20,000 (Output 1.2)</p> <p>2. Part costs for TWG led by PMU for development of Investment plan and criteria for site selection for restoration in collaboration with TWG, CMC and land owners: part costs and transportation costs for CMC and TWG Year2 - \$20,000 (Output 1.2)</p> <p>3. Services associated with mangrove (80 ha), seagrass bed (20 ha) and coral restoration (20 ha) and maintenance ? YRs 1-5 - \$600,000 (Output 1.2). In terms of mangroves</p> | <p>1 ,305,000</p> | | <p>1,305,000</p> | | | <p>1,305,000</p> | <p>MEID ECC</p> |
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| | <p>restoration this entail costs such as nursery development (land levelling, sheds, fencing, water supply, drainage etc.), raising of seedlings (labor, materials), preparation of ins-situ planting sites (leveling, weed removal, land preparation, plant bed preparation and labor for planting), fencing of planted areas, signage, fencing to keep pigs out, maintenance labor and replanting failed out areas), For seagrass restoration this will involve: undertaking assessment of status of seagrass beds and feasibility for restoration, identify habitat suitable location of restoration, species selection, source transplant materials or seeds, seed processing,</p> | | | | | | |
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| | <p>establish nurseries of required, ensure/develop adequate sediment base for seed growth, reseeded/planting, enforce biosecurity and damage prevention measures in replanting sites (signboards, floating barriers, etc.), maintenance of sites, monitoring regrowth, etc. Significant labor costs will be associated with the above activities. For coral restoration this will involve: identification, prioritization and selection of restoration sites (this will involve assessing risks, ability of site to regenerate, tide levels, historical presence, ecological resilience, consultations, etc.), select appropriate restoration interventions (coral propagation and out planting, seed</p> | | | | | | |
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| | <p>planting, managed relocation, etc.) and design restoration plan, substrate stabilization, coral predator removal/management, seagrass meadow management, establish evaluation criteria and performance matrices, protection of restoration sites (sign boarding, demarcation buoys, etc.).</p> <p>4. Undertake baseline surveys, consultations to establish 4 new SMA sites as per community request in YR 2 and 3 - \$60,000: (Output 1.3)</p> <p>5. Support for ecotourism development including signage, trail improvements, education displays and information center programs, hire of canoes, training of small ecotourism business development,</p> | | | | | | | |
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| | <p>development of ecotourism products etc.) ? Yrs 1-5 - \$150,000</p> <p>6. Contractual services for small-business, value chain and livelihood improvement, including assessment of viability, training communities for skills development, facilitating market linkages and product development (including provision of small equipment at household level such as grinders, processors, harvesting tools, storage equipment, small farm equipment, etc.) and support to communities for value chain and livelihood development including technical support, training and market access support) YRs 2-5 - \$200,000 (Output 1.4).</p> <p>7. Contractual support to PMU, Vava'u</p> | | | | | | | |
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| | <p>Technical committee in consultation with communities and stakeholders to support the development of Vaipua Stewardship plan and Action plan YRs 2-4 - \$30,000 (Output 1.5)</p> <p>8. Support to assist VEPA in baseline surveys at Vaipua Channel and technical support to identify conservation measures YRs 2 and 3 - \$15,000 (Output 1.5)</p> <p>9. GIS support to assist in demarcation of boundaries and GPS coordinates of proposed MPAs and SMAs in Vaipua ? YRs 2 and 3 - \$10,000 (Output 1.5)</p> <p>10. Support for implementation of management activities in Vaipua Channel and 3 Vava?u PAs in YRs 1-4 -</p> | | | | | | | |
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| | <p>\$200,000 (Output 1.5). This would involve baseline studies, management plan preparation, consultation with stakeholders, support for park management activities (signages, interpretation support, bird and ecological surveys, vegetation surveys, fisheries surveys, boundary demarcation, support for community training, hiring of canoes, mangrove stabilization, small works for coast stabilization, waste management, etc.</p> | | | | | | | |
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| <p>Contractual services-Company</p> | <p>13</p> | <p>Contractual services ? Firm -Total \$174,000</p> <p>1. Assessment of information sharing platforms pertaining to FL and develop a centralized system for all stakeholders to access including updating website and social media and knowledge sharing platforms in YR 1 and 2- \$24,000 (Output 3.1)</p> <p>2. Contractual services for publicity and knowledge management materials for equipping Environment Resources Information Centre in YR 2-3 \$50,000 (Output 3.2)</p> <p>3. Support for citizen science program, science fair and annual awards scheme for active involvement of women and youth in YR1-5 \$50,000 (Output 3.2)</p> | | <p>174,000</p> | <p>74,000</p> | | <p>174,000</p> | <p>MEID ECC</p> |
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| | | 4. Contractual services to design education and national communication plan and materials (press release, newsletters, awareness materials, etc.) and conduct awareness activities - \$50,000 | | | | | | | |
| International Consultants | 18 | International Consultants ? Total \$45,000 1. Consultant for MTR in YR 2/3 \$20,000 (Output 3.4) 2. Consultant for terminal evaluation in YR 5 \$25,000 (Output 3.4) | | | | - | 45,000 | 45,000 | UNDP |

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| | | <p>Local Consultants: Total \$168,000</p> <p>1. Evaluation of implementation of FSP to identify gaps and actions to develop revised FSP Action Plan (2024-2034) in YR 1 ? 60 days @350/day = \$21,000 (Output 1.1)</p> <p>2. Conduct annual review of FSP Action plan implementation (YRs 2-5) at 20 days/year @ \$250 = \$5,000 x 4 = \$20,000 (Output 1.1)</p> <p>3. Review of FSP monitoring and evaluation system to develop revised M&E system in YR 1 at 40 days @\$250 and implementation review in YRs 3 and 5) at 20 days@250 in YRs 3 and 5 = \$20,000 (Output 1.1)</p> <p>4. Review of M&E system for SMAs and support development</p> | 168,000 | | | 168,000 | | 168,000 | MEID ECC |
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of M&E system and specific actions for development of database for all SMA officers to share data and updates on SMA management in Fanga'uta and Vaipua Channel: YR 2 50days @\$300 per day = \$15,000 (Output 1.3)

5. Support the review of SMA regulations in alignment with Parks and Reserves Management Act and Birds and Fish preservation Act for amendments to include sharing SMAs in Fanga'uta Lagoon including identification of Regulations and enforcement needs in YRs 2 and 3 = 80 days@\$250/day = \$20,000 (Output 1.3)

6. National economist/ marketing consultant to conduct review of alternative livelihoods

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| | <p>and eco-tourism potential in communities and develop marketing strategy for promoting goods and services at community level including sustainable financing mechanisms in YR 1 and 2 - 60 days @\$250/day = \$15,000 (Output 1.4)</p> <p>7. Marketing/production services expertise to conduct training on skills development to producers and service providers: \$39,000 (Output 1.4)</p> <p>8. Consultant to support development of in YR 2 Vaipua Stewardship/Management Plan and Vava'u PA plans: 60days@\$300/day = \$18,000 (Output 1.5)</p> | | | | | | | |
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| Local Consultants | 8 | <p>Local consultants ? Total \$112,500</p> <p>1. Consultant to review policies and legislation on managing Fanga'uta lagoon and Vaipua Channel and drafting amendments and recommendations for strengthening enforcement and support PMU in conducting training for enforcement: 60days@\$350/day. Fanga'uta lagoon Year 2, Vaipua Channel Year 3 - \$42,000 (Output 2.2)</p> <p>2. Review district development plans to mainstream and align to FSP Action Plan (Year 2) and Vaipua Channel Management Plan (Year 4) including recommendations for M&E alignment: 60days@\$350/day - \$42,000 (Output 2.2)</p> <p>3. Consultant to conduct capacity needs</p> | 112,500 | | 12,500 | | 112,500 | MEID ECC |
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| | | <p>assessment of sectors and communities involved in managing the lagoon and develop a gender-sensitive five year capacity development plan for the project in YR 1: 60days @\$350 per day -\$21,000 (Output 2.3)</p> <p>4. IT/ Communications specialist to update website and develop data management, reporting and grievance redress procedures for communities and sectors in YR 2 30days@\$250 per day - \$7,500 (Output 2.3)</p> | | | | | | | |
| Local Consultants | 19 | <p>Local Consultants ? Total \$14,000</p> <p>1. Consultant for MTR in YR 2/3 \$6,000 (Output 3.4)</p> <p>2. Consultant for terminal evaluation in YR 5 \$8,000 (Output 3.4)</p> | | | | - | 14,000 | 14,000 | UNDP |

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| <p>Training, Workshops, Meetings</p> | <p>4</p> | <p>Training, workshops and conferences ? Total \$498,000 1. Annual/bi-annual Environment Advisory Committee meetings and Technical working group Y1- Y5 at \$2,000/year = \$25,000 (Output 1.1) 2. Consultation meetings with sector agencies to identify priority activities and responsibilities for phase 2 project Y1 and review Y1-Y5 - \$24,000 (Output 1.1) 3. Consultation meetings to approval process of FSP Action Plan in YRs 1 and 2 - \$5,000 (Output 1.1) 4. Consultations for update of FSP monitoring and evaluation Y1, Y3 and Y5 - \$8,000 (Output 1.1) 5. Conduct training with NGOs Y2 and</p> | <p>498,000</p> | | | <p>498,000</p> | | <p>498,000</p> | <p>MEID ECC</p> |
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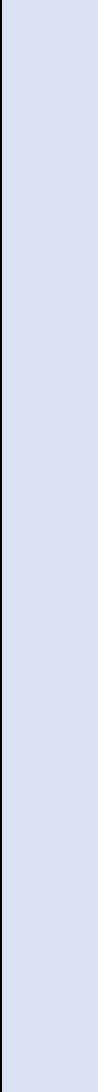
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| | <p>assist PMU to conduct mangrove nursery development trainings with 10 selected communities in Y2 and Y3 - \$30,000 (Output 1.2)</p> <p>6. Training and skills development for local communities for restoration, nursery development: 3 selected communities @\$2000/community per day for 3days Y2 and Y3 and monitoring activities \$5000 (Y2-Y5) - \$60,000 (Output 1.2)</p> <p>7. Training to support NGOs and conduct of local researchers/ students to assess causes of mangrove die-off: 2NGOs and tertiary students: \$2,000 per day including materials and equipment and catering x3days Y2 and Y3and monitoring support \$5000 for Y2-Y5 - \$55,000</p> | | | | | | | |
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| | <p>(Output 1.2)</p> <p>8. Training to support staff training for DOE and MOF (8 staff) to enhance collaboration for streamlining SMA establishment in Fanga'uta lagoon and sharing information to coincide with establishment of new SMAs in YRs 2 and 3 \$3,000 per day for 5 days includes equipment hire, fuel, catering, transportation etc. - \$30,000 (Output 1.3)</p> <p>9. Training for CMCs to improve community management of SMAs at \$2,000 per training for 2 days and monitoring support \$3,500 Y2-Y5 - \$22,000 (Output 1.3)</p> <p>10. Support for national and regional SMA workshops? YR 1, 3 and 5 - \$15,000 (Output 1.3)</p> <p>11. Capacity</p> | | | | | | | |
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| | <p>building workshops for women and youth for 3 communities over the course of the project in relation to livelihood improvements: 3 days training@ \$2,000 per day per group (\$6,000x2) x 3 in YRD 2-4 - \$108,000 (Output 1.4)</p> <p>12. Support for establishing or strengthening Blue/ Green Livelihood program/dialogue (if already in place) YRs 1-5 - \$45,000 (Output 1.4)</p> <p>13. Consultation costs for developing Vaipua Channel Management plan and PA plans (Year 3) and reviewing district development plans (Year 2 for FL and Year 3 for VC) -\$20,000 (Output 1.5)</p> <p>14. Consultations meetings to obtain MPA approval and gazette in YRs</p> | | | | | | | |
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| | <p>1-3 \$3,000 (Output 1.5)</p> <p>15. Consultations with communities and key stakeholders (NGOs, private sector) on resource use, development of management plans and boundaries, development of consultation and Communication plan in line with Stakeholder engagement plan to include grievance redress mechanism in YRs 1-3 - \$18,000 (Output 1.5)</p> <p>16. Consultations for establishing governance structure (CMC, Vava'u Ma'alahi Taskforce) and regular quarterly update meetings and monitoring activities in YR 1 and 2 - \$25,000</p> <p>17. Training for drone applications and GIS</p> | | | | | | | |
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\$5,000



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| <p>Training, Workshops, Meetings</p> | <p>10</p> | <p>Training, workshops and conferences ? Total \$195,000 1. Training and skills development for District and town officers (CMC) in YRs 1-3 - \$30,000 (Output 2.1) 2. Training to revive the technical committee and steering committee with regular monthly/quarterly meetings in YRs 1-5 - \$40,000 (Output 2.1) 3. Consultations to establish CMC regulations to ensure membership of CMC contains representation of all stakeholder groups (women, youth, men, church denominations etc.) in YR 1 - \$20,000 (Output 2.1) 4. Training of DOE, Ministry of Fisheries and other enforcement staff in the management</p> | <p>195,000</p> | | <p>95,000</p> | <p>1</p> | <p>195,000</p> | <p>MEID ECC</p> |
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| | <p>of Fanga'uta lagoon and Vaipua Channel in YRs 1-3 - \$15,000 (Output 2.2)</p> <p>5. Workshops and Consultation costs associated with policy and legislative review in YR 1-3 - \$18,000 (Output 2.2)</p> <p>6. Consultations for developing and updating website with key stakeholders and how to use the software and procedures following completion of the GRM process in YR 2-4 - \$12,000. (Output 2.3)</p> <p>7. Capacity building training workshops for TWG on ecosystem-based and sustainable development approaches in YRs 1-4 - \$20,000 (Output 2.3)</p> <p>8. Capacity building training for CMC at Fanga'uta</p> | | | | | | | | |
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| | <p>Lagoon on communication and consensus building, collective decision making, M&E etc. in YRs 1-4 - \$20,000 (Output 2.3)</p> <p>9. Capacity building training for CMC at Vaipua Channel on communication and consensus building, collective decision making, M&E etc. in YRs 1-4 - 20,000 (Output 2.3)</p> | | | | | | |
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| <p>Training, Workshops, Meetings</p> | <p>15</p> | <p>Training, workshops and conferences ? Total \$221,000 1. Consultation meeting costs for assessing knowledge and information platforms and data in YR 1 and 2 \$10,000 (Output 3.1) 2. Training on information and data access and sharing that are gender focused and appropriate in YRs 3-5 \$12,000 (Output 3.1) 3. Workshops for training on gender aspects and implementing gender action plan in YRs 1-3 \$8,000 (Output 3.2) 4. Conduct annual workshops and National end of project workshop to share lessons experiences with views to replicate in Vava'u in YRs 3-5 \$13,000 (Output 3.2) 5. Hosting national dialogue and</p> | | <p>221,000</p> | <p>21,000²</p> | | <p>221,000</p> | <p>MEID ECC</p> |
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| | <p>workshops for dissemination of best practices and sharing lessons learned in YRs 4 and 5 \$20,000 (Output 3.3)</p> <p>6. Consultations for development of video documentaries in YRs 4 and 5 \$8,000 (Output 3.3)</p> <p>7. Support for participation in regional and global events on coastal marine knowledge sharing and convening national dialogue in YRs 3-5 \$150,000 (Output 3.3)</p> | | | | | | | |
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| <p>Training, Workshops, Meetings</p> | <p>21</p> | <p>Training, workshops and conferences ? Total \$25,000 1. Inception workshop in YR 1 \$5,000 (Output 3.4) 2. Monthly and quarterly update meetings to monitor project activities and address M&E issues as they arise in YRs 1-5 \$15,000 (Output 3.4) 3. Sector and community consultation meetings for ESMF and M&E framework development in YR1 \$5,000 (Output 3.4)</p> | | | | <p>-</p> | <p>25,000</p> | <p>25,000</p> | <p>MEID ECC</p> |
| <p>Training, Workshops, Meetings</p> | <p>26</p> | <p>Training, workshops and conferences ? Total \$1,400 1. Training of PMU staff in financial management, project management and procurement management - \$1,400</p> | | | | <p>-</p> | <p>1,400</p> | <p>1,400</p> | <p>MEID ECC</p> |

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| | | Travel - Total \$205,000 | | | | | MEID ECC |
| | | 1. Travel related to evaluation of FSP status and update and development of revised FSP Action Plan YR 1-3 - \$25,000 (Output 1.1) | | | | | |
| | | 2. Travel related to mapping of Fanga?uta lagoon and restoration activities in YR 1-5 - \$45,000 (Output 1.2) | | | | | |
| Travel | 5 | 3. Travel related to outer islands SMA support officers for involvement in SMA related work -\$YR 2-5 -\$40,000 (Output 1.3) | 205,000 | | | 05,000 | 205,000 |
| | | 4. Travel related to promotion of income generation activities in YRs 1-5 - \$\$60,000 | | | | | |
| | | 5. Travel related to support for the Vaipua Channel management planning and implementation process and preparation of | | | | | |

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| | | PA management plans in YR 1-5 - \$35,000 (Output 1.5) | | | | | | | |
| Travel | 11 | <p>Travel ? Total \$143,660</p> <p>1. Travel costs associated with improving institutional arrangement for the Fanga?uta Lagoon in Yrs. 1-5 - \$30,000 (Output 2.1)</p> <p>2. Travel costs for policy and legislative review and district plan review and district development planning in YRs 1-4 - \$20,000 (Output 2.1)</p> <p>3. Travel costs associated with undertaking capacity building trainings in YRs 1-4 - \$93,660 (Output 2.3)</p> | 143,660 | | | 143,660 | | | MEID ECC |

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| <p>Travel</p> | <p>16</p> | <p>Travel ? Total \$30,000 1. Travel associated with developing IT knowledge management and sharing platforms and training in YRs 1-3 \$10,000 (Output 3.1) 2. Travel associated with gender action plan implementation production of awareness materials and documentaries in YRs 2-5 \$20,000 (Output 3.2)</p> | | | <p>30,000</p> | <p>30,000</p> | | <p>30,000</p> | <p>MEID ECC</p> |
| <p>Travel</p> | <p>22</p> | <p>Travel ? Total \$13,500 1. Travel associated with M&E related work in YRs 1-5 \$2,500 (Output 3.4) 2. Travel associated with MTR in YR2/3 \$4,000 (Output 3.4) 3. Travel associated with TE in YR5 \$7,000 (Output 3.4)</p> | | | | <p>-</p> | <p>13,500</p> | <p>13,500</p> | <p>MEID ECC</p> |

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| Office Supplies | 12 | Supplies ? Total \$26,000 1. Supplies to support capacity building trainings and workshops for YRs 1-4 - \$26,000 (Output 2.3) | | 26,000 | | 26,000 | | | 26,000 | MEID ECC |
| Office Supplies | 27 | Supplies ? Total \$5,125 1. Office supplies for PMU | | | | - | | 5,125 | 5,125 | MEID ECC |
| Other Operating Costs | 25 | Professional Services ? Total 12,500 1. Annual audits at \$2,500/year for YR 1-5 \$12,500 | | | | - | | 13,395 | 13,395 | UNDP |
| Other Operating Costs | 28 | Utilities ? Total \$5,000 1. Electricity, internet and other utilities at \$1,000/year for 5 years = \$5,000 | | | | - | | 5,000 | 5,000 | MEID ECC |
| Grand Total | | | 2,473,000 | 507,160 | 498,000 | 3,478,160 | 202,500 | 184,025 | 3,864,685 | |

ANNEX F: (For NGI only) Termsheet

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

ANNEX G: (For NGI only) Reflows

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

with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

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

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