

GEF-8 REQUEST FOR MSP (1-STEP) APPROVAL

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General Project Information

Project Information

Project Title:

Tonga Rural Innovation Project Phase III (TRIP III)

Region:

Asia

GEF Project ID:

12265

Country(ies):

Tonga

Type of Project:

MSP

GEF Agency(ies):

IFAD

GEF Agency Project ID:

2000005633

Project Executing Entity(s):

Mainstreaming of Rural Development Innovation Tonga Trust (MORDI-TT)

Project Executing Type:

Government

GEF Focal Area (s):

Multi Focal Area

Submission Date:

12/29/2025

Type of Trust Fund:

MTF

Project Duration (Months):

60

GEF Project Grant: (a)

4,507,534.00

GEF Project Non-Grant: (b)

0.00

Agency Fee(s) Grant: (c)

428,215.00

Agency Fee(s) Non-Grant (d)

0.00

Total GEF Financing: (a+b+c+d)

4,935,749.00

Total Co-financing

10,173,000.00

PPG Amount: (e)

150,000.00

PPG Agency Fee(s): (f)

14,250.00

PPG total amount: (e+f)

164,250.00

Total GEF Resources: (a+b+c+d+e+f)

5,099,999.00

Project Tags

CBIT: No NGI: No SGP: No Innovation: No Competitive Window: No

Project Sector (CCM Only):

AFOLU

Taxonomy:

Focal Areas, Climate Change Adaptation, Climate Change, Biodiversity, Mainstreaming, Agriculture and agrobiodiversity, Species, Plant Genetic Resources, Protected Areas and Landscapes, Productive Landscapes, Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Demonstrate innovative approaches, Stakeholders, Civil Society, Local Communities, Type of Engagement, Participation, Partnership, Gender Equality, Gender Mainstreaming, Gender-sensitive indicators, Beneficiaries, Gender results areas, Participation and leadership, Capacity, Knowledge and Research

Rio Markers

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Principal Objective 2	Principal Objective 2	Principal Objective 2	Principal Objective 2

Project Summary

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

Tonga is exposed to intense tropical cyclones and changing rainfall patterns, making it one of the most vulnerable island nations to climate change. These impacts threaten infrastructure, agriculture and water supply. Changing climate patterns also increase prevalence of agricultural pests and diseases which, coupled with monoculture farming practices and excessive pesticide use, decrease agricultural productivity and soil fertility. Run-off of pesticides and fertilizers also threaten native and endemic species. Agriculture expansion has contributed to biodiversity loss, land degradation, disrupted native ecosystems and caused significant habitat alteration. These issues are particularly evident in the Vava'u island group and on Tongatapu. The Tonga Rural Innovation Project Phase III (TRIP III) combines GEF financing and an IFAD grant of USD 5.3 million with the objective to enhance the ability to anticipate and respond to climate-related risks as well as improve food security through climate-resilient and biodiversity-friendly farming practices. The project aims to: (i) strengthen local governance by integrating climate change, biodiversity, gender and social inclusion into community development planning; (ii) promote agroforestry, mixed cropping and crop rotation practices and; (iii) biodiversity conservation with a focus on invasive species management to protect native flora and fauna. The proposed project will support 128 communities in Vava'u, Eua, Tongatapu, Ha'apai, and the Nuias, targeting 8,843 households, and cover 1,068 hectares of cropland managed for climate resilience. Global Environment Benefits (GEBs) will be attained by reducing threats to critical terrestrial and marine biodiversity, strengthening ecosystem-based management of land and forest areas and promoting sustainable resource management at national and community levels.

Project Description Overview

Project Objective

To strengthen community development and improve rural livelihoods by promoting diverse agricultural production and commercialization, integrating climate-resilient practices, improving biodiversity, reducing

land degradation, fostering social inclusion, and incorporating innovative solutions.

Project Components

Component 1. Community development planning

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
1,507,216.00	1,931,350.00

Outcome:

Outcome 1: Capacities enhanced to mainstream climate resilience and biodiversity and land degradation considerations in community and livelihood plans

Indicators (gender and youth disaggregated):

ha covered by Community Development Plans (CDPs) formulated and/or revised to mainstream climate change adaptation and biodiversity

climate vulnerability assessments for integrating policies and planning in the agriculture sector

of people trained in climate change/ biodiversity risks and response for increased livelihood resilience

Output:

Output 1.1: Climate- and biodiversity-informed suitability and vulnerability analyses produced for priority crops and farming systems, including recommended adaptation options and measures needed to reduce agricultural runoff into sensitive terrestrial and marine ecosystems

Output 1.2: Landscape-level biodiversity, ecosystem service, and land degradation / erosion risk spatial analysis / maps updated and integrated into Community Development Plans (CDPs) and Livelihood Development Plans (LDPs), including identification of areas sensitive to erosion, invasive species, and agricultural runoff affecting marine ecosystems

Output 1.3: Local government officials and technical staff trained to apply biodiversity- and climate-resilience criteria, screening tools, and ecosystem considerations in CDP and LDP planning and prioritization

Output 1.4: Community members trained to understand climate risks, biodiversity threats, and adaptation opportunities, including climate-resilient practices, safe pesticide and fertilizer management, integrated pest management, and measures to reduce pollution and eutrophication of inshore marine ecosystems

Output 1.5: CDPs and LDPs revised to incorporate climate and biodiversity and land degradation risk information, opportunities for ecosystem-based and biodiversity-friendly practices, invasive species management, and measures to reduce agricultural runoff and protect sensitive terrestrial and marine ecosystems.

Component 2: Sustainable Livelihoods through Commercialization

Component Type	Trust Fund
Investment	SCCF-A
GEF Project Financing (\$)	Co-financing (\$)

2,651,490.00	5,955,000.00
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Outcome:

Outcome 2: Adoption of Climate-Smart Agriculture (CSA) and biodiversity-friendly and sustainable land management practices and livelihood diversification options by farmers and their household members

Indicators (gender disaggregated):

Area (ha) of land managed for climate resilience

demonstration sites under CSA

% increase (compared to the baseline) in the number of rural producers accessing CSA production inputs and/or technological packages

people trained in new technologies / practices

private sector enterprises/ civil organizations engaged in climate change adaptation and resilience action through innovation facility

of extension providers trained to enhance outreach capacity and systematically integrate agrometeorological information and best practices into last-mile support.

Output:

Output 2.1: Rural producers' access and adopt climate-smart and biodiversity-friendly production inputs and technologies and land degradation prevention practices through Community Economic Livelihood Grants (CELGs) and targeted training

Output 2.2: At least 19 farmer field schools and home-garden models established and used for farmer training on climate-resilient, biodiversity-friendly, and sustainable land use / agricultural practices, aligned with community development plans

Output 2.3: Innovation Facility operational and financing pilot and scale-up initiatives on climate-smart agriculture, biodiversity-friendly practices, reduced-runoff farming, digital agrometeorological tools, and youth-centered business models

Output 2.4: Agrometeorological advisory services developed and disseminated, providing crop-specific, location-specific, and last-mile climate advisories to support climate-resilient production and risk reduction

Output 2.5: Strengthened last-mile outreach mechanisms—through SMS, radio, digital tools, women's groups, and youth groups—to increase awareness of climate risks, biodiversity co-benefits, pollution-reduction options, and CSA/livelihood diversification opportunities

Output 2.6: Community seed banks set up and/or rehabilitated to preserve valuable agrobiodiversity

Component 3. Policy Support and Knowledge Management

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
59,000.00	1,778,000.00

Outcome:

Outcome 3: Improved generation, sharing, and use of climate and biodiversity and land degradation knowledge leads to strengthened policies and systems supporting resilient and biodiversity-friendly agriculture.

Indicators (gender disaggregated):

of policy-relevant knowledge products (e.g. manuals, how to notes, extension sheets)

% increase (compared to baseline) in policy feedback and stakeholder collaboration achieved through knowledge management

of multistakeholder consultations and coordination mechanism events conducted to enhance climate mainstreaming among related sectors.

Output:

Output 3.1: At least three policy relevant knowledge products (e.g. technical briefs, manuals, extension sheets) developed on climate resilient production, land degradation, erosion control, land-sea linkages and the adverse impacts of invasive species on ecosystem health

Output 3.2: Priority policies, strategies, and regulatory frameworks of MAFF, MEIDECC, and DLG reviewed and revised to integrate biodiversity conservation, invasive species management, climate resilience, and CSA principles

Output 3.3: Systems for tracking biodiversity-friendly practices, CSA adoption, and climate impacts integrated into systems being developed under TRIP III

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
75,184.00	

Outcome:

Outcome 4: Effective M&E framework informs adaptive management of the project.

Indicators:

A gender-responsive M&E framework.

MTE and TE reports

Output:

Output 4.1: A gender and youth responsive M&E framework developed.

Output 4.2: Mid-term Evaluation (MET) and Terminal Evaluation (TE) conducted to ensure adaptive management.

Component Balances

Project Components	GEF Project Financing (\$)	Co-financing (\$)
Component 1. Community development planning	1,507,216.00	1,931,350.00

Component 2: Sustainable Livelihoods through Commercialization	2,651,490.00	5,955,000.00
Component 3: Policy Support and Knowledge Management	59,000.00	1,778,000.00
M&E	75,184.00	
Subtotal	4,292,890.00	9,664,350.00
Project Management Cost	214,644.00	508,650.00
Total Project Cost (\$)	4,507,534.00	10,173,000.00

Please provide justification

PROJECT OUTLINE

A. PROJECT RATIONALE

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

Country Context

The Kingdom of Tonga (hereinafter referred to as Tonga) is an archipelago situated in the South Pacific. It is made up of 176 low-lying coral and volcanic islands and measures over 360,000 square kilometers in area. Among these islands, only 36 are inhabited. Due to its location at the subduction zone of the Indian Australian and Pacific plates, the country is subject to frequent seismic activity (WBG, 2021). The western ridge hosts active volcanoes, while the eastern ridge hosts coral islands such as Vava'u and Ha'apai. Tongatapu (260 km²) and Eua (87 km²) are the two largest island groups, Ha'apai (109 km²) is the middle island group, and Vava'u (121 km²), Niuatoputapu (71.7 km²), and Niuafu'ou (15 km²) are the northernmost island group [1].

The population of Tonga is approximately 104,597, with females comprising 51% of the total (World Bank, 2023). Tongatapu comprises almost 70% of the country's arable land and is home to around 75% of Tonga's population, the majority of whom are subsistence farmers. Tonga is a lower middle-income country with a GDP per capita of approximately USD 4,500 (TSD, 2024). Over the past few decades, there has been a decline in the population due to men and young people migrating mainly through the Seasonal Workers Programmes (SWPs) to New Zealand and Australia. The World Bank (2021) estimates that around 60% of Tongan income comes from remittances, as nearly half of the Tongan population live overseas.

The primary sector, including agriculture, forestry and fisheries, represents 18% of the country's gross domestic product (GDP). About 95% of the country's population relies on agriculture for subsistence and semi-subsistence, making it an important sector in the country. Root crops such as cassava (manioc), yam, taro (yautia), sweet potato, and swamp taro are the main staple crops. Vegetables and fruits also represent significant food items [2]. Tonga's population faces moderate to severe food insecurity with 58-83% of its

population consuming imported, low-nutrient processed food, which contributes to obesity and malnutrition (FAO and SPC, 2019). Labor migration also contributes to food insecurity, resulting in labor shortages as 45% of agricultural land remains fallow. While extreme poverty declined to less than 1% of the population in 2021, approximately 20% of the population still lives below the poverty line of USD 2,600 per year (TSD, 2023).

Global environmental and adaptation problems

Tonga is considered a fragile country driven by economic vulnerability, susceptibility to natural disasters and social challenges, particularly around youth inclusion and opportunities for youth in rural areas. Based on the ND-GAIN Index,^[3] Tonga ranked 140th out of 185 countries in 2021. The principal causes of Tonga's fragility include:

- ***Economic vulnerability:*** Tonga's economy is historically weak due to structural factors shared by many Pacific Island Countries. Economic growth has been sluggish, and erratic exacerbated by major shocks such as tropical cyclones, volcanic eruptions and tsunamis and the COVID-19 pandemic.
- ***Natural disasters:*** Tonga is highly vulnerable to natural disasters which cause significant damage to infrastructure, communications, homes, agriculture, fisheries leading to economic and social disruptions.
- ***Climate change*** such as rising sea levels, more intense tropical storms and cyclones, and increased coastal erosion. These pose significant threats to Tonga's population and infrastructure.
- ***Social Challenges.*** High levels of poverty due to limited job opportunities and social inequality contribute to fragility. Women and rural populations are particularly vulnerable to poverty and lack access to essential services. In addition, many returnees from overseas employment programmes struggle to re-integrate into rural societies.

As outlined in Objective 4 of Tonga's Joint National Action Plan 2 (JNAP2) on Climate and Disaster Risk Management^{[4]¹}, improving agriculture's resilience to climate change is a key priority.

Tonga's key terrestrial protected areas, while generally small, are crucial for conserving the nation's unique ecosystems and endemic species. The risks to biodiversity and agrobiodiversity are intertwined and represent a serious threat to the country's environmental health, food security, and cultural heritage. While the recent volcanic eruption and tsunami added significant localized damage, the ongoing climate change trends of warming oceans, rising sea levels, and extreme weather events pose a long-term, systemic challenge that requires robust and integrated conservation and adaptation strategies. The expansion of agricultural land, driven by policies and economic incentives for crop production (like squash for export), has historically led to the clearing of native forests and coastal vegetation, particularly around areas like Houma on Tongatapu. This uncoordinated land use results in deforestation, agricultural runoff, accelerated coastal erosion, and reduced protection from natural hazards like storm surges and saltwater intrusion, directly conflicting with environmental protection and climate adaptation goals.

Tonga's current farming systems rely on a limited range of crops that are sensitive to climatic shifts. Key factors include:

- **Crop losses from cyclones:** Intense tropical cyclones can cause extensive damage to crop, infrastructure, and food sources, wiping out entire harvests. This disrupts the food supply and negatively impacts rural livelihoods.

- Higher intensity and frequency of rainfall interspersed with more intense drought and water scarcity during El Niño events: Higher rainfall may lead to nitrogen leaching and increased disease incidence and severity on food crops. Prolonged droughts, intensified by El Niño events, reduce rainfall and deplete groundwater resources, threatening traditional rainfed crops. This forces a greater reliance on imported food.
 - Saltwater intrusion: Rising sea levels cause saltwater to contaminate coastal aquifers, affecting the freshwater lens that many communities use for drinking water and agriculture. Increased soil salinity can damage traditional crops that are not salt-tolerant.

Baseline datasets and information sources informing land cover, land productivity, and soil organic carbon (SOC) baselines include Digital Earth Pacific,^{[5]²} SPREP's Pacific Environment Data Portal^{[6]³} and the Pacific Data Hub.^{[7]⁴} Together with recent analysis,^[8] these show that land degradation and deforestation remain significant rural development and agricultural challenges in Tonga, driven by prolonged cropping without adequate fallow, widespread monocropping, and unsustainable commercial practices that accelerate soil nutrient depletion and increase pest pressures. In addition, damage from feral animals further contributes to vegetation loss and soil degradation. Unregulated use of chemical fertilizers and pesticides and overharvesting exacerbate deterioration of soil quality and broader environmental conditions, with downstream impacts on terrestrial and marine ecosystems.^{[9]⁵}

Intensive farming system that relies on a few species and heavy use of chemical pesticides and fertilizers and the spread of invasive species continues to reduce agricultural biodiversity making the entire food system more vulnerable to pests, diseases and environmental shocks. Furthermore, environmental spillovers of agricultural pollutants as well as invasive species also threaten Key Biodiversity Areas (KBAs) which include:

- Tofua National Park: As Tonga's largest national park, it encompasses the entire volcanic island of Tofua, covering approximately 53.94 km² (20.82 sq mi). This park is vital for its moist tropical forest and several restricted-range bird species^[10].
 - Kao National Park: Located on Kao Island, this park has a total area of 11.47 km² (4 sq mi), encompassing both the island and its surrounding marine environment.
 - 'Eua National Park: Tonga's only national forest park, situated on 'Eua Island, spans 4.51 km² (2 sq mi). It protects a valuable band of tropical rainforest and its associated endemic flora and fauna, like the Tongan whistler (*Pachycephala jacquinoti*; Near threatened) and Lau banded iguana (*Brachylophus fasciatus*; Endangered).
 - Fonualei Reserve: This volcanic island in the north of the Vava'u group is an uninhabited reserve covering approximately 5 km². It's notable for its volcanic features and a re-established population of the Tongan megapode.
 - Mount Talau National Park: While smaller in land area compared to the other national parks, this Vava'u-based park protects over 50 hectares of local tropical rainforest on Mount Talau and is a habitat for species such as the Lau banded iguana and Insular flying fox.

Tonga's agricultural landscapes are also hydrologically and ecologically connected to several community-managed Marine Protected Areas, including Special Management Areas and Fish Habitat Reserves, which

conserve marine biodiversity in inshore reef and lagoon systems. These marine protected areas provide important context for the project's land-based interventions, given their proximity to agricultural areas and shared coastal and watershed processes.

Climate Risks

Exposure: Observed and Anticipated Effects of Climate Change

Observed and anticipated effects of climate change continue to have a significant bearing on Tonga's food security, rural livelihoods, and economy. Tonga has a tropical climate all year round with two distinct seasons in the region - the wet season (November-April) and the dry season (May-October). Temperatures range from 24°C in Tongatapu in the south to 27°C in Niuafu'ou in the north (MEIDECC, 2019). Temperature has already risen by 0.7°C as of 2011–2020 compared to pre-industrial levels and is expected to reach 1.1°C by 2030. By 2050, temperatures could rise by 1.2°C under a low emissions scenario and 1.8°C under a high emissions scenario.

More than 60% of precipitation falls during the wet season. The amount of rain that falls on an island depends on its latitude and distance from the South Pacific Convergence Zone (SPCZ)^[11] and wet tropics (see Figure 1). Although all islands receive a considerable amount of rainfall each year, the northern islands receive more than the southern ones [12]. Interannually, the El Niño Southern Oscillation (ENSO) climate patterns have a significant bearing on the country's climate variability. During El Niño events, cooler and drier-than-normal dry seasons typically occur, along with reduced rainfall during wet seasons, while La Niña events generally bring wetter-than-normal conditions. Similarly, more frequent and intense tropical cyclones (TCs) occur during El Niño events (MEIDECC, 2019).

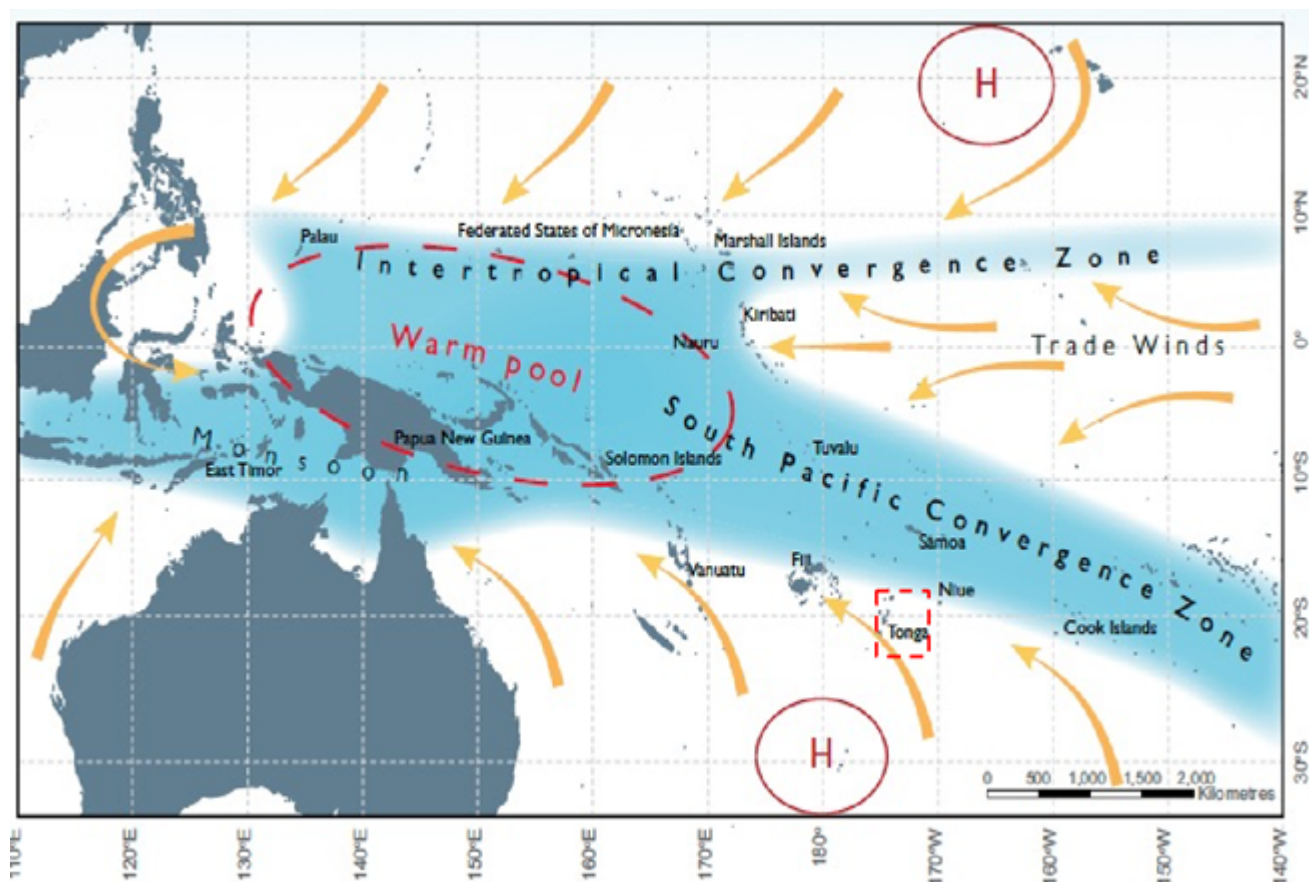


Figure 1: Relative Position of Tonga to SPCZ

The mean annual temperatures of the islands are highly correlated with the surrounding ocean temperatures and their latitudinal positions. Forecast precipitation varies significantly depending on the position of the SPCZ and ENSO, with the largest uncertainty found under the Shared Socioeconomic Pathway (SSP) 5-8.5 in CMIP6 (WBG, 2021b). Rise in sea surface temperature (SST) is associated with an increase in the intensity and frequency of rainfall events, particularly TCs^[13] which have occurred 55 times since 1981, with 35% being severe events (WBG, 2021).

As the frequency of extreme TCs increases, sea level rise (SLR) is also expected to increase storm surge and coastal inundation risks (Martyr-Koller et al., 2021). Sea levels are expected to rise by 9–18 cm by 2030 across all emissions scenarios, with projections for 2050 ranging from 17–30 cm under low emissions and 21–37 cm under high emissions. The Standardized Precipitation Evapotranspiration Index (SPEI) indicates a slightly negative water balance around the 2070s but a positive balance by the 2090s under RCP 8.5. This suggests low drought risk, though with low confidence levels (WBG, 2021a). Figure 2 shows the multi-model-mean projections for the years 1995-2100, against the mean sea level between 1986-2005, for RCP 8.5, RCP 4.5, and RCP 2.6, indicating a rising trend under all scenarios (CSIRO and SPREP, 2021).

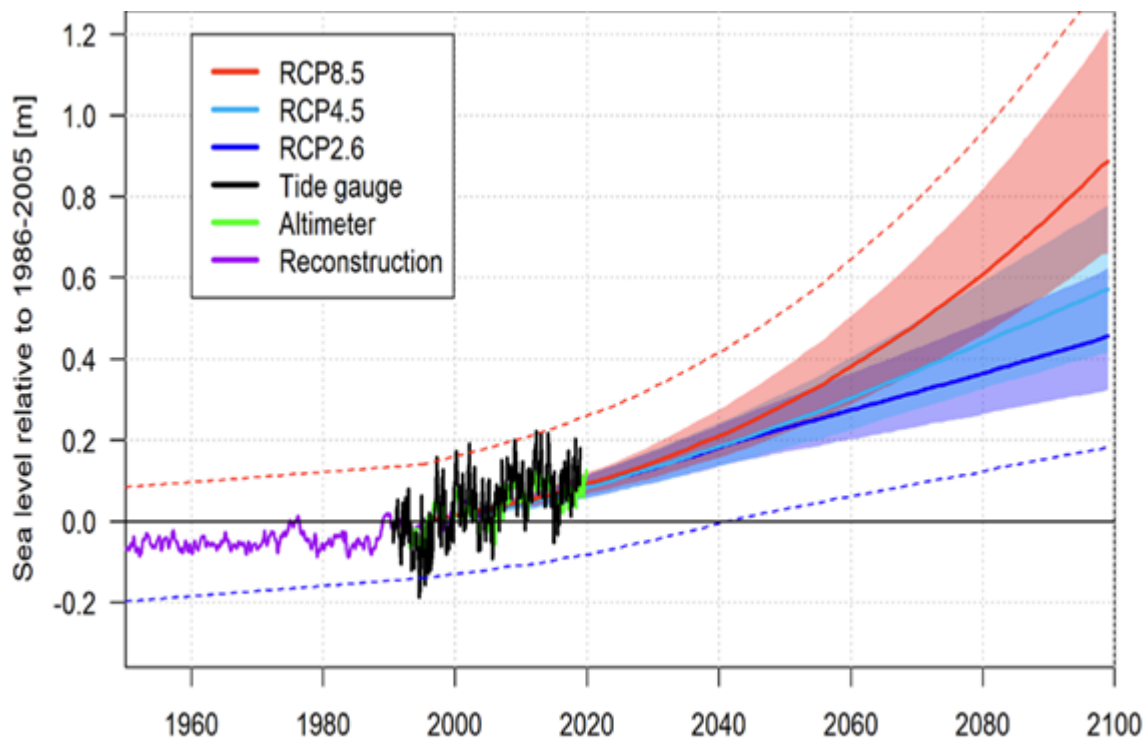


Figure 2: SLR Projections (CSIRO and SPREP, 2021)

Over the last two decades, the monthly mean sea level has risen 0.007 meters, and the sea surface temperature has risen 0.06°C. As sea surface temperatures rise, convective storms can take place, inundating low-lying island countries like Tonga and contaminating fresh water sources. The combination of TCs and SLR has also resulted in increased soil erosion, loss of arable land, and saltwater intrusion into both surface and groundwater sources. Nearly 9% of Tongatapu's agricultural land, which is the most at risk in the country, is directly exposed to these risks (MEIDECC, 2019). These effects on agriculture will likely worsen over the next decades based on the future climate projections presented above.

Simulation studies using soil profile information from Solomon Islands predicted a ~57% reduction in taro yield over 20 years of climate change projection, mostly due to nitrogen leaching from runoff associated with excess rainfall and current cultivation practices (Maeke 2013, Quity 2012). A simulation study on cassava using data from Fiji estimated up to 18% reduction in yield over 30 years of climate change projection due to higher disease incidence and intensity (McGregor 2016). More comprehensive crop-specific investigations are necessary to grasp the ramifications of climate change on Tonga's key crops, including cassava (18% of the total cultivated area), yam (9%), taro (4%), sweet potato (3%), swamp taro (3%), alongside various vegetables and fruits, which are particularly important for the domestic market in population centers like Tongatapu. Generally, perennial crops (5.5% of cultivated land area) like kava, paper mulberries, vanilla, pineapple, and breadfruit (pandanus) are generally more vulnerable to TC impact and often sustain damage. Annual crops (41% of cultivated land area), including root crops and vegetables, are more susceptible to higher rainfall and temperature increases, which can also have long-term effects on perennial phenology [14]. The combination of rising temperatures, increased humidity levels and waterlogged soils also lead to increased pests and diseases, such as anthracnose disease affecting yams and leaf scab fungal disease affecting sweet potatoes.

Climate change is expected to intensify pressures on Tonga's biodiversity through rising temperatures, ocean warming, sea-level rise, stronger cyclones, and prolonged droughts. These stresses will degrade coral reefs, coastal ecosystems, and freshwater resources, disrupt terrestrial habitats, increase invasive species risks, and reduce the resilience of native species and agro biodiversity across the islands.

The following geophysical impacts are expected:

- Coastal inundation and erosion: Both scenarios lead to increased sea-level rise, with high-emissions pathways causing more severe impacts. The geophysical consequences include: (i) Coastal erosion damages to infrastructure and settlements; (ii) Permanent inundation of low-lying coastal areas, especially on islands like Tongatapu where over 80% of the population lives near the coast; and (iii) Increased frequency and severity of coastal flooding from storm surges and high tides.
- Freshwater contamination: As sea levels rise, saltwater intrudes into freshwater aquifers. This issue is particularly pronounced on smaller, low-lying islands and is exacerbated during droughts.
- Intensified storm damage: Stronger tropical cyclones under both scenarios will cause greater damage from high winds and heavier rainfall. Higher sea levels will also increase the impact of storm surges during cyclones.
- Degraded marine ecosystems: Ocean acidification and warming threaten Tonga's coral reefs, which serve as natural coastal protection. The impacts on marine biodiversity will be more severe under the high-emissions pathway.

The following are among the main socioeconomic impacts of climate change anticipated:

- Food and water security: Agriculture and fisheries, critical for local livelihoods and the economy, are vulnerable to climate change. Extreme weather events, droughts, and saltwater intrusion threaten crop yields. Increased rainfall during the wet season may cause flooding, while dry seasons could reduce water availability, especially for rainwater-dependent communities. Coral reef bleaching and ocean acidification disrupt marine food chains, affecting fish stocks and artisanal fishing. Higher sea temperatures alter the distribution of commercial species like tuna, impacting the oceanic fisheries sector.
- Disaster-related economic losses: More intense tropical cyclones cause major damage to housing, public buildings, schools, infrastructure, and transport systems. For instance, Tropical Cyclone Gita (2018) caused damage estimated at 38% of Tonga's GDP. Higher emissions scenarios increase the likelihood of more devastating storms and higher economic losses.
- Infrastructure vulnerability: Critical infrastructure, including the capital city Nuku'alofa, is in vulnerable coastal areas. Sea-level rise and storm surges threaten ports, roads, power supply, and telecommunications, disrupting economic activity and hampering recovery efforts.
- Health impacts: Changes in weather patterns and water contamination can affect public health. Drier conditions can lead to water shortages, while increased rainfall can cause flooding, waterlogging, and sanitation issues.
- Internal displacement: As coastal areas become unlivable due to rising sea levels and storm impacts, some communities may face displacement. This could create socioeconomic stress and alter traditional settlement patterns.

In summary, climate change projections for key variables show significant warming, sea-level rise, and altered rainfall patterns, with impacts varying based on different emissions scenarios. The most cited scenarios, or Representative Concentration Pathways (RCPs), indicate that the magnitude of climate impacts will be much more severe under a high-emissions scenario (like RCP 8.5) compared to a low-emissions scenario (like RCP 4.5 or RCP 2.6).

Table 1: Climate Change projections for key variables

Variable	Low Emissions Scenario (e.g., RCP 4.5)	High Emissions Scenario (e.g., RCP 8.5)
Air and sea temperature	Projects a smaller temperature increase, consistent with global warming being kept well below	Projects a larger increase in temperature, with higher average and extreme daily temperatures. By 2030, an increase of 0.3–1.1°C was projected under an older high-emissions scenario.
Sea level rise	Projects a smaller, but still significant, rise in sea level.	Projects a larger rise in sea level. Earlier high-emissions projections indicated a rise of 3–17 cm by 2030, with potentially higher rises towards the end of the century.
Rainfall	Future rainfall projections are less certain than for temperature. Some models suggest slightly wetter wet seasons and drier dry seasons.	Projections generally indicate more extreme rainfall events and a potential decrease in dry-season rainfall, exacerbating drought conditions.
Tropical cyclones	While projections suggest a decrease in the overall number of tropical cyclones in the region, average intensity is expected to increase.	Projects a decrease in the frequency of tropical cyclones but an increase in their average intensity, including higher wind speeds and more intense rainfall.
Ocean acidification	Less severe increases in ocean acidity, though the trend of increasing acidity continues.	Projects more significant increases in ocean acidity, which exacerbates stress on marine ecosystems.

Threats to Biodiversity

Tonga's diverse islands host a range of vital habitats for its unique flora and fauna, alongside significant efforts to manage invasive species and protect threatened or endangered species. Marine ecosystems, including its extensive coral reefs and lagoons, are exceptionally vulnerable to ocean warming and acidification. Rising sea temperatures cause coral bleaching events, which can lead to widespread coral mortality. In addition, intense tropical cyclones and tsunamis continue to physically damage both marine habitats. With regards to terrestrial biodiversity, native forests and vegetation are under pressure from climate change effects and human activities. Climate change exacerbates the loss of native forest habitats already threatened by agricultural expansion. This is causing extinction of rare flora and threatening the fauna that depend on these ecosystems. As stated in the National Invasive Species Strategy and Action Plan (NISSAP), Tonga's key invasion pathways are also affected by trade with Australia, Fiji, Hawai'i, and New Zealand - each of which brings its own set of risks on native biodiversity and the whole environment.

The main threats to national and global environmental values associated with current land use practices in a context of climate change include the following:

- **Deforestation and coastal erosion:** Agriculture, logging for timber and firewood, and increasing pressures from a growing economy and population are largely responsible for deforestation in Tonga, leading to severe coastal erosion, loss of biodiversity (i.e. medicinal plants), and reduced natural protection from storms, contributing to climate change impacts such as cyclones and sea level rise.
- **Lagoon and nearshore pollution:** Runoff from agricultural lands and urban expansion deposits sediments, nutrients, and agrochemicals into lagoons, degrading mangroves, seagrass beds, coral

reefs, and other coastal habitats. Exacerbated by fertilizer and pesticide use, nutrient runoff causes turbidity, eutrophication, coral stress, and loss of fish nursery functions, reducing marine biodiversity and ecosystem resilience.

- **Monoculture over traditional varieties:** Monoculture farming, particularly the cultivation of crops such as taro and yams, is prevalent in Tongatapu and Vava'u. This practice reduces genetic diversity and creates conditions that are highly susceptible to pests and diseases. Farmers often respond by using excessive pesticides, which degrade soil health and pollute waterways, further reducing the resilience of agricultural systems. In areas like Popua and Pea in Tongatapu, pesticide runoff into Fanga'uta Lagoon has led to water contamination, affecting aquatic biodiversity and degrading critical habitats for fish and other marine organisms. In the agricultural regions of Tongatapu, particularly in areas like Popua and Pea, the loss of pollinators has reduced crop yields, creating a cycle of increased pesticide use and further biodiversity loss.
- **Spread of Invasive Alien Species (IAS):** Invasive species introduced to Tonga, such as the African Tulip and *Cordia alliodora*, many of which can outcompete native plant species, contribute to habitat loss and reduced biodiversity. Some of these invaders, like the African Tulip, can also take over productive farmlands, forcing farmers to abandon them. Invasive species such as the little fire ant (*Wasmannia auropunctata*) and the giant African snail (*Achatina fulica*), disrupt native ecosystems, reducing biodiversity and the adaptive capacity of local species to climate change. In 'Eua National Park, invasive plants like Lantana camara outcompete native vegetation, diminishing the availability of habitats for endemic species. This loss of biodiversity weakens ecosystem services, such as soil stabilization and water regulation, which are critical for adapting to extreme weather events, including cyclones and droughts.

Barriers that need to be addressed

According to Tonga's Third National Communication to the United Nations Framework Convention on Climate Change (UNFCCC), traditional farming practices involve shifting cultivation of root crops and a short rotation of fallow species. The worsening effects of climate change, however, compound underlying barriers related to policies, institutional capacity, technical knowledge, and socioeconomic conditions. Adaptive capacity and baseline investments already exist in areas concerning each barrier. Despite this, more efforts are required to ensure that the sector has the capacity and available resources to cope with climate change and to ensure biodiversity conservation.

Barrier 1: Limited capacity and information prevent local governments and communities from integrating climate risks, biodiversity threats, and land degradation considerations into development planning and livelihood decisions

Local governments and communities in Tonga play a central role in development planning through Community Development Plans (CDPs) and Livelihood Development Plans (LDPs). However, these planning processes are often constrained by limited access to climate- and biodiversity-relevant information and insufficient technical capacity to interpret and apply such information in a systematic way. Climate risks—including cyclones, droughts, saltwater intrusion, and rising temperatures—are widely recognized, but they are not consistently translated into practical, location-specific planning decisions. Similarly, biodiversity considerations such as ecosystem services, invasive species pressures, erosion risks, and land–sea interactions are rarely incorporated in a structured manner into local development priorities.

Existing spatial data, land-use information, and environmental assessments are fragmented, outdated, or not readily accessible to communities and local officials. As a result, planning decisions tend to focus on short-term livelihood needs rather than longer-term resilience and ecosystem sustainability. Limited training opportunities further constrain the ability of local government staff, extension agents, and community leaders to apply climate and biodiversity screening tools, assess trade-offs, or identify nature-based and biodiversity-friendly options.

As a result of this barrier, CDPs and LDPs fail to fully account for climate variability, ecosystem health, and cumulative land-based impacts on terrestrial and marine environments. Without targeted capacity strengthening, improved analyses, and practical planning tools, communities will remain unable to mainstream climate resilience and biodiversity considerations into development decisions.

Barrier 2: Farmers lack access to climate-smart technologies, biodiversity-friendly practices, sustainable land management options, reliable agrometeorological information, and support systems needed to adopt resilient and diversified livelihood options

Smallholder farmers and rural households in Tonga face increasing exposure to climate-related shocks and stresses, yet many lack practical access to climate-smart agriculture (CSA) technologies and biodiversity-friendly practices that could reduce vulnerability and stabilize production. While awareness of climate change impacts is growing, adoption of improved practices remains limited due to financial constraints, weak extension services, and insufficient demonstration of viable, locally adapted solutions. Many farmers continue to rely on conventional production methods that are increasingly sensitive to droughts, cyclones, pests, and soil degradation.

Access to reliable, crop-specific agrometeorological information is also limited. Existing weather and climate information is rarely if ever translated into actionable farm-level advisories and fails to reach farmers through effective last-mile delivery channels. This limits farmers' ability to make informed and timely decisions on planting, harvesting, pest management, and input use. At the same time, support systems for innovation, experimentation, and scaling of new practices—particularly for youth and women—remain weak and fragmented.

Overall, these constraints reduce farmers' capacity to diversify livelihoods, improve productivity sustainably, and adopt practices that enhance soil health, reduce runoff, conserve agrobiodiversity, and protect ecosystem services. Without targeted investments in technologies, demonstration sites, innovation mechanisms, seed systems, and outreach services, farmers will be unlikely to shift at scale toward resilient and biodiversity-friendly production systems.

Barrier 3: Weak knowledge management systems constrain development, dissemination, and use of evidence needed to guide policy reforms and institutional frameworks for resilient, biodiversity-friendly agriculture

At the national and institutional level, Tonga lacks sufficiently strong knowledge management systems to systematically generate, consolidate, and apply evidence on climate resilience, biodiversity conservation, and sustainable agricultural practices. While data and experience exist across ministries, projects, and communities, they are often dispersed, inconsistently documented, and not translated into policy-relevant formats. As a result, lessons from field-level implementation, pilot initiatives, and community-based innovations are not effectively captured or used to inform policy and institutional reforms. This limits the ability of national agencies to update policies, strategies, and regulatory frameworks in response to evolving climate and biodiversity challenges. In particular, guidance on climate-resilient agriculture, invasive species management, agrobiodiversity conservation, and land-based impacts on marine ecosystems remains incomplete or outdated. Monitoring systems also lack the capacity to track adoption of biodiversity-friendly practices, CSA uptake, and climate impacts in a way that supports adaptive management and evidence-based decision-making.

Associated baseline projects

The Tonga Rural Innovation Project (TRIP) was launched with **Phase I (TRIP I, 2012–2017)** to pilot community-driven development approaches strengthening local planning, livelihoods, and social inclusion. **TRIP II (2017–2025)** scaled these approaches nationwide, expanding livelihood diversification, climate awareness, and institutional coordination while embedding Community and Livelihood Development Plans as core instruments for rural development and resilience.

The 13-years of TRIP I and II have yielded many lessons to inform the design and implementation of TRIP III:

- **Effective stakeholder engagement** is crucial for successful and sustainable implementation. Early and continuous involvement of key stakeholders, including local communities, government agencies, and development partners, helps to align project activities with local needs and ensures ownership and sustainability. Regular consultation and collaboration should be maintained throughout the project life cycle.
- **Decentralised management** is critical in countries such as Tonga where government agencies and service providers have limited outreach in small and isolated outer island communities. TRIP I and II demonstrated the benefits of decentralisation of development planning and implementation to district and town/village level which enables better oversight of activities in the field, reduces costs, and builds stronger local engagement.
- **Capacity Development** among implementing agencies and communities is essential for sustainable outcomes. TRIP II identified the need for targeted capacity development to enhance technical skills, knowledge, and institutional capacities. Training programmes, workshops, and knowledge-sharing platforms have proven effective in empowering stakeholders and enabling them to take ownership of project activities.
- **Conditionality and competition** are key elements of the approach in supporting and partnering with rural communities. The communities are made aware that support comes with conditions attached in terms of beneficiary contributions and prior actions such as making land or building materials available. Competition is applied by providing additional support to better performing communities and vice versa.
- **Capacity for procurement** is critical for effective and timely project implementation. TRIP II has sometimes struggled to execute its Annual Workplan and Budget (AWPBs) due to procurement delays, and some activities have had to be cancelled due to insufficient time to complete outstanding procurement items.
- **Flexibility and responsiveness** are key elements of the approach in a high-risk environment subject to natural disasters, and economic crises. Projects need to be able to switch quickly from mainstream development to crisis mitigation and recovery mode, and back again when conditions normalise.

The IFAD-funded portion of the **Tonga Rural Innovation Project Phase III (TRIP III)** builds on earlier phases to strengthen community development, climate resilience, and inclusive rural livelihoods nationwide. Support is structured around three core components: **(1) community development and livelihood planning**, supporting participatory CDPs and LDPs; **(2) climate-resilient livelihood investments**, including Community Economic Livelihood Grants (CELGs), farmer field schools, innovation support, and agrometeorological services and investments across broad livelihood categories such as climate-smart crop production, agroforestry, aquaculture, fisheries-related activities, value addition, and small rural enterprises; and **(3) policy, institutional capacity, and project management**, focusing on knowledge management, policy integration, and effective implementation. TRIP III emphasizes social inclusion, resilience to climate and disaster risks, and sustainable, market-oriented livelihoods.

The GEF grant builds on the GEF-6 Regional Invasive Species Project, which was designed to strengthen the capacity of Pacific Island nations to manage invasive alien species (IAS) that posed threats to globally significant terrestrial, freshwater, and marine biodiversity in the region. In particular, the Pacific Regional Invasive Species Management Support Service (PRISMSS), initiated since 2009, focused on restoring biodiversity and improving climate resilience. Efforts such as the Ha'apai Islets Restoration project have successfully removed invasive rats and feral pigs, benefiting native birds, turtles, fish populations, and reefs. A rat eradication project on Late Island also led to a significant increase in seabird populations. This initiative demonstrated the importance of managing invasive species to build climate resilience in Tonga which the TRIP III will build upon.

In the area of land degradation, the GEF grant will strategically align with FAO's GEF MSP, *"Transforming food systems through ecosystem-based approaches to combat land degradation and loss in ecosystem services in value-chains in Tonga"* by positioning itself as a complementary, site-level and community-driven operational contribution to the national LDN strengthening agenda. Thus, while the FAO-GEF project focuses on establishing national LDN indicators, spatial monitoring systems, and enabling policy frameworks, the present project will leverage these tools to guide community development planning, climate-smart agriculture investments, and biodiversity-friendly livelihood diversification. In particular, the present intervention will: (i) apply nationally endorsed LDN indicators and spatial datasets to prioritize vulnerable districts and farming systems; (ii) pilot soil restoration, agroforestry, erosion control, and runoff reduction measures that directly contribute to LDN targets; and (iii) generate field-level evidence on land–sea linkages and soil organic carbon improvements to inform national monitoring systems. The IFAD–GEF project will not duplicate or independently develop new national baseline maps for the three LDN indicators (land cover, land productivity, and SOC); rather, it will rely on and operationalize existing and FAO-supported LDN baselines and national datasets, focusing its incremental resources on implementation, demonstration, and localized monitoring within selected intervention landscapes.

Other associated baseline projects include the Tonga Australia Resilient Communities Project (TARCP) [15] supported by the Australian Department of Foreign Affairs and Trade (DFAT). TARCP will also be implemented by MORDI-TT under the same implementation arrangements of TRIP III and finance infrastructure investments that generate benefits for target communities from improved roads, water supply, and disaster preparedness.

Additional efforts will need to be closely aligned and streamlined with DFAT's Market Development Facility (MDF), which aims to develop market systems for kava, tourism, renewable energy, farm mechanisation, climate change and disaster resilience. Through collaboration with MDF, there is potential to support private sector engagement under TRIP III. Coordinated efforts with the proposed ADB project: Women Entrepreneurs Leveraging Innovative Finance in Tonga (WE-LIFT) will be sought. WE-LIFT aims to unlock access to finance for women entrepreneurs by introducing gender-responsive financing instruments and investing in tailored business development services. Potential collaboration is envisaged to ensure training of extension officers and farmers in climate-resilient agriculture and improving financial access. A full list of associated baseline projects is provided under Table 2: Coordination with Ongoing and Planned Initiatives.

Baseline scenario

Under the baseline scenario, Tonga's agriculture sector is expected to continue benefiting from the investments and institutional strengthening supported through TRIP III. Communities will gain improved capacities in participatory planning, livelihood development, and basic climate awareness. Through Community Development Plans and Livelihood Development Plans, rural households will identify priority livelihood needs and strengthen their engagement in local development processes. TRIP III will also expand opportunities for income diversification and support community economic initiatives, contributing to greater social cohesion and improved household resilience.

Despite these gains, climate risks will continue to intensify across Tonga's farming systems. Rising temperatures, prolonged dry periods, saltwater intrusion, and more frequent cyclone-related damage will place growing pressure on soils, water availability, and crop productivity. The Global Facility for Disaster Reduction and Recovery (GFDRR) reports that Tonga is expected to incur, on average, USD 15.5 million per year in losses due to earthquakes and tropical cyclones. In the next 50 years, Tonga has a 50% chance of experiencing a loss exceeding USD 175 million and casualties larger than 440 people, and a 10% chance of experiencing a loss exceeding USD 430 million and casualties larger than 1,700 people [16].

TRIP III's support will help farmers adopt improved practices, but its resources are not designed to fully address the scale and specificity of climate adaptation needs in agriculture. In particular, the project does not provide advanced climate information services, crop-specific vulnerability analyses, or systematic training on climate-smart agriculture beyond basic awareness raising. Similarly, while TRIP III promotes environmentally

responsible livelihoods, it has limited scope to address agricultural runoff, invasive species management, or the protection of biodiversity and ecosystem services in production landscapes. Current institutional frameworks and policy systems also offer only partial guidance on how climate resilience and biodiversity considerations should be mainstreamed into the agricultural sector or local development planning.

Under a baseline scenario, Tonga will thus make steady progress in rural development and community empowerment, while significant gaps will remain in climate-informed decision-making, biodiversity-friendly production, and system-level resilience.

Tonga's agricultural sector thus remains exposed to a broad range of threats under the baseline scenario, and the future of its species will depend on their adaptability and resilience. A narrow range of cash crops continues to increase the country's vulnerability rather than reduce it. Without a targeted adaptation response, these climate pressures, coupled with intensive monoculture-based farming practices will lead to severe food insecurity, economic instability, and the irreversible loss of culturally significant agrobiodiversity.

The projected climate changes in Tonga are expected to have severe socio-economic and environmental impacts. Increased heavy rainfall will lead to more frequent flooding and prolonged water ponding, heightening the risk of waterborne and vector-borne diseases such as dengue fever. Rising sea levels will contribute to coastal inundation, erosion, and saltwater intrusion into freshwater aquifers, posing a significant threat to coastal communities, where 84 percent of the population resides within 1 km of the shore. Additionally, critical infrastructure is highly vulnerable, with 51 percent of assets and 57 percent of total infrastructure replacement value located within 500 m of the coast. Under a high-emissions scenario, severe coral bleaching is expected to occur annually by 2045, threatening marine biodiversity and coastal ecosystems. Fisheries, a key economic sector, are projected to experience a 20 percent decline in catch potential by 2050, further jeopardising food security and livelihoods (RCCAP, NA).

All participating communities and households face challenges of climate variability and long-term climate change including increasing temperatures, rising sea levels and increasing severity of extreme events, especially tropical cyclones. Whilst TRIP III cannot totally avoid these challenges it can do much to reduce the risks and mitigate their impacts through measures such as mainstreaming climate change and biodiversity considerations into the CDP process, promoting climate-smart and disaster resilient agricultural technologies, building climate proof infrastructure, and enhancing adaptive capacity through disaster preparedness trainings; and in the event of disasters occurring, supporting recovery and rebuilding activities in line with IFAD's Policy on Crisis Prevention and Recovery (2006).

Without addressing the above-mentioned barriers, climate change will seriously affect Tonga's food security and sovereignty. With more severe TCs, higher temperatures, higher rainfall interspersed by agricultural droughts, increased pests and diseases, erosion and saltwater damage due to SLR, the country's food production capacity will be reduced, which will increase food insecurity, make farmers more vulnerable, and make them more dependent on imported food, processed foods with low nutrients, and price fluctuations as well as increase pressure to expand production into protected areas.

[1] These islands are divided administratively into five subdivisions: Tongatapu (hosts its capital city, Nuku'alofa), 'Eua, Ha'apai, Vava'u, and Ongo Nilua (which encompasses Niuatoputapu and Niuafu'ou). The subdivisions are further divided into 23 districts.

[2] Tonga's exports mostly come from agriculture and fisheries, such as fish (22%), crustaceans and aquatic invertebrates (20%), root crops (18%), kava (9%), pumpkins (7%) and other items like watermelons and coconuts (TSD, 2023).

- [3] The ND-GAIN Country Index captures a country's vulnerability to climate change and other global challenges, and its readiness to improve resilience: <https://gain.nd.edu/our-work/country-index/rankings/>
- [4] <https://www.pacificclimatechange.net/document/tonga-joint-national-action-plan-2-climate-change-and-disaster-risk-management-2018-2028>
- [5] <https://www.spc.int/updates/blog/dynamic-story/2024/06/digital-earth-pacific-kingdom-of-tonga>
- [6] <https://tonga-data.sprep.org/>; https://tonga-data.sprep.org/search?f%5B0%5D=content_type%3Adataset.dataset
- [7] <https://pacificdata.org/data/dataset/tonga-vector-296>
- [8] Stockman, U. et. al. "State and trend of surface soil organic carbon stocks and associated nutrients in Tongatapu, Kingdom of Tonga." *Soil Research*. September 2024. Available at https://www.researchgate.net/publication/384380540_State_and_trend_of_surface_soil_organic_carbon_stocks_and_associated_nutrients_in_Tongatapu_Kingdom_of_Tonga
- [9] IFAD. 2025. TRIP III project document
- [10] While there is no permanent resident population, the island is regularly visited and temporarily inhabited by farmers who cultivate kava and other staple crops like taro and cassava.
- [11] Rainfall is significantly affected by the position of the SPCZ, a belt of intense convective precipitation caused by the convergence of winds over warm ocean waters (WBG, 2021a).
- [12] Between 1947 and 2017, the average rainfall ranged from 1,619 mm in Ha'apai, 1,721mm in Tongatapu, 2,150mm in 'Eua, 2,374 mm in Niuatoputapu, and 2,455 mm in Niuafu'ou (MEIDECC, 2018).
- [13] As a population center, TCs often have the most significant impact on Tongatapu in terms of its infrastructure, buildings, and cropland. As a result of TC Gita, a Category 4 storm that hit the country in 2018, about 80,000 people, or 80% of the population, were affected. 800 homes were destroyed and another 4,000 damaged, according to the 2018 report by the Government of Tonga.(CSIRO, SPREP, 2020; WBG, 2021a).
- [14] Perennial phenology refers to the study of the timing of recurring biological events in plants that live for more than two years, and how these events respond to environmental changes. Understanding perennial phenology is crucial for understanding plant life cycles, predicting plant responses to climate change, and managing ecosystems.
- [15] The TARCP has a budget of TOP\$19.6 million over five years, strategically allocated to achieve sustainable, long-term outcomes. The largest share, 72%, supports resilient infrastructure such as water systems and cyclone shelters to enhance community resilience and reduce disaster risks. The remaining 19% is allocated to program management, monitoring, and evaluation, ensuring efficient delivery, accountability, and measurable impact.
- [16] In January 2022, the eruption of the underwater volcano Hunga Tonga-Hunga Ha'apai (HT-HH) and the resulting tsunami disrupted economic activity and severely affected livelihoods and infrastructure. The disaster caused damage and losses estimated to range from US\$90.4 million (approximately 18.5 percent of Tonga's GDP) to US\$182 million (more than 36 percent of Tonga's GDP), and impacting approximately 80,000 Tongans, or 85 percent of the country's population.

B. PROJECT DESCRIPTION

Project description

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

TRIP III is a joint initiative blending GEF financing of USD 4.69 million and a USD 5.3 million IFAD grant. The present proposal was developed in close coordination with the IFAD design of the third phase of TRIP III conducted in January 2025. The proposed TRIP III project will provide strategic investment direction to improve agricultural diversification and commercialization. It will also create a more conducive environment to reduce invasive weed and fauna spread. GEF and IFAD investments will enable coverage of 128 rural communities in Tonga. The project objective is to strengthen community development and improve rural livelihoods by

promoting diverse agricultural production and commercialization, integrating climate-resilient practices, improving biodiversity, fostering social inclusion, and incorporating innovative solutions.

The proposed project aligns with Tonga's national development aspirations as well as key IFAD and GEF priorities in the areas of food and nutrition security, gender equality and social inclusion, indigenous people, climate resilience, biodiversity conservation, innovation, partnerships and collaboration. It will directly contribute to Tonga's Climate Change Policy and JNAP2 objectives and targets, National Biodiversity Strategy and Action Plan (NBSAP), National Invasive Species Strategy and Action Plan (NISSAP) 2021–2027 and IFAD's Strategy for Engagement in SIDS (2022-2027); as well as IFAD's thematic policies and strategies covering gender, youth, nutrition, climate change, environment, biodiversity, indigenous people, participatory planning and private sector development. It will also support the country's efforts in meeting its Sustainable Development Goals (SDGs), including SDG 1 (No Poverty), SDG 2 (Zero Hunger), and SDG 13 (Climate Action) as described in the Pacific United Nations Pacific Sustainable Development Cooperation Framework (UNSDCF) 2023-2027, particularly Outcomes 1 to 3 related to Planet, People and Prosperity.

The lead executing agency for TRIP III will be the Mainstreaming of Rural Development Innovation Tonga Trust (MORDI-TT), which has extensive experience implementing rural community development support, including local development planning, farmer-to-farmer knowledge sharing, homestead gardens for women's groups and livelihood diversification activities. It is expected that both IFAD and GEF financing will contribute to increasing agricultural resilience to climate change through capacity building at the community level. Both GEF and IFAD financing will focus on investments needed to raise awareness of crop-specific climate risks among farmers and promote the application of agro-met advisories and early warnings for climate-resilient farming. TRIP III will also support the adoption of specific technologies for climate-smart production and improve agroecological conditions and resilience at the landscape level. These alternative techniques, technologies, and approaches should diversify livelihood options and household income through improved market access, value-addition opportunities, and time savings.

GEF funding will support the following activities:

- Promoting CSA and biodiversity-friendly agricultural practices: The project will train farmers in sustainable agricultural practices, including agroforestry, to replace intensive monoculture. Techniques like intercropping, deployment of bio input and cover cropping build biodiversity and soil health, reducing the need for chemical inputs.
 - Strengthening soil and water management: Investments will focus on improving soil health and water conservation practices to mitigate runoff, strengthening climate adaptation in agriculture and reducing contamination of both land and marine ecosystems.
 - Diversifying livelihoods: Supporting sustainable livelihoods based on diversified farming and various value addition ventures to reduce economic reliance on commercial monocultures and chemical-intensive agriculture.
 - Supporting sustainable pest management: The project will introduce sustainable pest management strategies that protect pollinators and other beneficial organisms, thereby reducing reliance on toxic pesticides in managing agricultural pests and invasive species.

The project will contribute to Land Degradation Neutrality (LDN) by applying the avoid–reduce–reverse hierarchy within climate-resilient agricultural landscapes. Land degradation will be *avoided* through improved land-use planning and integration of erosion and land-degradation risks into community development plans. It will be *reduced* through adoption of climate-smart and biodiversity-friendly practices such as agroforestry, soil conservation, and improved nutrient management. Where degradation has already occurred, the project will help *reverse* impacts through soil restoration practices and diversification of resilient farming systems.

Theory of Change

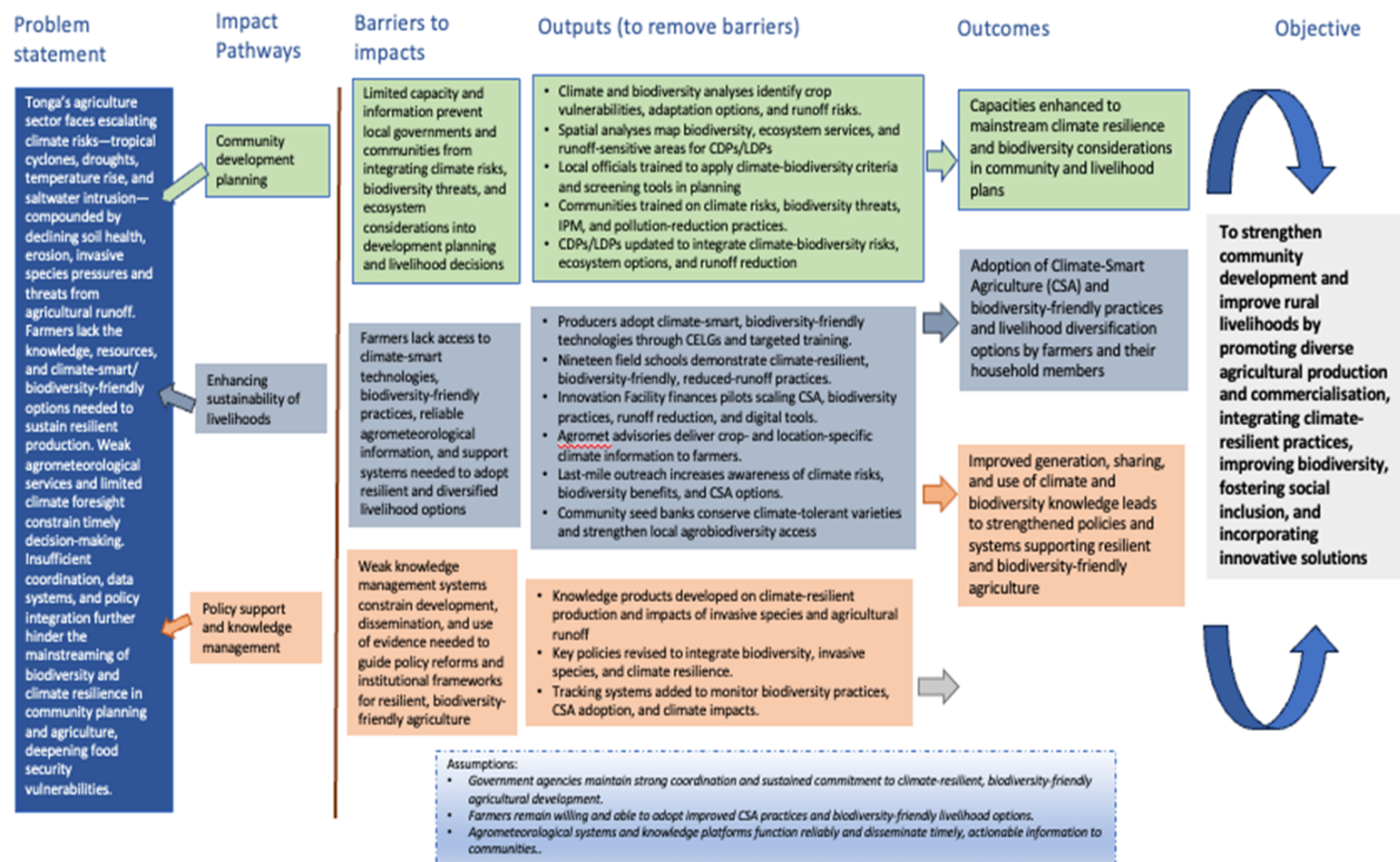
Most of Tongan agriculture is based on traditional subsistence farming and is highly vulnerable to climate and natural disaster hazards such as droughts, floods, cyclones, volcanic eruptions and tsunamis. Adaptive capacity is limited due to low availability of new/improved inputs and technologies, and weak extension support. Government outreach in rural areas is limited and the local government system based on elected District Officers (DOs) and Town Officers (DOs) needs to be strengthened. Youth show limited interest in farming and prefer seasonal employment in Australia and New Zealand, which contributes to high cost and low availability of labour in rural areas. Whilst domestic and export marketing opportunities exist for the main agricultural commodities, the capacity to provide consistent supplies of high-quality produce limits penetration of these markets. Consequently, Tonga imports growing amounts of food, often of poor nutritional value. The Tonga Agricultural Sector Plan II (TASP II) addresses these challenges, but implementation is constrained by an outdated legal and regulatory framework, ministerial budget restrictions and weak institutional capacity at both national and local levels. These challenges lead to limited income opportunities and food insecurity among rural communities and high prevalence of rural poverty.

The theory of change for TRIP III, as depicted in Figure 3 below, illustrates the causal linkages between outcomes and outputs, addressing the barriers and constraints hindering the shift to CSA and climate-resilient livelihoods to achieve the project's objective. The key transformational logic of the project is to strengthen community development planning through improved climate foresight and early warning systems and enhance last-mile services that incorporate climate-informed advisories to reduce risks to agriculture and rural livelihoods. This will be combined with gender-responsive demonstrations of CSA and other livelihood diversification options, supported by better access to finance, resources, and technologies.

The Theory of Change is based on the following chain of reasoning:

- If the project generates policy-relevant knowledge products on climate-resilient agriculture, biodiversity-friendly production, and invasive species impacts, as well as sustainable land management practices addressing soil degradation, erosion, and land-sea linkages, and reviews and revises key policies, strategies, and regulatory frameworks of MAFF, MEIDECC, and DLG to better integrate climate resilience, biodiversity conservation and CSA and SLM principles, then the resulting improved enabling environment will support the mainstreaming of resilient and biodiversity-friendly agriculture.
- If the project strengthens institutional, technical, and participatory capacities by delivering climate- and biodiversity-informed suitability and vulnerability analyses, updating spatial ecosystem and land-use assessments, and providing targeted training for local officials and community members on climate risks, biodiversity threats, invasive species, and pollution reduction, along with SLM practices, then planning processes will be able to more effectively integrate climate, land degradation and biodiversity considerations into CDPs and LDPs.
- If the project promotes sustainable land management practices—including soil conservation, agroforestry, and improved soil management—through community planning and farmer training, then land degradation pressures will be reduced and soil productivity and ecosystem resilience will improve.
- If these interventions are supported by effective systems for tracking biodiversity-friendly practices, CSA and SLM adoption, and climate impacts—integrated into TRIP III monitoring—and if project knowledge is shared through strengthened institutional partnerships and learning platforms, then evidence will inform future programming, reinforcing adaptive management and policy uptake.
- If these outcomes are achieved, and key assumptions hold—including continued government commitment, farmer willingness to adopt improved practices, and reliable functioning of agrometeorological and knowledge systems—then Tonga's agriculture sector will become more climate-resilient, biodiversity-supportive, and sustainable. This will lead to strengthened rural livelihoods, reduced ecosystem pressures, enhanced food security, and national and global environmental and development benefits.

Figure 3: Theory of Change



Component 1: Community development planning

Additional Costs: US\$ 1,507,216

Co-Financing: US\$ 1,931,350

Outcome 1: Capacities enhanced to mainstream climate resilience and biodiversity considerations in community and livelihood plans.

Outcome 1 will strengthen capacities to mainstream climate resilience and biodiversity considerations in community and livelihood planning. Building on the community-based development planning approach initiated under TRIP I and II, TRIP III—through IFAD financing—will continue to support the preparation and updating of Community Development Plans (CDPs) and Livelihood Development Plans (LDPs) across project communities. These participatory plans provide the primary mechanism for identifying community priorities, guiding livelihood investments, and coordinating local development actions. IFAD support under Component 1 focuses on sustaining inclusive planning processes, strengthening local governance, and ensuring that CDPs and LDPs remain central instruments for community-driven rural development and livelihood decision-making.

The project will introduce assessment of climate, biodiversity and land degradation risks into CDP development process. In the complementary IFAD project, CDP development process will be institutionalized to allow for periodic stocktaking of these thematic risks and updating of the plans. These periodic updates can serve as conduit for a medium / long term monitoring of changes in climate, biodiversity and land degradation status in particular communities. Furthermore, Tonga NBSAP to 2030 listed a number of relevant national and regional monitoring framework for forest ecosystems, agrobiodiversity, species conservation and alien invasive species. The project will contribute to the operationalization of some of these frameworks, including by introducing

mechanisms to monitor and track biodiversity friendly practices and CSA adoption in community development (see Component 3.3).

GEF support will enhance this foundation by integrating climate, land degradation and biodiversity-specific content into planning processes. This includes crop and farming-system vulnerability analyses; updated landscape-level biodiversity, ecosystem service, and land-use mapping; and targeted training for local officials and communities on climate risks, invasive species, pollution reduction, and ecosystem-based adaptation. GEF resources will enable CDPs and LDPs to systematically incorporate climate resilience, biodiversity-friendly practices, and measures to reduce agricultural runoff affecting terrestrial and marine ecosystems, providing a robust enabling framework for downstream adoption and policy learning.

Output 1.1: Climate- and biodiversity-informed and land degradation-sensitive suitability and vulnerability analyses produced for priority crops and farming systems, including recommended adaptation options and measures needed to reduce agricultural runoff into sensitive terrestrial and marine ecosystems

Tonga's traditional farming systems rely on a diverse range of crops that are sensitive to climatic shifts. As a first step, the project will conduct climate vulnerability assessments (CVAs) of priority crops and farming systems based on current and future climate trends and recommend adaptation options and measures. Landscape-level analyses will identify erosion-prone, salinity-affected, and degraded soils. Landscape-level analyses will identify erosion-prone, salinity-affected, and degraded soils. These assessments will be supervised by MORDI-TT and conducted through a recruited technical service provider/individual. In this way, the CDP process will be assisted to strengthen the environment and climate aspects by identifying threats to biodiversity conservation, sustainable land use, loss of habitats for fauna and flora (especially threatened or endangered species), loss of forest wood and non-wood products, and degradation of mangrove forests. A key objective is strengthening the methodology so that aspects such as management plans for preserving and protecting endemic species, management of invasive species, and guidance on pesticide use in agriculture are emphasized in CDPs/LDPs.

Output 1.2: Landscape-level biodiversity, ecosystem service, and land degradation/erosion risk spatial analysis / maps updated and integrated into Community Development Plans (CDPs) and Livelihood Development Plans (LDPs), including identification of areas sensitive to erosion, invasive species, and agricultural runoff affecting marine ecosystems

As a first step, separate MoUs will be signed between MORDI-TT and MEIDECC as well as with MAFF for cooperation on updating information on biodiversity conservation, climate resilience and CSA. Existing databases on native flora and fauna species will be updated to identify priority species [1] as well as land use plans and resource maps. Erosion hotspots, degraded soils, and runoff pathways using Digital Earth Pacific and Pacific Data Hub layers, with local validation via the Tonga Environmental Data Portal. Compiling relevant baseline information will ensure that CDPs/LDPs are founded on sound information and include an element of capacity building for climate resilient agricultural and non-farm investment options. Baseline data collection may include: (i) village maps using data layers held by the GIS unit in the Ministry of Lands and Natural Resources (MNL); (ii) an inventory (including GPS locations) of all rainwater tanks and water bores; (iii) locations of existing household and boundaries of tax allotments; (iv) a crop mix/type inventory, soil types/production potentials; and current land use and types of crops grown/livestock raised; (v) an assessment of the food security status of target villages and; (vi) identified areas essential for biodiversity conservation and water catchment.

Output 1.3: Local government officials and technical staff trained to apply biodiversity- and climate-resilience criteria, screening tools, and ecosystem considerations in CDP and LDP planning and prioritization

In the above-mentioned processes, local government officials and technical staff will receive additional training to better understand climate risks, biodiversity threats, and adaptation opportunities in CDP and LDP planning.

For example, protecting forested catchment areas around water sources from cropland conversion and ensuring sustainable water use for agriculture and human consumption may deliver environmental, social, and disaster risk reduction (DRR) benefits, as the forests would act as a windbreak during TCs. Other examples include climate resilient practices, safe pesticide and fertilizer management, integrated pest management, and measures to reduce pollution and eutrophication of inshore marine ecosystems. Leveraging this understanding alongside weather forecasts (Output 2.4), proactive investment strategies can be developed to foster resilient agricultural practices.

Training will be conducted in the following areas: (i) use of community participatory learning and action methods; (ii) mainstreaming of climate resilience strategies and techniques, and gender/youth equality, into CDPs and LDPs; (iii) technical skills required for the design of LDPs – with particular attention to climate resilience, biodiversity and sustainability; (iv) project implementation practices and gender/youth mainstreaming. This understanding may also reveal domestic and international agricultural market opportunities through an enhanced understanding of changes in crop suitability over time and location. Capacity building will also be undertaken at the national level for MAFF staff, and Church representatives; and at island level for district officers (DOs) and town officers (TOs), as well as representatives from village's men, women, and youth sub-committees.

As a first entry point, the budget for training activities includes a cofinancing element. This cost-sharing approach reflects the ownership of the government and translates into an approach that supports the integration in national policies (e.g. JNAP2) to formalize trainings as mandatory after project completion. Secondly, the role of MORDI-TT is critical given its track record to train and mobilize a cohort of 'master trainers' accompanied by training manuals/briefs uses as 'handover kits'.

Output 1.4: Community members trained to understand climate risks, biodiversity threats, and adaptation opportunities, including climate-resilient practices, safe pesticide and fertilizer management, integrated pest management, and measures to reduce pollution and eutrophication of inshore marine ecosystems

Training of community members will entail developing and implementing a capacity-building package which addresses the need to link knowledge of climate change and extreme events (cyclones, droughts) and how to implement climate-resilient agriculture systems. It will include training for community members in food safety, reducing food wastage, biodiversity threats, and adaptation opportunities, including climate-resilient practices, safe pesticide and fertilizer management, integrated pest management, and measures to reduce pollution and eutrophication of inshore marine ecosystems. Through this Output, MORDI TT will train volunteer Community Facilitators (CFs) and TOs prior to the preparation of LDPs to ensure that climate resilience and social inclusion are mainstreamed. In addition, a Community Engagement Coordinator and a Biodiversity and Ecosystem Officer will be recruited to support and assist Common Interest Groups (CIGs) to prepare Community Economic Livelihood Grant (CELG) applications, giving due consideration to target group engagement and environmental safeguards in accordance with Social, Environmental and Climate Assessment Procedure (SECAP).

Output 1.5: CDPs and LDPs revised to incorporate climate and biodiversity and land degradation risk information, opportunities for ecosystem-based and biodiversity-friendly practices, invasive species management, and measures to reduce agricultural runoff and protect sensitive terrestrial and marine ecosystems.

A key aspect of CDP revision and formulation will be community-based analysis of climate related risks. CDPs in the 122 communities will be revised and updated with such analysis, while CDPs for the six new communities will be developed. Through Outputs 1.1 to 1.4, the methodology for CDP development itself will be strengthened to make the plans more climate responsive. For example, for economic infrastructure development activities this process will include consideration of the impact of cyclones and associated impacts such as storm surges and tsunamis, and how to reduce and/or mitigate these impacts. There will be an open menu of options, subject to an exclusion list and compliance with IFAD, GEF and MORDI TT safeguards and

grievance procedures, as well as Tongan laws and regulations. Subsequently, CDPs and LDPs will be revised and consolidated into District Development Plans (DDPs) by MORDI TT. Copies of the DDPs will be lodged with DOs, the Governor's Office or Governors' Representatives, and DLG.

Participatory plans (CDPs and LDPs) will provide the primary mechanism for identifying community priorities and guiding livelihood investments while incorporating climate resilience, biodiversity-friendly practices, SLM etc. These community priorities and livelihood investments will then be financed through CELGs and Innovation Facility under Component 2.

Component 2: Sustainable livelihoods through commercialization

Expected Outcome: Adoption of Climate-Smart Agriculture (CSA) and biodiversity-friendly practices and livelihood diversification options by farmers and their household members.

Additional Costs: US\$ 2,651,491

Co-Financing: US\$ 5,955,000

GEF incremental support will strengthen TRIP III's sustainable livelihoods component by enabling farmers to adopt Climate-Smart Agriculture (CSA), biodiversity-friendly practices, and diversified livelihood options that generate global adaptation and biodiversity benefits. Building on TRIP's commercialization and value-chain approach through CELGs, GEF resources will support farmers in transitioning from conventional practices toward climate-resilient production systems, including improved soil and water management, agroforestry, integrated pest management, climate-tolerant crop varieties, and reduced-runoff nutrient practices.

Complementary investments in farmer field schools, demonstration sites, innovation pilots, community seed systems, and enhanced agrometeorological advisories will further lower adoption barriers and support scaling. As a result, rural producers will diversify livelihoods, strengthen resilience to climate variability, and reduce pressures on terrestrial and near-shore ecosystems, contributing to long-term biodiversity conservation and climate change adaptation outcomes.

Output 2.1: Rural producers' access and adopt climate-smart and biodiversity-friendly production inputs and technologies and land degradation prevention practices through Community Economic Livelihood Grants (CELGs) and targeted training

GEF resources would finance priority interventions that aim to strengthen agrobiodiversity and conservation including the identification, collection, and propagation of climate-resilient varieties of crops (e.g., specific varieties of taro, cassava, and yam) that are naturally adapted to local conditions. This includes setting up and/or rehabilitating existing nurseries and providing incentives for farmers to plant a diversity of crops, thereby preserving valuable agrobiodiversity and increasing the overall resilience of the food system, while enabling farmers to adopt Climate-Smart Agriculture and biodiversity-friendly practices through CELG-supported investments and targeted training, in areas including improved water-efficient practices, soil-health measures, agroforestry options, integrated pest management, and reduced-runoff nutrient management.

CELG matching grant investments are expected to support cluster farms (CFs), community gardens, handicraft activities, and other initiatives identified through the community planning process. The communities on each island group are classified as small, medium and large. The number of CFs per community that can be financed is assumed as 1, 3 and 4 for small, medium and large CF respectively. The CELG will cover fifty percent of the estimated costs, which may cover the cost of fencing material and initial land preparation. The remaining fifty percent is in the form of in-kind contribution towards the setup and site development costs. The CELG is only available for one three-year cropping cycle. Subsequent cycles are fully funded by the beneficiaries. The CELG applications are submitted to a Project Review and Appraisal Committee (PRAC) for assessment. The PRAC will provide an executive management function for the various grant windows – CELGs, agribusiness partnerships and the innovation facility. MORDI TT will be responsible in assisting with the preparation of grant applications for the PRAC including screening and reporting results to the PMU.

GEF-supported CELG investments are expected to reach several thousand rural producers and contribute to the adoption of improved practices across more than 1,000 hectares of agricultural landscapes. Supported technologies will include soil conservation structures, cover crops, organic inputs, and erosion-control practices to improve soil organic carbon and land productivity.

Output 2.2: At least 19 farmer field schools and home-garden models demonstrate climate-resilient, biodiversity-friendly, and sustainable land use/agricultural practices, aligned with community development plans

Under TRIP III, the project will establish 19 Farmer Field Schools (FFSs) and home-garden demonstration models across five island groups (Vava'u, 'Eua, Tongatapu, Ha'apai, and the Niuas) to facilitate peer-to-peer, on-site training and learning. These FFSs will be embedded within broader livelihood investments, including agroforestry-based cluster farms on tax allotments, community gardens, and Community Economic Livelihood Grants (CELGs). The FFS curriculum will combine generic modules—covering climate risk management, soil and water management, agrobiodiversity, nurseries, post-harvest practices, and basic value-chain concepts—with crop- and livelihood-specific modules identified by farmers. Cluster farms and community gardens will provide practical learning platforms incorporating tree crops, annual crops, fallow management, and low-cost infrastructure such as nurseries and water storage.

The FFS Curriculum will be a mixture of generic training modules focused on activities proposed by the Project along with specific modules as requested by farmers. Generic modules will include climate change risk management which integrates soil and water management, agrobiodiversity, nurseries, and post-harvest storage, i.e. the landscape approach. Specific modules will cover information on crops of interest, additional resilience-building activities such as biogas production, simple market assessment and value chain analysis, and formation and operation of farmer organisations based on CIGs with an interest in agriculture. In addition, FFSs will demonstrate soil conservation, erosion control, salinity management, and SLM practices using locally appropriate methods. Mainstreaming the FFS approach into the national agricultural extension system and reflected in the Tonga Agriculture Sector Plan (TASP) will ensure it is a standard service provided by MAFF with permanent access to trained facilitators and resources.

GEF financing will strengthen the environmental and adaptation focus of these Farmer Field Schools by integrating advanced Climate-Smart Agriculture (CSA) practices, biodiversity-friendly production systems, invasive species management, and measures to reduce agricultural runoff affecting terrestrial and near-shore marine ecosystems. GEF support will enhance demonstration of practices such as agroforestry system design, integrated pest management, water-efficient irrigation, soil cover and nutrient management, and climate-resilient species selection, informed by climate and biodiversity analyses. Through this incremental support, the FFSs will function as flagship demonstration hubs for scalable climate adaptation and biodiversity conservation within production landscapes.

Output 2.3: Innovation Facility operational and financing pilot and scale-up initiatives on climate-smart agriculture, biodiversity-friendly practices, reduced-runoff farming, digital agrometeorological tools, and youth-centered business models

Through an Innovation Facility being established under TRIP III to support innovative business models that promote innovative, youth-attractive business models in agriculture, the project will support pilot and scale-up initiatives demonstrating climate-resilient and biodiversity-friendly practices. These will include intercropping and conservation tillage; integrated pest management (IPM) to reduce dependence on chemical inputs and protect pollinators; organic fertilizer production using crop residues and green/organic wastes; agroforestry systems involving felling of senile coconut trees and replanting of priority species; and utilizing solar-powered postharvest processing for value addition. Demonstration plots will be used to test and showcase these innovations under local agroecological conditions. The Innovation facility will be strategically aligned with the Tonga Climate Change Fund (TCCF) to ensure complementarity, avoid duplication, and enable potential co-financing or sequencing of successful climate-resilient investments.

The facility will be administered by MORDI TT which will call for proposals, assess applications, award and disburse grants, monitor activities and publicise success stories to support the upscaling of successful initiatives in CELG-funded activities. It is envisaged that TRIP III will fund around ten innovation grants involving investments of around TOP 24,000 (USD 10,000) for small grants, TOP 60,000 (USD 25,000) for medium grants, and TOP 83,000 (USD 35,000) for large grants: to be funded 50/50 by TRIP III and the grant recipients. Innovation grants will be performance-based and disbursed in 3-4 tranches against milestones defined in the grant agreements. This facility prioritizes youth to propose demonstration and testing of innovative technologies and/or youth-focused business models in areas such as mechanisation services, greenhouse and drip irrigation, digital applications, and value addition/waste utilisation. The grant award criteria will consider cultural relevance and local ownership; strategic alignment and policy support; digital connectivity; and inclusivity and equity.

Output 2.4: Agrometeorological advisory services developed and disseminated, providing crop-specific, location-specific, and last-mile climate advisories to support climate-resilient production and risk reduction

TRIP III will disseminate agrometeorological advisory services highlighting and prioritizing CSA techniques and technologies that are crucial to reduce biodiversity loss including switching to resilient varieties, organic fertilizers, integrated pest management (IPM), intercropping, precision irrigation, collecting rainwater, and solar-powered post-harvest processing. In close synergy with the demonstration sites, crop-specific agro-met advisories and early warnings will be disseminated to improve farming and livelihood practices in response to climate change. Linking to the future climate trends on crops, the project will also establish last-mile outreach mechanisms – through SMS, radio, digital tools etc. to increase farmers' awareness in terms of crop calendars, guiding seeding, planting and harvesting timings and early warnings about TCs, pests and diseases. Activities under this output will also enhance climate data parameters by incorporating additional sensors, such as soil moisture and temperature sensors, to the existing weather stations. As part of this output, platforms for disseminating agro-met and early warning information will be created. MORDI-TT will support farmers' successful adoption of CSA techniques and technologies, delivered through complementary existing investments (e.g. TCCF) and financial services and products.

Technical assistance will also evaluate the availability and utilisation of agro-met services and prepare recommendations on suitable ICT tools to disseminate weather-based advisories. Following this initial assessment of options, MORDI-TT will recruit a product developer to engage in the design and launch (or re-launch) of a smart-phone accessible agro-met app providing farmers with the information they need to make informed decisions in the face of growing climate challenges. In addition, the Tonga Meteorological Service (TMS) is implementing a Quality Management System (QMS) to standardize how forecasts are shared with farmers. This will be assessed at project start-up with key stakeholders to secure sustainability of project impacts after completion.

Output 2.5: Strengthened last-mile outreach mechanisms—through radio, digital tools, women's groups, and youth groups—to increase awareness of climate risks, biodiversity co-benefits, pollution-reduction options, and CSA/livelihood diversification opportunities

In combination with FFS (Output 2.2), the innovative use of information and communication technologies (ICT) including the "Digital Green Method" will improve the consistency, reach and effectiveness of extension services. This approach uses short 5-10 minutes video clips produced in villages with farmers as actors demonstrating climate-smart, biodiversity-friendly practices on their own fields, including CSA techniques, soil and water management, and reduced-runoff practices. Videos will be integrated into extension activities and further disseminated through social media and community networks to support peer learning and behavioral change. Additional outreach channels, including radio programming and mobile messaging, will reinforce key adaptation and biodiversity messages. Under this output, training will also be provided to extension officer on the use and interpretation of agro-met services, enabling farmers to translate climate information into timely farm-level decisions that support climate resilience and sustainable livelihoods.

Output 2.6: Community seed banks set up and/or rehabilitated to preserve valuable agrobiodiversity

This output will strengthen conservation and use of agrobiodiversity by: (i) supporting the operation of seedbanks and community nurseries; (ii) developing a digital database of seed collection in the existing seedbanks to improve the seedbank management and (iii) redistribution of priority species. The project aims to further support MORDI's Community Seed Banks which have been instrumental in establishing a network of women-led community seed banks and nurseries across Tongatapu and 'Eua. These local seed banks and nurseries focus on collecting, propagating and storing seeds for redistribution to households, particularly promoting the use of diverse, climate-resilient local crops and traditional varieties to reduce dependence on external markets.

The proposed digital databases can significantly strengthen these community seed banks by improving the organization, preservation, and accessibility of seed information. However, given that capacities at community level are to an extent limited, the project supports a more direct role of MORDI-TT combined with community ownership (e.g. managed by local management committees that oversee 'open-pollinated nurseries' allowing farmers to save and replant seeds independently of imported commercial supplies. An additional element which can be capitalized through the CELGs is developing value-addition strategies, such as selling packaged, high-quality seeds to schools and hospitals to create internal revenues for MORDI-TT which can sustain the nurseries. However, given that capacities at community level are to an extent limited, the project supports a more direct role of MORDI-TT combined with community ownership (e.g. managed by local management committees that oversee 'open-pollinated nurseries' allowing farmers to save and replant seeds independently of imported commercial supplies. An additional element which can be capitalized through the CELGs is developing value-addition strategies, such as selling packaged, high-quality seeds to schools and hospitals to create internal revenues for MORDI-TT which can sustain the nurseries.

By systematically recording data such as seed varieties, origin, traits, storage conditions, and viability, databases reduce the risk of knowledge loss and human error in the community seed bank operation. This structured information helps seed banks track inventory, plan regeneration cycles, and ensure the long-term conservation of local and indigenous crop diversity. In addition, digital databases enhance collaboration, transparency, and decision-making within and beyond the community. They make it easier to share seed availability, exchange knowledge among farmers, and connect with other institutions such as universities and other seed banks. Digital records can also support monitoring of seed distribution and usage, facilitating evaluation of the seed banks' impacts on the community.

Component 3: Policy Support and knowledge management

Expected Outcome: Improved generation, sharing, and use of climate and biodiversity knowledge leads to strengthened policies and systems supporting resilient and biodiversity-friendly agriculture.

Additional Costs (Indicative): US\$ 59,000

Co-Financing (Indicative): US\$ 1,778,000

Component 3 will strengthen knowledge management and the enabling policy environment by identifying key policy gaps and developing at least three policy-relevant knowledge products on climate-resilient agricultural production, biodiversity-friendly practices, and the adverse impacts of invasive species on ecosystem health. These activities will be undertaken in close coordination with MEIDECC on climate change, biodiversity, and environmental management; MAFF on food security, agricultural commercialization, biosecurity, and invasive species prevention across international, regional, and internal pathways; and the Department of Local Government (DLG) on decentralised development planning. Gender perspectives will be integrated, and civil society organizations, farmer associations, and community-based organizations will be engaged throughout knowledge development and policy dialogue processes. Component 3 will also support the review and refinement of selected policies, strategies, and regulatory frameworks, and strengthen systems for tracking

CSA adoption, biodiversity-friendly practices, and climate impacts within TRIP III, ensuring that evidence and lessons from project implementation inform policy decisions and future scaling.

Output 3.1: At least three policy relevant knowledge products (e.g. technical briefs, manuals, extension sheets) developed on climate resilient production, land degradation, erosion control, land-sea linkages and the adverse impacts of invasive species on ecosystem health

Under this output, the project will develop at least three policy-relevant knowledge products—such as technical briefs, practitioner manuals, and extension sheets—focused on climate-resilient agricultural production and the adverse impacts of invasive species on ecosystem health within production landscapes. These products will be grounded in evidence generated through TRIP III implementation, including farmer field schools, innovation pilots, and community-level adoption of CSA and biodiversity-friendly practices. Rather than duplicating formal NBSAP or NISSAP revision processes supported through other GEF initiatives, the project will provide applied, sector-specific inputs that can inform ongoing and future policy updates. This will enable the project to support several KM materials as deemed relevant and may include KM products on agricultural biodiversity, CSA, post-harvest, business management, weather, climate and market, documentation on innovative business models, technologies and practices. Targeted stakeholder consultations and validation workshops will ensure the products are relevant, practical, and usable by MAFF, MEIDECC, DLG, and extension services, strengthening the translation of field-level experience into policy and institutional learning. Key dissemination pathways will include FFS and other training events with beneficiary farmers and mobile apps for farmers.

Output 3.2: Priority policies, strategies, and regulatory frameworks of MAFF, MEIDECC, and DLG reviewed and revised to integrate biodiversity conservation, invasive species management, climate resilience, and CSA principles

The objective of this Output is to strengthen priority policies addressing the causes of Tonga's fragility, as discussed in the baseline section above. For example, through this output existing legislation to support effective environmental impact assessment procedures as a means of regulating sand, mining, land reclamation, coral quarrying, mangrove destruction and waste disposal will be reviewed. Further, a review of the following will be conducted by recruited international technical assistance: Tonga's Climate Change Policy; the Joint National Action Plan on Climate Change and Disaster Risk Management; Tonga's NDC Implementation Roadmap and NDC Investment Plan; the National Biodiversity Strategy and Action Plan (NBSAP); and the National Invasive Species Strategy and Action Plan (NISSAP) 2021–2027.

Output 3.3: Systems for tracking biodiversity-friendly practices, CSA adoption, and climate impacts integrated into systems being developed under TRIP III

The project will facilitate coordination mechanisms to exchange knowledge, provide policy feedback, and foster regional collaboration. The objective is to highlight and share insights gathered from TRIP III and similar initiatives in the region. These platforms will include outreach mechanisms (e.g., TV, radio, social media, community bulletins, school curricula, and church networks) for sharing CSA knowledge to support climate-informed planning and decision-making in policy, investment, farm management, and livelihood diversification. These activities will be aligned and conform with the GEF policy on communication and visibility. Using these platforms and improved extension capacity, the project will also establish systems for tracking biodiversity-friendly practices, CSA adoption, and climate impacts.

Component 4: Monitoring and Evaluation (M&E)

Expected Outcome: Effective M&E framework informs adaptive management of the project.

Additional Costs (Indicative): US\$ 75,183

This component has two outputs: a gender and youth responsive monitoring and evaluation framework (**Output 4.1**) and a mid-term and terminal evaluation (MTE and TE) of the TRIP III (**Output 4.2**). These outputs

ensure the project is implemented and managed adaptively. The success of TRIP III in meeting its goal relies on several key assumptions. Firstly, there needs to be data and information available to conduct climate impact and vulnerability analyses as outlined in Outcome 1. This requires effective sharing of data and information among institutions and coordination among key institutions at various government levels. Secondly, stakeholders, particularly farmers, must be willing to adopt CSA practices and technologies. Finally, the projected impacts of climate change should not surpass the suitability limits for the key crops in the country. The project also needs to address various risks, including climate, environmental, social, political, governance, and institutional and policy risks, which are detailed in a later section titled “Risks to Achieving Outcomes.”

Global Environmental Benefits and Additionality

The baseline includes IFAD’s previous and ongoing investments under the Tonga Rural Innovation Project (TRIP III), building on the foundations established through TRIP I and II. These programmes focus on strengthening rural livelihoods through participatory community development planning, agricultural commercialization, and improved income-generating opportunities. Key activities include the development and updating of Community Development Plans (CDPs), support for community gardens and agricultural enterprises, and investments in community infrastructure (including under TARCP). These interventions improve livelihoods and local economic opportunities but provide only limited and indirect support for biodiversity conservation, avoidance of land degradation and climate adaptation. While CDPs and extension services provide an entry point for addressing environmental risks, baseline activities do not systematically integrate climate risk analysis, biodiversity conservation priorities, land degradation considerations, or climate information services into agricultural planning and decision-making.

Thus, under the baseline scenario, agricultural expansion and intensification continue to place pressure on agricultural lands and surrounding ecosystems. Soil degradation, nutrient depletion, and erosion remain challenges in some cultivated areas, while pressures from invasive species and land-use change contribute to the gradual loss of agrobiodiversity and degradation of ecosystem functions. Runoff of sediments, nutrients, and agrochemicals from agricultural areas also contributes to declining water quality and associated pressures on coastal and marine ecosystems, including coral reefs and nearshore fisheries. At the same time, under the baseline scenario, climate risk information, climate-resilient crop planning, and agrometeorological advisory services are not systematically incorporated into agricultural extension or community development planning. As a result, farmers and local institutions would continue to have limited capacity to anticipate and respond to climate risks such as droughts, cyclones, and changing rainfall patterns, which would likely further exacerbate land degradation, biodiversity loss, and ecosystem pressures.

SCCF-A financing will enable TRIP III to move beyond the baseline development intervention to strengthen climate resilience in Tonga’s agricultural landscapes and food systems. It will do so by supporting the development of farmer advisory systems that translate climate information into practical decision-making tools. SCCF resources will also support climate-informed crop suitability and vulnerability analyses, strengthen agrometeorological advisory services, and promote climate-resilient agricultural practices through demonstration sites, farmer field schools, and improved extension services. Through these activities, farmers and communities will be better equipped to anticipate climate risks, diversify production systems, and adopt climate-resilient farming practices, thereby strengthening long-term food security and reducing climate-related losses.

GEF Trust Fund financing under the Biodiversity and Land Degradation focal areas will provide the additional resources required to generate global environmental benefits that are not addressed under the baseline programme. GEF funding will support the integration of biodiversity conservation and sustainable land management considerations into community development planning and agricultural systems. This will include the development and digitization of a registry of genetic resources; review and updating of land-use plans and resource maps across Tonga’s main islands to identify priority areas for biodiversity conservation and sustainable land management; and training of local government officials and community members to mainstream biodiversity, land degradation neutrality (LDN), and climate resilience considerations into CDPs. GEF investments will also incentivize farmers and communities to shift away from monoculture-based

agricultural practices toward diversified and agroecological systems that enhance agrobiodiversity, reduce soil degradation, and improve ecosystem resilience. These activities will promote sustainable land management across agricultural landscapes, reduce soil erosion and nutrient depletion, and protect endemic species and ecosystem services while reducing pressures from invasive species, agrochemical use, and pollution.

Through the combined baseline and GEF-supported increments, the project will deliver significant adaptation and global environmental benefits. The project will support 8,843 farmers (40 percent women) to adopt climate-resilient and biodiversity-friendly agricultural practices and place approximately 1,068 hectares of cropland under sustainable land management. These interventions will increase agrobiodiversity, restore soil health, reduce land degradation, and improve water quality while strengthening ecosystem connectivity and resilience. By promoting diversified agroforestry systems and improved soil nutrient management, the project will also contribute to increased forest cover, enhanced carbon sequestration, and improved soil carbon stocks, consistent with Tonga's NDC (2020) and JNAP2 (2018). At the landscape level, the project will reduce pressures on environmentally sensitive areas, decrease shifting cultivation practices, and strengthen the long-term resilience of Tonga's agricultural systems, delivering both national adaptation benefits and global environmental benefits related to biodiversity conservation and land degradation neutrality.

Innovation and Scalability toward Broader Transformation

Best practices and lessons learned from on-site demonstration activities will be scaled up and replicated through knowledge management. These results will contribute to outcomes, including enabling policy and institutional environments, CSA practices for resilient rural livelihoods, and effective knowledge management to support Tonga's overall agri-food transformation. The project will employ participatory, demonstration, and systematic knowledge management methods to achieve these results.

The innovation and scalability of TRIP III are evident in its focus on enhancing the understanding of sector- and crop-specific climate vulnerabilities, coordinating actions among relevant institutions and stakeholders, and providing agro-met advisories and early warnings through improved data collection, coordination, interpretation, and last-mile service capacities. Without a clear understanding of how climate change may impact agriculture and related sectors (e.g., water) and specific crops based on the best available information, any actions would run the risk of maladaptation. Currently, Tonga's capacity in these areas is basic. IFAD and GEF investments in these areas will, therefore, enable improved coordination among institutions and levels of government responsible for planning and decision-making in agriculture, land-use, and water sectors in response to climate change.

This model of coordination and collaboration, informed by common and specific climate risks, can be replicated in other interlinked sectors such as water, health, and education to reduce the impact of climate change on the Water, Sanitation, and Hygiene (WASH) sector. Additionally, agro-met advisory and early warning systems, along with related capacity development programs for last-mile services and farmers, can be expanded to other areas in the country. Furthermore, farm-level training and demonstration activities, including capacity building for increasing farmers' access to necessary finance and resources to transition to CSA, are also highly scalable and replicable across the country. The project's innovation and scalability are closely tied to the focus on investment effectiveness and targeting current capacity gaps, which brings complementary benefits to the baseline and parallel investments. In this context, the project will ensure that the Government of Tonga maintains full ownership of the project's outputs and outcomes throughout its implementation.

Global Environmental Benefits and Additionality

While Tonga's landmass and forest areas are small in comparison to large continental rainforests, there are opportunities to achieve global environmental benefits for the following reasons:

(i) **High Endemism and Irreplaceability:** Tonga's forests, particularly those on islands like 'Eua, Tofua, and Late, are home to highly endemic species – meaning species found nowhere else on Earth. Examples include the critically endangered Tongan Megapode, the Tongan Whistler, and various unique plant species. The loss

of these endemic species would represent an irreplaceable global loss of biodiversity, regardless of the total area of the forest. Protecting these small, isolated populations is thus of immense global significance.

- (ii) **Evolutionary Significance:** Island ecosystems like Tonga's are often 'living laboratories' for evolution, showcasing unique adaptive radiations and evolutionary processes that contribute to our understanding of biodiversity globally. Conserving these sites protects valuable evolutionary heritage.
- (iii) **Role in Regional Biodiversity:** While individual islands are small, collectively, the forest remnants across the Tongan archipelago contribute to the broader biodiversity of the Pacific Islands region, which is a recognized global biodiversity hotspot.
- (iv) **Ecosystem Services and Climate Resilience:** Tonga's forests, even if fragmented, provide essential ecosystem services like watershed protection, soil stabilization, and carbon sequestration. These services are locally critical for climate resilience (e.g., buffering against storms, preventing erosion) and contribute to global climate regulation by storing carbon. Protecting these services, especially in a vulnerable Small Island Developing State (SIDS), has global relevance.

GEF additionality stems from targeted funding to deploy investments in biodiversity conservation, environmental protection and climate resilience. Potential areas for improvement include policy/regulatory frameworks in biosecurity, agro-met and climate-informed last-mile service capacities, which require cross-sectoral cooperation, to provide a more conducive environment for agricultural diversification and commercialisation. GEF funding will aim to build the capacity within Tonga's meteorological services to produce and disseminate this climate-specific information such as developing seasonal forecasts and early warning systems against drought and cyclone risks as well as creating a farmer advisory service to help interpret climate data and translate it into practical farming decisions.

GEF and IFAD investments will strengthen TRIP III's approach which consists of: (i) participatory community development planning; (ii) sustainable livelihoods derived from agricultural commercialization, community gardens, and other income-generating activities (IGAs); and (iii) policy support and project management. Local governments and community members will be able to develop and update Community Development Plans (CDPs) considering climate and biodiversity-related risks and opportunities for the conservation and protection of endemic species, invasive species, the use of pesticides and fertilizers in agriculture, pollution and eutrophication. The CDPs will span multiple sectors including agriculture, non-farm IGAs and community infrastructure (the latter to be financed under TARCP) and will build on the registry of genetic resources (database) as well as a review of existing land-use plans and resource maps of all the main islands of Tonga to identify forest areas essential for biodiversity conservation.

GEF Incremental costs: *With GEF-TF (Biodiversity allocation) incremental funding*, CDPs would prioritize channeling funds for incentivizing farmers and communities to move away from monoculture-based practices which result in a decrease in the diversity of agricultural species and an increase in vulnerability of root crops to diseases. More specifically, GEF investments will support the following activities:

- Crop-specific analyses of suitability and vulnerability, along with recommended adaptation options
 - Registry of genetic resources (database) developed and digitized
 - Review existing land-use plans and resource maps of all the main islands of Tonga and identify forest areas essential for biodiversity conservation
 - Training local government officials and community members to mainstream biodiversity and climate resilience aspects in community development planning
 - Community members trained in climate risks and adaptation opportunities

- Community development plans and climate-resilient livelihood plans revised/updated, taking into account climate and biodiversity related risks and opportunities for the conservation and protection of endemic species, invasive species, the use of pesticide and fertilizer in agriculture, pollution and eutrophication etc.

GEF Incremental costs: *With the SCCF's incremental funding*, the project moves beyond a standard development intervention to achieve transformative, long-term climate resilience. By preserving agrobiodiversity, promoting resilient agricultural practices, replanting priority trees and crops species including the production of high-quality seedlings for public sale and distribution and enhancing climate information, the project strengthens Tonga's food security and protects its unique genetic heritage. The upfront investment in adaptation saves significantly on future costs from climate-related disasters.

The project aims to deliver several global and local environmental benefits. The project aims to empower 8,843 farmers, with 40% of them being women. Through capacity development and demonstration activities, the project aims to support climate-resilient agriculture and food systems. By providing on-site demonstrations of CSA practices and improved last-mile support through strengthened extension services, the project aims to place 1,068 hectares of cropland for both annual and perennial crops under sustainable land management. This intervention is expected to increase agrobiodiversity and agroecosystems, promote landscape connectivity, and restore ecosystem functions at a broader landscape level.

Furthermore, these efforts are expected to increase the country's forest cover, as targeted by Tonga's NDC (2020) and JNAP2 (2018), and carbon stocks, as well as its capacity to remove carbon, by improving soil nutrient cycling and promoting improved agroforestry systems. At the same time, the project aims to decrease shifting cultivation practices, especially in environmentally sensitive areas, by encouraging alternative practices for managing soil nutrients and fallow land. Global environmental benefits such as improved soil health, better water quality, and enhanced coastal protection will be achieved by integrating biodiversity-friendly practices and nature-based solutions.

[1] To date, 13 additional Special Management Areas have been added to the 13 protected areas that existed in 2010, and 12 organically certified sites and projects have been funded for terrestrial and marine organisms (see more [here](#)).

[2] The IFAD grant has been approved and has a duration of 6 years, planned to commence in 2026. The GEF financing will have a duration of 5 years and the expected approval and entry into force is in Q4 2026. Aligning activities within potentially different timelines will require careful planning during start-up, and throughout project implementation.

Institutional Arrangement and Coordination with Ongoing Initiatives and Project.

Please describe the Institutional Arrangements for the execution of this project, including financial management and procurement. If possible, please summarize the flow of funds (diagram), accountabilities for project management and financial reporting (organogram), including audit, and staffing plans. (max. 500 words, approximately 1 page)

Implementation Arrangements

MORDI TT will be the Implementing entity and the as the recipient of the grant whilst the Ministry of Finance (MOF) will be the signatory in receiving the funds^[1]. A MOU will be signed between MORDI TT and MOF formalising the arrangement.

MORDI TT will also engage several Implementing Partners through MOUs and disbursement of fund to undertake policy work including MAFF (agriculture), MEIDECC (climate, disaster risk management and agro-

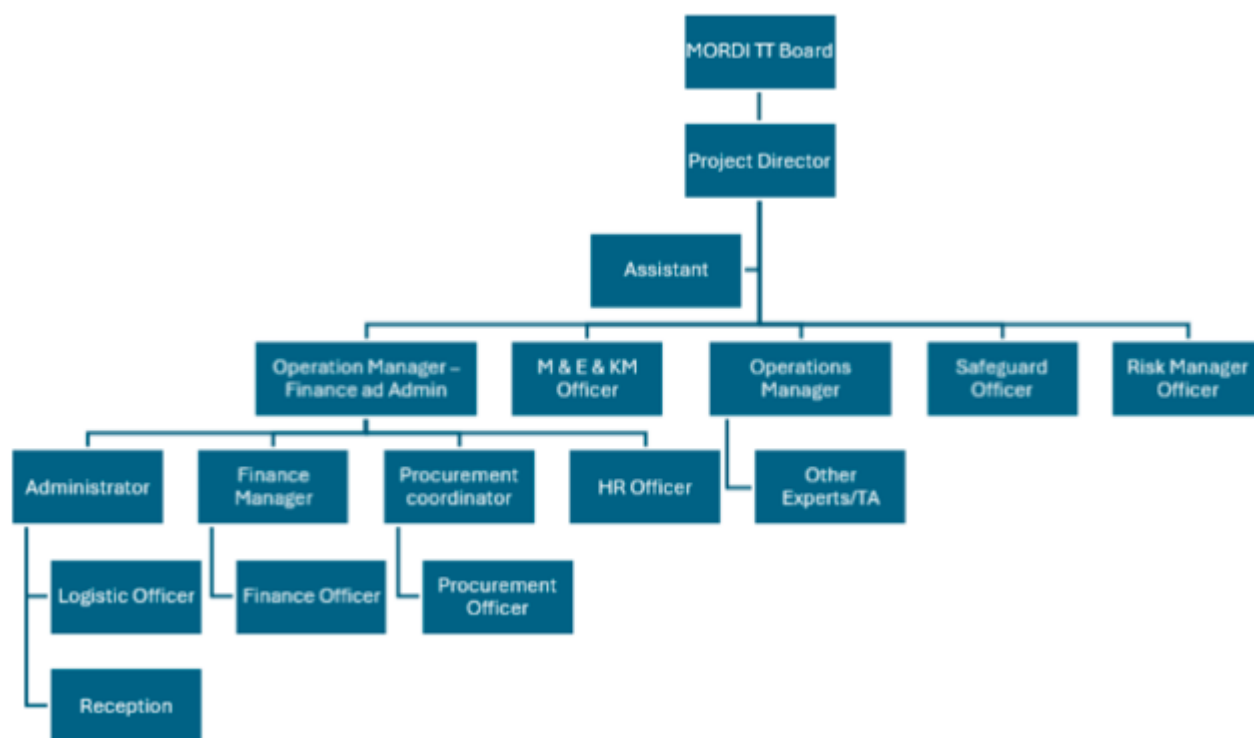
met services) and the DLG (decentralisation/local government). MORDI TT is also a member of the Pacific Farmer Organisations (PFO) which is the implementing agency of the EU funded/IFAD administered Farmer Organisations for Africa, Caribbean and the Pacific (FO4ACP) project.

Project implementation arrangements will be based on the existing arrangements used by MORDI TT for the implementation of TRIP I and II with several scaling up and institutional improvements [2]. Arrangements for the implementation of Component 1 (Community Development) will remain much the same as for TRIP II, with some fine-tuning of approach and improved coordination with all levels of Government. Component 2 (Sustainable Livelihoods) will move from being mainly production activities into commercialization of entire value chains for selected agricultural enterprises. External Service Providers (ESPs) will be contracted by MORDI TT to provide implementation assistance for various activities as needed. Possible examples include training, technical support, supervision, adaptive research, and special studies. Greater involvement in commercialization and market development will also require MORDI TT to recruit (and develop in-house) the skills required to support rural communities in these areas. In addition, it is expected that MORDI TT will establish a Project Office in Nuku'alofa and recruit staff positions including: (i) Project Manager (PRM); (ii) Component Managers (PCMs); (iii) Finance and Administration Manager (FAM); (iv) Senior Project Officers (SPROs); (v) Project Officers (PROs); and (vi) Biodiversity and Ecosystem Officer.

Flow of Funds

A Project Account (PA) in TOP\$, managed by LPA, will be opened in the Bank of South Pacific Tonga Limited, a commercial bank. LPA will submit requests to MoF to transfer funds from the DA to PA for transaction purposes. The foreign exchange rate to be applied will be based on the first in first out method. GEF financing will follow similar arrangements and to avoid co-mingling the separate financing, a Dedicated account will be opened together with the Project Account in TOP\$.

MORDI TT will designate the person/s authorised to operate the Project accounts. MORDI TT will designate authorised signatories (including alternate signatories) to the TOP\$ project account with two signatures required, including the appointment of certifying and approving officers for payments against the TOP\$ account with their alternates. TRIP III will follow the revolving fund mechanism based on six-month cash forecasts as projected on the quarterly IFR. Withdrawals from the Grant and Loan Accounts will be made based on WAs being prepared by MORDI TT and authorised by the person/s designated by MOF to sign WAs.



[1] The IFAD grant has been approved and has a duration of 6 years, planned to commence in 2026. The GEF financing will have a duration of 5 years and the expected approval and entry into force is in Q4 2026. Aligning activities within potentially different timelines will require careful planning during start-up, and throughout project implementation.

[2]MORDI TT has a strong track record in facilitating and enabling community-based rural development activities. It has been the lead Executing Agency for both IFAD TRIP I and II project's spanning over the past 13 years and has established relationships with all 122 rural communities in the TRIP II project area.

Will the GEF Agency play an execution role on this project?

If so, please describe that role here and the justification.

Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (max. 500 words, approximately 1 page)

Effective coordination and collaboration with other ongoing and planned initiatives are vital for the success of TRIP III. The project will coordinate with the following initiatives (Table 2) to ensure its complementarity and additionality and avoid duplication.

Table 2: Coordination with Ongoing and Planned Initiatives

Initiative	Expected Results	Coordination and Complementarity
Implementation of the Fanga'uta Lagoon Stewardship Plan (FSP) and Replication of Lessons Learned to Priority Areas in Vava'u (Tonga R2R Phase 2)^{[1]8} Agency: UNDP/GEF Focal Area: Biodiversity Budget: USD 3.8M grant Status: Under implementation	The project aims 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. Expected results include the implementation of the Fanga'uta Lagoon Stewardship Plan, improving management of the Fanga'uta Lagoon Marine Reserve for biodiversity conservation and integrated management through streamlined policies, proactive institutions, and improved human capacity.	TRIP III will work with this project under Component 1 to ensure coordinated policy and institutional planning in overlapping domains. The project will focus on incorporating climate-specific elements to support climate-informed policy and institutional capacity development, as well as coordination and stakeholder engagement to ensure its additionality.
Establishing resilient, low carbon agriculture in Tonga, Vanuatu and Samoa^{[2]9} Agency: SPC/GCF Focal Areas: Climate change Mitigation and Adaptation Budget: USD 30M	The planned project aims to develop climate-resilient regenerative agricultural (CRRRA) practices among smallholder farmers, create market linkages with farmers' organizations and lead commercial producers to promote the sustainable uptake of CRRRA in Tonga, Vanuatu and Samoa.	TRIP III will establish a close coordination mechanism with the SPC-led, GCF-funded project to ensure synergies and complementarities between the two initiatives, particularly through cross-sectoral coordination and institutional capacity building, training of extension providers and farmers, and financial access development.

Initiative	Expected Results	Coordination and Complementarity
Status: Under preparation		
Pacific Horticultural and Agricultural Market Access (PHAMA) / Market Development Facility (MDF) Agency: Australian Department of Foreign Affairs and Trade (DFAT) Focal Areas: Market access Status: Completion in mid-2026	Market systems development programme launched in 2021. Focusing on kava, tourism, renewable energy, farm mechanisation, climate change and disaster resilience. Export market access programme for agricultural and horticultural products.	Potential to support private sector engagement under TRIP III.
Enhanced fruit systems for Tonga and Samoa (Phase 2) on Community based citrus production / Half-pearl industry development in Tonga and Vietnam Agency: Australian Centre for International Agricultural Research (ACIAR)	The project runs from 2021-2025. Has successfully demonstrated that citrus can be grown in Tonga and is a potential component of mixed agroforestry farming systems being promoted by TRIP III. ACIAR has also supported expansion of community-based pearl farming in Tonga (the project ended in 2024).	Pearl farming is an IGA model and mixed agroforestry systems with citrus varieties grown in Tongatapu and 'Eua has both potential to be replicated under TRIP III

Initiative	Expected Results	Coordination and Complementarity
Focal Areas: Horticultural and IGAs Budget: AUD 1,227,721 Status: Completed in June 2025		
Health Enhancement and Resiliency in Tonga (HEART) Agency: World Bank Focal Areas: Health and Nutrition Budget: USD 30 million Status: Approved in October 2024	Support to meet the growing challenge of non-communicable diseases (NCDs), such as diabetes and heart disease. Aims to develop an innovative system for preventing, detecting, and managing NCDs that can potentially serve as a model in the Pacific. A comprehensive approach includes service delivery design; and the strengthening of primary health care workers, the provision of medical equipment, and digital technology.	TRIP III synergies will be limited to a better understanding and lessons learnt on NCDs and the challenges for target communities given the rise in the consumption of imported processed food items.
Climate Resilient Islands (CRI) programme Agency: Live and Learn Focal Areas: Climate change Adaptation Budget: USD 30 million Status: Active	Supported by New Zealand's Department of Foreign Affairs and Trade (MFAT) and launched in 2021 the project focuses on strengthening community resilience to climate change through nature-based approaches. Works with 14 communities in Ha'apai, 'Eua and Vava'u to protect and restore ecosystems, and strengthen preparedness for natural disasters. Supports community livelihoods through small grants.	TRIP III will conduct assessments on the NBS approaches supported under this project to gather lessons learnt for better selecting demonstration sites with a high potential for replication and scaling up.
Safe Agriculture	Led by SPC and financed by the European Union, the	TRIP III will gather lessons learnt on biosecurity and animal/plant health measures and support sustainable

Initiative	Expected Results	Coordination and Complementarity
Trade Facilitation through economic integration in the Pacific (SAFE Pacific) Agency: SPC Focal Areas: Biosecurity measures Budget: Status: 2021–2025	SAFE Pacific project provides targeted assistance in the areas of sanitary and phytosanitary improvement and value chain strengthening to increase export capacity for commodities like coconut, kava, coffee, and turmeric and improve economic growth in 15 Pacific Island countries. Tonga will receive X-ray facilities as part of this project, among other initiatives.	agri-value chains through linkages with Micro, Small, and Medium Enterprises (MSMEs) being supported under this project to boost their competitiveness and access high-value markets.
The Pacific Regional Invasive Species Management Support Service (PRISMSS), led by SPREP, facilitates regional cooperation and the sharing of expertise. Agency: South Pacific Regional Environment Programme (SPREP) Focal areas: Invasive species management Budget: US\$6 million in 2019 that included	'Predator Free Pacific' and 'Resilient Ecosystems Resilient Communities' are regional programmes for invasive species management run by PRISMSS.	The GEF funding will gather lessons and further support investments in the natural biological control of weeds, which have often proven to be successful and include: • Lantana camara. A leaf-mining beetle (<i>Uroplata girardi</i>) and lacebug (<i>Teleonemia scrupulosa</i>) are effective. A third insect (<i>Leptobyrsa decora</i>) did not establish. • Five other natural enemies that have not been deliberately released are having slight impacts (<i>Calycomyza lantanae</i>, <i>Crocidosema lantana</i>, <i>Lantanophaga pusillidactyla</i>, <i>Ophiomyia lantanae</i>, and <i>Salbia haemorrhoidalis</i>). • <i>Mimosa diplotricha</i>. A psyllid (<i>Heteropsylla spinulosa</i>) found only in Vava'u targets this invasive plant. • <i>Cyperus rotundus</i>. May have been functionally eradicated by two natural enemies. • <i>Elephantopus mollis</i>. May have been functionally eradicated by a self-introduced natural enemy. • <i>Leucaena leucocephala</i>. A seed-feeding beetle (<i>Acanthoscelides macropthalmus</i>) is present, although not deliberately released. The beetle damages a small proportion of seeds.

Initiative	Expected Results	Coordination and Complementarity
over \$22 million in co-financing from partners Status: 2019-2024		
Food and Agricultural Organization (FAO) Transforming Tonga's food systems through ecosystem-based approaches to food production and consumption for global environmental and national health benefits Focal Areas: Biodiversity and Land Degradation.	The estimates of the project's contributions to GEBs include: 1,204ha of area of land and ecosystems under restoration; 1,080ha of landscapes under improved practices; and 34ha area of marine habitat under improved practices	TRIP III, through its executing agency, MORDI, will consult and leverage the ongoing research on the status of soil health integrated with well-designed ecosystem-based approaches to food systems and agricultural production, including traditional farming, practices. Collaboration will also be sought for supporting CSA practices to strengthen resilience of agro-forestry systems and home gardens. Coordination will also extend to land degradation neutrality (LDN) objectives being advanced under the FAO–GEF project. The project will also utilize nationally endorsed LDN indicators and spatial datasets developed through the FAO initiative to help prioritize intervention sites and guide sustainable land management practices. In turn, field-level activities supported under the IFAD–GEF project—such as soil conservation, agroforestry, and erosion control measures—will generate practical evidence and lessons that can inform national LDN monitoring and policy processes.

Initiative	Expected Results	Coordination and Complementarity
Status: The concept has been approved. Budget: US\$1,776,48		
United Nations Environment Programme Building national institutional capacity and capability to protect and restore biodiversity and increase resilience to climate change by managing invasive species Focal Areas: Biodiversity Status: The concept has been approved. Budget: 4,429,225	Regional project covering Marshall Islands, Cook Islands, Tonga, Niue, Tuvalu. This project will benefit the globally significant biodiversity that delivers the following global environmental benefits: 100 ha each of terrestrial and marine protected areas under improved management; 250 ha of land and ecosystems under restoration, 10,000 ha of landscapes under improved practices. The project activities are expected to impact the lives of 192,504 people (99,522 women and 92,982 men).	Collaboration will be sought through the Executing Agency, South Pacific Regional Environment Programme (SPREP) to advance NISSAP implementation and contribute to implementing National Biodiversity Strategy and Action Plans (NBSAPs), fulfilling their obligations under the Convention on Biological Diversity and the aims of the Post-2020 Global Biodiversity Framework.

[1] <https://www.thegef.org/projects-operations/projects/10518>

[2] <https://www.greenclimate.fund/document/establishing-resilient-low-carbon-agricultural-systems-tonga-vanuatu-and-samoa>

Core Indicators

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0	1068	0	0

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	568.00		

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

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

Type/Name of Third Party Certification

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	500.00		

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

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

Indicator 4.5 Terrestrial OECMs supported

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

Documents (Document(s) that justifies the HCVF)

Title

Indicator 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		14,194		
Male		20,949		
Total	0	35,143	0	0

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

The project will contribute to the following GEF8 core indicators, under the GEFTF and the LDCF, as follows:

GEF core Indicator #4: The project will contribute to achievement of this indicator through support to the introduction of improved land and resource use practices in Tonga. These will include specific practices related to sustainable land use, biodiversity conservation and climate-smart agriculture. The project target will be for these and other improved practices to be adopted over an area of at least 1,068 ha., among which 568 ha representing the area of landscapes under improved management to benefit biodiversity (Indicator 4.1), and 500 ha representing the area of the landscape under sustainable land management in production systems (Indicator 4.3).

LDCF core indicator #2(a): The area targeted for improved land and resource use practices under GEF core indicator #4 will simultaneously be supported for enhanced climate resilience. This will be achieved by the introduction of improved agroforestry practices, crop associations, grass strips along ditches, mulching, crop rotation and organic soil improvement, development of small-scale irrigation, introduction of short-cycle crops, drought- and heat-tolerant varieties, use of improved seeds, etc.

LDCF core indicator #3: Under Output 1.1, three policies, plans and frameworks, including community development plans, will be developed / enhanced to incorporate strengthened climate adaptation capacities. These are expected to strengthen the capacity of MEIDECC, MAFF and the DLG and may include a review of climate variability and resilience and biodiversity policies and strategies such as Tonga's Climate Change Policy; the Joint National Action Plan on Climate Change and Disaster Risk Management; Tonga's NDC Implementation Roadmap and NDC Investment Plan; and the NBSAP.

LDCF core indicator #4: Training and awareness activities will target approximately two percent of the population of the target landscapes, or approximately 17,569 individuals, including at least 50% women.

LDCF core indicator #5: A total of 25 private sector enterprises/civil organizations engaged in climate change adaptation and resilience will be targeted through the Innovation Facility.

GEF core Indicator #11 / LDCF core indicator #1: The project will contribute to achievement of Core Indicator 11, Number of beneficiaries disaggregated by gender (co-benefit), by reaching an expected 35,143 direct beneficiaries, including 20,949 men and 14,194 women.

META INFORMATION – SCCF

LDCF false	SCCF-B (Window B) on technology transfer false	SCCF-A (Window-A) on climate Change adaptation true
Is this project LDCF SCCF challenge program? false		
This Project involves at least one small island developing State(SIDS). true		
This Project involves at least one fragile and conflict affected state. false		
This Project will provide direct adaptation benefits to the private sector. true		

This Project is explicitly related to the formulation and/or implementation of national adaptation plans (NAPs).

false

This project will collaborate with activities begin supported by other adaptation funds. If yes, please select below

Green Climate Fund	Adaptation Fund	Pilot Program for Climate Resilience (PPCR)
true	false	false

This Project has an urban focus.

false

This project will directly engage local communities in project design and implementation

true

This project will support South-South knowledge exchange

true

This Project covers the following sector(s)[the total should be 100%]: *

Agriculture	100.00%
Nature-based management	0.00%
Climate information services	0.00%
Coastal zone management	0.00%
Water resources management	0.00%
Disaster risk management	0.00%
Other infrastructure	0.00%
Tourism	0.00%
Health	0.00%
Other (Please specify comments)	0.00%
Total	100.00%

This Project targets the following Climate change Exacerbated/introduced challenges:*

Sea level rise	Change in mean temperature	Increased climatic variability	Natural hazards
false	false	true	true
Land degradation	Coastal and/or Coral reef degradation	Groundwater quality/quantity	
true	false	false	

CORE INDICATORS – SCCF

	Total	Male	Female	% for Women
CORE INDICATOR 1 Total number of direct beneficiaries	35,098	20,949.00	14,149.00	40.31%

CORE INDICATOR 2				
(a) Area of land managed for climate resilience (ha)	1,068.00			
(b) Coastal and marine area managed for climate resilience (ha)	0.00			
CORE INDICATOR 3				
Number of policies/plans/ frameworks/institutions for to strengthen climate adaptation	3.00			
CORE INDICATOR 4				49.99%
Number of people trained or with awareness raised	17,569	8,786.00	8,783.00	
CORE INDICATOR 5				
Number of private sector enterprises engaged in climate change adaptation and resilience	25.00			

SUB INDICATOR 1

	Total	Male	Female
1.1 Number of direct beneficiaries from more resilient physical and natural assets	0		
1.2 Number of direct beneficiaries with diversified and strengthened livelihoods and sources of income	0		
1.3 Number of direct beneficiaries from the new or improved climate information services including early warning systems	0		
1.4 Number of youth (15 to 24 years of age) benefiting from the project	0		
1.5 Number of elderly (over 60 years of age) benefiting from the project	0		
1.6 Increased income, or avoided decrease in income (per capita in \$ across all relevant beneficiaries)			

SUB-INDICATOR 2

- 2.1 Hectares of agricultural land
- 2.2 Hectares of urban landscape
- 2.3 Hectares of rural landscape
- 2.4 Hectares of forests
- 2.5 Hectares of marine area
- 2.6 Hectares of freshwater area

2.7 Number of residential houses

2.8 Number of public buildings

2.9 Number of irrigation or water structures

2.10 Number of fishery or aquaculture ponds or cages

2.11 Number of ports or landing sites

2.12 Km of road

2.13 Km of riverbank

2.14 Km of coast

2.15 Km of stormwater drainage

2.16 Number of new adaptation technologies supported

SUB INDICATOR 3

3.1 Number of policies/plans developed and strengthened that will mainstream climate resilience

(regional, national, sub-national)

3.2 Number of systems and frameworks established for continuous monitoring, reporting and review of climate adaptation impacts

3.3 Number of national climate policies and plans enabled, including national adaptation planning processes

3.4 Number of institutional partnerships or coordination mechanisms established or strengthened

3.5 Number of institutions with increased capacity to plan, implement, monitor, and report for climate adaptation

3.6 Number of institutions with increased capacity to attract, and manage climate adaptation finance

3.7 Number of local community organizations benefitting from and/or engaged in institution strengthening, partnerships, or financing

3.8. Number of climate risk and vulnerability assessments conducted

SUB INDICATOR 4

4.1 Number of people trained or made aware of climate change impacts and appropriate adaptation responses	Total	Male	Female
a) National government	0		
b) Local government	0		
c) Local community organizations	0		
d) Extension services	0		
e) Hydromet and disaster risk management agencies	0		
f) School children, university students, and teachers	0		
g) Youth	0		

SUB INDICATOR 5

	Total	Male	Female
5.1 Amount of investment mobilized (US\$) from private sector sources			
5.2 Number of entrepreneurs supported for climate adaptation or resilience	0		
5.3 Total financial value of lines of credit and/or investment funds			
5.4 Number of MSMEs incubated/accelerated with technical assistance, financial matchmaking, and/or direct financing			

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Substantial	The effects of climate change, including sea level rise, ocean acidification, rising temperatures, and increasingly intense cyclones, continue to threaten the people of Tonga, their livelihoods, society, and natural environment. Project related risks entail ensuring that TRIP III will recruit appropriately-qualified personnel which are engaged and made available to target communities when they are designing and implementing their CDPs. TRIP I and II used this approach to managing risks associated with climate-related events and the results led to high quality and resilient economic infrastructure (e.g. cyclone-proof multi-purpose community halls, and local wharves which are able to withstand storm surges). In addition, the project aims to conduct a sector and crop-specific analysis of climate vulnerability and suitability as it seeks to strengthen the country's capacity to collect climate information by expanding data parameters and providing agro-met advisories and early warnings to farmers and rural households. The IFAD investment design has developed a Targeted Adaptation Assessment (TAA). These interventions will allow for hazard identification, assessment of vulnerability and exposure, and mitigation measures to improve the agricultural production capacity to tackle the country's food security challenges.
Environmental and Social	Moderate	The project will adhere to IFAD and GEF social and environmental policies and standards throughout its planning and implementation phases. The project will promote CSA practices, enhance soil health, and support agrobiodiversity. Given that the use of pesticides is common in Tonga, improper handling of chemicals could contaminate soil. Further, there are risks associated with improper management of agricultural waste, excessive use of chemical fertiliser, particularly in farming cash crops. Mitigation

		measures at project level include having prior approval from Tonga's Ministry of Agriculture or Biosecurity Authority, demonstrate track record of compliance with biodiversity safeguards and provide certifications for non-IAS status of biological inputs. Risks from livestock production are unchecked due to use of antibiotics and lack of sanitation in livestock rearing practices. Regarding fishery and onshore aquaculture, there is a risk of habitat destruction from clearing of coastal vegetation, use of exotic fish varieties, use of uncertified fish feed or reduction in fish biodiversity from overfishing or discarding by-catch. Project activities will be confined to agricultural or fallow lands. Special attention will be given to supporting women, female-headed households, youth, and marginalised communities. Free Prior Informed Consent (FPIC) will be ensured through the CDP process. Overall, TRIP III is expected to generate positive environmental and social benefits through a comprehensive examination and evaluation of risks, based on which the Environmental, Social and Climate Management Plan (ESCMP) will be refined. Furthermore, thematic studies on the environment and climate will be conducted, as relevant, to ensure comprehensive risk management and compliance with project design specifications to mitigate potential adverse social and environmental effects while enhancing the project's co-benefits.
Political and Governance	Substantial	Political instability, staff turnover, and abrupt shifts in policy direction can greatly influence the project's progress. To counter these potential challenges, it is crucial to implement robust monitoring mechanisms. IFAD will maintain continuous dialogue with MOF, MAFF and MEIDECC at both strategic and operational levels, enabling proactive identification and resolution of issues as they emerge. Additionally, the Board and management of MORDI Tonga Trust will continue to promote and intensify engagement with the government. The project has been commissioned to a civil society organisation with extensive track record and long partnership with IFAD. IFAD has invested substantially in building capacity of the CSO and of Government.
INNOVATION		
Institutional and Policy	Low	The Government of Tonga has a robust framework of policies and strategies addressing climate change and sectoral policies concerning agriculture and related sectors. The project seamlessly aligns with these directives. However, non-conducive land tenure systems under which land and tax allotments are allocated to elder male heirs are often abandoned and unproductive. Throughout the implementation phases, any revisions or updates to these policies and strategies will be closely monitored to maintain alignment. Also, during the PPG start-up phase, crucial baseline assessments of relevant institutional capacities will be conducted to pinpoint the most pertinent capacity gaps and monitor progress effectively. For example, to combat low digital literacy, a train-the-trainer approach will be used, supported by

		community information hubs and extension agents. Institutional maintenance challenges will be addressed through formal protocols and the designation of focal points at MAFF and TMS. To enhance coordination and collaboration among stakeholders, including national and sub-national institutions, as well as multilateral and bilateral partners, efforts will focus on raising awareness and facilitating dialogues.
Technological	Low	The project design integrates the best available scientific knowledge, best practices, and lessons learned from ongoing and past initiatives funded by GEF, IFAD and others. Its integrated M&E component will facilitate adaptive management, ensuring effective project oversight and adjustment. Complementary investments in risk mitigation infrastructure and services, including enhanced agro-meteorological information, early warning systems, and locally adapted disaster recovery protocols, ensure that vulnerable farming communities are better equipped to withstand and recover from climate-related disruptions.
Financial and Business Model	Low	The project aims to enhance the financial literacy and entrepreneurial skills of farmers, as well as improve their access to finance and resources necessary for transitioning to CSA and realizing related livelihood diversification opportunities through forging agribusiness partnerships and leveraging the Innovation Facility under Component 2. The project supports a vibrant commercial landscape to attract anchor firms or agribusinesses that commit to buying produce under transparent contracts and, crucially, provide embedded services such as improved planting material, mechanisation, working-capital finance and agronomic training. This private-sector leverage transfers technology and management know-how into rural communities, raising productivity while spreading investment risk across a wider set of actors.

EXECUTION

Capacity	Substantial	MORDI-TT will act as a primary Executing Entity (EE) given also its demonstrated extensive experience and capacity in implementing similar initiatives spanning 13 years, beginning with TRIP I (2012-2017), followed by TRIP II (2018-2025). The project will also build on various policy, institutional, and individual capacities developed through the baseline initiatives described above. Nonetheless, during the start-up implementation stage, the necessary capacity assessments of the EE, partners, and beneficiary groups will be carried out to identify any capacity gaps in delivering project activities and absorbing support to identify clear strategies for building and addressing the capacity gaps before and during the implementation taking into account that the project targets remote, isolated communities with particular attention to women and youth whose economic opportunities are limited and where there is comparatively lower efficacy in Government support.
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Fiduciary	Substantial	The project will be implemented through IFAD's national execution modality through MAFF. To address operational and fiduciary risks, assessments will be conducted during the start-up implementation stage, aligning with criteria. These assessments will inform the development of appropriate risk management strategies.
Stakeholder	Low	Stakeholder engagement will continue to be undertaken during the start-up implementation stage, with a focus on inclusive engagement processes for women and youth. A stakeholder engagement plan (SEP) has been prepared and will be refined to align with GEF requirements.
Other	Moderate	Global pandemics and natural disasters, such as those caused by TCs, may disrupt project operations. These risks are diligently monitored, and contingency strategies, such as remote work arrangements and evacuation plans, will be prepared. . All potential investments will undergo screening according to IFAD's SECAP to identify site-specific risks such as soil degradation, water scarcity or cyclone exposure. Mitigation and adaptation measures such as intercropping, mulching, rainwater harvesting, drought-tolerant varieties, and renewable-energy powered irrigation are built into the technical package
Overall Risk Rating	Substantial	Remoteness, transport and communication obstacles remain challenging and target communities' financial capacity remains low. The project targets isolated rural communities and including to women and youth whose economic opportunities are limited and where there is comparatively lower efficacy in Government support. The effects of climate variability, including sea level rise, ocean acidification, rising temperatures, and increasingly intense cyclones, continue to threaten the people of Tonga. This may require recalibration of work plans from time to time to ensure short-term recovery needs are in place for communities further jeopardising the Government's poverty alleviation commitments and national development objectives.

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

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

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

Confirm if any country policies that might contradict with intended outcomes of the project have been identified, and how the project will address this. (max. 500 words, approximately 1 page)

The project aligns closely with the GEF-8 Land Degradation (LD) Focal Area Strategy, particularly LD-1 (Avoid and reduce land degradation through sustainable land management) and, indirectly, LD-2 (Reverse land degradation through restoration of degraded landscapes). The project promotes sustainable land management practices within agricultural landscapes—such as soil conservation, agroforestry, crop diversification, and improved soil fertility management—while integrating land degradation risks into community and livelihood planning processes. Through Farmer Field Schools, innovation grants, and climate-smart agricultural practices, the project contributes to maintaining land productivity, improving soil health, and restoring degraded agricultural areas. In addition, policy-relevant knowledge products and strengthened planning systems will support enabling environments for sustainable land management, contributing to LD-4 (Strengthening policy, institutional, and knowledge frameworks for Land Degradation Neutrality).

The project also aligns with the GEF-8 Biodiversity (BD) Focal Area Strategy, particularly BD-2 (Mainstream biodiversity across sectors) and BD-4 (Sustainably manage production landscapes and seascapes). Biodiversity considerations will be integrated into community development and livelihood plans, including spatial assessments identifying sensitive ecosystems, invasive species risks, and agricultural runoff affecting coastal and marine ecosystems. By promoting biodiversity-friendly production systems, agrobiodiversity conservation, integrated pest management, and reduced pollution from agriculture, the project contributes to maintaining ecosystem services in agricultural landscapes while reducing pressures on terrestrial and marine biodiversity.

Finally, the project aligns with the SCCF Priority Areas under the GEF-8 LDCF/SCCF Adaptation Programming Strategy, particularly Priority Area 1: Supporting the Adaptation Needs of Small Island Developing States (SIDS) and Priority Area 2: Strengthening Technology Transfer, Innovation, and Private Sector Engagement. By strengthening climate-resilient agriculture, ecosystem-based approaches, and climate information services, the project enhances adaptive capacity and reduces climate risks affecting food systems and livelihoods in Tonga. It also promotes innovation and technology transfer through agrometeorological advisories, farmer field schools, and digital extension tools, strengthening climate information delivery and supporting locally led, knowledge-driven resilience building.

Alignment of the project with national plans, policies, and strategies

TRIP III aligns with several key national policies and strategies aimed at addressing climate change and biodiversity conservation goals in Tonga as outlined below:

Tonga Climate Change Policy (2016): The policy aims to achieve a resilient Tonga by 2035 through meeting 20 specific targets, including utilizing 30% of land for agroforestry or forestry, fully protecting and enhancing native biodiversity, building capacity for food self-sufficiency, reducing reliance on imported food and managing water resources. The policy also seeks to ensure that all households and communities understand climate change, the need for disaster preparedness, and have taken actions to integrate resilience measures into their development plans with enhanced crop production and food security measures in place.

Tonga actively addresses invasive species through its **National Invasive Species Strategy and Action Plan (NISSAP) 2021-2027**. Tonga's Ministries have corporate plans that support the TSDF and outline current and planned short-term activities. Invasive species fall under the MAFF corporate plan (2020/21–2022/23) within the border control and quarantine requirements for imports, and management of existing crop pests, which also apply to invasive species. Major threats include invasive plants like *Cordia alliodora* and African Tulip (*Spathodea campanulata*), which displace native vegetation and impact agricultural land, as well as invasive animals such as rats, pigs, and cats that prey on native wildlife.

National Biodiversity Strategy and Action Plan to 2030: Tonga's conservation and biodiversity management policies are guided by the National Biodiversity Strategy and Action Plan (NBSAP). The NBSAP aims to address the lack of technical information, expertise, public awareness, and weak legislation for conservation planning. It focuses on key issues such as agrobiodiversity, access and benefit sharing, and overharvesting of resources. The plan advocates for balanced land-use planning, protection of ecosystems,

and greater community responsibility. Mainstreaming conservation in all levels of development planning is a priority, focusing on awareness raising and education. This includes ratifying the Convention on Biological Diversity (CBD) and implementing actions to conserve, sustainably use, and protect its biodiversity. The government is committed to both national and international environmental obligations.

Joint National Action Plan 2 on Climate Change and Disaster Risk Management (JNAP2) 2018 – 2028: The project aligns closely with Tonga’s national climate adaptation framework as articulated in the Joint National Action Plan on Climate Change and Disaster Risk Management (JNAP2) 2018–2028, which functions as Tonga’s National Adaptation Plan (NAP) framework. JNAP2 aims to build a “Resilient Tonga” by mainstreaming climate change and disaster risk management into national policies, sector strategies, and development planning while strengthening institutional capacity, knowledge systems, and community resilience. The project contributes directly to these priorities by promoting climate-resilient agriculture, ecosystem-based approaches to food production, and improved climate information services for farmers and local institutions. This includes support to JNAP2 Objective 4 on resilience-building actions, particularly in strengthening climate-resilient agriculture and sustainable land and ecosystem management. By integrating climate and land-resilience considerations into agricultural practices and local development planning, the project operationalizes key adaptation priorities for the agriculture sector and strengthens community-level capacity to manage climate risks.

Tonga Agricultural Sector Plan II (2025-2035): The policy aims to enhance and maintain resilient agricultural livelihoods through two strategic objectives. The first is to establish climate-resilient agricultural systems, encompassing soils, sustainable water use, diversified farming methods, and resilient communities. The second objective is to enhance the enabling environments through policy, legislation, land tenure, finance, market access, quality control and assurance, and industry and organizational support.

2nd Tonga Strategic Development Framework (TSDF) 2015 – 2025: The vision is to create a more progressive Tonga with seven national outcomes, including a sustainable knowledge-based economy, balanced urban and rural development, empowering human development with gender equality, responsive governance, successful infrastructure and technology provision, effective land administration and environmental management with increased resilience to climate change, and consistent advancement of external interests and security. These outcomes are supported by five pillars, including economic, social, and political institutions, as well as infrastructure, technology, and natural resource and environmental inputs.

National Women’s Empowerment and Gender Equality Tonga Policy and Strategic Plan of Action (2019–2025): Provides a framework for mainstreaming gender and fostering gender equality and equity for climate resilience and natural disaster management. An updated strategy is under development.

Tonga National Youth Policy & Strategic Plan of Action (2021-2025): Provides a framework to guide government and youth stakeholders in supporting the development and growth of young people across the country. An updated strategy is under progress.

Tonga Low Emission Development Strategy 2021 – 2050 (2021): The overall vision of the Strategy is to realize a low-emission Tonga, where all sectors work together to create resilience, autonomy, and self-reliance. It targets several key sectors: energy, transport, agriculture, forestry and other land use (AFOLU), waste, and human settlement.

Tonga’s Second Nationally Determined Contribution (NDC) (2020): To adapt to climate change, the NDC targets the observed and anticipated temperature increases and SLR and their effects on different sectors, including agriculture. This will be achieved by, among other interventions, increasing the country’s forest cover to 30%, preventing the loss of land, including cropland, and protecting marine resources. The details of these interventions are linked to the second National Adaptation Plan (JNAP2).

In alignment with the above-mentioned policies and strategies the following table provides an overall summary of the key responsible institutions that will be engaged under the proposed TRIP III project.

Table 3: Key institutions and responsibilities

Institutions	Responsibilities
Ministries	
Prime Minister's Office	Responsible for coordinating local administration across the country and overseeing local government functions, ensuring alignment with national policies and priorities.
Ministry of Finance	Responsible for supporting the Government in expenditure, financial management, and operations, and budget implementation and providing financial and economic policy advice.
Ministry for Meteorology, Energy, Information, Disaster Management, Environment, Communications and Climate Change (MEIDECC)	Responsible for coordinating and implementing climate change legislations, policies and plans, ensuring integration and mainstreaming of climate change issues at community, sectoral and national levels; ensuring Tonga's international climate change agreements, including the UNFCCC and the Paris Agreement obligations are fulfilled; implementing mitigation and adaptation activities, conducting surveys and assessments in vulnerable areas of Tonga to identify project needs and directing the Tonga Climate Change Fund to support implementing such projects.
Ministry of Agriculture, Food and Forests (MAFF)	Responsible for developing policy and providing advice for enhancing the competitiveness, productivity, and sustainability of the agriculture sector; regulating the import and export of agricultural products to safeguard against pests and diseases and ensuring compliance with international standards; delivering training and support to farmers, particularly women and youth, to improve agricultural practices and productivity; conducting research to develop climate-resilient farming systems and innovative agricultural practices; partnering with regional and global agricultural organisations to implement initiatives and secure technical assistance.
Ministry of Internal Affairs (MIA)	Responsible for consolidating policy and service delivery functions focusing on poverty alleviation, inclusive community building and equitable distribution of benefits; promoting women's rights, gender issues, youth and sports; promoting cultural preservation and strengthening local governance through capacity building; managing District Development Committees.
Ministry of Trade and Economic Development (MTED)	Responsible for promoting enabling environment for business through improvement of regulatory and institutional framework to support private sector growth, including simplifying business registration processes and reducing barriers to entrepreneurship; providing assistance to Small Medium Enterprises (SMEs) through capacity building programs, access to finance, and market linkages to enhance

Institutions	Responsibilities
	their competitiveness; managing programs that facilitate the temporary movement of workers to overseas market; collecting and disseminating data on employment trends, skills requirements, and labour market dynamics to inform policy decisions and workforce development strategies; and protect intellectual property rights of innovators.
Ministry of Fisheries	Responsible for sustainable management and conservation of marine resources through development and implementation of policies and plans for fisheries management and aquaculture development focusing to ensure food security and enhance the social and economic well-being, promoting community-based fisheries management to foster sustainable fishing practices and enhancing gender-inclusive community stewardship.
Ministry of Public Enterprises (MPE)	Responsible for exploring and supporting the development of public-private partnerships where appropriate to boost infrastructure and service delivery.
Ministry of Health	Responsible for providing quality care through the promotion of good health, reducing morbidity, disability, and premature mortality through health care service delivery, health promotion and disease prevention, emergency health response, health information management and infrastructure development; surveillance and control of zoonotic disease; and food safety of food products of animal origin
Departments/Divisions	
Department of Local Government	Responsible for overall administration at the district and town level including inspections for compliance with public health safeguard standards, licensing requirements and agriculture; facilitating community development. Administration responsibilities lie with the governors, DOs and TOs.
Tonga Meteorological Services (under MEIDECC)	Responsible for providing meteorological and oceanographic services to support disaster risk reduction, climate resilience, and public safety by issuing regular weather updates and forecasts; collaborating with regional partners to reduce potential damage from extreme weather and disaster events; enhancing community preparedness and response through capacity building.
Women's Affairs and Gender Equality Division (WAGED) (under MIA)	Responsible for developing and implementing policies promoting gender equality and women's empowerment; coordinating and monitoring gender equality initiatives; providing technical advisory services on gender mainstreaming and women's empowerment strategies; conducting awareness raising and capacity building trainings and workshops on gender equality and participation of women in decision-making process; and leading the implementation of the National Women's Empowerment and

Institutions	Responsibilities
	Gender Equality Tonga Policy and Strategic Plan of Action 2019–2025.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

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

Yes

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

Yes

If the project expects to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment, please indicate in which results area(s) the project is expected to contribute to gender equality:

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

Improving women's participation and decision-making; and/or

Generating socio-economic benefits or services for women.

Yes

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

Yes

Stakeholder Engagement

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

Yes

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor;

Co-financier;

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

Executor or co-executor;

Other (Please explain)

Private Sector

Will there be private sector engagement in the project?

Yes

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

Yes

Environmental and Social Safeguard (ESS) Risks

We confirm that we have provided information regarding Environmental and Social risks associated with the proposed project or program, including risk screenings/ assessments and, if applicable, management plans or other measures to address identified risks and impacts (this information should be presented in Annex E).

Yes

Please provide overall Project/Program Risk Classification

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
	Medium/Moderate		

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described during Project Preparation in the Project Description and that these activities have been budgeted.

Yes

Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate and these benefits translate in supporting the achievement of global environmental benefits (GEF Trust Fund) or adaptation benefits (LDCF, SCCF). This section identifies the direct beneficiaries from the project.

TRIP III will target 128 of Tonga's 139 rural communities (defined as all villages/communities outside the Nuku'alofa town boundaries) in five island groups prioritizing communities that are (i) under-served rural areas, in districts that are already covered by TRIP II; (ii) manageable population size (about 2,000 or less) where the CDP process can be applied; (iii) expressed a commitment to participatory planning; (iv) where households rely on semi-subsistence and subsistence production, and are at risk from climate variability and other environmental pressures, emigration, or loss of remittances. The target communities include 8,843 households and around 35,143 people, almost half the national population (based on 2021 census data). Urban communities are not excluded. As shown in the Logical Framework (Annex 3). Around 4,500 households are expected to participate in community gardening (mainly through women and youth family members), around in 2,700 cluster farming (mainly men); plus, around 8,400 households participating in handicrafts and non-farm IGAs. Several members of a household may participate in different LDPs.

ANNEX A: FINANCING TABLES

GEF Financing Table

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

GEF Agency	Trust Fund	Country/ Regional / Global	Focal Area	Programm ing of Funds	Grant / Non- Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
IFAD	GET	Tonga	Biodiversit y	BD STAR Allocation : BD-1	Grant	1,216,774.0 0	115,593 .00	1,332,367.00
IFAD	SCCF-A	Tonga	Climate Change	SCCF-A Country allocation	Grant	2,651,490.0 0	251,892 .00	2,903,382.00
IFAD	GET	Tonga	Land Degradati on	LD STAR Allocation : LD-1	Grant	639,270.00	60,730. 00	700,000.00
Total GEF Resources (\$)						4,507,534.0 0	428,215 .00	4,935,749.00

Project Preparation Grant (PPG)

Is Project Preparation Grant requested?

true

PPG Amount (\$)

150000

PPG Agency Fee (\$)

14250

GEF Agency	Trust Fund	Country/ Regional / Global	Focal Area	Programming of Funds	PPG(\$)	Agency Fee(\$)	Total PPG Funding(\$)
IFAD	GET	Tonga	Biodivers ity	BD STAR Allocation: BD-1	61,765.00	5,868.00	67,633.00
IFAD	SCCF-A	Tonga	Climate Change	SCCF-A Country allocation	88,235.00	8,382.00	96,617.00

Total PPG Amount (\$)	150,000.00	14,250.00	164,250.00
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Please provide justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)
IFAD	GET	Tonga	Biodiversity	BD STAR Allocation	2,100,000.00
Total GEF Resources (\$)					2,100,000.00

Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
BD-1-1	GET	1,216,774.00	2,218,000.00
CCA-2-1	SCCF-A	2,651,490.00	5,955,000.00
LD-1	GET	639,270.00	2,000,000.00
Total Project Cost (\$)		4,507,534.00	10,173,000.00

Confirmed Co-financing for the project, by name and type

Please include evidence for each co-financing source for this project in the tab of the portal

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
GEF Agency	IFAD	Grant	Investment mobilized	5,300,000.00
Recipient Country Government	Ministry of Finance	In-kind	Recurrent expenditures	4,873,000.00
Total Co-financing (\$)				10,173,000.00

Please describe the investment mobilized portion of the co-financing

The co-financing to the GEF project will be USD 5,300,000 in grant (investment mobilized) contribution from the IFAD TRIP III project (2026-2032).

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	12/24/2025	Pierre Yves Guedez, Multilateral Climate and Environment Funds lead (GCF, GEF, AF)		p.guedez@ifad.org
GEF Agency Coordinator	12/24/2025	Paola Palestini, GEF Technical Focal Point		p.palestini@ifad.org
Project Coordinator	12/24/2025	Ralulu, Ovini	+6799922925	o.ralulu@ifad.org

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

Name of GEF OFP	Position	Ministry	Date (Month, day, year)
Mr Sione Akau ola	GEF Operational Focal Point and CEO for MEIDECC TONGA	MEIDECC	7/24/2025

ANNEX C: PROJECT RESULTS FRAMEWORK

Please indicate the page number in the Project Document where the project results and M&E frameworks can be found. Please also paste below the Project Results Framework from the Agency document.

Tonga Rural Innovation Project Phase III (TRIP III)								
Project Objective: To strengthen community development and improve rural livelihoods by promoting diverse agricultural production and commercialization, integrating climate-resilient practices, improving biodiversity, fostering social inclusion, and incorporating innovative solutions								
Results Hierarchy	Indicators				Means of Verification			Assumptions
	Name	Baseline	Mid-Term	End Target	Source	Frequency	Responsibility	
Objective	GEF Core Indicator 4: Area of landscapes under improved practices (ha)		641	1,068 ha	Progress Reports	Annual	PMU	
	GEF Core Indicator 11: People			35,143 (20,949)	Progress Reports	Annual	PMU	

	benefiting from GEF-financed investments disaggregated by sex (count):			male; 14,194 female)					
	SCCF Core Indicator 1: Total number of direct beneficiaries			35,143 (20,949 male; 14,194 female)	Progress Reports	Annual	PMU		
	SCCF Core Indicator 2: (a) Area of land managed for climate resilience			1,068 ha	Progress Reports	Annual	PMU		
	SCCF Core Indicator 3: Number of policies / plans / frameworks / institutions with strengthened climate adaptation capacities			3	Progress Reports	Annual	PMU		
	SCCF Core Indicator 4: Number of people trained or with awareness raised			17,569 (8,786 male; 8,783 female)	Progress Reports	Annual	PMU		
	SCCF Core Indicator 5: Number of private sector enterprises engaged in climate change adaptation and resilience action			25	Progress Reports	Annual	PMU		
Outcome 1: Capacities enhanced to mainstream climate resilience and biodiversity considerations in community and livelihood plans.	SF.2.2 Households reporting they can influence decision-making of local authorities and project-supported service providers				Progress Reports	Annual	PMU	All 122 TRIP II communities revise CDPs by mid-term	
	Household members - # of people		14,059	35,143					
	Households - Percentage (%)		32	80					
	Households - Households		3,537	8,843					
	SF.2.1 Households satisfied with project-supported services					Progress Reports	Annual		PMU
	Household members - Number of people		11,247	28,518					

	Indigenous households - Households		2,830	7,070				One committee per community, 10 members per committee
	Women-headed households - Households		424	1,061				
	Households - (%)		80	80				
	Households - Households		2,830	7,070				
Output 1.1 Climate- and biodiversity-informed suitability and vulnerability analyses produced for priority crops and farming systems, including recommended adaptation options and measures needed to reduce agricultural runoff into sensitive terrestrial and marine ecosystems	CDPs formulated and revised with climate change and biodiversity considerations				Progress Reports	Annual	PMU	
	CDP Formulated - Number	0	6	6				
	CDP Revised - Number	0	122	122				
	People trained in community management/development topics				Progress Reports	Annual	PMU	
	DOs (one per district) - Number		19	19				
	TOs (one per community) - Number		128	128				
	Committee members - Number		1,280	1,280				
	Community Facilitators (two per community) - Number		256	256				
	# of climate risk and opportunity assessments to inform community and livelihood development planning – Number		128	128				
Output 1.2: Landscape-level biodiversity, ecosystem service, and land-use spatial analysis / maps updated and integrated into Community Development Plans (CDPs) and Livelihood Development Plans (LDPs), including identification of areas sensitive to erosion, invasive	# of updated spatial analyses / maps integrated		32	64				

species, and agricultural runoff affecting marine ecosystems								
Output 1.3: Local government officials and technical staff trained to apply biodiversity- and climate-resilience criteria, screening tools, and ecosystem considerations in CDP and LDP planning and prioritization	Number of people trained in climate change/biodiversity risks and response for increased livelihood resilience				Progress Reports	Annual	PMU	80 percent of adult male and female populations in target communities. 20 percent of beneficiaries are youth. (based on 2021 census). Five LDPs per community
	Government officials - Number		60	100				
Output 1.4: Community members trained to understand climate risks, biodiversity threats, and adaptation opportunities, including climate-resilient practices, safe pesticide and fertilizer management, integrated pest management, and measures to reduce pollution and eutrophication of inshore marine ecosystems	Number of people trained or with awareness raised		8,784	17,569 (8,786 male; 8,783 female)	Progress Reports	Annual	PMU	
Output 1.5: CDPs and LDPs revised to incorporate climate and biodiversity risk information, opportunities for ecosystem-based and biodiversity-friendly practices, invasive species management, and measures to reduce agricultural runoff and protect sensitive terrestrial and marine ecosystems.	Climate-Resilient LDPs revised/updated - Number		431	718	Progress Reports	Annual	PMU	
Component 2: Sustainable Livelihoods through Commercialization								
Outcome 2: Adoption of	1.2.4 Households reporting an increase in production					Annual	PMU	10,221 households in

Climate-Smart Agriculture (CSA) and biodiversity-friendly practices and livelihood diversification options by farmers and their household members.	Total number of household members - Number of people	10,612	21,223	Progress Reports			target communities
	Households - (%)	30	60				5 CIGs per community x 10 members x 139 communities x 70 percent success rate
	Households - Households	2,653	5,306				
	2.2.1 Persons with new jobs/employment opportunities			Progress Reports	Annual	PMU	Two cluster farms per community x 8 acres (3.2 ha)
	Males - Males	1,805	3,008				
	Females - Females	2,242	3,737				
	Indigenous people - Indigenous people	4,047	6,745				
	Young - Young people	2,816	3,755				
	Total number of persons with new jobs/employment opportunities - Number of people	4,047	6,745				
	2.2.5 Rural producers' organisations reporting an increase in sales			Progress Reports	Annual	PMU	
	Number of Rural POs - Organisations	431	718				
	Total number of POs members - Number	4,047	6,745				
	Women PO members - Number	2,242	3,737				
	Men PO members - Number	1,805	3,008				
	Young PO members - Number	2,816	3,755				
Output 2.1 Rural producers' access and adopt climate-smart and biodiversity-friendly production inputs and technologies through Community Economic Livelihood Grants (CELGs) and targeted training	3.1.4 Area of Land managed for climate resilience			Progress Reports	Annual	PMU	Two cluster farms per community x 8 acres (3.2 ha)
	Hectares of land - Area (ha)	641	1,068				
	Area of landscapes under improved management to benefit biodiversity						
	Hectares of land - Area (ha)	341	568				
	Area of landscapes under sustainable land management in production systems						90% of groups 10% of groups 20% of groups 100% of groups
	Hectares of land - Area (ha)	300	500				
	3.1.1 Groups supported to sustainably manage natural resources and climate-related risks			Progress Reports	Annual	PMU	Two community gardens per

	Total size of groups - No of people		1,603	2,672	Progress Reports	Annual	PMU	community x 15 members, of whom 90 percent are women. 0.1 acres per garden. Includes handicrafts. 2 groups per community x 20 members, of whom 90 percent are women.
	Groups supported – Groups		200	334				
	Males – Males		200	334				
	Females – Females		0	0				
	Young - Young people		40	66				
	Indigenous people - Indigenous people		1,603	2,672				
	1.1.8 Households provided with targeted support to improve their nutrition							
	Total persons participating - No of people		2,688	4,480				
	Males – Males		169	448				
	Females – Females		2,419	4,032				
	Households – Households							
	Household members benefitted - Number of people		2,688	4,480				
	Indigenous people - Indigenous people		2,688	4,480				
	Young - Young people		484	806				
	2.1.2 Persons trained in income-generating activities or business management							
	Males – Males		3,760	3,760				
	Females – Females		4,672	4,672				
	Indigenous people - Indigenous people		8,432	8,432				
	Young - Young people		1,686	1,686				
Persons trained in IGAs or BM (total) - Number of people		8,432	8,432					
Output 2.2: At least 19 farmer field schools and home-garden models demonstrate climate-resilient, biodiversity-friendly, and	1.1.3 Rural producers accessing CSA production inputs and/or technological packages/ / People benefitting from GEF-financed investments				Progress Reports	Annual	PMU	Includes all beneficiaries of cluster farms and community gardens.
	Males – Males		2,256	3,760				
	Females – Females		2,803	4,672				
	Young - Young people		1,011	1,686				

reduced-runoff agricultural practices, aligned with community development plans	Indigenous people - Indigenous people		5,059	8,432				
	Total rural producers -# of people		5,059	8,432				
Output 2.3 Innovation Facility operational and financing pilot and scale-up initiatives on climate-smart agriculture, biodiversity-friendly practices, reduced-runoff farming, digital agrometeorological tools, and youth-centered business models	# private sector enterprises/ civil organizations engaged in climate change adaptation and resilience action through innovation facility				Progress Reports	Annual	PMU	Assumes 25 innovation grants awarded, each involving 20 households in testing and demonstrating innovations
	# private sector enterprises/ civil organizations							
	# of people trained/ exposed to new technologies through the innovation facility				Progress Reports	Annual	PMU	
	Total – Number		200	500				
	Male – Number		100	250				
	Female – Number		100	250				
	Young – Number		40	100				
	IP – Number		200	500				
Output 2.4: Agrometeorological advisory services developed and disseminated, providing crop-specific, location-specific, and last-mile climate advisories to support climate-resilient production and risk reduction	3.1.2 Persons provided with climate information services				Progress Reports	Annual	PMU	All adults (40 percent of population) in target communities can access climate information and services.
	Males – Males		4,127	6,879				
	Females – Females		4,308	7,180				
	Young - Young people		1,012	1,687				
	Indigenous people - # of people		8,435	14,059				
	Persons provided with climate information services - # of people		8,435	14,059				
Output 2.5: Strengthened last-mile outreach mechanisms—through radio, digital tools, women's groups, and youth groups—to increase awareness of climate risks, biodiversity co-benefits, pollution-reduction options, and CSA/livelihood diversification opportunities	# of knowledge products (e.g. manuals, how to notes, extension sheets							
	Knowledge products (e.g. manuals, how to notes, extension sheets) - #		10	25	Progress Reports	Annual	PMU	

Output 2.6: Community seed banks set up and/or rehabilitated to preserve valuable agrobiodiversity	Acreage/# of multiplication/ seedbanks rehabilitated/ established		19	19	Progress Reports	Annual	PMU	
Component 3: Policy Support and Knowledge Management								
Outcome 3: Improved generation, sharing, and use of climate and biodiversity knowledge leads to strengthened policies and systems supporting resilient and biodiversity-friendly agriculture.	Policy 3 Existing/new laws, regulations, policies or strategies proposed to policy makers for approval, ratification or amendment				Progress Reports	Annual	PMU	
	MAFF		0	1				
	MEIDECC		0	1				
	Local Government Department		0	1				
Outputs 3.1: At least three policy relevant knowledge products (e.g. technical briefs, manuals, extension sheets) developed on climate resilient production and the adverse impacts of invasive species on ecosystem health	# of policy relevant knowledge products developed				Progress Reports	Annual	PMU	
	Policy relevant knowledge product developed that will mainstream climate resilience		0	1				
	Policy relevant knowledge products developed that will mainstream climate resilience		0	1				
	Policy relevant knowledge product developed – Local Government		0	1				
Output 3.2: Priority policies, strategies, and regulatory frameworks of MAFF, MEIDECC, and DLG reviewed and revised to integrate biodiversity conservation, invasive species management, climate resilience,	# of multi-stakeholder consultations facilitated				Progress Reports	Annual	PMU	
	Multi-stakeholder consultation facilitated		1	2				

and CSA principles								
Output 3.3: Systems for tracking biodiversity-friendly practices, CSA adoption, and climate impacts integrated into systems being developed under TRIP III	Multi-stakeholder consultation facilitated		1	2	Progress Reports	Annual	PMU	

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)

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

Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount (\$)		
	Budgeted Amount	Amount Spent To date	Amount Committed
Technical experts: Environment Management Specialist- Team Leader; Gender and Social Inclusion Specialist; Economist	21,269.00	21,269.00	
Consultation missions: travel costs, field visits	50,000.00	50,000.00	
Workshops: inception, validation, and baseline collection	15,000.00	15,000.00	
Baseline studies: including data collection, household surveys, and remote sensing analysis	63,731.00		63,731.00
Total	150,000.00	86,269.00	63,731.00

ANNEX E: PROJECT MAP AND COORDINATES

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

Location Name	Latitude	Longitude	GeoName ID
Niualo'ou	-15.63136	-175.64489	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Niutoputapu	-15.63136	-175.64489	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Vava'u	-15.63136	-175.64489	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Pangai	-15.63136	-175.64489	

Location Description:

Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Nuku'alofa	-15.63136	-175.64489	

Location Description:

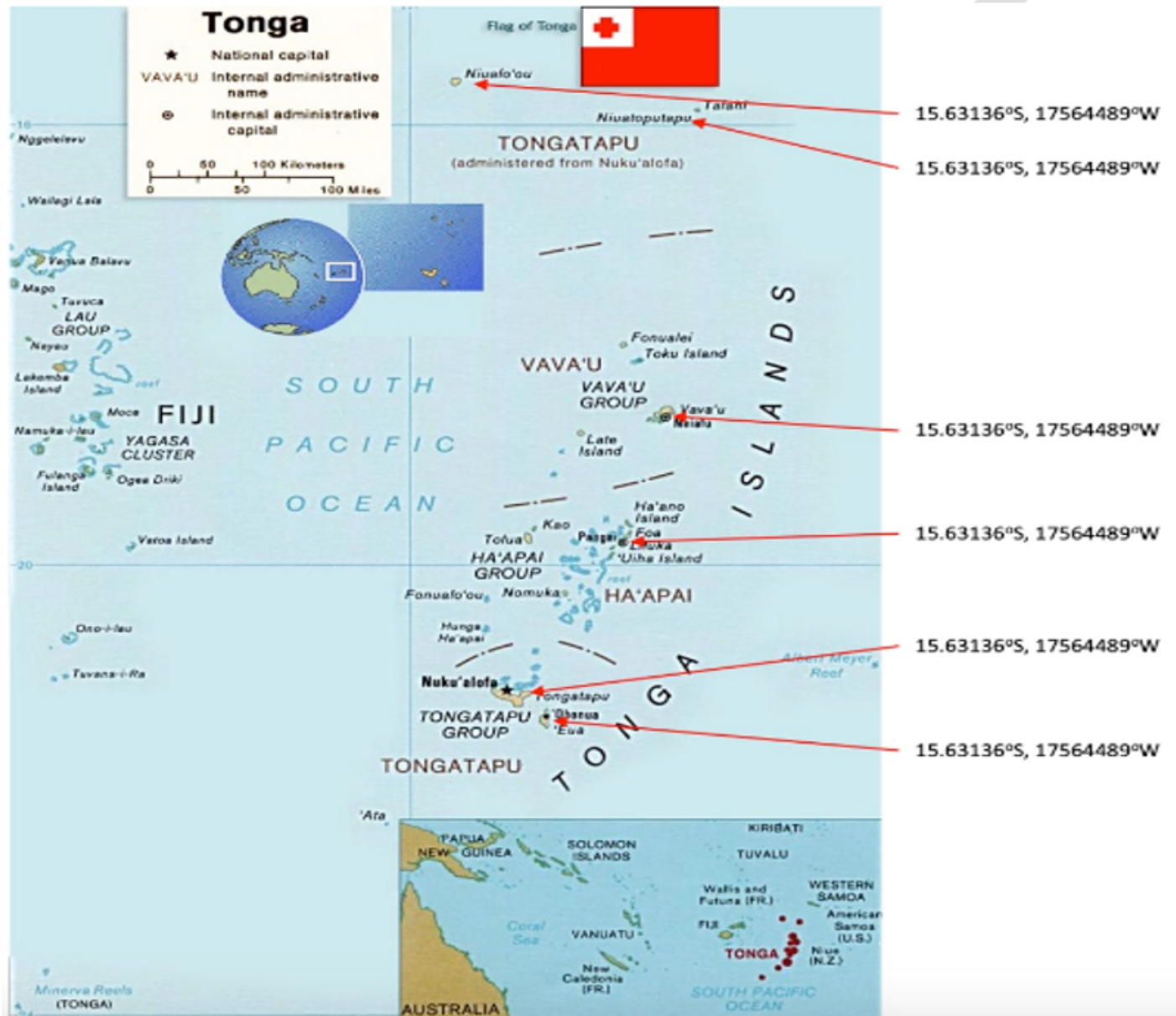
Activity Description:

Location Name	Latitude	Longitude	GeoName ID
Ohunua	-15.63136	-175.64489	

Location Description:

Activity Description:

Please provide any further geo-referenced information and map where project interventions are taking place as appropriate.



ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

Attach agency safeguard screening/assessment report(s), including ratings of risk types and overall project/program risk classification as well as any management plans or measures to address identified risks and impacts.

Title

TRIP III SECAP ESC Screening Matrix_GEF_171125

ANNEX G: BUDGET TABLE

Please explain any aspects of the budget as needed here

Expenditure Category	Detailed Description	Component (USDeq.)						Total (USDeq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)[1]
		Component 1: Community development planning	Component 2: Sustainable Livelihoods through Commercialization	Component 3: Policy Support and Knowledge Management	Sub-Total	M&E	PMC		
		Outcome 1: Capacities enhanced to mainstream climate resilience and biodiversity considerations in community and livelihood plans	Outcome 2: Adoption of Climate-Smart Agriculture (CSA) and biodiversity-friendly practices and livelihood diversification options by farmers and their household members	Outcome 3: Improved generation, sharing, and use of climate and biodiversity knowledge leads to strengthened policies and systems supporting resilient and biodiversity-friendly agriculture.					
Goods	Agroforestry support to Cluster Farms		375,000		375,000			375,000	MORDI-TT
	Community Gardens and Nurseries	312,216	155,490		467,706			467,706	MORDI-TT
	Support to District and Town Officers					4,184		4,183	MORDI-TT
Grants/ Sub-grants	Innovation Facility	130,000			130,000			130,000	MORDI-TT
	Demonstration sites and roll-out of Community Empowerment Livelihood Matching Grants (CELGs)		2,121,000		2,121,000			2,121,000	MORDI-TT
Contractual Services – Individual	Climate Vulnerability Assessments (CVAs) and crop-specific analyses based on climate trends	232,000			232,000			232,000	MORDI-TT
	Develop baseline village and related maps	70,000			70,000			70,000	MORDI-TT

	using existing data layers								
Contractual Services – Company	Agro-met services: for real time weather monitoring, climate advisories, real-time flood or tropical cyclones (TCs) sensors and support climate informed decision making including for agricultural practices (when to plant and harvest crops)	302,000			302,000			302,000	MORDI-TT
International Consultants	Policy Scoping studies: as outlined in the annex TOR_CVA_Agro met services and policy studies	97,000			97,000			97,000	MORDI-TT
Local Consultants	KM & M&E Coordinator					27,000		27,000	MORDI-TT
	Community Engagement Coordinator	36,000			36,000			36,000	MORDI-TT
	Biodiversity and Ecosystem Officer	48,000			48,000			48,000	MORDI-TT
Salary and benefits / Staff costs	Administrator						35,000	35,000	MORDI-TT
	Finance Manager						21,000	21,000	MORDI-TT
	Procurement Coordinator						41,000	41,000	MORDI-TT
	Human Resources Officer						28,000	28,000	MORDI-TT
	Administrative Assistant						18,000	18,000	MORDI-TT
	Finance Officer						28,000	28,000	MORDI-TT
	Logistics Officer						35,000	35,000	MORDI-TT
Trainings, Workshops, Meetings	Training and workshops for District & Town Officers & Communities	110,000			110,000			110,000	MORDI-TT, MAFF
	Multistakeholder workshops to validate and			59,000	59,000			59,000	MORDI-TT, MAFF, MEIDECC

	disseminate results from Policy Studies								
Travel	Consultations for Community Development Plans (CDPs)					44,000		44,001	MORDI-TT
	Staff travel (including MEIDECC and MAFF)	170,000			170,000			170,000	MORDI-TT
Office Supplies	Laptop, equipment and office supplies						8,644	8,644	
Grand Total		1,507,216	2,651,490	59,000	4,217,706	75,184	214,644	4,507,534	