

GEF-8 REQUEST FOR CEO
ENDORSEMENT/APPROVAL

TABLE OF CONTENTS

GENERAL PROJECT INFORMATION	3
Project Summary	4
Project Description Overview	4
PROJECT OUTLINE	11
A. PROJECT RATIONALE	11
B. PROJECT DESCRIPTION	28
Institutional Arrangement and Coordination with Ongoing Initiatives and Project	54
Core Indicators	58
Key Risks	67
C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES	71
D. POLICY REQUIREMENTS	73
Gender Equality and Women’s Empowerment	73
Stakeholder Engagement	74
Private Sector	74
Environmental and Social Safeguards	74
E. OTHER REQUIREMENTS	74
Knowledge management	74
Socio-economic Benefits	75
ANNEX A: FINANCING TABLES	75
GEF Financing Table	75
Project Preparation Grant (PPG)	75
Sources of Funds for Country Star Allocation	76
Focal Area Elements	76
Confirmed Co-financing for the project, by name and type	76
ANNEX B: ENDORSEMENTS	78
Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s)	78
ANNEX C: PROJECT RESULTS FRAMEWORK	78
ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)	87
ANNEX E: PROJECT MAP AND COORDINATES	88
ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING	97
ANNEX G: BUDGET TABLE	98
ANNEX I: RESPONSES TO PROJECT REVIEWS	115

General Project Information

Project Title

Strengthening Climate Adaptation, Biodiversity Conservation, and Combating Land Degradation through Ecosystem-based Adaptation in Samoa

Region	GEF Project ID
Asia	11700
Country(ies)	Type of Project
Samoa	FSP
GEF Agency(ies):	GEF Agency Project ID
UNDP	9942
Project Executing Entity(s)	Project Executing Type
Ministry of the Natural Resources and Environment	Government
GEF Focal Area (s)	Submission Date
Multi Focal Area	2/5/2026
Type of Trust Fund	Project Duration (Months)
MTF	60
GEF Project Grant: (a)	GEF Project Non-Grant: (b)
5,329,452.00	0.00
Agency Fee(s) Grant: (c)	Agency Fee(s) Non-Grant (d)
506,298.00	0.00
Total GEF Financing: (a+b+c+d)	Total Co-financing
5,835,750.00	37,024,000.00
PPG Amount: (e)	PPG Agency Fee(s): (f)
150,000.00	14,250.00
Total GEF Resources: (a+b+c+d+e+f)	
6,000,000.00	

Project Tags

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

Project Sector (CCM Only)

Mixed & Others

Taxonomy

Convene multi-stakeholder alliances, Influencing models, Strengthen institutional capacity and decision-making, Demonstrate innovative approaches, Deploy innovative financial instruments, Stakeholders, Indigenous Peoples, Private Sector, Capital providers, Large corporations, SMEs, Individuals/Entrepreneurs, Beneficiaries, Local Communities, Civil Society, Community Based Organization, Non-Governmental Organization, Academia, Type of Engagement, Information Dissemination, Partnership, Consultation, Participation, Communications, Awareness Raising, Education, Public Campaigns, Behavior change, Capacity, Knowledge and Research, Capacity Development, Knowledge Exchange, Learning, Theory of change, Adaptive management, Indicators to measure change, Innovation, Knowledge Generation, Gender Equality, Women groups, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Gender results areas, Access to benefits and services, Access and control over natural resources, Knowledge Generation and Exchange, Participation and leadership, Focal Areas, Biodiversity, Protected Areas and Landscapes, Terrestrial Protected Areas, Coastal and Marine Protected Areas, Productive Seascapes, Productive Landscapes, Community Based Natural Resource Mngt, Mainstreaming, Forestry - Including HCVF and REDD+, Tourism, Agriculture and agrobiodiversity, Fisheries, Infrastructure, Species, Threatened Species, Biomes, Mangroves, Coral Reefs, Sea Grasses, Wetlands, Rivers, Lakes, Tropical Rain Forests, Financial and Accounting, Conservation Trust Funds, Climate Change, Land Degradation, Sustainable Land Management, Ecosystem Approach, Sustainable Livelihoods, Sustainable Agriculture, Climate Change Adaptation, Small Island Developing States, Disaster risk management, Sea-level rise, Climate resilience, Climate information, Ecosystem-based Adaptation, National Adaptation Programme of Action, Mainstreaming adaptation, Private sector, Climate Change Mitigation, Agriculture, Forestry, and Other Land Use, United Nations Framework Convention on Climate Change, Nationally Determined Contribution

Rio Markers

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

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. (max. 250 words, approximately 1/2 page)

Samoa is highly vulnerable to climate hazards which are already driving coastal erosion, flooding, infrastructure and livelihood losses, and saltwater intrusion into freshwater resources. These shocks intensify existing pressures on Samoa's key ecosystems, which are essential natural defenses that reduce wave energy, storm surge, and flood impacts. However, these ecosystems are increasingly degraded by deforestation, over-extraction of natural resources, invasive species, land-use change, and climate impacts, leading to habitat loss, reduced biodiversity, declining land productivity, erosion, and weakened ecosystem resilience. The result is rising risk for communities, food security, and economic stability. The proposed project will strengthen the climate resilience of Samoa's ecosystems and communities by integrating Ecosystem-based Adaptation (EbA) into watershed management while delivering co-benefits for biodiversity conservation and land degradation neutrality. It will: (1) build national EbA capacity to protect and restore ecosystems with high adaptation value; (2) implement on-the-ground EbA measures that reduce climate risk, conserve biodiversity, and curb land degradation; (3) establish a comprehensive knowledge management system to capture and scale effective EbA models; and (4) implement robust monitoring and evaluation to track progress, impacts, and sustainability. Key project targets include restoring 1,000 ha of degraded terrestrial and coastal ecosystems and 1 ha of coral reef; establishing 505 ha of new community-led conservation areas; placing 300 ha under sustainable agroforestry; managing 500 ha of mangroves and seagrass under a community Blue Carbon initiative; avoiding 683,762 tCO₂e over 20 years; constructing 800 m of hybrid EbA seawall; and directly benefiting at least 10,000 people (50% women).

Project Description Overview

Project Objective

To enhance climate resilience of Samoa's ecosystems and communities through integrated Ecosystem-based Adaptation approach, that promotes biodiversity conservation and combats land degradation.

Project Components

1: Enhancing national climate adaptation, biodiversity conservation, and sustainable land management capacity via integrated and gender inclusive Ecosystem-based Adaptation (EbA)

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
569,000.00	3,391,553.00

Outcome:

1. Strengthened national climate adaptation, biodiversity conservation, and sustainable land management capacity through the integrated and gender inclusive Ecosystem-based Adaptation (EbA) approach, *indicated by:*

NESSC capacitated as Multi-sectoral EbA Coordination Committee;

>= \$300,000 raised via EbA/Biodiversity funding window of Samoa's Loss&Damage Fund;

National EbA capacity increased up to 4.64 from the baseline value of 2.99 (2025, measured by UNDP Capacity Scorecard)

Output:

- 1.1. Multi-sectoral institutional framework led by MNRE established for the coordination of Ecosystem-based Adaptation and associated conservation initiatives (barrier, source and filter ecosystem restoration and protection) under the Community Integrated Management Plans (CIMPs) (GEF BD: \$307,334)
- 1.2. EbA & Biodiversity Funding Window of Samoa's Loss & Damage Fund established and operationalized to catalyze financial and technical resources to restore, protect, and enhance the county's ecosystems and biodiversity for climate adaptation (GEF BD: \$261,666)

1: Enhancing national climate adaptation, biodiversity conservation, and sustainable land management capacity via integrated and gender inclusive Ecosystem-based Adaptation (EbA)

Component Type	Trust Fund
Technical Assistance	SCCF-A
GEF Project Financing (\$)	Co-financing (\$)
600,000.00	2,778,822.00

Outcome:

1. Strengthened national climate adaptation, biodiversity conservation, and sustainable land management capacity through the integrated and gender inclusive Ecosystem-based Adaptation (EbA) approach, *indicated by:*

NESSC capacitated as Multi-sectoral EbA Coordination Committee;

>= \$300,000 raised via EbA/Biodiversity funding window of Samoa's Loss&Damage Fund;

National EbA capacity increased up to 4.64 from the baseline value of 2.99 (2025, measured by UNDP Capacity Scorecard)

Output:

1.2. EbA & Biodiversity Funding Window of Samoa's Loss & Damage Fund established and operationalized to catalyze financial and technical resources to restore, protect, and enhance the county's ecosystems and biodiversity for climate adaptation (SCCF: \$130,000)

1.3. Nurseries used for Ecosystem-based Adaptation are upgraded to support implementation of CIMP in ecosystem restoration and mixed adaptation solutions (SCCF: \$470,000)

2. Implementing gender inclusive Ecosystem-Based Adaptation measures to improve climate resilience of ecosystems and communities, protect biodiversity, and combat land degradation

Component Type	Trust Fund
Investment	GET
GEF Project Financing (\$)	Co-financing (\$)
1,763,440.00	12,731,508.00

Outcome:

2. Scaled up gender inclusive Ecosystem-based Adaptation measures in the project area, *indicated by:*

>=990 ha of riparian forests restored;

>=10 ha of mangroves and 1 ha of coral reefs restored;

>=500 ha of new terrestrial CCAs established;

>=5 ha of marine CCAs established;

>=300 ha under sustainable agroforestry;

>=500 ha of mangroves and seagrass meadows under the community Blue Carbon project;

>= 800 m of biodiversity-friendly hybrid sea wall constructed (boulders + mangroves + forest);

>= 4 functional PPP agreements for co-management of EbA sites;

prevented emission of $\geq 683,762$ tons of CO₂-equivalent over 20 years after the ecosystem restoration and establishment of new CPAs and Blue Carbon project;

$\geq 10,000$ people, including at least 50% of women, directly benefit from the project

Output:

2.1. Ecosystem-based Adaptation initiatives are implemented on-the-ground to support CIMP climate resilience priorities, including shoreline and springs protection, mangrove, riparian and coral reef restoration, reforestation of slopes, agroforestry systems, and Blue Carbon projects (GEF: \$1,398,003)

2.2. Community-led Conservation Areas (CCAs) are established to protect the coastal ecosystems (forest, mangroves, wetlands, coral reefs, and seagrass meadows) having adaptation and biodiversity conservation values (GEF: \$365,437)

[BD: 1,630,792, LD: 132,648]

2. Implementing gender inclusive Ecosystem-Based Adaptation measures to improve climate resilience of ecosystems and communities, protect biodiversity, and combat land degradation

Component Type	Trust Fund
Investment	SCCF-A
GEF Project Financing (\$)	Co-financing (\$)
1,719,526.00	13,274,434.00

Outcome:

2. Scaled up gender inclusive Ecosystem-based Adaptation measures in the project area, *indicated by:*

≥ 990 ha of riparian forests restored;

≥ 10 ha of mangroves and 1 ha of coral reefs restored;

≥ 500 ha of new terrestrial CCAs established;

≥ 5 ha of marine CCAs established;

≥ 300 ha under sustainable agroforestry;

≥ 500 ha of mangroves and seagrass meadows under the community Blue Carbon project;

>= 800 m of biodiversity-friendly hybrid sea wall constructed (boulders + mangroves + forest);

>= 4 functional PPP agreements for co-management of EbA sites;

prevented emission of >=683,762 tons of CO2-equivalent over 20 years after the ecosystem restoration and establishment of new CPAs and Blue Carbon project;

>=10,000 people, including at least 50% of women, directly benefit from the project

Output:

2.1. Ecosystem-based Adaptation initiatives are implemented on-the-ground to support CIMP climate resilience priorities, including shoreline and springs protection, mangrove, riparian and coral reef restoration, reforestation of slopes, agroforestry systems, and Blue Carbon projects (SCCF: \$1,240,000)

2.3. Public-Private Partnerships and Blue Economy projects focused on Ecosystem-based Adaptation are developed and implemented (SCCF: \$479,526)

3. Gender Mainstreaming, Knowledge Management and Learning for scaling up of EbA best practices for climate adaptation, biodiversity conservation, and sustainable land management

Component Type	Trust Fund
Technical Assistance	SCCF-A
GEF Project Financing (\$)	Co-financing (\$)
163,500.00	1,000,376.00

Outcome:

3. Project EbA best practices and gender-inclusive models are replicated and scaled up by Samoa's districts, projects, and stakeholders, as indicated by:

->=60% of adult population in the target districts demonstrate good understanding of EbA benefits and supportive to EbA projects over grey infrastructure

->= 8 project lessons and best practices are replicated by other districts of Samoa

Output:

3.1. Comprehensive Gender Mainstreaming Strategy is developed and coordinated to incorporate gender equality into EbA initiatives (SCCF: \$63,600)

3.2. Communication and awareness strategy on EbA for climate adaptation and biodiversity conservation developed and implemented (SCCF: \$99,900)

3. Gender Mainstreaming, Knowledge Management and Learning for scaling up of EbA best practices for climate adaptation, biodiversity conservation, and sustainable land management

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
106,600.00	850,736.00

Outcome:

3. Project EbA best practices and gender-inclusive models are replicated and scaled up by Samoa's districts, projects, and stakeholders, as indicated by:

->=60% of adult population in the target districts demonstrate good understanding of EbA benefits and supportive to EbA projects over grey infrastructure

->= 8 project lessons and best practices are replicated by other districts of Samoa

Output:

3.3 Gender-inclusive best practices and lessons learned by the project on EbA are made available for use by Samoa's districts, and shared regionally and internationally for replication (GEF BD: \$106,600)

M&E 4. Gender Sensitive Monitoring & Evaluation

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing (\$)	Co-financing (\$)
75,000.00	491,379.00

Outcome:

4. Effective project Adaptive Management for results based on gender sensitive M&E

- Satisfactory project rating by QA reports, MTR, and TE

Output:

4.1. Participatory and gender sensitive M&E system to measure the project effectiveness and tests the project Theory of Change (GEF BD: \$75,000)

M&E 4. Gender Sensitive Monitoring & Evaluation

Component Type	Trust Fund
Technical Assistance	SCCF-A

GEF Project Financing (\$)	Co-financing (\$)
79,000.00	744,905.00

Outcome:

4. Effective project Adaptive Management for results based on gender sensitive M&E

- Satisfactory project rating by QA reports, MTR, and TE

Output:

4.1. Participatory and gender sensitive M&E system to measure the project effectiveness and tests the project Theory of Change (SCCF: \$79,000)

Component Balances

Project Components	GEF Project Financing (\$)	Co-financing (\$)
1: Enhancing national climate adaptation, biodiversity conservation, and sustainable land management capacity via integrated and gender inclusive Ecosystem-based Adaptation (EbA)	569,000.00	3,391,553.00
1: Enhancing national climate adaptation, biodiversity conservation, and sustainable land management capacity via integrated and gender inclusive Ecosystem-based Adaptation (EbA)	600,000.00	2,778,822.00
2. Implementing gender inclusive Ecosystem-Based Adaptation measures to improve climate resilience of ecosystems and communities, protect biodiversity, and combat land degradation	1,763,440.00	12,731,508.00
2. Implementing gender inclusive Ecosystem-Based Adaptation measures to improve climate resilience of ecosystems and communities, protect biodiversity, and combat land degradation	1,719,526.00	13,274,434.00
3. Gender Mainstreaming, Knowledge Management and Learning for scaling up of EbA best practices for climate adaptation, biodiversity conservation, and sustainable land management	163,500.00	1,000,376.00
3. Gender Mainstreaming, Knowledge Management and Learning for scaling up of EbA best practices for climate adaptation, biodiversity conservation, and sustainable land management	106,600.00	850,736.00
M&E 4. Gender Sensitive Monitoring & Evaluation	75,000.00	491,379.00
M&E 4. Gender Sensitive Monitoring & Evaluation	79,000.00	744,905.00
Subtotal	5,076,066.00	35,263,713.00

Project Management Cost	125,686.00	873,148.00
Project Management Cost	127,700.00	887,139.00
Total Project Cost (\$)	5,329,452.00	37,024,000.00

Please provide Justification

PROJECT OUTLINE

A. PROJECT RATIONALE

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

Development Challenge

Samoa is a Small Island Developing State (SIDS) lying in the Polynesian Region of the South Pacific. It comprises two main islands of Upolu and Savai'i, 1,115 and 1,700 sq. km, respectively, and 8 smaller, peripheral islands (total land area is 2,935 sq. km), all of which are volcanic. Upolu's ridge rises to 1,100 m and Mt. Silisili (1,848 m) on Savaii Island is the country's highest peak. The central uplands of the main two islands are covered with primary and secondary forests; much of the coastal belt (below 1,000 m) comprises a mosaic of farms, plantations (e.g., coconuts, cocoa, bananas, taro), woodlands, grasslands, wetlands, rural settlements, and urban areas. Coastal areas include mangrove forests with coral reefs identified as some of the most diverse in the world.

Samoa's population of 205,557 is 80% rural and has a poverty rate of 23%^[1]. The population density of approximately 70 people per square kilometer is relatively low compared to many other Pacific Island nations, however, the population is concentrated in urban centers and coastal areas, leading to pressure on natural resources in these regions. The country's population has been growing steadily in recent years, with an annual growth rate of around 1.2%. The GDP of Samoa for 2022 was approximately \$0.83 billion^[2] with the projected GDP growth rate of 6% in 2023 and by 4.2% in 2024, according to the Asian Development Bank's forecast^[3]. The key sectors of Samoa's economy are tourism, agriculture and fisheries. Samoa's tourism sector accounts for 20% of GDP and heavily relies on its marine and terrestrial resources such as coral reefs and tropical fish stocks, which are vulnerable to climate risks. Agricultural output accounts for less than 10% of GDP, with the employment share of 20%, but it is a source of income for over 70% of population. Fisheries accounted for about 3.4% of GDP in 2014, but fish constitutes a large part of the citizens' dietary protein.

The country is part of the Polynesia-Micronesia Biodiversity Hotspot, one of 34 regions globally with extraordinary biodiversity and endemism^[4]. Samoa's biodiversity includes over 500 native flowering plants, 220 fern species, many of which are endemic, and a variety of terrestrial mammals (13 species), birds (44 species), reptiles, insects, land snails, and fish. Samoa's marine biodiversity is very rich, with up to 991 fish and 45 coral species recorded, showcasing the country's status as a marine biodiversity hotspot. The islands' volcanic nature provides diverse terrestrial habitats including cloud forest, tropical rainforest, scrub, and marsh spanning from coast to ridges. Coastal areas include mangrove forests with coral reefs identified as some of the most diverse in the world^[5]. Samoa's ecosystems offer significant climate adaptation value by providing natural barriers against climate impacts, such as coastal erosion and storm surges, through coral reefs and mangroves. Rainforests and wetlands play a vital role in natural water filtration

and storage, helping to maintain the quality and availability of fresh water for various uses. They also support biodiversity, which contributes to resilience and the ability of ecosystems to adapt to changing conditions.

Samoa's ecosystems, economy and communities are highly vulnerable to climate change impacts, manifesting through increased intensity and frequency of extreme weather events (storms, droughts, and floods), rising sea levels, and seasonal shifts in rainfall patterns. These changes threaten both terrestrial and marine ecosystems, leading to habitat degradation, loss of biodiversity, and reduced ecosystem services. Such impacts are particularly severe for Samoa's key economic sectors—agriculture, fisheries, and tourism—which depend heavily on environmental health and stability. These climate impacts not only threaten economic stability but also pose direct risks to the livelihoods and well-being of Samoa's predominantly rural population, exacerbating poverty and constraining development

The nine districts across the islands of Savai'i and Upolu (namely, Falealili 1 (West), Falealili 2 (East), Siumu, Safata 1, Safata 2, Lefaga & Faleaseela, Faasaleleaga 3, Faasaleleaga 4, Faasaleleaga 5) selected as a target area for suggested project, epitomize the acute vulnerabilities Samoa faces due to climate change. Encompassing 55,385 ha and hosting approximately 12% of the nation's population, these districts are particularly prone to climate-induced threats such as storm surges, coastal erosion, and seasonal shifts in rainfall patterns leading to droughts and flooding. The area's rich coastal and terrestrial ecosystems, including mangroves, coral reefs, and tropical forests, are not only vital for biodiversity but also serve as natural defenses against climate impacts. However, these natural barriers are increasingly compromised by human caused degradation, diminishing their protective capacities and the resilience of the local communities and ecosystems they support. **Sensitivity** of the cluster is acute because 60-80% of households rely on coastal agriculture, small-scale fishing and beach-fale tourism; extreme rainfall already washes farm chemicals into lagoons, bleaching near-shore coral and lowering fish catches. Adaptive capacity is mixed: every village now has an approved Community Integrated Management Plan, several have begun inland relocation and forest-reserve expansion, but financing and engineering capacity lag behind hazard growth.

Key Threats for Ecosystems and Local Communities in Samoa

Key threats to Samoa's biodiversity, ecosystems, and local communities include deforestation, over-exploitation of natural resources, invasive species, and climate change impacts. These challenges lead to habitat loss, reduced resilience to climate impacts, and decreased biodiversity, impacting both ecosystems and the livelihoods of local communities, including their adaptation capacity.

Deforestation. Approximately 60% (170,000 ha) of Samoa's total land area is categorized as forest. However, this ecosystem, critical not only for its carbon storage and greenhouse gas (GHG) mitigation benefits, but also its ecosystem services co-benefits such as regulating water cycles, preventing soil erosion, restoring biodiversity and alleviating poverty, is facing pressing and multi-dimensional issues leading to its depletion and degradation^[6]. In the 1990s, the rate of deforestation in Samoa was around 3,000 ha, or 2.1% per year. Currently, 32% and 22% of all forest area in Samoa is either open or secondary forest respectively, indicating a high degree of nation-wide forest depletion^[7]. When this is paired with the significant contributions to GHG emissions from the agriculture, forest and other land use (AFOLU) sector, which accounts for 38% of total GHGe (135.37 Gg CO₂e)^[8]. The key drivers of deforestation in Samoa are conversion to agriculture, logging, and heavily dependency of Samoans on firewood as fuel for cooking ^[9]. The removal of forests disrupts water cycles, increases soil erosion, and decreases biodiversity. These changes not only diminish ecosystem services critical for mitigating climate impacts but also increase vulnerability to climate-induced changes such as hurricanes and tsunamis.

Over-exploitation of natural resources. The increasing rise of population and demands for food and monetary income force Samoan farmers to abandon their traditional farming methods to adopt more intensive farming systems consequently resulting in soil erosion and depletion. A substantial amount of soil depletion and erosion occurs from deforestation and climate change impacts, i.e. heavy rainfall and hurricanes. Because of Samoa's susceptibility to hurricanes, and heavy rainfall, erosion was and continues to be widespread and results in the transport of sediment and debris in both land and seaward. Logging of virgin primary forest for agricultural use and/or for construction use is another prevalent contributor to soil erosion. Because reef fish is an essential part of Samoans' diet, overfishing occurs and causes substantial and detrimental effects to the coral reefs that surround the Samoan islands. Villagers are practicing extensive fishery which in effect, has profound consequences. The reefs around Samoa are in generally poor conditions because of man-made factors which include top-soil run off deforestation, construction, and agriculture^[10]. This over-

exploitation, coupled with deforestation for agricultural expansion or logging, aggravates land and marine resources degradation. The loss of vegetative cover and coral reefs further enhances susceptibility to climate impacts, including extreme rainfall that intensifies soil erosion and sedimentation, affecting both land and marine ecosystems.

Invasive Alien Species. In Samoa, over 300 invasive species pose significant threats to forestry, crops, and the safety and livelihoods of Samoans. These species impact the environment and economy, necessitating strategic eradication efforts to minimize their effects. The presence of invasive species, exacerbated by climate change, underscores the conservation activities in Samoa. Thus, the devastating impact of invasive species on the environment, production systems (crops), and social values of Samoa has been witnessed in recent years particularly through invasions of taro leaf blight, the giant African snail (*Achatina fulica*), Myna species (*Acridotheres tristis*, *A. fuscus*) and Merremia vine (*Merremia peltata*). Another species, *Phytophthora colocasiae*, not only devastated Samoa's staple food source, but also decimated farmers' incomes from local and overseas markets: taro production in Samoa dropped by over 95% (Chan, 1995), and the export value fell from \$US 3.2 million in 1993 to only \$US 53,000 one year later^[11]. Increased temperature and erratic weather patterns can contribute to the rapid spread of IAS, which in turn, decrease diversity of natural Samoa's ecosystems and make them more vulnerable to the climate change impacts. The loss of biodiversity and degradation of ecosystems due to invasive species reduce the natural capacity of these systems to adapt to climate changes.

Climate Change Impacts. As a SIDS, Samoa shares with other island nations the characteristics of being economically vulnerable and ecologically fragile because of its geographical location, isolation, limited resources, and exposure to global economic crises. According to the Climate Vulnerability Index, approximately 40% of Samoa's population and infrastructure are considered highly or 'quite' vulnerable, with significant hotspots located along the coastal regions (70% of the population resides in the coastal areas)^[12]. These areas, particularly around the main islands of Upolu and Savai'i, are highly susceptible to tropical cyclones, flooding, and sea-level rise. The vulnerability is linked to high exposure to these extreme weather events, which exhibit some of the highest hazard scores in the Pacific region. Samoa's high climate hazard exposure is compounded by its low capacity to cope with climate change. This is reflected in its ranking on the ND-GAIN Index, where Samoa is positioned 144th out of 181 countries in 2021. This ranking underscores the urgent need for building resilience to sustain current and future growth^[13].

Samoa has observed trends and variability in climate derived from long term climate data from the region: the mean island near-surface air temperature increased from 25.9°C in 1901 to 27°C by 2020 (Fig.1), and annual precipitation increased from 2,554 mm in 1901 to 3,085 mm by 2020 (Fig. 2)^[14]. Recent studies and tracking of cyclones in and around the Samoa region have found that there has been an increase in the frequency of tropical depressions, gale force winds, and tropical cyclones during the cyclone season from December to February since 1980s (Fig. 3)^[15]. The sea level around Samoa has risen near Samoa by about 4 mm per year since 1993^[16].

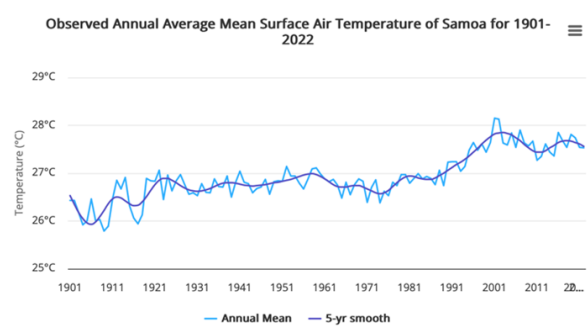


Figure 1. Air Temperature trend in Samoa in 1900-2020

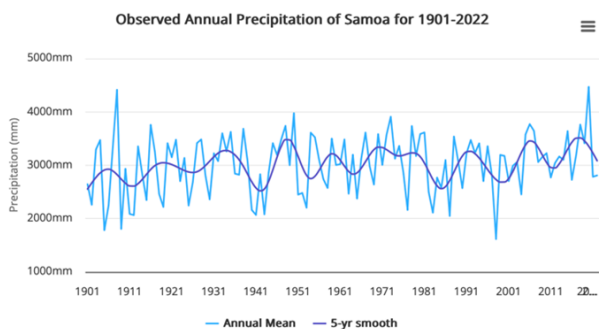


Figure 2. Annual Precipitation trend in Samoa in 1900-2020

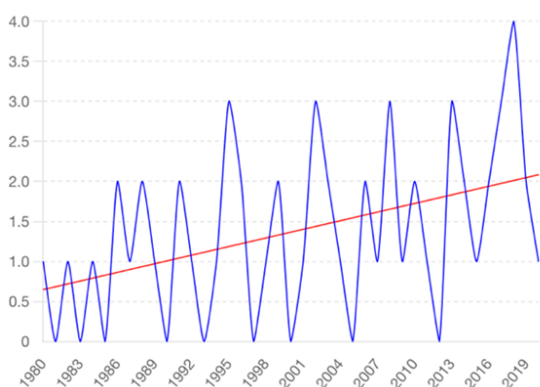


Figure 3. Number of Extreme Weather Events (heavy storms and cyclones) in Samoa in 1980-2020

Over the course of the 21st century (for the period to 2100), the global climate model projections and climate science findings for Samoa indicate:

- air temperature and sea-surface temperature will increase up to 27.3 (RCP4.5) - 28.0 °C (RCP8.5) by 2040-2060, and 27.6 (RCP4.5) - 28.8°C (RCP8.5) by 2080-2100 (see Fig. 4);
- variability of annual precipitation will increase considerably under both RCP4.5 and RCP8.5 scenarios (Fig. 5); projections (RCP4.5 and RCP8.5) show extreme rainfall days are likely to occur more often and be more intense
- increases in average temperatures will also result in a rise in the number of hot days and warm nights, and a decline in cooler weather;
- there is likely to be an increase in the average maximum wind speed of cyclones by between 2% and 11% and an increase in rainfall intensity of about 20% within 100 km of the cyclone center. By 2100, for Samoa, climate projections suggest no clear increase in the total number of tropical cyclones, with many models indicating a slight decrease, but a higher likelihood that cyclones that do occur will be more intense, with stronger winds and heavier rainfall;
- while the meteorological component of storm surge itself is not projected to increase, rising mean sea level by late century will cause cyclone-driven storm surges and extreme sea levels that are currently rare to occur much more frequently and to penetrate further inland, with recent national modelling indicating that average annual losses to buildings from extreme sea level flooding could roughly double by 2100

ocean acidification in the tropical Pacific, where approximately a quarter of the world's coral reefs are located, has already reduced surface-ocean pH by about 0.11 units since the early 19th century and is projected to decline by a further ~0.3 units by 2100 under high-emission scenarios, leading to markedly lower aragonite saturation and reduced coral growth. In this context, reefs in Samoa are expected to face not only more acidic conditions but also the cumulative impacts of warming-driven coral bleaching, cyclone-

related damage and local fishing pressure, undermining reef capacity to dissipate wave energy and to sustain coastal fisheries and reef-based tourism.

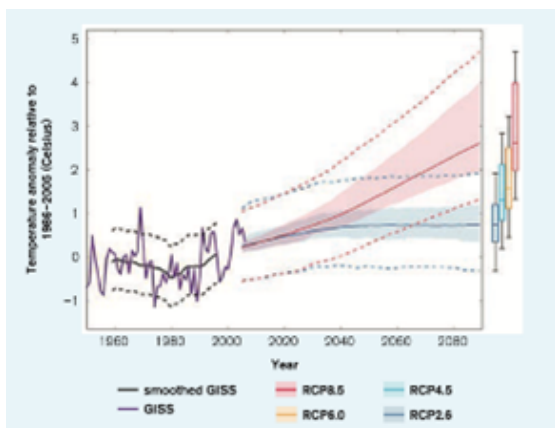


Figure 4. Projected Mean Air Temperature in Samoa by 2080-2100[17]

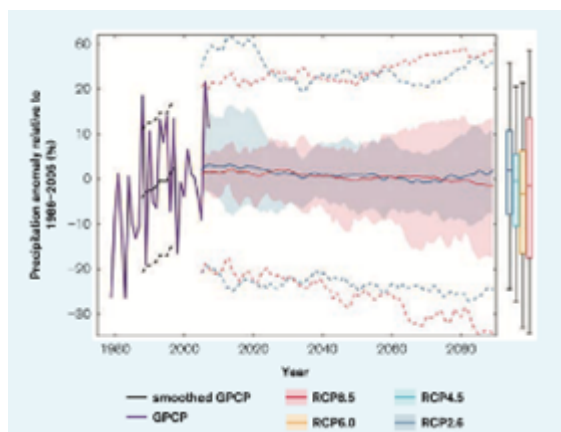


Figure 5. Annual Precipitation projection for Samoa by 2080-2100[18]

Climate change impacts are an added imposition on the inherent challenges Samoa already faces as a SIDS to achieve its sustainable development goals. The current impact of climate change on Samoa's biodiversity, ecosystems, and communities is significant and multifaceted. Samoa's unique ecosystems, including its coastal, marine, and terrestrial habitats, are under threat from rising temperatures, sea-level rise, and increased frequency and intensity of extreme weather events. Rising sea levels contribute to coastal erosion, loss of land, saltwater intrusion (causing freshwater contamination affecting livelihoods and access to freshwater), and damage to coastal ecosystems such as mangroves and coral reefs. Samoa has experienced variability in rainfall patterns, with intense rainfall events causing flooding and landslides, damaging terrestrial habitats and affecting the natural regeneration processes of forests.

Over the past two decades, Samoa has experienced several major tropical cyclone disasters with severe macro-economic consequences. Tropical Cyclone Evan (December 2012), the most damaging storm since Cyclone Val in 1991, caused at least five deaths and displaced around 7,500 people. Post-disaster assessments estimate damage to durable physical assets at SAT 235.7 million (≈ US\$103 million) and the total cost of recovery and resilient reconstruction at approximately SAT 470 million (≈ US\$206 million), equivalent to about 30–40% of national GDP at the time, effectively wiping out years of development gains in key sectors such as energy, transport and housing. More recently, Tropical Cyclone Gita (February 2018) passed just south of Samoa as a Category 1 system, bringing up to 300 mm of rainfall, widespread riverine flooding, landslides, and an estimated US\$10 million in damage to the national power grid, and prompting a national state of disaster, albeit without recorded cyclone-related fatalities.

No official damage report is available for the 2015 drought, however, there was recognition amongst authorities that the drought caused high stress in agriculture, the power sector, and elevated wildfire risks. On average, Samoa's economic damage, including property, crops, and livestock, are estimated to be about 30% of GDP per disaster over the past four decades. Samoa could be trapped in a repeated disaster-recovery cycle, losing fiscal space and missing time windows for development. For example, due to

repeated natural disasters, the 2021 Article IV for Samoa projects GDP growth to be lower by 1.3% overall and fiscal and current account deficits to widen by 3.5% of GDP compared to a counterfactual without natural disasters^[19]¹⁷.

Local communities also experience different climate impacts due to global warming and destruction and degradation of natural climate barriers and filters – healthy ecosystems, and these impacts are projected to exacerbate in the nearest 30-50 years, including loss of land due to erosion from the sea and extreme climate events; flooding inundation of land and sedimentation; lack of water supply and poor water quality; increased health hazards and outbreak of diseases such as vector-borne diseases like malaria; destruction of crops; loss of heritage and land values; and damage to community assets, especially in coastal areas. Samoa has already been experiencing declining production of fish since 2007. Marine heat stress and ocean acidification would present additional threats for fisheries^[20]¹⁸. According to the Asian Development Bank (ADB), the expected economic losses from climate change are projected to amount to 3.8% of Samoa's GDP annually by 2100, primarily driven by the impact of tropical storms. Considering various scenarios, climate change would reduce tourism revenues by 27%-34% and agricultural output by 10-21% for the Pacific region, including Samoa by 2050^[21]¹⁹.

Key Threats and Vulnerabilities of Targeted Communities in Samoa

The nine project districts across the islands of Savai'i and Upolu—Falealili 1 (West), Falealili 2 (East), Siumu, Safata 1, Safata 2, Lefaga & Faleaseela, Faasaleleaga 3, Faasaleleaga 4, Faasaleleaga 5—are emblematic of the acute vulnerabilities Samoa faces due to climate change. Encompassing 55,385 hectares and hosting approximately 24,600 people (about 12% of the nation's population), these districts are predominantly rural and characterized by high poverty rates, limited livelihood options, and strong cultural ties to customary land.

These communities are **highly exposed** to climate-induced threats due to their geographical location and socio-economic conditions. Thus, many villages in the project districts are situated along the coastline, making them directly vulnerable to sea-level rise, increased storm surges, and coastal erosion. Rising sea levels have led to the loss of land and property, saltwater intrusion into freshwater sources, and degradation of coastal ecosystems like mangroves and coral reefs. The increasing frequency and intensity of tropical cyclones, heavy rainfall, and prolonged droughts have led to flooding, landslides, and water scarcity. For example, Tropical Cyclone Evan in 2012 caused widespread destruction in these districts, damaging homes, infrastructure, and agricultural lands. The degradation of natural barriers (forests, mangroves, and seagrass meadows) due to deforestation and over-exploitation of resources amplifies the exposure of the communities to climate hazards reducing natural protection against storms and floods.

The **sensitivity of these communities** to climate change is heightened by several factors. With over 70% of the district population engaged in subsistence agriculture and fisheries, any disruption to these sectors directly impacts food security and income. The decline in agricultural productivity due to erratic rainfall and soil erosion exacerbates poverty. The poverty rate in these districts is higher than the national average of 23%. Limited access to education, healthcare, and alternative employment opportunities increases vulnerability to climate impact. Increased temperatures and changing precipitation patterns have led to a rise in vector-borne diseases such as dengue fever. Limited healthcare facilities in rural areas hinder effective response to health crises. The customary land tenure system ties communities strongly to their ancestral lands. Loss of land due to erosion or flooding not only affects livelihoods but also cultural identity and social cohesion.

The **adaptive capacity** of the targeted communities is constrained by limited financial resources, lack of awareness, institutional limitations, and infrastructure deficits. Thus, poverty restricts the ability to invest in adaptation measures such as resilient infrastructure, diversified crops, or alternative livelihoods. There is a significant gap in knowledge about climate change risks and adaptation strategies. Limited access to information and training hampers the adoption of sustainable and adaptation practices.

Inadequate integration of local needs into national policies and limited support from government agencies reduce the effectiveness of adaptation efforts at community level. Decentralized planning without cohesive national coordination leads to fragmented and insufficient responses to climate and non-climate threats. Poorly developed infrastructure such as roads, bridges, and water systems increases local vulnerability to climate impacts. Damage to infrastructure from extreme weather events isolates communities and disrupts access to essential services.

From climate change, socio-economic, and environmental perspectives, the targeted communities face the following risks:

- **Loss of Livelihoods:** decreased agricultural yields due to droughts and floods threaten food security and economic stability. Fisheries are impacted by coral reef, mangrove, and seagrass degradation and overfishing, reducing a critical protein source and income.
- **Health Impacts:** increased prevalence of waterborne and vector-borne diseases strains limited healthcare resources; and malnutrition risks rise with food insecurity;
- **Displacement and Land Loss:** coastal erosion and flooding lead to the loss of homes and agricultural land, forcing relocation and causing social disruption;
- **Educational Disruptions:** damage to schools and lack of resources hinder educational attainment, affecting future opportunities for youth;
- **Gender Inequalities:** women, who make up 50% of the beneficiaries in the project districts, often have less access to resources and decision-making, increasing their vulnerability;
- **Degradation of Natural Ecosystems:** mangroves, coral reefs, and seagrass meadows, which provide critical ecosystem services such as storm protection and carbon sequestration, are declining due to over-exploitation, coastal development, and pollution.
- **Loss of Biodiversity:** habitat destruction and changes in climatic conditions are leading to a decline in native species, which affects ecosystem balance and resilience, reducing the communities' ability to rely on natural resources;
- **Water Resource Depletion:** increased drought frequency coupled with saltwater intrusion is diminishing the availability of freshwater for both human and ecological needs, threatening ecosystems reliant on freshwater and amplifying community vulnerability;
- **Increased Soil Degradation:** soil erosion due to deforestation and extreme weather events diminishes soil fertility, further reducing agricultural productivity and promoting land degradation.
-

Interactions of anthropogenic threats (deforestation, natural resource depletion, IAS) and climate impacts (increased frequency and intensity of extreme weather events, rising sea levels and ocean acidification, variability in rainfall, and frequent droughts) creates the cycle of vulnerability that is reinforced as anthropogenic activities degrade natural ecosystems, reducing their capacity to mitigate climate impacts and provide natural resilience. In turn, the exacerbation of climate change impacts further stresses these degraded ecosystems, making them and the communities that depend on them even more vulnerable. This vicious cycle highlights the need for urgent and integrated intervention strategies that address both anthropogenic activities and climate change impacts to enhance ecosystem resilience and reduce community vulnerability (see Fig .6).

This is where Ecosystem-based Adaptation (EbA) that uses a wide range of Nature-based Solutions (NbS) offer a powerful means to interrupt the cycle of vulnerability created by the interaction of anthropogenic threats and climate impacts. By restoration and protection of ecosystems of high climate adaptation value, EbA as the key NbS approach can simultaneously address the root causes of environmental degradation, enhance ecosystem climate resilience, and reduce community vulnerability to climate change impacts. EbA, as one of the key NbS approaches, is specifically focused on utilizing biodiversity and ecosystem services to help communities adapt to adverse climate impacts. Thus, EbA solutions address societal challenges like climate change, providing both human well-being and biodiversity benefits. This project treats EbA as a cornerstone within the broader framework of NbS, aiming for holistic and sustainable climate adaptation outcomes.

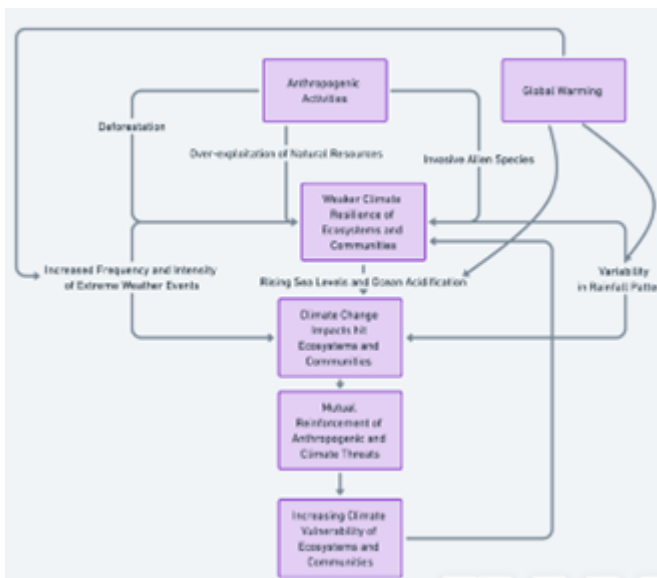


Figure 6. Self-Reinforced Cycle of Climate Vulnerability of Ecosystems and Communities in Samoa

Future scenarios for Samoa

Based on the analysis of situation in Samoa, general development and climate trends, and key threats for ecosystems and communities the following four simple future scenarios were considered for this GEF/SCCF project^[22]²⁰. Three key drivers considered are:

- **Driver A:** Climate-hazard intensity to 2040 (rate of sea-level rise, cyclone strength, marine-heat wave days); a
- **Driver B:** Quality of domestic& external governance for resilience (fiscal space, policy coherence, access to concessional finance, enforcement of land-use/reef bylaws);
- **Driver C:** Economic and population growth

1. Blue Harmony Growth (Low Hazard, High Governance). Likelihood: Moderate. In this optimistic future, Samoa faces only mild climate stresses while exhibiting strong, coordinated climate governance. Gradual sea-level rise and infrequent extreme events allow ecosystems to recover, aided by proactive adaptation measures. For example, coral reefs rebound as refugia expand; live coral cover is projected to reach ~25% by the mid-2030s, reviving lagoon fisheries and beach tourism. Robust watershed reforestation and coastal management raise forest cover in districts like Falealili back above 70%, reducing erosion. A blended Loss&Damage Fund channels resources into mangrove and reef restoration, helping eco-tourism grow to ~25% of GDP. With diversified upland agroforestry and inclusive community co-ops, rural livelihoods improve and poverty drops below 10% (a dramatic improvement from ~22% in 2018)^[1]. This scenario requires successful global climate mitigation and sustained high governance capacity, making it plausible but contingent on concerted efforts.

^[1] adb.org

2. Fortress Adaptation (High Hazard, High Governance). Likelihood: Moderate. This scenario envisions intense climate hazards hitting Samoa by 2040, including faster sea-level rise, more extreme cyclones, and marine heatwaves, but met with strong governance and aggressive adaptation. The government acts as a “fortress,” leveraging funds to build hybrid defenses (e.g., restoring protective reef barriers combined with hybrid seawalls with boulder, mangrove, and forest layers) along vulnerable coasts. Inland relocation zones are enforced to move at-risk communities (hundreds of coastal households are resettled on higher ground with solar-powered infrastructure). Advanced early-warning systems and climate-proofed agriculture (drought-resilient crops, insurance subsidies) help stabilize food production despite erratic rainfall. The economy adjusts to slower growth (~3% GDP growth) as resources shift to resilience, but importantly disaster losses per event are held under 5% of GDP: a huge improvement given past cyclones like Evan in 2012 caused damage ~30% of GDP[23]²¹. Tight land-use controls and reforestation initiatives boost watershed health and reduce flood risk, although hard infrastructure can isolate some mangroves, preventing ecosystem expansion. Overall, Samoa endures the high-hazard era through coordinated adaptation, limiting damages and safeguarding communities. Given current climate trends, stronger storms and flooding are likely, but with solid governance and international support this resilient response is feasible.

3. Stagnant Lagoons (Low Hazard, Low Governance). Likelihood: Low. Under this scenario, global climate impacts remain relatively mild, but weak domestic governance leads to complacency and underinvestment in resilience. With slow-onset hazards, Samoa’s institutions enforce environmental rules laxly, for instance, unchecked farming and logging clear an additional 4,000-10,000 ha of upland forests. The resulting sediment runoff continually smothers coastal ecosystems, so even without severe bleaching events, coral reefs fail to recover; live coral cover stagnates below 10%. Reef fisheries decline sharply, and annual per capita fish consumption falls under 18 kg, less than half of recent levels (~48.5 kg in 2013)[24]²² – undermining food security. Economic opportunities plateau as well: tourism receipts stagnate and a lack of jobs drives emigration, with roughly 15% of working-age Samoans moving abroad for better prospects. Remittances, already about 28% of GDP in 2023[25]²³, become the lifeline sustaining many households. Meanwhile, public services and infrastructure deteriorate; for example, debris from deforestation clogs village water intakes each wet season, causing chronic boil-water notices and a surge in water-borne diseases. This scenario of benign climate conditions but poor governance is less likely; it assumes global mitigation success paired with domestic inaction, yet it highlights the risk of stagnation if complacency prevails when climate pressure seems distant.

4. Erosion Spiral (High Hazard, Low Governance). Likelihood: High. This worst-case future combines severe climate hazards with weak resilience governance, sending Samoa into a downward spiral by 2040. Back-to-back Category 5 cyclones in the 2030s, along with frequent marine heatwaves, devastate ecosystems and infrastructure. Coastal protection fails as successive storms and ocean warming strip away coral reefs; live coral cover effectively collapses to under 1% in affected areas, in line with global projections that >99% of coral reefs could be lost around 2°C of warming[26]²⁴. The loss of reefs and fisheries causes a 40% drop in local fish protein intake, forcing communities to rely on imports and emergency food aid. Unrestrained resource extraction and disaster damage further degrade land and water resources: deforestation accelerates, pushing forest cover below 50%, which in turn worsens landslides and runoff. By 2040 over 30% of homes in low-lying districts flood annually, and some villages have access to clean water only about 200 days per year as droughts and infrastructure failures intensify. Socio-economic conditions deteriorate severely: out-migration surges as young workers leave, and poverty swells above 35% (up from roughly 22% a generation earlier)[27]²⁵. Social cohesion frays under the stress, with communities increasingly dependent on external aid and disaster relief. Without stronger climate action and governance improvements, this dire scenario is a real risk: the combination of rising hazard intensity and limited adaptive capacity could overwhelm Samoa’s development gains, mirroring the escalating disaster losses already seen in recent decades.

There are a few strategic leverage points that remain robust across all future scenarios:

- **Restore the natural breakwaters:** By coupling coral gardening with strategic mangrove expansion, the strategy rebuilds the living reef-and-root systems that blunt 60-97% of incoming wave energy. These green breakwaters (can be mixed with hybrid infrastructure, like boulder-mangrove-forest seawall) simultaneously cut storm surge heights, trap sediment, improve near-shore fisheries habitat and create new eco-tourism attractions, making them a “no-regrets” defense in every climate or governance future.
- **Re-establish ridge-to-reef forest buffers:** A statutory vegetated strip (forest and grass) along all streams and coastal forest restoration, reinforced by community agroforestry on adjacent terraces, slashes sediment delivery to lagoons, stabilizes cyclone-prone slopes and protects village water intakes. Native broadleaf trees with vetiver grass contour hedges can occupy the inner zone, while an outer zone of breadfruit, cacao and coffee provides income for landowners. Conservation easements (e.g., backed by REDD+ payments) lock the buffer in place and knit together fragmented forest blocks from Siumu’s uplands to the Faasaleleaga catchments, ensuring watershed resilience even in the worst “Erosion Spiral” scenario.
- **Launch national Adaptation Fund:** Samoa sets up a revolving window that blends a 1% tourism climate-levy, village-savings deposits, sales of forest- and blue-carbon credits, and international grants/investments. E.g., 60% of the pool is issued as soft loans for EbA micro-enterprises, 20% as adaptation grants for the poorest households and 20% held as a disaster reserve giving local leaders flexible capital in boom years and an emergency cushion when cyclones batter revenues. A gender-balanced board administers the fund with annual public audits, anchoring long-term financing for all other strategies.
- **Embed inclusive early-warning and relocation protocols:** A low-cost mesh of SMS cell-broadcasts, solar sirens and VHF radios ties village disaster committees to the Samoa Meteorology Service, delivering cyclone or tsunami alerts to 90% of households within 90 seconds. Hazard zoning based on LiDAR maps prohibits new buildings in red-zone strips, while pre-negotiated leases on upland customary land provide immediate relocation sites when retreat becomes unavoidable. Twice-yearly drills, designed for children, elders and persons with disabilities, turn these plans into muscle memory and ensure zero fatalities even under back-to-back Category-5 storms.
- **Scale invasive-species biocontrol programs:** Targeted suppression of Merremia vine, African tulip, feral pigs and rats boosts crop yields, accelerates forest regeneration and reduces sediment and nutrient stress on reefs. UAV mapping pinpoints outbreaks, community cash-for-work crews uproot or cut-stump invasive plants, and bio-control agents—tried with SPC’s plant-health lab oversight—keep regrowth in check. Ridge-top pig fencing and coastal bait stations further protect plantations and water sources. Because healthier forests and reefs reinforce every other adaptation measure, consistent IAS control is indispensable across all four future scenarios.

Baseline Programmes in Samoa to address environmental and climate threats for ecosystems and local communities

The Government of Samoa is working hard to address the anthropogenic and climate threats for ecosystems and communities of Samoa and interrupt the Cycle of Climate Vulnerability (Fig. 6). Thus, Samoa is committed to global climate efforts, participating in initiatives like the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. The country’s medium term development strategy, the Pathway for the Development of Samoa (2021/2-2025/6), prioritizes securing the environment and action on climate change (including EbA) as well as a diversified and sustainable economy. Samoa’s Climate Change Policy 2020, and Second NDC 2021-2030 identify EbA targets for reforestation, agro-forestry and mangrove restoration and replanting actions that are also prioritized in the Ocean Strategy 2020-2030 as well as Draft Samoa National Water Resources Management Plan and draft Land Degradation Neutrality (LDN) report.

These approaches build on and link with work on valuation of ecosystem services^{[28]26} and trialling of Payment for Ecosystem Services (PES) schemes that are also included in the Environmental Management and Conservation Bill and Soil Resource Management Bill, undergoing national consultations and expected to be passed into legislation in 2024, whilst also aligning with Samoa's international commitments and engagement to the Rio Conventions as well as regional platforms with Samoa committed to achieving the Kunming-Montreal Global Biodiversity Framework (GBF) and the Sustainable Development Goals (SDGs). Samoa's National Biodiversity Strategy and Action Plan (EBAAP) 2015–2020 emphasizes the importance of biodiversity conservation and sustainable use in addressing environmental challenges, including climate change. While the document itself is a comprehensive plan that outlines Samoa's priorities for conserving its biodiversity, it inherently supports the principles of EbA through various strategies and actions aimed at ecosystem preservation, restoration, and sustainable management for adaptation gains.

The Samoa National Disaster Management Plan (NDMP) 2017-2020, while not explicitly mentioning EbA by name, incorporates principles and strategies that align with the concept of EbA, particularly in its focus on disaster risk reduction and climate change adaptation. While not explicitly stated, the Plan emphasizes a holistic approach to the Disaster Risk Management (DRM) suggesting an openness to incorporating EbA methods. Also, the plan recognizes the importance of involving communities in DRM efforts and building their capacity to manage risks. This participatory approach is a key element of EbA, as it ensures that solutions are locally adapted, culturally relevant, and supported by those most affected by disasters.

Additionally, Community Integrated Management Plans (CIMPs) developed through multi-stakeholder engagement, providing a basis for local planning with a focus on key nature-based solutions (NbS) and EbA such as catchment rehabilitation to address flash flooding, restoration of mangroves as barriers against storms, etc. CIMPs in Samoa are strategic documents developed to guide the sustainable management of natural resources, reduce vulnerability to climate change, and enhance community resilience. They focus on integrating ecosystem-based approaches to address environmental challenges, including coastal erosion, flooding, and loss of biodiversity, while promoting sustainable livelihoods. Also, CIMPs in Samoa are designed as blueprints for climate change adaptation interventions across all development sectors, reflecting the Government of Samoa's programmatic approach to climate adaptation. These plans are linked to the Strategy for the Development of Samoa 2016/17 – 2019/20 and relevant ministry sector plans, indicating a comprehensive approach to addressing climate change and its impacts. The initial wave of CIMPs was developed in the early 2000s, with significant updates and expansions occurring in subsequent years. As of the most recent updates, all 41 districts in Samoa have developed Community Integrated Management Plans. Funding for the implementation of CIMPs in Samoa is sourced from a combination of national budgets, international development assistance, and community contributions. The CIMPs for the project nine districts in Samoa are planned to be updated with comprehensive NbS and EbA measures in the framework of the UNDP/GEF Blue and Green Islands Integrated Program (BGI IP) Project "Coastal Resilience Samoa" in 2025-2026. Some critical activities of the suggested GEF/SCCF project will be based on the updated CIMPs for the target districts. The Government of Samoa plans to spend US\$19,600,000 of their own funding for the CIMPs implementation in the nine districts in 2025-2030 as co-financing for the GEF/SCCF Project.

In some cases, private sector and government partnerships and corporate social responsibility (CSR) initiatives have supported the implementation of specific CIMP activities, such as coastal protection and reforestation. The private sector in Samoa (mainly in agriculture, fishery, and tourism) is beginning to play a more active role in EbA, particularly in sectors like tourism, agriculture, and fisheries. However, there is still considerable room for growth, and strategic partnerships and incentives could further enhance private sector contributions to EbA in the country. Despite these positive trends, the private sector's engagement in EbA faces challenges such as limited awareness, financial constraints, and the need for technical capacity to implement EbA practices effectively.

The Ministry of Natural Resources and Environment (MNRE) leads several ecosystem-based adaptation projects aimed at sustainable management and conservation of natural resources to combat climate change impacts. One of the flagship initiatives is the Samoa Ocean Strategy (SOS), launched in 2020. The SOS aims to manage and protect Samoa's marine habitats, including seamounts, biodiverse coral reefs, mangroves, and oceanic basins, to ensure long-term ecological, economic, and cultural benefits. The strategy includes a commitment to protect 30% of Samoa's ocean by 2025, significantly increasing the area of fully protected ocean space. This effort is implemented in collaboration with Conservation International (provides essential technical assistance for the facilitation and design of the SOS) and the Blue Prosperity Coalition (focuses on building local capabilities for sustainable ocean

management for SOS), and aims on marine spatial planning, sustainable fisheries, and blue economy, ensuring the integration of science-based and community-driven conservation and adaptation approaches^{[29]²⁷}.

Also, last 10 years MNRE implemented at least two GEF project that addressed ecosystem conservation and restoration as well as community and sectoral adaptation issues in Samoa. Thus, UNDP/GEF Project “Economy-wide integration of climate change adaptation and disaster risk management to reduce climate vulnerability of communities in Samoa (**EWACC**)” 2014-2019 (GEF ID 5417) addressed integration of climate change adaptation and disaster risk management into national development planning and programming across all sectors, including measures to increase climate resilience of local communities. The project partially addressed EbA through a variety of strategies aimed at enhancing the resilience of Samoa’s communities and ecosystems to climate change and natural disasters, including integrated Watershed Management Planning (“Ridge-to-Reef” approach), restoration of degraded ecosystems, and climate-resilient agricultural practices to protect community assets and promote sustainable use of natural resources. Another UNDP/GEF Project “Enhancing integrated sustainable management to safeguard Samoa’s natural resources” (GEF ID 10410) is focused on empowerment of local communities to safeguard Samoa’s indigenous species, natural ecosystems and food production systems from Invasive Alien Species (IAS) and unsustainable land use practices. The project partially addresses EbA by emphasizing the integrated management of catchments to safeguard indigenous species, and ensure resilience of natural ecosystems, and food production systems from Invasive Alien Species (IAS) and unsustainable land use practices. Both projects significantly contributed to CIMP’s development and implementation, including by integrating IAS prevention and management and climate change adaptation and disaster management activities within these plans.

In July 2024 MNRE submitted to GEF the UNDP BGI IP Project “Coastal Resilience Samoa” that was approved by GEF in 2025. The project will enhance recognition of the value of ecosystem services within government planning through the integration of Natural Capital Accounting (NCA) and NbS in the CIMP’s and food and tourism sectors, and will implement pilot landscape and seascape nature-based solutions in a few watersheds supporting the tourism, agriculture and fishery sectors while unlocking private finance and investment in NbS, including EbA. That project will be the key partner for implementation of the suggested GEF/SCCF project (see the Project Description section for details).

There are a few World Bank projects with some nature-based adaptation activities implemented and planned in Samoa, including the *Preparedness, Adaptation and Resilience Program – Samoa (2021-2016)*, *Samoa Recovery and Resilience Development Policy Operation (2023 – 2028)*, *Samoa Climate Resilient Transport Project (2018-2023)*, and *Pacific Resilience Project under Pacific Resilience Program (2020-ongoing)*. Additionally, the Asian Development Bank (ADB) implements and plans 6 climate adaptation projects in Samoa (2020-2030). However, World bank and ADB projects are mainly focused on engineered climate adaptation and built adaptation infrastructure in the locations other than the GEF/SCCF project sites.

Also, Samoa is in the process of establishing a **national Loss and Damage Fund (LDF)** (aligned conceptually with the Warsaw International Mechanism, Article 8 of the Paris Agreement) as a dedicated financing mechanism to address climate-related losses that go beyond the scope of conventional adaptation and disaster response instruments. The Ministry of Finance (MoF) has been designated as the government entity responsible for the establishment and operationalization of the LDF, with technical support from the Climate Change and GEF Division (CCD) of MNRE to develop a Samoa Loss and Damage Policy Framework, including governance arrangements, eligibility criteria, and standard operating procedures for accessing the fund, aligned with Article 8 of the Paris Agreement and the Warsaw International Mechanism for Loss and Damage. As part of New Zealand’s climate change programme in Samoa (NZD 15 million), the Ministry of Foreign Affairs and Trade (MFAT) has earmarked NZD 2 million specifically to support the establishment and early operationalization of the LDF, while the Climate Finance Capacity Support Programme (CFCSP) is being used across Samoa’s public finance system to set up the assessment and reporting mechanisms needed to channel climate-flexible finance through this fund and to design engineering solutions that respond to identified loss and damage risks.

Non-government, civil society and private sector actors are also committed to the long-term sustainable and climate-resilient development of the island nation. It is demonstrated by the early adoption of the Global Sustainable Tourism Council criteria of the country’s tourism sector in 2014. In Samoa, several impressive EbA projects led by NGOs have been implemented, focusing on

community resilience to climate change impacts. The Community-Based Adaptation (CBA) portfolio in Samoa, supported by the United Nations Development Programme (UNDP) and the Global Environment Facility (GEF), includes projects aimed at addressing coastal ecosystem vulnerabilities. This initiative has rolled out six projects across different communities in Samoa, focusing on adaptations to flooding and sea level rise, conservation of mangroves, ecosystems, and coral reefs, and other community-specific climate change mitigation efforts. These projects not only emphasize the importance of maintaining ecosystem services like erosion control, storm protection, and water filtration in the face of climate change but also involve local and national NGOs actively in their execution.^{[30]²⁸}

Barriers for development of Ecosystem-based Adaptation in Samoa

Despite all very significant commitments and progress in biodiversity conservation and Ecosystem-based Adaptation demonstrated by Samoa, there are a few serious barriers at national and local levels impeding the country's ability to address the anthropogenic and climate threats and interrupt the self-reinforcing cycle of vulnerability. These barriers are summarized as the following:

Barrier 1. *Incomplete policy, legislation, and institutional frameworks for integration of EbA and NbS for resilience benefiting to biodiversity conservation and combating land degradation into the national and sectoral climate adaptation practices.*

Samoa's national policies for climate change and environment highlight resilience goals, but gaps and fragmentation impede the coherent integration of Ecosystem-based Adaptation (EbA) and Nature-based Solutions (NbS). The Strategy for the Development of Samoa (SDS) 2016–2020 elevated “environmental resilience” and climate adaptation as national priorities^{[31]²⁹}. However, the SDS did not explicitly reference EbA or NbS, and its recent successor document (Samoa 2040: Transforming Samoa to a Higher Growth Path) largely omits environmental or climate objectives beyond resilient infrastructure^{[32]³⁰}. Samoa's National Biodiversity Strategy and Action Plan (NBSAP) 2015–2020 acknowledges climate change as a major threat to biodiversity and promotes sustainable use through “ecosystem-based approaches” in resource management^{[33]³¹}. This shows conceptual alignment with EbA, but the NBSAP frames it mainly within conservation – it does not embed EbA as a unifying adaptation strategy across other sectors like agriculture or land use.

In Samoa's climate policy framework, EbA and NbS are only indirectly addressed. The Climate Change Policy 2020 focuses on strengthening adaptation and resilience but does not mention “EbA” or “NbS” by name. Instead, it emphasizes using both “soft” (nature-based) and hard measures for adaptation, aiming to enhance ecosystem resilience alongside engineered solutions^{[34]³²}. Samoa has yet to finalize a comprehensive National Adaptation Plan (NAP) that could serve as an overarching vehicle for EbA/NbS mainstreaming. Policy silos and institutional fragmentation are fundamental barriers to mainstreaming EbA and NbS in Samoa. Environmental policies and climate strategies have traditionally been developed in isolation from sectoral development plans. Climate adaptation efforts have likewise been led by MNRE and often executed through standalone projects or sector-specific plans, rather than through coordinated, multi-sector programs. Prior to 2020, climate change was not systematically integrated into planning for key economic sectors such as agriculture, forestry, or community development.

The lack of coherent cross-sector integration still hinders the mainstreaming of EbA and NbS in Samoa. Sectoral plans in domains like agriculture, land management, and rural development seldom explicitly incorporate nature-based adaptation solutions, often focusing on conventional development targets without leveraging ecosystem services for resilience. This misalignment means that EbA interventions – for example, mangrove restoration for coastal protection or “ridge-to-reef” watershed management – are typically implemented as isolated projects rather than systematically scaled across sectors. Also, there is a need for adaptation

policies and frameworks to more systematically recognize and incorporate traditional knowledge and practices in EbA planning and implementation. These gaps hinder the effective use of EbA at national scale, which are crucial for enhancing ecosystem resilience, providing sustainable livelihoods, and protecting biodiversity.

Barrier 2. *Limited technical and financial capacity to plan and implement full-scale EbA measures by government agencies, communities, and private sector.*

Small island developing states like Samoa face well-documented challenges in implementing climate resilience measures due to constrained technical expertise and funding^[35]³³. Samoa's own climate strategies acknowledge that addressing climate change is made more difficult by the country's limited financial, technical, and human resources^[36]³⁴. Government agencies often lack sufficient personnel with specialized training in ecosystem-based adaptation (EbA) planning and management. This capacity gap at the institutional level hinders the integration of EbA into policies and programs, and promising small-scale pilot projects have struggled to scale up without dedicated technical support.

At the community level, capacity barriers include low awareness of climate risks and limited know-how to implement EbA solutions. Local villages depend on healthy ecosystems (forests, mangroves, coral reefs) for protection and livelihoods, but they often lack training in climate-resilient land management, coastal restoration, and other EbA practices^[37]³⁵. In similar Pacific island contexts, communities have cited limited knowledge-sharing and technical support as obstacles to scaling up and replicating effective EbA measures^[38]³⁶. The private sector's engagement in EbA is likewise constrained – businesses and landowners typically have little information or guidance on integrating nature-based solutions into their operations, and thus few incentives to invest in EbA. These factors result in minimal participation by industry in ecosystem-based adaptation efforts, leaving a gap in resources and innovation that the private sector could otherwise provide.

Financial constraints compound the technical capacity gap, as insufficient funding limits the ability of government, communities, and private actors to implement EbA at scale. Samoa's adaptation needs far outstrip its domestic resources – for example, estimated climate adaptation expenditures for 2022–2026 are about US\$650 million (approximately 17% of Samoa's GDP per year), yet only about US\$400 million is expected to be available, leaving a funding gap of roughly US\$250 million (6% of GDP per year)^[39]³⁷. With such limited fiscal space, Samoa relies heavily on international grants and climate finance to fund adaptation, but accessing these resources is itself challenging. This financial barrier means that many EbA initiatives remain stuck at the project or pilot level because stable, long-term financing for scaling them up is unavailable.

Additionally, currently Samoa has a very limited number and capacity of research stations, training centers, and nurseries to provide technical support, seedlings, and seeds for full scale EbA activities (e.g., for mangroves, forest, and coral reef restoration) by government, communities, and private sector. For example, Samoa's reforestation supply chain is still operating at pilot scale. MNRE manages just five government nurseries—Vailima, Togitogiga, Maota, Vaipouli and Asau—which together raised 387,539 native seedlings in FY 2022/23, missing the ministerial target of 500,000 and covering barely 20 % of the ±1 million seedlings per year that forestry officials estimate will be required to meet national forest-restoration and ridge-to-reef goals (≈1,000 seedlings/ha for 1,000 ha/year)^[40]³⁸.

Technical support infrastructure is equally thin. The Nu’u Crop Research Station, upgraded through the China-Samoa Agricultural Demonstration Farm Project in 2020, remains Samoa’s only fully-equipped field research hub; its mandate is crop improvement, and it houses just a handful of agronomists, leaving coastal-forest, mangrove, and coral-reef EbA research largely uncovered^{[41]39}. Marine restoration capacity is limited to one gene-bank coral nursery established under a South-Pacific coral-adaptation initiative; while it holds “dozens of species and multiple genotypes,” it is experimental and lacks the scale or staffing to service national reef-rehabilitation needs^{[42]40}. Taken together, these figures confirm that Samoa’s nursery, research, and training backbone is still an order of magnitude smaller than what is required to support full-scale, ridge-to-reef EbA programmes across the country.

Barrier 3. Lack of larger-scale and complex EbA projects in Samoa.

Samoa currently has few examples of full-scale EbA or integrated Ridge-to-Reef (R2R) initiatives. Adaptation efforts remain small and fragmented, largely confined to pilot projects and community-level interventions. This gap is intertwined with Barrier 1 and Barrier 2 issues – incomplete mainstreaming of EbA into policy and limited capacity – which have prevented holistic, cross-sector adaptation planning. For instance, only about 8.2% of Samoa’s land area was officially protected as of 2025^{[43]41}, reflecting the minimal integration of ecosystem approaches into national frameworks. Without stronger policy mandates and inter-agency coordination to connect upland watersheds with coastal zones, Samoa’s climate adaptation measures have not yet achieved the transformative, ridge-to-reef scale intended by national strategies.

Implementing EbA at landscape scale is challenging under Samoa’s prevailing land management regime. Approximately 80% of land is held under customary ownership, where village councils and chiefs control access and land use^{[44]42}. This means large conservation or restoration projects must negotiate across numerous community jurisdictions. While there are many Community Protected Areas (CPAs) and Community Conservation Areas (CCAs), these are typically isolated and localized. More than 120 villages have established their own small marine or fisheries reserves under Samoa’s Community-Based Fisheries Management Program^{[45]43}, and various villages have set aside terrestrial conservation sites on communal lands. However, these efforts are scattered across Upolu and Savai’i and are not formally linked into an integrated network.

Samoa’s limited technical and financial capacity (Barrier 2) also hinders the implementation of complex, multi-site EbA projects. Designing and managing a true R2R project – spanning inland forests, rivers, and coastal ecosystems – demands expertise, data, and funding that currently exceed what national agencies and communities can mobilize. Past adaptation initiatives have therefore been modest in size. For example, the UNDP-GEF Community-Based Adaptation programme in Samoa consisted of only six small projects targeting individual villages^{[46]44}. These projects and similar donor-funded pilots addressed specific local issues (e.g., flood protection, mangrove replanting, coastal erosion control) but did not cover entire catchments. Likewise, community-led conservation areas tend to be limited in extent. Large multi-focal projects often depend on external funding (e.g., GEF, Green Climate Fund), and without substantial co-financing or long-term budgets, Samoa has struggled to move from pilots to programmatic, country-wide EbA initiatives.

On the other hand, private sector involvement in EbA and NbS remains limited. Key industries such as agriculture, fisheries, and tourism depend on healthy ecosystems – for soil fertility, fish stocks, and natural attractions – yet there are few incentives or

requirements for these sectors to invest in ecosystem adaptation. In fact, economic development pressures can run counter to EbA objectives: for example, rapid growth has created pressure to convert mangroves or coastal areas for tourism and infrastructure, underscoring a lack of private-sector commitment to conservation^[47]⁴⁵. Overall, insufficient engagement of the private sector and the need for stronger public-community partnerships mean that large-scale EbA projects struggle to gain the broad support and resources they require.

Barrier 4. Limited awareness and knowledge of key stakeholders on EbA approaches and models

In Samoa and across the Pacific Island Countries and Territories (PICTs), many key stakeholders, from community members to policymakers and private sector actors, still have a limited understanding of ecosystem-based adaptation (EbA) concepts and practices. Despite high-level recognition of nature-based solutions in regional frameworks, surveys reveal that the terminology and ideas of EbA/NbS are not widely understood among practitioners^[48]⁴⁶. Decision-makers often lack awareness of the full benefits that healthy ecosystems provide for climate resilience^[49]⁴⁷, and there is generally low appreciation of how ecosystem services contribute to policy objectives. This knowledge gap means EbA is not routinely considered in planning; in fact, entrenched perceptions persist in some institutions that traditional “grey” infrastructure solutions are more reliable, with natural solutions sometimes viewed as inferior or “too difficult” to implement^[50]⁴⁸. Correcting these misconceptions is critical, as they can lead to underinvestment in EbA initiatives.

Community-level uptake of EbA in Samoa (and the wider Pacific) is held back by low awareness of climate risks and nature’s protective role, compounded by language and cultural barriers, English-only/jargon-heavy materials, and widespread online misinformation, so projects struggle to gain local ownership even though rich indigenous stewardship knowledge aligns well with EbA but is rarely systematized. On the government side, climate and environment units are under-resourced, specialist skills for EbA design/monitoring are scarce, and short project cycles leave few rigorous, long-term cases proving effectiveness or cost–benefit versus grey options, which weakens political buy-in, budgets, and cross-sector collaboration. Knowledge often sits in silos (DRM, agriculture, infrastructure planners aren’t versed in EbA), further slowing mainstreaming. The private sector is likewise disengaged: tourism, agribusiness, and insurers seldom see how restoring reefs, mangroves, and forests protects assets and lowers long-run costs, so PPPs and innovative finance (e.g., eco-tourism levies, resilience insurance) remain largely untapped. Addressing these gaps—plain-language outreach, integration of traditional knowledge, stronger local evidence and CBA, capacity building across ministries, and targeted business cases—would unlock broader community, policy, and investment support for EbA.

[1] Samoa Population and Housing Census (2021). https://sbs.gov.ws/documents/census/2021/Census-2021-Final-Report_221122_051222.pdf Samoa Bureau of Statistics (SBS).

[2] <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=WS>

[3] <https://www.adb.org/where-we-work/samoa/economy>

[4] The IUCN Red List for Samoa includes 105 species under special protection status (CE, E, V) across taxonomic classes.

Assessments of the country’s biodiversity note high levels of endemism with a high number of native flora and fauna including 540 native plant species, 64 native land snail species, 33 native bird species, 4 native reptiles and 3 native land mammal species^[4] with 116 of these under threat of extinction^[4]. Marine biodiversity is also high with 890 coral reef fish, over 200 corals and several species of turtles, whales and dolphins^[4]

[5] <https://constructive-voices.com/samoa-biodiversity/>

[6] <https://unfccc.int/resource/docs/natc/samnc2.pdf>

[7] <https://gggi.org/wp-content/uploads/2023/02/Samoa-NDC-Implementation-Roadmap-and-NDC-Investment-Plan-2021.pdf>

[8] <https://gggi.org/wp-content/uploads/2023/02/Samoa-NDC-Implementation-Roadmap-and-NDC-Investment-Plan-2021.pdf>

[9] https://ics.uci.edu/~wmt/courses/ICS5_W13/Samoa.html#:~:text=The%20reefs%20around%20Samoa%20are,fishing%20techniques%20utilized%20by%20villagers.

[10] https://ics.uci.edu/~wmt/courses/ICS5_W13/Samoa.html#:~:text=The%20reefs%20around%20Samoa%20are,fishing%20techniques%20utilized%20by%20villagers.

[11] <https://faolex.fao.org/docs/pdf/sam176258.pdf>

[12] IMF 2022. Samoa: Technical Assistance Report—Climate Macroeconomic Assessment Program

[13] <https://www.elibrary.imf.org/view/journals/002/2022/083/article-A001-en.xml>; <https://ourworldindata.org/grapher/number-of-natural-disaster-events>

[14] <https://climateknowledgeportal.worldbank.org/country/samoa/climate-data-historical>

[15] <https://unfccc.int/resource/docs/napa/sam01.pdf>

[16] https://world.350.org/pacific/files/2014/01/3_PCCSP_Samoa_8pp.pdf

[17] Climate Risk Country Profile: Samoa (2021): The World Bank Group

[18] Climate Risk Country Profile: Samoa (2021): The World Bank Group.

[19] <https://www.undrr.org/publication/human-cost-disasters-overview-last-20-years-2000-2019>

[20] <https://unhabitat.org/apia-samoa-climate-change-vulnerability-assessment>

[21] <https://www.adb.org/news/samoas-climate-change-losses-could-reach-38-gdp-2100-adb>

[22] Scientific and Technical Advisory Panel to the Global Environment Facility (2023). *Simple Future Narratives: Helping to Ensure the Durability of GEF Investments*. STAP Brief, June 2023. Available at: <https://stapgef.org/resources/advisory-documents/simple-future-narratives-brief-and-primer>.

[23] devpolicy.org

[24] samoabserver.ws

[25] theglobaleconomy.com

[26] ipcc.ch

[27] adb.org

[28] Efforts to develop work on valuation of Samoa's ecosystem services has been developing over a number of years with work economic valuation of ecosystem services being done as early as 2001 (<https://www.sprep.org/att/IRC/eCOPIES/Countries/Samoa/106.pdf>) with further work looking at the value of water linked to national accounts being conducted in 2017 (<https://www.wavespartnership.org/en/knowledge-center/water-accounts-samoa-2014-2015>) and more recent work focused specifically on the marine ecosystems – (<https://www.mnre.gov.ws/wp-content/uploads/2022/02/MESV-factsheet-29OCt.pdf>), while work to pilot PES approaches is being implemented in Vaisigano Catchment GCF Project;

[29] <https://www.mnre.gov.ws/samoa-secures-a-sustainable-future-with-new-ocean-strategy/>

[30] <https://www.adaptation-undp.org/projects/spa-community-based-adaptation-samoa>

[31] <https://www.frontiersin.org/journals/environmental-science/articles/10.3389/fenvs.2021.723166/full>

[32] <https://www.scribd.com/document/849051089/Samoa-2040-Final>

[33] <https://www.cbd.int/doc/world/ws/ws-nbsap-v2-en.pdf#:~:text=sustainably%2C%20legally%20and%20applying%20ecosystem,species%2C%20fisheries%20have%20no%20significant>

[34] <https://faolex.fao.org/docs/pdf/sam202477.pdf#:~:text=,SFESA%2C%20LTA%2C%20MWTI%2C%20STA%2C%20MWCS>

[35] https://www.ipcc.ch/site/assets/uploads/2018/02/WGIAR5-Chap29_FINAL.pdf#:~:text=to%20adaptation%20on%20small%20islands,a%20way%20of%20overcoming%20some

[36] https://www.v-20.org/wp-content/uploads/2020/10/Samoa-INDC_Submission-to-UNFCCC.pdf#:~:text=life%20%20%20for,and%20human%20%20%20resources

[37] https://cdn.climatepolicyradar.org/navigator/PLW/2023/ecosystem-based-adaptation-eba-for-reducing-community-vulnerability-to-climate-change-in-northern-pacific-small-island-developing-states-sids_6420d6d9812562c99deb78f2e643ede3.pdf#:~:text=intensity%2C%20and%20ocean%20warming%2C%20acidification,of%20resources%20to%20engage%20in

[38] https://cdn.climatepolicyradar.org/navigator/PLW/2023/ecosystem-based-adaptation-eba-for-reducing-community-vulnerability-to-climate-change-in-northern-pacific-small-island-developing-states-sids_6420d6d9812562c99deb78f2e643ede3.pdf#:~:text=FSM%2C%20Palau%20and%20RMI%20have,protected%20areas%20throughout%20the%20three

[39] [imf.org](https://www.imf.org)

[40] https://www.mnre.gov.ws/wp-content/uploads/2024/10/MNRE-Annual-Report-2022-2023-Eng-Version.pdf?utm_source=chatgpt.com

[41] <https://china.aiddata.org/projects/61282/>

[42] <https://reefresilience.org/case-studies/south-pacific-restoration/>

[43] <https://www.cbd.int/pa/doc/dossiers/samoa-abt11-country-dossier2021.pdf>

[44] <https://www.cbd.int/doc/nr/nr-06/ws-nr-06-en.pdf#:~:text=environments%20including%20catchments%20and%20erosion,cent%20of%20parcels%20for%20major>

[45] <https://maf.gov.ws/fisheries/#:~:text=To%20date%2C%20more%20than%20120,not%20limited%20to%20the%20following>

[46] <https://www.adaptation-undp.org/projects/spa-community-based-adaptation-project#:~:text=The%20CBA%2A0portfolio%20in%20Samoa%20consists,6%29%20projects>

[47] https://library.sprep.org/sites/default/files/225_1.pdf#:~:text=village,There%20is%20a%20delicate

[48] https://library.sprep.org/sites/default/files/2023-09/Lit-Policy-Review_Mainstreaming_Kiwa-Cap-Needs-Assessment.pdf#:~:text=integrate%20Gender%20Equality%20and%20Social,role%20of%20traditional%20governing%20and

[49] <https://www.spc.int/updates/blog/2023/10/nature-based-solutions-what-are-the-pacific-nations-needs-a-new-report-is#:~:text=Key%20challenges%20include%20the%20insufficient,governance%20systems%20is%20often%20overlooked>

[50] https://library.sprep.org/sites/default/files/2023-09/Lit-Policy-Review_Mainstreaming_Kiwa-Cap-Needs-Assessment.pdf#:~:text=integrate%20Gender%20Equality%20and%20Social,role%20of%20traditional%20governing%20and

B. 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 guidance document. (Approximately 3-5 pages) see guidance here

The **Project Objective** is to enhance climate resilience of Samoa's ecosystems and communities through integrated Ecosystem-based Adaptation approach, that promotes biodiversity conservation and combats land degradation. The project Theory of Change is depicted on Fig. 7 and described below. So, the project objective is focused on the interruption of the cycle of vulnerability created

by the interaction of anthropogenic threats and climate impacts leading to destruction and degradation of terrestrial and coastal ecosystems that provides climate protection for local communities of the country. For that the project will harness the power of the Ecosystem-based Adaptation (EbA) and Nature-based Solutions (NbS). Through a strategic blend of these approaches, the project aims to restore and protect key habitats while ensuring community adaptability to climate variability and extremes.

EbA/NbS approach offers **significant comparative advantages** over traditional engineered approaches to climate adaptation in Samoa. Unlike hard infrastructure solutions, which often involve high costs and can disrupt natural ecosystems, EbA/NbS leverage the restorative and protective functions of natural habitats to mitigate climate impacts. This approach is particularly advantageous in Samoa due to its rich biodiversity and the cultural importance of natural resources to local communities. EbA/NbS are cost-effective and sustainable, providing multiple co-benefits such as biodiversity conservation, improved livelihoods, and enhanced ecosystem services like carbon sequestration and water purification. Moreover, EbA/NbS are inherently adaptable to changing climatic conditions, increasing the resilience of both ecosystems and communities over time. They align closely with traditional Samoan practices and knowledge systems, facilitating community engagement and ownership of adaptation measures. By restoring and protecting ecosystems like mangroves, coral reefs, and forests, EbA/NbS not only serve as natural barriers against climate-induced hazards such as storm surges and erosion but also support fisheries, agriculture, and tourism sectors vital to the nation's economy. This holistic approach addresses the root causes of vulnerability by enhancing the health of ecosystems upon which communities depend, making EbA/NbS a more effective and culturally appropriate option compared to conventional engineering solutions in the context of Samoa.

The Project Objective is planned to be achieved through implementation of four project Strategies (**Components**):

- **Component 1:** *Enhancing national climate adaptation, biodiversity conservation, and sustainable land management capacity via the integrated and gender inclusive Ecosystem-based Adaptation (EbA);*
- **Component 2:** *Implementing gender inclusive Ecosystem-Based Adaptation measures to improve climate resilience of ecosystems and communities, protect biodiversity, and combat land degradation;*
- **Component 3:** *Gender Mainstreaming, Knowledge Management and Learning for dissemination of EbA best practices for climate adaptation, biodiversity conservation, and sustainable land management;*
- **Component 4:** *Gender Sensitive Monitoring and Evaluation (M&E).*

The Components are designed to remove the Barriers 2-4 on the way to address the key threats for ecosystem and communities in Samoa that negatively impact their climate resilience. The Barrier 1 (and partially Barriers 2, 3, and 4) will be addressed by the UNDP/GEF BGI IP Project "Coastal Resilience Samoa" that will be implemented in parallel and strong coordination with this GEF/SCCF project. Specifically, the NCA and NbS outputs of the BGI IP project will provide a basis for understanding the value of ecosystems and their services, as well as means to determine the cost-effectiveness and long-term benefits of green infrastructure. Thus, the GEF/SCCF Project is fully complementary to the BGI IP project and will scale up its key results adding a significant block of complementary activities. The Strategies have been suggested based on the lessons learned from other GEF and non-GEF projects in Samoa, including the Samoa Ocean Strategy (SOS) Initiative, Adaptation Fund Project "Enhancing Resilience of Samoa's Coastal Communities to Climate Change" (2013-2018); UNDP/GEF Project "Economy-wide integration of climate change adaptation and disaster risk management to reduce climate vulnerability of communities in Samoa" (2014-2019), UNDP/GEF Project "Enhancing integrated sustainable management to safeguard Samoa's natural resources" (2020-2025); World Bank projects Preparedness, Adaptation and Resilience Program – Samoa, Samoa Recovery and Resilience Development Policy Operation, Samoa Climate Resilient Transport Project, and Pacific Resilience Project under Pacific Resilience Program; and ADB projects in Samoa. The suggested Strategies (Components) are based on the GEF8 Levers and will work in synergy with each other (and BGI IP project) to establish a functional EbA model in the project area and replicate it in other districts of Samoa.

Component 1: *Enhancing national climate adaptation, biodiversity conservation, and sustainable land management capacity via the integrated and gender inclusive Ecosystem-based Adaptation (EbA).* This Component is designed to remove the Barrier 2: *Limited technical and financial capacity to plan and implement full-scale EbA measures by government agencies, communities, and private sector.* Also, Component 1 will establish necessary technical and financial capacity for biodiversity conservation and climate adaptation based on EbA and will support implementation of Component 2. It will work on the initial NbS/EbA capacity foundation (NbS and EbA training programs and decision-making tools) established by the BGI IP project to optimize resources and impact and deliver joint integrated capacity building and institutional development activities for the structures delivered under the Component, including a multi-sectoral institutional framework (on the base of the *National Environmental Sector Steering Committee* (NESSC)) to coordinate EbA between Samoa's districts and CIMPs; an EbA/Biodiversity funding window of Samoa's Loss and Damage Fund (LDF); and upgraded nurseries necessary for EbA scaling up.

Component 1 enhances the adaptive capacity of the government and targeted communities by strengthening national technical and financial resources essential for effective EbA. By establishing a multi-sectoral institutional framework on the base of NESSC (Output 1.1), the project ensures coordinated gender inclusive EbA efforts among government agencies, communities, and the private sector. This coordination enables the integration of local needs into national policies and plans, overcoming institutional limitations that previously hindered adaptation efforts. The creation of the EbA/Biodiversity funding window for the Loss and Damage Fund (Output 1.2) provides sustainable financial mechanisms to support community-led adaptation initiatives. This fund empowers local communities to invest in resilience-building measures such as restoring protective, filter, and source ecosystems, protecting existing ecosystems of high adaptation and economic value through Community Conservation Areas (CCAs) and other initiatives, and adopting sustainable land management practices, directly addressing climate risks like increased storm intensity and non-climate drivers like limited financial resources for adaptation. To ensure the long-term sustainability of the EbA/Biodiversity funding window of the Loss and Damage Fund (LDF), the project will establish mechanisms for continuous financing, including partnerships with the private sector, government allocations, and international donors, as well as generating revenue through ecosystem services payments and innovative financial instruments like green bonds and carbon credits. These efforts will provide a stable financial foundation to support ongoing community-led adaptation initiatives and ecosystem restoration efforts, securing resilience for future generations. Upgrading operational tools and infrastructure of key tree and coral nurseries (Output 1.3) directly benefits MNRE, MAF, and communities by enhancing their capacity to implement EbA practices effectively. By improving key nurseries/training centers, the project equips government agencies and communities with necessary infrastructure and tools needed to restore degraded ecosystems that serve as natural barriers against climate-induced hazards like floods and storms. Enhanced capacity building enables communities to adopt sustainable practices, reduce vulnerability to climate impacts, and break the cycle of vulnerability reinforced by the interaction of anthropogenic threats and climate change.

Component 2: *Implementing gender inclusive Ecosystem-Based Adaptation measures to improve climate resilience of ecosystems and communities, protect biodiversity, and combat land degradation.* This Component aims to remove the **Barrier 3: Lack of larger-scale and complex EbA projects in Samoa.** The Component is designed to scale up existing climate adaptation initiatives through implementation of EbA on the inter-district level based on the CIMPs updated by BGI IP Project and with involvement and leveraging resources of the private sector. While BGI IP project potential for implementation of EbA and NbS measures is rather limited, the GEF/SCCF project will ensure larger scale and complexity of the EbA measures in the project districts. The specific EbA measures under this Component includes the following: (1) restoring and protecting mangrove areas to serve as natural barriers against storm surges and coastal erosion while supporting marine biodiversity; (2) coral gardening and other restoration techniques to rebuild coral reefs, enhancing their role in protecting coastlines and supporting marine life and reef fisheries; (3) restoring riparian forests to improve water quality, stabilize riverbanks, and enhance biodiversity connectivity; (4) new protected areas managed by local communities to conserve key ecosystems that provide resilience benefits and ecosystem services; (5) agroforestry practices that integrate tree planting with crop production, improving soil health, and providing economic benefits while enhancing climate resilience; (6) hybrid infrastructure combining boulders and biological components like mangroves to protect against storms, flooding, and even tsunamis while maintaining ecosystem integrity; (7) first Blue Carbon community project focused on conservation and restoring mangroves and seagrass meadows to protect communities from storms and floods and support marine biodiversity and fishery productivity while capturing and storing carbon providing additional source of income to communities. The EbA/Biodiversity funding window of LDF (Output 1.2) will serve as a critical financial mechanism to support and scale up the implementation of these specific EbA measures. Through the EbA/Biodiversity window of LDF, sustainable finance flows will be increased to support community-based activities essential for building resilience to climate change impacts. By securing diverse sources of funding—including public and private sector investments, international donors, and innovative financial instruments, like visitor levy, and PES, and potentially carbon credits from Blue Carbon projects, the LDF will provide communities with the necessary financial resources to undertake and maintain these nature-based solutions. This Component will establish an effective, sustainable, and replicable EbA/NbS model in the project area ready for replication in other districts of Samoa. Also, as a part of scaling up our NbS/EbA initiatives, this component will integrate Natural Capital Accounting (NCA) modules developed under the BGI IP project to assess and communicate the economic benefits of ecosystem services provided by habitats restored and protected through EbA and NbS. By quantifying the cost savings, enhanced ecosystem services, and reduced vulnerability to climate impacts, NCA will provide a compelling business case to attract private sector investments into EbA and NbS. This economic valuation will underscore the cost-effectiveness and long-term resilience benefits of NbS/EbA compared to traditional built infrastructure, highlighting additional co-benefits such as biodiversity conservation, enhanced fisheries, and improved local livelihoods.

Component 2 is explicitly designed to work through (not replace) Samoa's customary indigenous governance, especially the *fa'amatai* system and village *fono o matai* by anchoring on-the-ground EbA investments in district- and village-led decision-making and rule-setting over customary land and nearshore resources. In practice, the Component 2 interventions (Outputs 2.1–2.3) are prioritized and implemented in line with Community Integrated Management Plans (CIMPs) and the existing district/village governance structures that already set local adaptation and resource-management rules (e.g., village by-laws, tapu on fisheries, and district-level arrangements such as Safata's TURF/no-take reserves), ensuring that customary authorities remain the legitimate locus

for local approvals and stewardship. The project further reinforces this by establishing community-led Conservation Areas on customary lands and waters (Output 2.2) and by formalizing site-level management arrangements that embed long-term ownership, operations, and maintenance within MNRE and local authorities/village governance structures, with day-to-day stewardship and compliance supported through locally agreed by-laws and enforcement mechanisms (e.g., preventing cutting, grazing, dumping; organizing replanting).

Component 3: Gender Mainstreaming, Knowledge Management and Learning for dissemination of EbA best practices for climate adaptation, biodiversity conservation, and sustainable land management. This Component will deal with the **Barrier 4: Limited awareness and knowledge of key stakeholders on EbA approaches and models.** This component is extremely important for communication and dissemination of the project lessons and best practices on EbA for replication of the project models in other districts of Samoa. It will integrate the knowledge and experience produced by the Components 1 and 2, as well as the BGI IP project. Also, in this component, the project will leverage NCA experience from BGI IP project and lessons from Component 2 to enhance Samoa's EbA and NbS knowledge and best practices. The economic valuation of ecosystem services to be completed by the BGI IP project will be used to educate and engage the private sector, demonstrating the tangible benefits and profitability of investing in NbS/EbA approaches. A key focus of this Component will be strengthening the case for green adaptation infrastructure over traditional grey infrastructure, especially with planners and government counterparts. By leveraging data from both the project and the BGI IP's economic valuation of ecosystem services, this component will present evidence of the long-term cost-effectiveness, co-benefits, and sustainability of green solutions such as mangrove restoration, riparian forest restoration, and agroforestry. These NbS approaches not only offer protection from climate impacts but also enhance biodiversity, improve water quality, and provide economic opportunities for local communities. By showcasing successful models and quantifying their benefits, this Component aims to catalyze further private investment into sustainable practices that offer substantial returns and resilience against climate variability. Additionally, Component 3 will leverage the synergies with the BGI project to implement joint awareness and knowledge sharing initiatives. The collaboration will extend to the development of joint communication strategies that highlight the successes and lessons learned, aiming to amplify the message and reach a broader audience.

Component 4: Gender Sensitive Monitoring and Evaluation (M&E), will provide effective project monitoring framework for exercising of the project Adaptive Management and achieving sustainable project Outcomes. This Component will provide a foundation for the learning under Component 3 and will ensure effective and timely delivery of all project Outcomes. Again, Component 4 of the GEF/SCCF project will be integrated with the similar Component 5 of the BGI IP project via coordinated planning, monitoring, reporting, and adaptive management.

The proposed project strategy was developed through a process of ongoing project development and stakeholder consultations between June 2024 and September 2025. The Strategy was discussed and adjusted during the Inception Workshop and Inception mission in Samoa between June 18 and 27 2025. This process was followed by a series of one to one and group meetings held with key national stakeholders, including local communities in July-September, with the Validation Workshop to confirm the project approach, Outputs, and budget on September 30 2025. Further details of this process are described in the section on stakeholder engagement and in the Stakeholder Engagement Plan in Annexes 8 and 8a.

Key Lessons and best practices from other projects integrated in the GEF/SCCF Project Strategy

This Project is based on the successful and recommended practices applied in Samoa and abroad, including:

- National inter-ministry committees (IMCs) that regularly convene government, CSOs and the private sector have proved effective at keeping EbA, IWRM, SLM, and conservation actions coherent across agencies in Samoa (e.g., NESSC), Fiji, Tonga, and Palau^{[1]⁴⁹}; the same architecture is recommended for Samoa's multi-sectoral framework for EbA coordination;
- Biodiversity finance mechanisms are successfully established and functioning in other countries: e.g., Micronesia Conservation Trust (MCT) backed by tourism & fisheries levies, national budget lines and donor grants has provided predictable small-grant financing for community EbA since 2006, demonstrating how diversified revenue streams can keep a fund solvent beyond

project cycles[2]⁵⁰. Caribbean Biodiversity Fund (CBF) US \$135 million endowment and an EbA Facility channel returns to 14 national trust funds, illustrating a two-tier model in which a regional vehicle de-risks investment while local windows disburse to communities, an option for scaling Samoa’s Loss and Damage Fund[3]⁵¹. Costa Rica’s FONAFIFO uses earmarked fuel taxes, water charges, carbon credits and biodiversity certificates to compensate landholders, covering 1.3 million ha and US \$524 million in payments. The mix of fiscal and market instruments is often cited as best practice for long-term EbA finance[4]⁵².

- RESTORE project (Kiwa – Samoa/Fiji/Tonga) demonstrates successful partnerships with 30 villages to rehabilitate 200 ha of mangroves and out-plant 80,000 coral fragments showcase community-run nurseries, standard operating procedures for seed collection, and low-cost “reef-growing” modules, approaches that Component 1 can replicate and expand[5]⁵³. The Lololo Station nursery in Fiji (capacity >1 million seedlings annually) underpinned the planting of 2.6 million trees in 22 months, illustrating how modest investments in infrastructure and extension services can unlock large-scale ecosystem restoration[6]⁵⁴.
 - Recent experience in Samoa already shows that adaptation nature-based solutions can deliver measurable gains for people and ecosystems. In the Vaisigano River Catchment, a gender-balanced “cash-for-work” scheme under the GCF flood management project has mobilized village labor to weed, replant and maintain about 100 acres of riparian and upland forest, restoring natural flood buffers while paying wages to 95 community members, more than half of them youth and 10 women[7]⁵⁵.
 - On the south coast, the Return to Paradise Resort and the village of Matautu-Lefaga have teamed up with the NGO *Reefs of Hope* to run a coral-nursery programme and declare a one-kilometer marine reserve; tourists help fund the work and local chiefs enforce no-take rules, proving that private-sector co-investment can accelerate reef recovery[8]⁵⁶.
 - The JICA-supported initiative “SDGs Business Verification Survey with the Private Sector for Environment Improvement and Reduction of Risks against Natural Disaster using the Bio-log Filter, Samoa (2019–2024)” has tested and demonstrated the performance and business feasibility of Bio-log Filters, palm-fiber cylinders that trap sediment, reduce turbidity, stabilize eroding riverbanks, and facilitate natural revegetation, at pilot sites near Apia (Fagaliitai and Fagaliford). The survey has quantitatively verified effects on turbidity reduction, riverbank erosion control, and conservation and recovery of riparian vegetation, while strengthening the technical knowledge and maintenance skills of MNRE’s Water Resources Division and other local stakeholders. At the same time, it has developed a phased business model in which a Samoan distributor markets the technology domestically in the short term and, in the medium term, expands to local manufacturing and export, thereby positioning Bio-log Filters as a commercially viable, nature-based solution for watershed and coastal protection in Samoa[9]⁵⁷.
 - Further inland, FAO’s Forestry & Protected Area Management (FPAM) project operates agro-forestry demonstration farms on Savai’i where more than 120 farmers, many from women’s committees, have learned contour planting, composting and tree-crop integration, raising incomes without clearing cloud-forest catchments[10]⁵⁸. Together these initiatives illustrate the kind of community leadership, gender inclusion and private-sector leverage that Component 2 will scale up.
 - Across the wider Pacific, large-scale EbA models confirm that Samoa’s proposed measures are technically sound and financially viable. Thus, Tonga’s EU-GIZ coastal-protection trials combine short seawalls with community-run mangrove nurseries, shielding more than 600 low-lying households while changing public attitudes toward “grey-green” defenses[11]⁵⁹. These Pacific precedents show that diversified funding, hybrid infrastructure and community stewardship can be scaled to landscape
-

or seascape level, exactly the ambition of Component 2 as it rolls out district-wide mangrove, coral, riparian-forest, and agro-forestry projects in Samoa.

- Samoa already demonstrates how targeted knowledge-management hubs and gender-responsive outreach can accelerate ecosystem-based action. The Pacific Climate Change Centre (PCCC) in Apia serves as a regional “one-stop shop” for climate information, applied research, training and innovation; its knowledge-brokerage function and e-learning node routinely connect ministry planners, community leaders and private investors with decision-support tools such as the Pacific Climate Change Portal and Climate Finance Navigator.
- National Information & Knowledge-Management (IKM) consultations convened by SPREP translated these resources into a work-plan for Samoa, while high-level dialogues on “Gender, Environment and Climate Change” have helped the MNRE weave gender equality through disaster-risk and environmental policies. Together, these home-grown initiatives show how Component 3 can package EbA evidence, economic valuation results and gender insights into accessible formats for local and national audiences^{[12]⁶⁰}.

Project Districts

The project will be implemented in nine districts across the islands of Savai'i and Upolu with a total area of 55,385 ha and total population of 29,884 people (approximately 12% of Samoa’s population): Falealili 1 (West), Falealili 2 (East), Siumu, Safata 1, Safata 2, Lefaga & Faleaseela, Faasaleleaga 3, Faasaleleaga 4, Faasaleleaga 5 (see Fig. 7). The selected districts are rated as medium and highly vulnerable to climate change due to exposure to storm surges, erosion, and sea-level rise, water quality degradation, marine ecosystem degradation, and climate variability affecting agriculture. Coastal (mangroves, coral reefs, seagrass meadows) and terrestrial ecosystems (highland and riparian tropical forest) provide natural barriers and filters in the districts, but due to partial degradation and destruction are susceptible to climate impacts and have decreasing climate resilience. Also, the districts include habitats for such globally endangered and threatened species as the Tooth-billed pigeon (*Didunculus strigirostris*, CE), Mao (*Gymnomyza samoensis*, EN), Samoan Flying Fox (*Pteropus samoensis*, VU), Hawksbill Turtle (*Eretmochelys imbricata*, CE) and Green Turtle (*Chelonia mydas*, EN). The project districts were initially identified at the PIF stage and their selection was confirmed during the PPG process at Inception and Validation Workshops and community consultations with 155 stakeholders (77 women, or 49.7%) (see details in Annex 8a. Stakeholder Consultations).

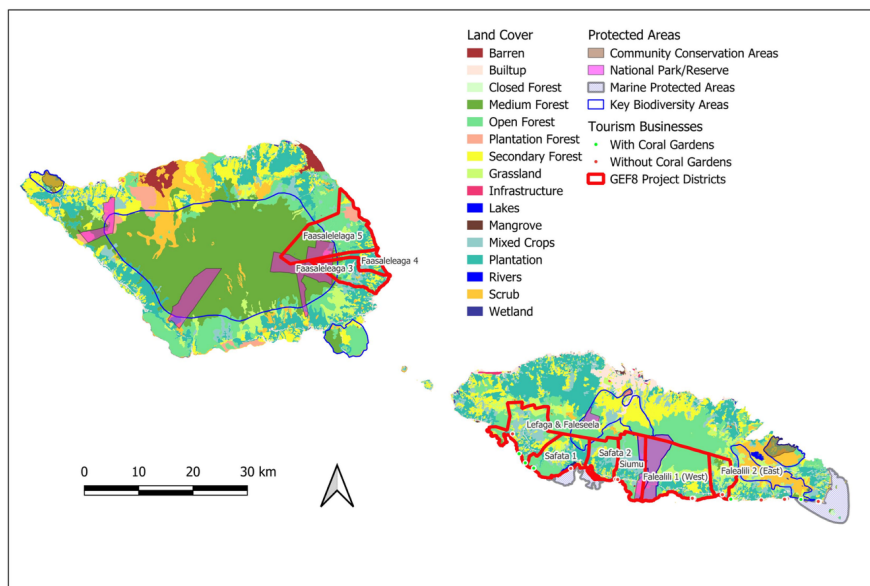


Figure 7. Project districts (Falealili 1 (West), Falealili 2 (East), Siumu, Safata 1, Safata 2, Lefaga & Faleaseela, Faasaleleaga 3, Faasaleleaga 4, Faasaleleaga 5)

Project Theory of Change

The project Theory of Change (ToC) is based on the Results-Based Management Concept, depicted on the Fig. 8 and explained below.

The implementation of the project Components (fully aligned and coordinated with the UNDP/GEF BGI IP Project “Coastal Resilience Samoa”) and delivery of the project Outputs (project products and services) will lead to achievement of the project **Outcomes** (lasting changes in the national and local capacity, adaptation management, and adaptation scale) that are necessary for the achievement of the project Objective (*enhanced climate resilience of Samoa’s ecosystems and communities*):

Thus, **Component 1** is designed to achieve **Outcome 1**. *Strengthened national climate adaptation, biodiversity conservation, and sustainable land management capacity through the integrated and gender inclusive Ecosystem-based Adaptation (EbA) approach* through delivery of three project Outputs:

- **Output 1.1.** Multi-sectoral institutional framework led by MNRE established for the coordination of Ecosystem-based Adaptation and associated conservation initiatives (barrier, source and filter ecosystem restoration and protection) under the Community Integrated Management Plans (CIMPs);
- **Output 1.2.** EbA & Biodiversity Funding Window of Samoa’s Loss & Damage Fund established and operationalized to catalyze financial and technical resources to restore, protect, and enhance the county’s ecosystems and biodiversity for climate adaptation; and
- **Output 1.3.** Nurseries used for Ecosystem-based Adaptation (nurseries and training centers) are upgraded to support implementation of CIMPs in ecosystem restoration and mixed adaptation solutions.

The Outcome 1 will be achieved in synergy with the BGI IP project that will provide necessary decision support tools for EbA and other NbS, and develop and implement NbS/EbA training programs for the key stakeholders in Samoa. If the Outputs above are delivered in full and in integration with the BGI IP project, then the national EbA technical and financial capacity will be strengthened considerably (**GEF Lever 1: Governance and Policy** and **GEF Lever 2: Financial Leverage**). The achievement of the Outcome 1 is based on the reasonable assumptions: (a) the government remains committed to and supportive of the initiative throughout its duration, including policy support, resource allocation, and active participation in the multi-sectoral framework; (b) the financial resources are available and stable to support the EbA/Biodiversity funding window of LDF ; and (c) the institutional capacity will become sufficient to not only implement the planned activities but also maintain and sustain the improvements made through the project on the long-term.

Component 2 is expected to achieve **Outcome 2**. *Scaled up gender inclusive Ecosystem-based Adaptation measures in the project area* through delivery of:

Output 2.1. Ecosystem-based Adaptation initiatives are implemented on the ground to support CIMP climate resilience priorities, including shoreline and springs protection, mangrove, riparian and coral reef restoration, reforestation of slopes, and agroforestry system;

Output 2.2. Community-led Conservation Areas are established to protect the key coastal ecosystems (forest, mangroves, wetlands, coral reefs, and seagrass meadows) having adaptation and biodiversity conservation values;

Output 2.3. Public-Private Partnerships and Blue Economy projects focused on Ecosystem-based Adaptation are developed and implemented.

The Outcome 2 is based on **GEF Levers 2: Financial Leverage** and **3: Multi-Stakeholder Dialog**. The Outputs of the Outcome 2 will be delivered based on the “enabling capacity environment” provided by the Outcome 1 (in coordination with capacity building activities of BGI IP project) and EbA/NbS policy and mechanisms provided by the BGI IP Project. Key assumption for the Outcome 1 are: (a) effective coordination among various stakeholders (government agencies, communities, private sector, NGOs) to implement EbA activities is in place; (b) communities, businesses, and policymakers are willing and open to implementing EbA initiatives; (c) there

is active community participation and leadership in EbA efforts; and (d) EbA interventions generate GEBs, benefit adaptive capacity, scale, and attract further private capital

Component 3 will achieve **Outcome 3**. *Project EbA best practices and gender-inclusive models are replicated by Samoa's districts, projects, and stakeholders* through delivery of:

Output 3.1. Comprehensive Gender Mainstreaming Strategy is developed and coordinated to incorporate gender equality into EbA initiatives;

Output 3.2. Communication and awareness strategy on EbA for climate adaptation and biodiversity conservation developed and implemented;

Output 3.3. Gender-inclusive best practices and lessons learned on EbA are made available for use by Samoa's districts, and shared regionally and internationally for replication.

The Outcome 3 (based on **GEF Levers 3: Multi-Stakeholder Dialog** and **4: Innovation and Learning**) is extremely important to ensure replication of the EbA models developed by the project by other Samoa's districts and financial sustainability of EbA initiatives via educating and convincing investors, donors and benefactors to support EbA initiatives, including through the EbA/Biodiversity funding window of LDF (Output 1.2). All the Outputs under the Outcome 3 will be delivered with full coordination with the respective activities of the BGI IP Project. Achievement of the Outcome 3 is based on the assumptions, that stakeholders will actively apply knowledge and skills provided by the project and are interested to replicate the project best models for climate adaptation based on EbA in and beyond the project districts.

Component 4 (M&E) is expected to achieve **Outcome 4**. *Effective project Adaptive Management based on gender sensitive M&E*. This Outcome (based on **GEF Levers 3: Multi-Stakeholder Dialog**) ensures an integration of all project Outcomes achieved through implementation of the project Adaptive Management based on the participatory M&E system that supports effective learning and Knowledge Management (Outcome 3) and test validity of the project Theory of Change. The Output 4.1. *Participatory and gender sensitive M&E system is implemented to measure the project effectiveness and tests the project Theory of Change* will be delivered in full synergy with the M&E activities of the BGI IP project. The Outcome 4 will provide control for achievement and sustainability of all project Outcomes. See the Project Outputs section for details.

Thus, the project **Objective** will be met through a sequenced “enabling → implementing → scaling → monitoring → learning” pathway. **Outcome 1** creates the enabling conditions: once a gender-balanced, multi-sectoral EbA coordination mechanism is functioning, a legally chartered and capitalized EbA/Biodiversity funding window of LDF is disbursing resources, and upgraded nurseries are supplying seedlings and skills, Samoa possesses the institutions, finance and human capacity to plan and resource EbA nationwide. **Outcome 2** translates that capacity into action by deploying gender-inclusive EbA measures—mangrove, riparian and forest restoration, hybrid coastal defense, climate-smart agroforestry, Blue Carbon project—across priority districts; these investments both reduce climate risks for communities and generate field evidence on costs, benefits and gender impacts. **Outcome 3** then uses those proven models and data to drive replication: the project packages best practices into bilingual toolkits, shares lessons and costings, and mobilizes the EbA/Biodiversity funding window of LDF and partner programmes so other districts, NGOs and private actors can adopt the same approaches, expanding coverage and impact beyond the original sites. **Outcome 4** underpins the entire cycle with a gender-sensitive monitoring-evaluation-learning system that tracks ecological and socio-economic indicators, feeds lessons back to decision-makers, and triggers adaptive management so strategies remain effective under shifting climate and stakeholder conditions.

The project's Theory of Change (ToC) is built around a “robust core, flexible shell” design: it locks in the same enabling foundations under every future: strong, gender-balanced coordination and EbA finance (Outcome 1), field-tested EbA measures that can be dialled up or down (Outcome 2), and an adaptive learning KM and M&E loop (Outcomes 3 and 4, but leaves the specific ‘how-much, where, and with what mix of grey or green’ open to adjustment as triggers emerge. In a favorable **Scenario 1 (Blue Harmony Growth)**, the ToC's replication engine channels surplus finance into scaling ridge-to-reef restoration and blue-bond investments; in a less coordinated **Scenario 3 (Stagnant Lagoons)** it still maintains minimum-viable nurseries, community stewardship contracts and gender-responsive adaptation models that slow degradation while lobbying the LDF for catch-up grants; under climate-intense but well-financed **Scenario 2 (Fortress Adaptation)** it pivots to hybrid EbA-plus-infrastructure packages and relocation support, using land-use controls to avoid maladaptation; and in a worst-case **Scenario 4 (Erosion Spiral)** the same M&E system acts as an early warning beacon, triaging funds to life-line ecosystem buffers (mangrove cores, upland water sources) and documenting lessons for

post-disaster recovery. By nesting flexible financing windows, staging decisions tied to climate and governance thresholds, and embedding gender-sensitive feedback loops that revise priorities annually, the ToC remains operational and relevant across all four scenarios.

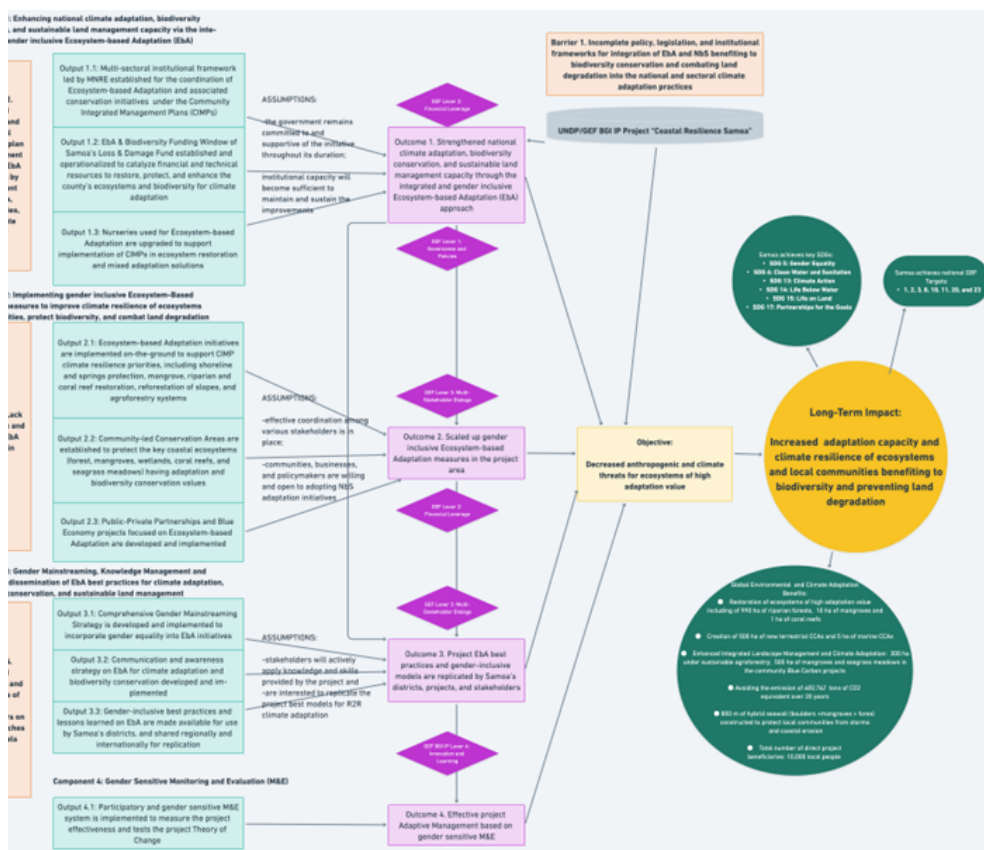


Figure 8. Project Theory of Change

Incremental Cost Reasoning and Expected Global Environmental Benefits of the project

Business as Usual Scenario (without GEF intervention)

Under a business-as-usual scenario, Samoa's ecosystems and communities would continue to face mounting pressures from climate change and environmental degradation with only fragmented, incremental responses. Ongoing baseline efforts, such as local conservation initiatives and sector-specific projects, would be insufficient to stem the decline in ecosystem services. Deforestation and land-use change would likely persist (e.g., over 9,200 ha of forest were cleared from 2000–2022), leading to further soil erosion, sedimentation of rivers, and loss of biodiversity. Critical ecosystem services would deteriorate: for example, without forest cover to regulate water and protect topsoil, crop yields are already declining and pest outbreaks rising, creating a feedback loop of land degradation and reduced food security. Similarly, without intervention, sediment runoff and nutrient pollution from denuded slopes would continue to smother coral reefs and seagrass beds, undermining coastal fisheries and tourism. In coastal areas, mangrove loss and coral reef degradation would leave communities increasingly exposed to storm surges and coastal erosion. The net effect of this baseline trajectory is escalating climate vulnerability, ongoing biodiversity loss, and heightened economic risks for Samoa's largely nature-dependent population.

Policy and institutional frameworks in the baseline scenario also remain fragmented and under-resourced. Samoa lacks a finalized National Adaptation Plan (NAP), meaning there is no unified mandate to mainstream Ecosystem-based Adaptation (EbA) across all sectors. Without the GEF/SCCF project, adaptation and conservation actions would continue in silos: EbA measures would occur only as isolated pilot projects rather than at scale. Key barriers would persist: limited technical capacity, inadequate funding, and weak cross-sector coordination. Samoa faces a substantial adaptation finance gap (estimated at US\$250 million shortfall for 2022–2026), so baseline resources would be directed to urgent development needs, with minimal investment in innovative or large-scale EbA. Local communities and government agencies, with constrained budgets and know-how, would focus on short-term coping measures. In summary, without the GEF/SCCF intervention, Samoa's current programs would fall short of achieving the

transformative “ridge-to-reef” resilience needed – global environmental benefits (e.g. significant biodiversity conservation, carbon sequestration) would remain unrealized, and the country’s vulnerability to climate impacts would continue to grow under the business-as-usual path.

Incremental Role of GEF/SCCF Project

The incremental value of the GEF/SCCF investment is to bridge the gap between what would happen anyway under baseline conditions and the elevated outcomes needed to secure global environmental and adaptation benefits. In the absence of GEF/SCCF funding, Samoa’s efforts in EbA, conservation, and climate adaptation would remain piecemeal and largely confined to local or sector-specific initiatives. The GEF/SCCF grant provides the catalyst to overcome these barriers by introducing resources and approaches that the baseline lacks. GEF/SCCF resources enable a holistic, cross-sector intervention that is not attainable with domestic or other donor funding alone. For example, the project will establish a national EbA coordination committee and an EbA financing window: these are *new* institutional solutions directly enabled by the GEF/SCCF increment, designed to tackle the baseline issues of fragmentation and insufficient funding. Likewise, the on-the-ground interventions (restoring forests, mangroves, coral reefs, and implementing climate-smart agriculture) represent an accelerated, scaled-up effort that goes well beyond the “business-as-usual” community projects. These activities specifically target the global benefits (biodiversity conservation, carbon sequestration, climate risk reduction, and climate adaptation) that would not be delivered by baseline investments, which tend to focus on immediate socio-economic needs.

In practical terms, the role of GEF and SCCF funding is to underwrite the additional costs of delivering public goods and innovation. GEF funds cover the incremental actions for biodiversity and land degradation objectives, such as creating new protected areas, restoring critical habitats, and developing sustainable land management models, which the baseline financiers would not fully cover. The SCCF funds are directed at adaptation add-ons: community resilience building, integrating EbA into planning, and demonstrating hybrid solutions like the nature-engineered seawall and innovative NbS like Blue Carbon project that specifically address climate vulnerabilities beyond the baseline development measures. By combining these resources, the project achieves a synergy of outcomes: *ecosystem restoration coupled with resilience gains*. Indeed, the project’s integrated design “addresses the root causes of vulnerability of ecosystems and local communities and ensures sustainable, long-term benefits that would not be achievable” through a narrower funding approach. In other words, GEF/SCCF money is enabling Samoa to do what it otherwise could not: it finances the incremental activities that generate global environmental and adaptation benefits and transformational impacts, while baseline efforts alone would have led to only marginal improvements. The GEF/SCCF involvement also de-risks innovation, allowing the piloting of novel solutions (e.g., the hybrid EbA seawall, Blue Carbon project, and EbA-oriented Public-Private Partnerships (PPP)) which go beyond standard practices and can be later replicated by others. By funding these strategic interventions and capacity boosts, the GEF/SCCF grant serves as the linchpin that elevates the project from a set of local actions to a nationally integrated, globally significant model of ecosystem-based climate adaptation.

Expected Global Environmental and Adaptation Benefits

The project aims to address climate adaptation, ecosystem conservation, and community livelihood in the project area and entire Samoa through development and replication EbA models. The incremental benefits of the project are significant and include the following:

- › **High Adaptation Value Ecosystem Restoration:** restoration of ecosystems of high adaptation value including of 990 ha of riparian forests (GEF Core Indicator 3); 10 ha of mangroves and 1 ha of coral reefs (GEF Core Indicator 4). Restoration of riparian forests is expected to reduce the peak flow of floodwaters by up to 65% and can remove up to 80-90% of nutrients and sediments from surface runoff [13]⁶¹. Mangrove restoration will lead to a reduction in wave height passing through them by up to 75% and increase fish catch yields in nearby areas by up to 50% [14]⁶². Healthy coral reefs reduce wave energy by up to 97% and can contribute over USD 1 million per square kilometer per year in terms of tourism and recreation value [15]⁶³.

- › **High Adaptation Value Ecosystem Conservation:** creation of 500 ha of new terrestrial Community Conservation Areas (CCAs) (GEF Core Indicator 1.1) and 5 ha of marine CCAs (GEF Core Indicator 2.1) to protect KBAs and ecosystems of high adaptation value. The CCA are expected to reduce sedimentation risks, potentially improving water quality by up to 50%, increase fish biomass up to 400%, and protect natural barriers for storms and floods decreasing vulnerability of local communities[16]⁶⁴;
- › **Protection of endangered species:** the project EbA activities will ensure stabilization and potential increase in the populations of at least five globally endangered and vulnerable species of Samoa including: the Tooth-billed pigeon (*Didunculus strigirostris*, CR), Mao (*Gymnomyza samoensis*, EN), Samoan Flying Fox (*Pteropus samoensis*, VU), Hawksbill Turtle (*Eretmochelys imbricata*, CR) and Green Turtle (*Chelonia mydas*, EN);
- › **Enhanced Integrated Landscape Management and Climate Adaptation:** The project will put 300 ha under sustainable agroforestry; and include 500 ha of mangroves and seagrass meadows in the community Blue Carbon projects. The agroforestry system and protected mangroves and seagrass will lead to increased community resilience to climate extremes, including storms, droughts, and floods;
- › **Climate Change Mitigation:** the project is expected to prevent the emission of 683,762 tons of CO₂ equivalent over 20 years after the ecosystem restoration and establishment of new CCAs to safeguard terrestrial and marine ecosystems of high adaptation value (GEF Core Indicator 6);
- › **Enhanced protection from coastal erosion and flooding:** pilot construction of 800 m of a hybrid seawall consisted of boulders, mangrove plantation, and forest belt to protect selected coastal communities from coastal erosion and floods;
- › **Socio-Economic Benefits:** At least 10,000 people, including at least 50% of women, will directly benefit from the project through direct project support, capacity building, improved adaptation capacity and ecosystem services, improved sources of clean water and agricultural yields, and enhanced livelihood opportunities (GEF Core Indicator 11). Through implementation of Components 1 and 2 the project will directly establish at least 500 new full and part-time jobs for local communities with a perspective to provide at least 5,000 new jobs in 5-7 years after the project completion (through continuous training program and replication of the best practices).

Cost-Benefit Analysis of the project incremental intervention

Conservative estimates across key ecosystem services illustrate that the economic benefits derived from the project's ecosystem-based interventions will far exceed the project's costs. For example, flood risk reduction from restored mangroves, riparian forests, and coral reefs can be monetized in terms of avoided damage to infrastructure and communities: studies show that each hectare of mangroves can avert roughly US\$3,200 in property damages per year[17]⁶⁵, and healthy coral reefs in high-exposure areas provide on the order of \$1 million per kilometer of coastline annually in avoided flood losses[18]⁶⁶. Similarly, habitat restoration is expected to boost fisheries productivity. Samoa's coastal fisheries are already worth nearly US\$40 million per year in aggregate[19]⁶⁷, and mangrove nurseries/coral reefs are known to significantly enhance local fish catch: studies have valued mangrove-supported

fisheries as high as ~\$37,500 per hectare per year in productivity benefits^{[20]⁶⁸}

 (though we apply a far more conservative coefficient in our estimates). Soil retention and water quality improvements from agroforestry and forest restoration also carry quantifiable benefits: by reducing erosion, the project will lessen sedimentation of rivers and coasts, avoiding dredging and water treatment costs (for context, dredging sediment can cost on the order of \$20–\$25 per tonne removed)^{[21]⁶⁹ while helping maintain land productivity. Enhanced reef health and mangrove recovery will likewise bolster tourism and recreation values: marine tourism in Samoa is valued in the tens of millions of tala per year, so even a modest uptick in visitor numbers and expenditures due to healthier reefs (e.g., improved diving, shoreline aesthetics and beach protection) translates into substantial economic gains for local communities. Finally, the project’s carbon sequestration and avoided emissions benefits are sizeable: an estimated 683,762 tCO₂e_q mitigated over 20 years, which, valued at a conservative ~\$15/ton (e.g., via carbon offset markets), represents roughly \$10 million in climate mitigation value. In total, when summing the monetary benefits of flood protection, fisheries enhancement, soil/water conservation, tourism, and carbon sequestration over a 20-year horizon, the project is expected to generate tens of millions of dollars in economic benefits in excess of the total investment (US\$5.33 million GEF/SCCF grant + \$37.02 million co-financing). In other words, even under cautious assumptions the **benefit-cost ratio** is comfortably **greater than 1 – on the order of 1.5–2:1 over 20 years** underscoring the strong economic rationale for the project. The substantial avoided damages and enhanced revenues from ecosystem services firmly justify the incremental investment, confirming that the project’s adaptation and conservation benefits will far outweigh its costs.}

Project Outcomes and Outputs (abridged, see Results and Partnerships section of the ProDoc for full details)

The GEBs will be delivered through achievement of 4 project Outcomes through delivery of the Outputs (direct project products and services) that are described below.

Outcome 1. Strengthened national climate adaptation, biodiversity conservation, and sustainable land management capacity through the integrated and gender inclusive Ecosystem-based Adaptation (EbA) approach

Output 1.1. Multi-sectoral institutional framework led by MNRE established for the coordination of Ecosystem-based Adaptation and associated conservation initiatives (barrier, source and filter ecosystem restoration and protection) under the Community Integrated Management Plans (CIMPs) (funded by GEF TF)

Under this Output the project will strengthen the *National Environmental Sector Steering Committee* (NESSC) (may be replaced by the *Sector Advisory Committee* (SAC) within new government structure) to serve as a multi-sectoral body for the coordination of EbA and other NbS initiatives, in order to achieve synergy and strong level of cooperation between different districts and communities when implementing district CIMPs. The NESSC has nearly 30+ members from 19 government agencies and non-governmental stakeholders and provides overall leadership and oversight for implementing the National Environment Sector Plan (NESP) and related programs. In practice, the NESSC is tasked with sector-wide planning, coordination of implementation, and monitoring & evaluation of environmental initiatives. Samoa’s Environment Sector goals already encompass climate resilience: one of the sector’s strategic priorities (Longterm Outcome 1) is to mainstream climate change and disaster risk management across the national development agenda, with strong cross-sectoral governance. This means the NESSC is inherently oriented toward cross-sector coordination on issues such as climate adaptation and disaster risk, in addition to traditional environmental management. These mandates position the NESSC (or SAC as a new intersectoral structure) as a logical platform to take on additional responsibilities in ecosystem-based adaptation (EbA). EbA coordination functions of NESSC should include:

Policy Coordination: Ensure EbA principles are integrated into national policies, sector plans (e.g., forestry, agriculture, fisheries, disaster risk management, land use planning), and planning processes. NESSC (or SAC) would facilitate sector alignment and oversight of EbA-related policies or guidelines that will follow the centralized process led by MNRE’s Legal Services Division, with sector policies tabled to the National Policy Committee (NPC) chaired by the Ministry of the Prime Minister and Cabinet (MPMC) and, subsequently, to Cabinet for approval;

Cross-Sector Collaboration: Convene relevant ministries (Environment, Climate Change, Agriculture, Fisheries, Finance, etc.) and stakeholders, including private sector, to encourage the mainstreaming of EbA initiatives and from this, to develop EbA Public-Private Partnerships (PPP) that embrace EbA principles;

Project Oversight: Guide the design and implementation of EbA projects/initiatives so they support national priorities. NESSC (or SAC) will have a key role to review EbA project concepts, resolve overlaps or gaps between projects (e.g., BGI IP and GEF/SCCF projects);

Monitoring & Reporting: Expand NESSC's (or SAC) M&R role to oversee EbA and ecosystem resilience outcomes through the sector results framework and indicators.

To strengthen NESSC (or SAC) to serve as EbA coordination body, the project will: (i) formally revise its ToR and procedures to embed a gender-inclusive EbA mandate, balanced women's representation, and clear oversight/reporting roles; (ii) create an EbA Working Group to handle technical work and brief the full committee; (iii) launch a twinning/exchange program with New Zealand agencies (MfE, EPA, CCC, MPI) and peers in Vanuatu, Tonga, and Fiji; (iv) deliver a practical EbA training package for decision-makers (e.g., village charters & EbA MoUs, waste management, coastal/forest restoration, SOPs for village implementation and compliance, PPP management, and results reporting, aligned with the BGI IP); and (v) fund targeted NESSC meetings to map EbA initiatives, plan interventions and PPPs, update policies, and ensure national reporting to CBD, UNFCCC, and UNCCD reflects EbA results

Output 1.2. EbA & Biodiversity Funding Window of Samoa's Loss & Damage Fund established and operationalized to catalyze financial and technical resources to restore, protect, and enhance the country's ecosystems and biodiversity for climate adaptation (funded by GEF TF and SCCF)

This Output will focus on the creation of a sustainable financial mechanism for EbA and associated conservation initiatives in Samoa. The Government of Samoa decided that given Samoa's realities, the following Trust Fund structure will be the most optimal:

- **The emerging Loss & Damage Fund**, with a dedicated an **EbA & Conservation window** (funded by GEF, donor contributions, International Tourist Levy, PES, etc.). Samoa's Loss and Damage Fund (LDF) Terms of Reference explicitly allow for investments that reduce and manage climate related losses and damages, including actions that strengthen resilience of ecosystems serving as barriers for natural disasters (e.g., coral reefs, mangroves, and coastal forests). However, EbA is not positioned as the LDF's core or flagship priority in the current ToR. For this reason, the project proposes establishing a dedicated EbA/Conservation window under the LDF as a targeted, ring-fenced funding stream that strengthens the Fund's ecosystem restoration and nature-based risk reduction function, without redefining the LDF's overarching mandate. Ecosystem restoration and protection reduce hazard exposure and vulnerability, thereby preventing and minimizing future climate-induced losses and damages (including avoided economic losses and avoided non-economic losses such as loss of ecosystem services, cultural values, and biodiversity). The EbA window does not replace "post-impact" L&D functions; it complements them by financing upstream actions that reduce the scale and frequency of L&D payouts over time.

This Trust Fund model is considered as the most optimal, because it maximizes TF financial sustainability, operational efficiency, and climate-biodiversity integration, which are critical criteria for success. An integrated single fund is optimal for Samoa because it efficiently consolidates limited resources to support interconnected climate adaptation and biodiversity goals, enabling coordinated, resilient, and scalable environmental finance through a unified national mechanism. Independent governance with government support ensures the fund is both credible to international donors and firmly embedded in Samoa's national priorities, combining transparency and resilience with alignment to long-term development goals. The Loss & Damage Fund is already in the process of establishment by the Government of Samoa with idea to incorporate EbA & Conservation window as soon as the project starts. In addition to grant financing, the EbA/Biodiversity funding window of the LDF will explore partnerships with national and regional development banks and insurance providers to pilot credit lines and nature-based insurance products that are underwritten against the improved resilience and productivity of coastal fisheries and other livelihoods arising from mangrove, seagrass and coral reef EbA investments.

So, the project will implement only activities to operationalize and capitalize the EbA & Conservation window of Loss and Damage Fund (LDF): it will (1) run a feasibility study benchmarking leading conservation funds and detailing legal, financial, and institutional options for EbA/Biodiversity funding window in Samoa (funded by SCCF); (2) engage mentors and peer exchanges (e.g., MCT, SeyCCAT, CBF, [Antigua & Barbuda's SIRF](#)) and arrange targeted site visits (funded by SCCF); (3) craft a capitalization plan and begin outreach, working with BIOFIN on instruments like the International Visitor Levy and PES, while convening donor roundtables (funded by SCCF); (4) constitute an initial, skills-based Board with ≥40% women and train Board/staff on governance, resource mobilization, grant-making, and reporting (funded by SCCF); (5) set up dedicated bank accounts, an investment policy, an Operations Manual (ESG, gender, M&E), and basic admin systems (funded by GEF); (6) stage a launch/pledging event to secure contributions, targeting at least US\$300,000 during the project and marketing the window as a legacy vehicle (funded by GEF); (7) disburse a first round of small EbA grants by Year 4 to prove functionality (funded by GEF); and (8) finalize a 2030–2035 strategy to scale the window (US\$10–30 million ambition) and pursue accreditation to channel larger instruments (e.g., GCF/AF) (funded by GEF).

Output 1.3. Nurseries used for Ecosystem-based Adaptation are upgraded to support implementation of CIMPs in ecosystem restoration and mixed adaptation solutions (funded by SCCF)

This Output aims to enhance the technical and operational capacity of key nurseries critical for effective climate adaptation strategies and conservation efforts using EbA. First, the project will conduct a thorough assessment of current operational nurseries in the project districts identifying gaps and limitations in supporting EbA activities in the project areas under Outputs 2.1-2.3 (as well as relevant activities of the BGI IP Project). A detailed upgrade plan will be developed based on the assessment findings, prioritizing needs and identifying the most effective interventions to enhance the capacity and efficiency of operational tools and infrastructure.

Based on the country mission consultations, the project will focus on MNRE and MAF nurseries that are much more sustainable than community nurseries, namely: Togitogiga (Upolu), Vailima (Upolu), and Maota (Savai'i) by MNRE; and Poutasi Falealili (Falealili 1), Savaia Lefaga (Lefaga & Falease'ela), and Salelologa (Faasaleleaga) by MAF. Only Maota (MNRE) and Salelologa (MAF) nurseries will be supported by the project funds. Other will be upgraded with co-financing from MNRE and MAF. Each nursery currently produces ~30,000 seedlings/year of mixed native tree species. To meet the project's restoration targets, these facilities will be upgraded to ~100,000 seedlings/year capacity each. This threefold increase will supply sufficient climate-resilient seedlings for riparian reforestation, coastal planting, and community agroforestry.

Additionally, the project will support establishment of two coral nurseries under MNRE management: on the Poutasi Reef, Falealili District (Upolu), and Lano Reef, Fa'asaleleaga 3 District (Savai'i). Poutasi Reef was prioritized due to its history of reef degradation and cyclone-induced coastal damage, where restoring coral cover will enhance shoreline protection and complement nearby mangrove and seagrass systems for integrated climate resilience. Lano Reef was selected for its strong community engagement in marine conservation and its potential to restore reef biodiversity and coastal protection along a vulnerable, gently sloping shoreline exposed to cyclone-driven wave energy. All supported and established nurseries will be supported by MNRE on the long-term. To establish the nurseries the project will use positive experience of the Artificial Reefs Samoa's nursery (Apea area) and Coral Gardening Initiative operated by the Return to Paradise Resort. It is expected that each coral nursery will outplant ~300 corals per year (with ~200 corals surviving to 12 months post-outplant on average) restoring ~60–100 m² reef area annually.

Outcome 2. Scaled up gender inclusive Ecosystem-based Adaptation measures in the project area

Output 2.1. Ecosystem-based Adaptation initiatives are implemented on the ground to support CIMP climate resilience priorities, including shoreline and springs protection, mangrove, riparian and coral reef restoration, reforestation of slopes, agroforestry systems, and Blue Carbon projects (funded by GEF TF and SCCF)

This Output will be implemented based on the updated CIMPs with integrated NbS/EbA measures (the CIMPs will be updated by the BGI IP project) and will be focused on complex EbA measures. This is the cornerstone output for the project. Activities under the output will be coordinated by NESSC as EbA Committee (Output 1.1), supported by strengthened nurseries (Output 1.3), and co-financed by EbA/Biodiversity funding window of LDF (Output 1.2). For each EbA intervention under this Output, climate change scenarios (e.g., projected sea-level rise, cyclone intensity, rainfall variability, and drought frequency) will be developed and applied during the design and implementation phases to ensure the long-term resilience and robustness of the measures. Project activities will encourage participation of women in restoration works and provide information sessions to women's community groups. These measures will include the following implemented by target communities in cooperation with NGOs, government agencies, and private sectors (will be validated at PPG stage):

- **Hybrid seawall construction** (Faasaleleaga 3, Faasaleleaga 4, Faasaleleaga 5): ~800 m of hybrid seawall (line of boulders on the low tide line or coastal line accompanied by a layer of mangroves (10-30 m wide, 1.0-3.0 ha) in the tidal zone and a layer of forest (or agroforestry) (20-50 m wide, 2.0-5.0 ha). The three-layer hybrid seawall will give erosion control and good protection against storm surges, and partial mitigation from small regional tsunamis. The hybrid design leverages natural processes: boulders break incoming waves and reduce their force, mangroves dissipate wave energy and trap sediment in the intertidal zone, and the forest buffer further slows floodwater, blocks wind and salt spray, and anchors the soil. This multilayer defense is intended to be more sustainable and cost-effective than a conventional seawall alone, while providing ecological co-benefits (habitat for fish, crabs, and birds, and forest resources for the community) (funded by SCCF);

Mangrove restoration (10 ha total) to enhance coastal and riverbank resilience in the following priority locations: Safata 1 (Sataoa-tai and Saanapu-tai), Falealili 1 (Sapunaoa, Malaemalu, Vaovai, and Poutasi), Lefaga & Faleaseela (Faleaseela and Matafaa), Faasaleleaga 3 (Sapapalii), and Faasaleleaga 5 (Lano, Asaga, Puapua). To ensure sustainability and resilience the restoration sites are located in the direct proximity of existing well-established mangroves with idea to extend them as a natural shield to prevent coastal erosion and mitigate tsunamis as well as support marine biodiversity (funded by GEF);

- **Coral reef restoration** (1 ha) using techniques like coral gardening and artificial reefs to establish natural wave-breakers and support marine biodiversity and fisheries (in connection with Output 1.3 – coral nurseries). Priority locations: Lefaga & Faleaseela (Faleaseela, Matautu, Lefaga), Falealili 1 (Matautu and Sapunaoa), Falealili 2 (Salani and Salesatele), Siumu (Maninoa and Siumu), Safata 1 (Sataoa & Saanapu), Faasaleleaga 3 (Fatausi, Fogapoa, and Tuasivi), Faasaleleaga 4 (Malae and Siufaga), and Faasaleleaga 5 (Puapua) (funded by GEF);
 - **Establishing agroforestry systems** (300 ha) that integrate tree planting with crop production to improve soil health and biodiversity and play climate adaptation function (will be done through MNRE and MAF co-financing). **Priority sites:** Sataoa–Sa’anapu inland–coast corridor (Safata 1): establish a ridge-to-reef agro-belt that starts with a 30-50 m mangrove strip against storm surge, then transitions upslope into a multi-strata breadfruit-coconut-cocoa system interplanted with pandanus and managed beehives for diversified income; Saleilua & Poutasi upland catchments (Falealili 1 & 2): contour-hedgerow agro-silviculture in which nitrogen-fixing *liriodia/liriodia* hedges stabilize steep slopes while alternating alleys of taro and ginger and border rows of native ifilele and tava provide both short-term crops and future timber; Puapua abandoned cocoa-coconut estate (Faasaleleaga 4): convert the cyclone-damaged monoculture into a cocoa-centric mixed agroforest by re-grafting disease-resistant cocoa under a nurse canopy of teak and falcataria, enriching gaps with native hardwoods and threading vanilla and black-pepper vines for high-value shade crops; Sapapali’i coastal strip & river mouth (Faasaleleaga 3): coastal agro-silvo-fishery buffer that staggers mangrove and nipa-palm plantings seaward, backs them with raised beds of taro and lima bean, and integrates community crab pens for combined shoreline protection and food security; and Fusi–Vaie’e upper pasture (Safata 2): silvopasture system of wide-spaced ifilele, teak and tamarind shade trees over improved *Brachiaria*–butterfly-pea forage, enclosed by living *liriodia* fences that supply fodder, firewood and erosion control (funded by GEF);
 - **Developing a pilot Blue Carbon project** in Safata 1 and Safata 2 mangrove stands (total area of 296 ha, including open estuarine water) and adjacent area of seagrass meadows (200-300 ha) to protect and restore coastal ecosystems of high adaptation value by communities while generating carbon credits. The project will directly contribute to conservation of Safata mangroves (30–40% of Samoa’s total mangrove cover) and ensure mangrove restoration on additional 5-10 ha during the project implementation through PPPs (Output 2.3) and co-financing. The project has a potential to generate 5,000–10,000 carbon credits per year and carbon prices for high-quality blue carbon credits range from \$5 to \$15 per credit, the gross annual revenue might be \$50,000–\$150,000^{[22]70} (require MNRE approval to start selling of carbon credits). MNRE will designate Safata Bay’s mangrove complex as Samoa’s National Blue Carbon Reference Site and the site will host a timebound eddy covariance (SmartFlux) station to generate national quality flux (carbon gas exchange) benchmarks (funded by SCCF)^{[23]71}; Additionally, the project will develop and consult on a revenue management and benefit-sharing framework that sets out where revenues would be received and held, allocation rules (e.g., reinvestment into ecosystem stewardship, community incentives/livelihood co-benefits, and long-term management costs), transparency and reporting requirements, and governance oversight (including community participation and safeguards).;
 - **Shoreline and springs protection using littoral, coastal and riparian forest restoration** (990 ha): These ecosystems are of high adaptation value, providing natural defenses against floods, erosion, and pollution. By restoring these forests, peak flood flows can be reduced by up to 65% and runoff filtered to remove 80–90% of sediments and nutrients – critical benefits for climate adaptation. Additionally, these coastal ecosystems provide third line of defense (after coral reef and mangroves) against strong storms and small tsunamis for local communities. Replanting littoral species such as *Barringtonia asiatica* (fish-poison tree), *Calophyllum inophyllum* (tamanu), *Hibiscus tiliaceus* (Beach hibiscus), *Pandanus tectorius* (screw pine), and other native trees will regenerate resilient coastal forests. The following **priority sites** are considered for restoration: (1) heavily cleared and degraded slopes and riparian zones above villages like Nu’usuatia, Fausaga, Vaie’e, and Lotofaga (Safata), extending down to littoral fringes of Safata Bay (~250 ha); (2) littoral forests behind village coastlines in Falealili (e.g., around Poutasi, Saleilua, Matautu, Tafatafa) and riparian corridors along rivers and streams that flow to the sea (~150 ha); (3) degraded riverbanks upstream of Falease’ela and coastal flats around Matautu
-

and Savaia in Lefaga & Falease'ela District (~150 ha); (4) degraded littoral forest and lowland rainforest between the villages of Pu'apu'a, Lano, Asaga, Saipipi, and Sa'asa'ai in Fa'asaleleaga District (~200 ha); (5) degraded littoral and coastal forest near springs such as Vaiele and Masoe in Siumu District (~100 ha). The project will apply Assisted Natural Regeneration (ANR) and targeted planting approaches for forest restoration (funded by GEF).

Overall, the project will restore ≥ 10 ha of mangroves, ≥ 1 ha of coral reefs, ≥ 990 ha of coastal and riparian forests; and put ≥ 300 ha under sustainable agroforestry, include 500 ha of mangroves and seagrass meadows in the community Blue Carbon projects, and construct 800 m of hybrid seawall (boulders, mangroves (1-3 ha), and forest belt (2-5 ha). Through implementation of the Output 2.1 and associated Outputs 2.2 and 2.3 the project is expected to prevent the emission of 683,762 tons of CO₂-equivalent over 20 years after the project start. This Output will allow to scale up the EbA measures to the landscape level effectively complementing to the initial NbS and EbA activities of the BGI IP project. For implementation of this Output MNRE will use professional contractors and gender-balanced community Cash for Work approach (supervised by MNRE and contractors) that channels income directly to households without placing the administrative burden of grant-management on village committees. Developed adaptation and biodiversity conservation models will be maintained by MNRE and local communities on the long run.

The project will ensure sustainability of the hybrid coastal protection measures beyond the project life cycle through a combination of resilient design, institutionalized responsibilities, and predictable financing pathways. The hybrid approach, integrating boulders/structural elements with mangrove and coastal forest belts, is intentionally selected because the living components can self-repair and accrete over time when protected, reducing the need for repeated heavy engineering. Post-project maintenance will focus on routine inspections, minor repairs to hard elements, debris removal after storm events, and replanting or reinforcement of mangrove/forest belts where needed. The project will formalize long-term ownership and O&M through site-level management arrangements with relevant public agencies (including MNRE and local authorities/village governance structures), embedding inspection and maintenance in existing coastal management and public works planning and budgeting processes. Communities in project sites will support day-to-day stewardship (monitoring survival, preventing damaging pressures such as cutting, grazing, and dumping, and organizing periodic replanting) under locally agreed by-laws and enforcement mechanisms. Over the longer term, maintenance will be sustained through integration into national and local budgets and through the EbA & Biodiversity window under Samoa's Loss and Damage Fund (Output 1.2), which provides an institutional mechanism to finance priority ecosystem-based maintenance and restoration needs.

Output 2.2. Community-led Conservation Areas are established to protect the coastal ecosystems (forest, mangroves, wetlands, coral reefs, and seagrass meadows) having adaptation and biodiversity conservation values (funded by GEF TF)

This Output focuses on engaging communities in adaptation and conservation efforts, recognizing their traditional knowledge, and empowering them to lead initiatives that protect ecosystems vital for climate resilience on their customary lands. Samoa has been actively engaged in establishing and recognizing Community Conservation Areas (CCAs) across the country. These areas are developed in partnership with village communities, the Samoa Conservation Society, MNRE, MAF, and other stakeholders to support forest conservation and marine ecosystems, and include important biodiversity and ecosystem services like water catchment areas, coral reefs, mangroves, wetlands, and forests. At the same time, they are playing an extremely important role for climate adaptation as appropriate EbA solutions. The following sites of high adaptation and biodiversity conservation value were selected for new CCAs through consultations with MNRE and local communities in the project districts [\[24\]⁷²](#):

Community Marine Reserves (Coral Reefs & Seagrass): the first line of defense against storms, tsunamis and coastal erosion to protect coral reefs and associated seagrass meadows (reduce wave energy up to 65-90% and have very high food security value). **Priority sites:** unprotected coral reefs and seagrass meadows of Safata 1 & 2, Falealili 2, Lefaga and Faleaseela, Siumu, Faasaleleaga 3, Faasaleleaga 4, and Faasaleleaga 5 with total area up to 5 ha;

Community Mangrove Reserves: the second line of defense and important food security ecosystem. **Priority sites:** unprotected Safata 1 and Safata 2 mangrove stands (total area of 296 ha, including open estuarine water); Faasaleleaga 5: Le Asaga Bay, Saletagaloa & Foua (total area ~72 ha); Falealili 1: Vaovai and Poutasi (total area ~60 ha);

Community Coastal Forest Reserves: the third line of defense against storms, tsunamis, flash-floods, and coastal erosion. Priority sites for the reserves: **Falealili West:** Saleilua–Poutasi (Vaovai River Corridor), ~50 ha of only remaining lowland rainforest areas in Falealili, forming a corridor from O le Pupu-Pu'e National Park to the coast; **Falealili East:** Salani (Matavai, Fagaloa River Riparian Zone), ~20 ha, the lower reach and delta of the Matavaifagaloa River at Salani: this area experienced severe sedimentation and flooding issues after extreme events; **Siumu:** Sa'aga-fou Village Scrub Forest, ~10 ha, a remaining patch of secondary scrub forest

near Sa'aga-fou, adjacent to a large coastal wetland at Maninoa: this forest and wetland complex provide natural drainage and coastal protection; **Safata 1:** Sataoa–Saanapu (Mulivai River Riparian Area), ~30 ha, one of the last riparian forests upstream of the Sataoa/Saanapu mangrove estuaries (along the Mulivai River); **Safata 2:** Tafitoala–Fausaga Watershed (Tafitoala River), ~50 ha, upper and mid catchment of the Tafitoala River serving Fausaga, Tafitoala, and neighboring villages: this catchment is targeted for a small hydropower scheme and water supply, highlighting its strategic importance; **Fa'asaleleaga 4:** Puapua Lowland Forest Restoration Area, ~80 ha, includes degraded lowland forest lands of Pu'apu'a, which have been heavily logged in the past, remaining forest cover is fragmented and has been partly replaced by abandoned exotic tree plantations; **Fa'asaleleaga 3:** Sa'asa'ai–Lu'ua Wetland and Stream Area, ~15 ha, a cluster of small wetlands and streams near Sa'asa'ai and Lu'ua villages vital for drainage and flood control; **Fa'asaleleaga 5:** Safotulafai–Sapapali'i Coastal Catchment, ~10 ha, remaining natural vegetation along streams and coastal flats near Safotulafai and Sapapali'i villages, includes historic springs and pools (e.g. the Mata-o-le-Afu stream in Sapapali'i) that are vulnerable to pollution and drought.

The project will establish community-led conservation areas (CCAs) by: using CIMPs plus targeted surveys to map and delineate climate-critical KBAs and ridge-to-reef ecosystems; running gender-responsive, socially inclusive consultations to align with community priorities and obtain FPIC; building local capacity (≥40% women) in CCA management, gender-responsive conservation, livelihoods, M&E, enforcement, leadership, and advocacy; co-creating participatory CCA management plans that reflect women's and youth perspectives and document consent; and providing seed financing (basic infrastructure/equipment/ops) while securing long-term funding from grants, government, private partners, and potentially the LDF's EbA/Biodiversity window. Overall, the project plans to establish at least 505 ha new CCAs covering 500 ha of terrestrial and 5 ha of coastal and marine ecosystems having high climate adaptation and biodiversity conservation value.

Output 2.3. Public-Private Partnerships and Blue Economy projects focused on Ecosystem-based Adaptation are developed and implemented (funded by SCCF)

This Output aims to leverage investments, expertise, and innovative solutions from the private sector to enhance ecosystem resilience through nature-based and mixed adaptation solutions, support sustainable use of marine and land resources, and promote economic growth within the framework of the Blue Economy and prioritizing women led enterprise to the greatest extent possible. Additionally, this Output will ensure the long-term sustainability of the EbA/Biodiversity funding window of LDF (Output 1.2) by establishing sustainable financing models that engage the private sector and create continuous resource flows. This Output will be implemented in strong collaboration and using inputs of the UNDP/GEF BGI IP Project (NCA modules, PES policy framework, and IVL mechanism). The following Public-Private Partnership models are suggested for this project (to be confirmed at the inception phase):

Private Reserves: hotels, several commercial and agricultural enterprises in Samoa's project districts either own, lease, or operate on substantial land areas with ecosystems of high biodiversity and adaptation values that could be suitable for Private Reserve models via long-term agreement with MNRE. Potential candidates for such ecosystem conservation agreement include hotels (e.g., Return to Paradise Resort (Lefaga & Falease'ela), Sinaiei Reef Resort & Spa (Siumu), Coconuts Beach Club Resort & Spa (Siumu), Amoa Resort (Fa'asaleleaga 3); and agricultural companies (e.g., Ah Liki Investment Group, Tanumapua Farm, Samoa Tropical Products Ltd., Samoa Commercial Farmers Association, Samoa Agroforestry Network) all of which will be validated during the project's Inception phase.. In the framework of conservation agreement a landowner (hotel or agri-business) voluntarily sets aside a defined area (e.g. mangrove buffer, riparian forest, upland slope) as a Private Conservation Area for long-term ecological protection. The agreement specifies land boundaries, duration (typically 10–25 years, renewable), and permitted activities (e.g., no clearing, only ecotourism use). Ownership remains with the company or landholder, but MNRE recognizes the area as part of Samoa's conservation network. MNRE provides technical support (e.g. tree nursery access, conservation planning, restoration expertise). The business may be eligible for financial incentives such as access to the EbA/Biodiversity funding window of LDF, carbon market support (e.g., Blue Carbon projects), or eco-certification recognition. Private reserve may enhance branding as an eco-friendly or climate-resilient business.

Eco-Tourism and Mangrove and Coral Reef Conservation PPPs are suggested to unite selected hotels and resorts (e.g., Return to Paradise Resort, Sinaiei Reef Resort & Spa, Coconuts Beach Club Resort & Spa), village councils, the Samoa Tourism Authority, MNRE, MAF, and NGOs to co-manage Community Marine and Mangrove Reserves as well as adjacent unprotected areas of mangroves, coral reefs, and seagrass meadows and offer conservation-oriented visitor experiences. Such partnerships can support Community Protected Areas, establish coral nurseries, mangrove replanting, provide participatory ecotourism programs and environmental education, and charge a small reef and mangroves protection fee (via hotels) that flows back into conservation. Such projects will not only protect and restore ecosystems of high adaptation value, but also demonstrates EbA's economic value, generating local jobs (including for women), boosting village and resort income, and helping Samoa meet its Ocean Strategy goal of protecting 30% of marine areas by 2030.

Sustainable Fisheries and Marine Co-Management PPPs: can link village fishery committees, MAF, MNRE, and a private seafood buyer (or hotel group) with regional fish-industry and NGO advisers to create community-managed fishery areas that protect mangroves, lagoons and reefs while strengthening local supply chains. Such partnerships may include establishing no-take zones, mangrove replanting, and installation of offshore Fish Aggregating Devices to shift effort to pelagic species, providing cold-storage and processing equipment, and training fishers in sustainable practices. Such PPP may tie premium purchase contracts to community stewardship, aiming for a rise in reef-fish biomass (monitored by MNRE and MAF) and an income boost for fishing families. Such a model will enhance food security and climate resilience, empower women and youth through new roles in processing and monitoring, increase community income, and demonstrates a Blue Economy model where private investment secures natural capital for long-term prosperity.

Climate-Smart Agroforestry and Value-Chain PPPs: can restore degraded upland and coastal land in the project districts by interplanting cocoa, coconut and fruit trees with native forest species, stabilizing soils, reducing erosion and sediment run-off, and boosting climate-resilient livelihoods. Local agribusinesses (e.g., Savai'i Koko and SerendiCoco) can provide processing upgrades, guaranteed offtake and a “planting premium”, NGOs can train farmers in organic practices and certification; international buyers can co-invest in PPPs through CSR programs. MAF and MNRE can supply improved seedlings to the PPPs, extension and potentially tax incentives through PES policy framework (developing by BGI IP Project); village committees will supply land and labor and integrate the scheme into CIMP, with the EbA/Biodiversity funding window of LDF (Output 1.2) matching private replanting contributions. Over the project lifetime such PPPs will increase production of seedlings, apply contour planting and shade trees to prevent landslides on slopes, and increase annual farmer income through value-chain upgrades while creating processing jobs. The PPPs will advance Samoa's EbA, decrease land degradation, and promote Green/Blue Economy goals; deliver diversified, drought-resilient crops; strengthen organic branding; and establish a scalable blended-finance model that ties private profit to long-term ecosystem health.

Additionally the project will look for PPPs to scale up application of Bio-log Filters, palm-fiber cylinders that trap sediment, reduce turbidity, stabilize eroding riverbanks, and facilitate natural revegetation (technology piloted by the JICA-supported initiative “SDGs Business Verification Survey with the Private Sector for Environment Improvement and Reduction of Risks against Natural Disaster using the Bio-log Filter, Samoa (2019–2024)”.

This output will mobilize private and public partners for EbA by: conducting a gender-responsive mapping of stakeholders (government, firms, MSMEs, financiers, NGOs, donors) to support long-term financing of local EbA and the LDF window; convening multi-stakeholder forums to shape opportunities and negotiate PPPs with clear roles, financing, safeguards, and equal opportunities for women and youth; launching private-sector pilot projects to demonstrate viable EbA PPP models; and exploring investment incentives and instruments, such as tax breaks, green bonds, and PES (in cooperation with BGI IP Project) to crowd in sustainable capital that benefits both partners and local communities.

Outcome 3. Project EbA best practices and gender-inclusive models are replicated by Samoa's districts, projects, and stakeholders

Output 3.1. Comprehensive Gender Mainstreaming Strategy is developed and coordinated to incorporate gender equality into EbA initiatives (funded by SCCF)

The Gender Mainstreaming Strategy is crucial to design project activities that ensure the equitable participation of women and men in project planning, implementation, and benefits of EbA and other adaptation and conservation initiatives. This strategy will address gender-specific impacts of climate change and leverage the unique contributions of all community members in climate adaptation efforts. The project will thus conduct a detailed gender analysis to identify the different needs, roles, vulnerabilities, and strengths of women, men, and other gender groups in the context of the project area related to climate adaptation. Based on the gender analysis a comprehensive strategy (or updated Gender Action Plan) will be developed to outline specific objectives, activities, and indicators to ensure gender equality is integrated into each project output, addresses barriers to gender equality and leverages opportunities for enhancing the participation and benefits of all gender groups in Samoa. The project will organize training sessions for project staff, partners, and stakeholders on gender mainstreaming practices, the importance of incorporating gender equality in climate adaptation and biodiversity conservation efforts, and gender-sensitive data collection, analysis, and reporting to monitor progress towards gender equality objectives. At the project inception phase after the strategy development, the project will review project outputs to include specific gender considerations and targets. The project will appoint gender focal points within the project team and among partner organizations to oversee the implementation of the gender mainstreaming strategy and to provide guidance on gender issues. The Gender Mainstreaming Strategy will be updated annually and monitored through the Output 4.1. Delivery of this output will be coordinated with relevant gender mainstreaming activities of the BGI IP project.

Output 3.2. Communication and awareness strategy on EbA for climate adaptation and biodiversity conservation developed and implemented (funded by SCCF)

The Output focuses on conducting a wide-spread and effective awareness campaign among local communities and decision-makers in the project districts on EbA, climate resilience and biodiversity conservation. Recognizing the common misconception that grey infrastructure is the only effective response to climate challenges, the campaign aims to shift mindsets and foster a deeper understanding of the role of nature, and the effectiveness of EbA/NbS and commitment to environmental sustainability, as a no-regrets, win-win and even low-cost solution to climate adaptation and biodiversity conservation. Where possible, knowledge products will include examples of women's contributions to ecosystem management and adaptation. To achieve a significant and lasting impact, the project will engage specific expertise in communications, marketing, and behavior change. This specialized approach acknowledges that traditional environmental messaging may not always resonate with the general public or lead to behavioral change. By employing professionals skilled in influencing perceptions and actions, the campaign will more effectively convey the benefits of EbA and NbS and the critical role of natural ecosystems in climate adaptation. An integrated, behavior change-oriented campaign grounded in Samoan culture, powered by radio plus social video, and reinforced through village, church and school networks, will offer the strongest pathway to normalize EbA/NbS as the *default* climate-resilience tool across Samoa. This Output will include the following activities:

The project will design and annually refine a Communication Strategy with campaign materials, then implement it through inclusive, gender-responsive outreach: community workshops and seminars; briefings for local leaders, decision-makers, large firms and SMEs; school and college programs; coordinated media and social-media campaigns; and public events and exhibitions (aligned with the BGI IP). Together, these actions will inform and engage communities and stakeholders across Samoa, building lasting commitment to environmental sustainability, climate adaptation, and conservation.

Output 3.3. Gender-inclusive best practices and lessons learned on EbA are made available for use by Samoa's districts, and shared regionally and internationally for replication (funded by GEF TF)

Under this Output the project will conduct annual lessons learning sessions with the project partners to formulate the project lessons and develop best practices on EbA. The lessons and best practices will be applied for improvement of the project strategies (adaptive management) and disseminated among other districts of Samoa (and internationally) for effective learning and replication of successful approaches with an intention to speed up the climate adaptation efforts and deliver national GBF targets in Samoa. Under this Output the project will develop and implement the Knowledge Management Strategy and update Stakeholder Engagement Plan to ensure participatory, inclusive and integrated implementation of the project activities in accordance with EbA concept and principles. This Output will be delivered in coordination with BGI IP project and will use BGI IP communication and knowledge management mechanisms to share and receive EbA experience.

This output will systematically capture, organize, and share Samoa's EbA/NbS experience; run rotating annual learning sessions on Upolu and Savai'i that convene communities, women's committees, district officials, private partners, and agencies to document real-time lessons and feed them into adaptive management via an updated Lessons Log; and package insights into a bilingual (Samoan/English) database and practical case studies with budgets, contacts, and policy tips, amplified through inter-district workshops, SIDS webinars, and exchanges with regional/global platforms (e.g., SAMOA Pathway, WBCSD, Business for Nature, TNFD, UNDP NbS Accelerator).

Outcome 4. Effective adaptive management for results based on gender sensitive M&E

Output 4.1. Participatory and gender sensitive M&E system is implemented to measure the project effectiveness and tests the project Theory of Change (funded by GEF TF and SCCF)

Under this Output the project will develop and implement a participatory and gender-sensitive M&E framework (coordinated with BGI IP project) in accordance with the Results-Based Management (RBM) approach practiced by UNDP and GEF. For the M&E, the project will use standard UNDP approaches and procedures and the following groups of indicators:

Output Indicators will be used to measure delivery of the project Outputs (the project's products and services) and monitor routine project progress on monthly and quarterly basis. Collection of information on the Output indicators will be performed by the Project Management Unit (PMU) and represented in the project Quarterly and Annual Reports;

Outcome Indicators in the Project Results Framework (PRF) will be used to indicate the progress toward and achievement of the project Outcomes (e.g., capacity, management, or behavioral changes happened in result of use of the project Outputs by target

groups of stakeholders). Collection of information on the Outcome indicators will be performed by the PMU and key partners. Project progress against Outcome indicators will be reflected in the Annual, Mid-Term and Terminal Project Reports, GEF Core Indicator Framework updates, and Mid-Term Review and Terminal Evaluation Reports.

Impact Indicators will be used to measure changes in the ecosystem health and extent, climate resilience of communities, carbon sequestration, progress towards GBF Targets, and community livelihood as a result of NbS adaptation, ecosystem restoration and improved protection.

Social and Environmental Risk Indicators will be used to assess impact of the project activities on gender equality and involvement of women in sustainable aquaculture development as well as to monitor potential social and environmental risks that may be produced by the project. The ongoing data collection on the social and environmental risks indicators will be quarterly carried out by the PMU in cooperation with project partners. The project will establish a simple Grievance Redress Mechanism (GRM) in the project area.

The information and data received through the project M&E will be applied for the project adaptive management and learning, including through Mid-Term Review and Terminal Evaluation. At the last year the project will produce a robust Exit Strategy to ensure sustainability and ownership of the project Outputs. The M&E activities are described in the M&E Plan section of the ProDoc.

Key Stakeholders

The project has included a wide range of consultations during the PPG development process, including Inception and Validation Workshops in Apia, stakeholder workshops on Upolu and Savai'i, individual consultations and focus groups with local people in the project districts. During the PPG, inputs from local indigenous communities (through district and village representatives under the fa'amatai system) were systematically captured. Community feedback was documented in detailed matrices and used to refine both *what* the project will do and *where* it will do it. Specifically, community-identified priorities, e.g., water safety and springs protection, continued/expanded coastal protection (including hybrid seawalls), mangrove and riverbank replanting, nursery support, drainage and floodwater management, reef and marine reserve extensions, and livelihood options such as agroforestry were incorporated into the final selection and packaging of on-the-ground EbA investments under Component 2 (Outputs 2.1–2.3) and the targeting of sites/activities within the nine districts.

A total of 155 stakeholders (77 women, or 49.7%) were consulted (see details in the Annex 8a. Stakeholder Consultations). As a result of Stakeholder Analysis, the following groups of stakeholders were identified for project:

Stakeholder	Mandate/ Function	Role in the project development and implementation
Ministry of the Natural Resources and Environment (MNRE), including The Division of Environment and Conservation (DEC), Forestry Services, Land Management Division, Technical Services, Water Resources Division, Climate Change Division	Responsible for state policy in environmental protection and rational use of natural resources, including EbA	Roles in the project: Implementing Partner and the Project Board Chair; supervision of project implementation; direct participation in the delivery of all project Outputs; project co-financing. Engagement mechanism: PPG phase, Inception Workshop, Project Board meetings, working meetings, M&E activities
Ministry of Agriculture and Fisheries (MAF)	Implements state policy and management in agriculture, fishing, and aquaculture, including soil fertility conservation and enhancement, including climate adaptation of the sectors	Roles in the project: Member of the Project Board; project partner for the Outputs 1.3. EbA Nurseries, 2.1. EbA initiatives, and 2.3. Blue and Green PPPs; participation in the M&E

		<p>Engagement mechanism: Inception Workshop, Project Board meetings, working meetings with PMU, M&E activities</p>
Ministry of Finance (MOF)	Mandated to provide policy and strategic advice, as well as financial services to the Government in order to achieve sustainable, long-term economic outcomes and fiscal viability towards the advancement of the national vision to 'achieve quality of life for all Samoan citizens', including climate adaptation finance	<p>Roles in the project: Member of the Project Board (a mandatory member of PB for all GEF projects in Samoa); key project partner for the Output 1.2. EbA/Biodiversity funding window of LDF; participation in the M&E</p> <p>Engagement mechanism: Inception Workshop, Project Board meetings, working meetings, M&E activities</p>
Ministry of Works, Transport and Infrastructure, specifically the Planning and Urban Management Agency (PUMA)	Responsible for ensuring sustainable use, development and management of land in Samoa, with the PUMA Act provides the mandate for the approval and consent on all development activities in Samoa	<p>Roles in the project: Member of the Project Board; project partner for the Outputs 2.1. EbA initiatives and 2.3. PPPs; participation in the M&E</p> <p>Engagement mechanism: Inception Workshop, Project Board meetings, working meetings with PMU, participation in the project events, M&E activities</p>
Ministry of Women, Community and Social Development (MWCSD)	Has the overall mandate to support local development through local government, and to provide vital link between GoS and communities	<p>Roles in the project: key project partner for the Outputs 3.1. Gender Strategy and 4.1 Gender-inclusive M&E</p> <p>Engagement mechanism: Inception Workshop, working meetings with PMU, M&E activities</p>
National Environment Sector Steering Committee (NESSC)	Inter-sectoral multi-stakeholder body led by MNRE and including Ministry of Finance, Ministry of Agriculture and Fisheries, Samoa Tourism Authority (STA), and other government agencies and NGOs. The Committee serves as the primary coordination body for the Environment Sector. Its key mandate includes providing leadership, oversight, and strategic direction for the planning and implementation of environmental policies, projects, and initiatives. The NESSC plays a crucial role in fostering collaboration among various government ministries, private sector entities, civil society organizations, and development partners to ensure integrated management of Samoa's natural resources and environmental sustainability.	<p>Roles in the project: inter-sectoral coordination and facilitation of joint implementation of BGI IP and GEF/SCCF Projects; key project partner for Output 1.1. EbA Steering Committee; coordination of delivery of all project Outputs</p>

		<p>Engagement mechanism: Inception Workshop, Project Board meetings, working meetings with PMU, participation in the project events, M&E activities, separate NECCS coordination meetings in framework of government cofinancing.</p>
<p>Administrations of the Falealili 1 (West), Falealili 2 (East), Siumu, Safata 1, Safata 2, Lefaga & Faleaseela, Faasaleleaga 3, Faasaleleaga 4, Faasaleleaga 5</p>	<p>Manages local economy and social-economic development, including environmental protection and climate adaptation at district level</p>	<p>Roles in the project: Member of the Project Board; key project partner for Outputs 2.1-2.3; participation in the M&E</p> <p>Engagement mechanism: Inception Workshop, PB meetings, working meetings with PMU, participation in the project events and activities, M&E activities</p>
<p>Local Communities and Community PAs of the Falealili 1 (West), Falealili 2 (East), Siumu, Safata 1, Safata 2, Lefaga & Faleaseela, Faasaleleaga 3, Faasaleleaga 4, Faasaleleaga 5</p>	<p>Key project stakeholders and beneficiaries on the project areas involved in different economic sectors.</p>	<p>Roles in the project: key project stakeholders and beneficiaries; project partners and target audience for Outputs 2.1-2.3, 3.2-3.3; participation in safeguard screening and monitoring of all project activities; users of GRM; participation in the project M&E</p> <p>Engagement mechanism: Inception Workshops in the districts, working meetings with PMU, participation in the project events and activities, M&E activities</p>
<p>National Academy of Sciences of Samoa, Monash University, Pacific Action for Climate Transition Research Centre, National University of Samoa</p>	<p>Scientific research, development, and technical advice on the ecosystem conservation, restoration, and EbA</p>	<p>Roles in the project: project partner for the Outputs 3.2 EbA Awareness and 3.3. Knowledge Management; consultations on Outcome 2; participation in the M&E</p> <p>Engagement mechanism: Inception Workshop, working meetings with PMU, participation in the project events, M&E activities</p>
<p>Micro, Small, and Medium Enterprises (MSMEs), large business companies, and investors in the tourist, agriculture, forestry, and fishery sectors</p>	<p>Development of business projects, PPPs, and investment initiatives</p>	<p>Roles in the project: project partners for Outputs 1.1. EbA Committee, 1.2. EbA/Biodiversity funding window of LDF, 1.3 EbA Nurseries, and all Outputs</p>

		<p>under Outcome 2; participation in the project M&E; providing co-financing for the project activities</p> <p>Engagement mechanism: Inception Workshops in the districts, working meetings with PMU, participation in the project events and activities, M&E activities</p>
Non-governmental environmental organizations (NGOs)	Possess knowledge and experience in biodiversity conservation, EbA, species conservation, capacity building, awareness raising, and environmental education.	<p>Roles in the project: Member of the Project Board; project partner for Outputs 2.1-2.3; participation in the M&E</p> <p>Engagement mechanism: Inception Workshop, PB meetings, working meetings with PMU, participation in the project events, M&E activities</p>
International Organizations and Donors, including Live & Learn Environmental Education, World Bank, Asian Development Bank, Australian Centre for International Agricultural Research (ACIAR), the Crawford Fund, and the Australian Department of Foreign Affairs and Trade (DFAT)	International support and funding of biodiversity conservation, EbA, and community livelihood development in Samoa	<p>Roles in the project: exchange of the best EbA and NbS practices with the project; consultations to the projects on the Outputs 1.2 EbA/Biodiversity funding window of LDF, and all Outputs under Outcome 2; participation in the M&E; project co-financing</p> <p>Engagement mechanism: Inception Workshop, working meetings with PMU, participation in the project events and activities, M&E activities</p>
United Nations Development Programme (UNDP) and other UNDP/GEF projects	Sustainable Development and Biodiversity Conservation Programs in Samoa, including climate adaptation	<p>Roles in the project: Member of the Project Board; supervision of the project implementation; project quality assurance</p> <p>Engagement mechanism: Project Board meetings, Inception Workshop, working meetings with PMU, participation in the project events, M&E activities</p>
UNDP GEF Small Grant Programme	The UNDP GEF Small Grants Programme (SGP) in Samoa serves several critical functions aimed at promoting environmental sustainability and community development through small grants for Community-Based Environmental	Roles in the project: support of delivery of Outputs 1.2,

Knowledge

Generating knowledge and lessons learning is a considerable part of the project: the project has entire Output 3.3 for the Knowledge Management and dissemination of its lessons and best practices. The following knowledge products will be produced by the project:

Knowledge Management Strategy: will be developed at the project inception phase and updated annually (Output 3.3);

Annual Project Reports: comprehensive reports detailing the progress, achievements, and challenges of the project including case studies, success stories, lessons learned, and impact assessments (Output 3.3 and Output 4.1);

Best Practice Manuals: guides and manuals on implementing of different EbA models in Samoan and other similar island state context (Output 3.3);

Technical Briefs and Policy Papers: documents aimed at policymakers and other stakeholders, providing insights into the project's policy drafts, ToRs, and SoP (e.g., for Output 1.1. EbA Committee and Output 1.2. LDF's EbA/Biodiversity Funding Window) and actual project results on EbA implementation (Outputs 2.1-2.3);

Training Programs and Curriculums: detailed training programs on EbA for NESSC (Output 1.1), LDF management (Output 1.2), and EbA techniques (Outputs 1.3, 2.1-2.3);

Media products: short documentaries showcasing the project's impact, featuring interviews with local communities, project staff, and stakeholders; visually engaging materials that summarize key project information, outcomes, and benefits of EbA for biodiversity conservation and climate resilience; regular press releases, success stories, and educational posts shared on platforms like Facebook, Twitter, and Instagram to engage a broader audience and raise awareness (Output 3.2);

The project will create visibility for knowledge and lessons learned using the following tools (see the section *South-South and Triangular Cooperation (SSTrC)* for more details):

- **Local Workshops and Trainings:** interactive sessions held in different districts to engage local communities, share project progress, and gather feedback, including hands-on training and participatory planning exercises;
- **National and Regional Webinars:** online seminars to disseminate knowledge to a wider audience, including government officials, NGOs, and private sector representatives. Topics will cover EbA, NbS, natural resource management, and gender mainstreaming (will be organized in cooperation with BGI IP Project);
- **International Webinars:** sessions aimed at sharing the project's experiences and best practices with global audiences, particularly other SIDS;
- **Global Conferences:** participation in international forums such as the United Nations Framework Convention on Climate Change (UNFCCC) conferences, the Convention on Biological Diversity (CBD) meetings, and the World Business Council for Sustainable Development (WBCSD) events, and BGI Integrated Programme events;
- **Regional Platforms:** engagement with regional bodies like SPREP, SPC, PIF, and PIFON to share knowledge and collaborate on EbA and NbS initiatives;
- **Local and National Conferences:** participating in conferences and meetings within Samoa to present project findings and foster collaboration among local stakeholders.

Project contribution to the policy coherence

The project is intentionally structured to advance policy coherence in Samoa, i.e., via integrating EbA and biodiversity conservation objectives into domestic policymaking by fostering synergies, managing trade-offs, and minimizing negative spillovers across sectors, levels of government, and timeframes. Concretely, it aligns horizontal policies through a multi-sectoral EbA coordination mechanism (upgrading NESSC/SAC) so that environment, water, agriculture, fisheries, tourism, DRM and

finance act on a shared agenda contributing to EbA and biodiversity conservation; it aligns vertically by using CIMPs as district-level blueprints that translate national strategies (NDC, NESP, SOS, SDS) into local actions; and it aligns temporally via a gender-sensitive M&E/learning loop that keeps outcomes durable as conditions change. These design choices directly mirror STAP's coherence pathways: maximize synergies, reconcile trade-offs with national goals and MEAs, and address spillovers/leakage, thereby safeguarding and scaling GEBs and adaptation benefits rather than allowing parallel policy tracks to undercut them.

Operationally, the project hard-wires coherence into finance, implementation, and evidence. The EbA/Biodiversity window of the national Loss & Damage Fund convenes public, private, and community finance around nature-based priorities, an approach to reorienting incentives and mobilizing blended resources for outcomes that last beyond project cycles. Natural Capital Accounting from the companion BGI IP Project, coupled with the project's KM/communications work, gives planners and budget holders a common economic language to choose green over grey infrastructure, reducing perverse subsidies and supporting integrated, cross-sector budgeting, and Public-Private Partnerships for EbA. On the ground, community-led CPAs and bundled EbA measures (restoration and protection of mangroves, reefs, riparian buffers, and development of agroforestry) reduce leakage across boundaries and lock in ridge-to-reef benefits; the gender-responsive M&E system then tracks results for adaptive management and national reporting, reinforcing coherence between local delivery and national/MEAs commitments.

Innovativeness, Potential for Transformation and Scaling Up

Innovativeness. The project has significant innovation potential for Samoa, and potentially other SIDS. The key innovations suggested by the project are the following:

- **A hybrid seawall that goes beyond business-as-usual EbA and grey infrastructure:** The project purposely layers classic nature-based measures (mangrove, riparian-forest and coral-reef restoration) with a hybrid seawall that marries boulders, newly planted mangroves and an on-shore forest belt, a configuration not yet tested in Samoa. This blended defense is expected to absorb up to 97% of wave energy while preserving habitat and cultural seascapes, offering a climate-smart upgrade on hard walls that dominate many Pacific coastlines;
- **EbA/Biodiversity funding window of LDF:** Creating a permanent, EbA/Biodiversity funding window for Samoa's Loss and Damage Fund that can host EbA/biodiversity grants and future loss-and-damage finance shifts Samoa from ad-hoc donor projects to a diversified, country-owned financing platform. No other Pacific SIDS has yet combined these revenue streams under one governance and fiduciary structure, giving Samoa an early-mover advantage in pooling scarce finance and aligning it with national priorities;
- **Public-Private Partnerships (PPPs) for EbA:** The project's PPP for EbA portfolio is innovative because it hard-wires private capital and market incentives into ecosystem stewardship across multiple sectors: long-term voluntary conservation easements turn hotel and agribusiness estates into private reserves that extend Samoa's protected-area network; reef- and mangrove-protection levies embedded in resort bills create a self-sustaining revenue stream for coral nurseries and CPA management; results-based purchase agreements link village fishery committees with seafood buyers, rewarding biomass recovery while easing pressure on near-shore reefs; climate-smart agroforestry deals let local processors underwrite erosion-controlling tree-crop systems in exchange for premium supply contracts; and a mangrove-seagrass Blue Carbon pilot, together offering a modular, finance-ready template that other SIDS can replicate.

Potential for up-scaling. The project has a significant potential for scaling up in Samoa and potentially across other SIDS. By institutionalizing EbA inside NESSC, creating an EbA/Biodiversity funding window of LDF, and upgrading core nurseries and creating coral propagation hubs, it sets up the coordination, financial and technical "backbone" that any Samoa district can plug into. The Fund's multi-window architecture (grants, biodiversity offsets, blue-carbon revenue, loss-and-damage finance) gives MNRE a steady, diversified stream of capital to roll out additional riparian forest, mangrove, reef and agroforestry packages beyond the nine project districts, while the community-friendly cash-for-work model, Community PAs, and PPP agreements ensure that new sites can be mobilized without complex grant administration. Replicable EbA models produced by the project will be fully available for other districts to implement. A real-time, gender-sensitive M&E system will provide the data needed to cost and priorities expansion, and the project's communication and learning track turns each field season into fresh training content for other villages, ministries and schools. As a result, Samoa can scale from the initial ~1,000 ha of restored ecosystems to the tens of thousands of hectares identified in its CIMPS and Ocean Strategy with minimal reinvention.

Regionally, the package offers a ready blueprint for other SIDS. Key project innovations and transformative activities address barriers common across SIDS: fragile public finances, limited land, heavy tourism dependence, diffuse private landownership, and low private sector involvement in EbA initiatives. Because the project EbA models are openly produced and disseminated, neighboring islands

can adapt them quickly; MNRE's role as a SPREP and BGI IP knowledge node further accelerates south-south transfer. In short, the initiative converts Samoa into both a national demonstration site and a regional up-scaling engine for coastal adaptation finance and practice.

Sustainability. Ensuring the long-term sustainability and durability of the project results is critical for achieving lasting impacts. The Samoa project incorporates several mechanisms to embed institutional and financial sustainability into its design, leveraging national systems, community and private sector leverage. At the policy level, NESSC is formally upgraded to an EbA Coordination Committee, given an explicit mandate in its Terms of Reference, and linked to a standing technical EbA working group; this locks EbA into Samoa's cross-sector planning and annual budget cycle rather than leaving it as a time-bound project. On the finance side, a legally constituted LDF with separate sub-windows for EbA grants and future loss-and-damage flows creates a permanent vehicle to channel government allocations, an International Visitor Levy, private offsets, and PES and Blue Carbon revenue revenue back into protection and restoration of ecosystems of high adaptation, biodiversity and economic value long after the GEF/SCCF grant ends. The first round of small grants will be deliberately routed through the Fund during the project so that fiduciary systems are in place and a performance track record exists before external donors or GCF are approached for larger contributions.

Technical and community-based mechanisms will reinforce that financial spine. Government nurseries at Togitogiga, Vailima and Maota will be tripled in capacity, while two coral propagation nurseries established, ensuring a local climate resilient supply chain of seedlings and coral fragments; accompanying training packages build a cadre of MNRE and village technicians who can plan EbA, propagate seedlings, plant and monitor success without outside consultants. Cash-for-work implementation will give households an immediate income stake during establishment, but each mangrove, agroforestry, reef, quarry reclamation or hybrid seawall site is simultaneously embedded in a village memorandum of understanding that designates community stewards, sets out maintenance duties, and links them to follow-on grants from the LDF or to revenue streams such as reef protection levies collected by partner resorts via PPPs. Community-led Protected Areas will receive simple management infrastructure and five-year operating plans, and they are eligible for matching support from PPP partners, so ongoing costs are tied to real economic activity rather than uncertain annual appeals. Blue Carbon projects will have a significant potential to generate income through credit selling on voluntary carbon market.

Finally, knowledge management and adaptive management loops will keep the outputs relevant, efficient, and funded. A gender-sensitive M&E system will track ecological and socio-economic performance in real time, feeding data to an annual learning forum where strategies and budgets are adjusted; lessons and cost norms will be packaged into open-access EbA models that other districts, NGOs and private firms can pick up, reducing transaction costs for replication. Because PPP models are drafted and disseminated openly, new stakeholders can copy proven templates instead of starting from scratch. Together, these legal, financial, technical and social mechanisms convert one-off outputs into self-financing, locally managed assets that continue delivering adaptation and biodiversity benefits and attracting investment well beyond the project's lifetime.

Project Budget is presented in the Annex G.

[1] <https://www.pacific-r2r.org>

[2] adaptation-fund.org

[3] caribbeanbiodiversityfund.org

[4] unfccc.int

[5] kiwainitiative.org

[6] pacific-r2r.org

[7] erc.undp.org

[8] samoobserver.ws

[9] https://www2.jica.go.jp/ja/priv_sme_partner/document/955/F172064_summary.pdf

[10] fao.org

[11] climatechange.gov.to

[12] sprep.org

[13] <https://www.nrcs.usda.gov/plantmaterials/idpmstn7248.pdf>

[14] <https://www.sciencedirect.com/science/article/pii/S1385110123001181>

[15] https://www.nature.org/content/dam/tnc/nature/en/documents/TNC_BOA_ReefInsuranceFeasibility_FLHI_113020.pdf

[16] <https://search.issuelab.org/resources/25951/25951.pdf>

[17] conservationgateway.org

[18] cisl.cam.ac.uk

[19] library.sprep.org

[20] news.mongabay.com

[21] seagrantpr.org

[22] https://appliedsciences.nasa.gov/sites/default/files/2024-12/BlueCarbon_Part1_Final.pdf?utm_source=https://www.nature.com/articles/s44183-025-00141-6?utm_source

[23] The final technical design of the hybrid protection measure (including exact lengths, cross-sections, material specifications and any complementary drainage or access works) will be completed during project implementation by qualified coastal engineers and EbA specialists, in line with Government design standards and UNDP's safeguards requirements. The project budget (estimated at US\$880,000 for works and associated soft measures) is based on MNRE experience with similar 1 m boulder/rock seawalls and on unit-cost benchmarks from comparable hybrid pilot schemes in the Pacific, adjusted to cover mangrove and forest establishment and several years of early maintenance. Detailed feasibility and design studies will confirm the most appropriate combination of hard and nature-based measures and will produce a maintenance and monitoring plan, with associated safeguard measures and responsibilities, before works are tendered.

[24] The sites may be changed at the project inception phase due to changes in the situation

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)

Implementing Partner and Execution Modality: the project will be executed under National Implementation Modality (NIM). The Ministry of Natural Resources and Environment (MNRE) will serve as the Implementing Partner (IP), responsible for overall project management. An overall risk rating of Low was concluded for IP (Annex 19. HACT Micro Assessment for MNRE) indicating full ability to manage the project. The IP is fully responsible for executing this project.

UNDP: UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. The UNDP GEF Executive Coordinator, in consultation with UNDP Bureaus and the Implementing Partner, retains the right to revoke the project DOA, suspend or cancel this GEF project. UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Board and attends Project Board meetings as a non-voting member.

Project Governance: the project implementation will be supervised and guided by the Project Board (PB) (same PB as for the BGI IP Project in Samoa) composed from the representatives of Samoa Umbrella for Non-Governmental Organisations (SUNGO), Ministry of Agriculture and Fisheries (MAF), Samoa Tourism Authority (STA), Samoa Bureau of Statistics (SBS), Ministry of Women, Community and Social Development (MWCSO) and the Aid Coordination and Debt Management Division (ACDMD) of the Ministry

of Finance (MOF). . The PB will provide strategic guidance, approve annual work plans and budgets, and ensure alignment with national priorities and policies. The PB will be chaired by the Project Director, MNRE.

Project Management Unit (PMU): This project will be implemented by the BGI IP Project Management Unit (PMU), but strengthened with additional staff and increased involvement of existing staff for the period of the project overlap. The **Project Coordinator** is the senior most representative of the PMU. The PMU will also include **Project Finance and Administration Officer**. Three original BGI IP consultants will support the PMU: **M&E Consultant, KM and Communication Consultant, and Safeguards and Gender Consultant**. The additional staff for implementation of GEF/SCCF Project will include: **Governance, Capacity & Trust Fund Officer** (responsible for GEF/SCCF Component 1); **Technical Officer for Ecosystem Restoration & EbA** (responsible for GEF/SCCF Component 2); and **Procurement & Logistics Assistant** to support Project Finance and Administration Officer. The Project Coordinator will be a designated representative of the PMU who is expected to attend all board meetings and support board processes as a non-voting representative.

Financial Flow Management: the GEF grant will be administered by UNDP, which will disburse funds to the IP and PMU based on approved work plans and budgets. UNDP, as the GEF Implementing Agency, is responsible for the oversight of the GEF resources. Project co-financing will be managed by respective co-financing partners, with the UNDP CO and PMU tracking contributions.

Budgeting and Accounting: Annual Work Plans (AWPs) with detailed budgets will be prepared by the PMU and approved by the PB, including detailed budgets for all activities. The PMU will maintain accurate financial records and submit quarterly financial reports to UNDP, ensuring transparency and accountability.

Procurement: the project procurement will be implemented in accordance with Government Procurement Policies as a full NIM project. The Procurement Plan developed by the PMU, detailing all procurement activities, timelines, and budgets, will be followed.

Audits: the project will be audited as per UNDP Financial Regulations and Rules and applicable audit policies. Additionally, UNDP CO and PMU will organize independent spot checks of financial management by the project partners.

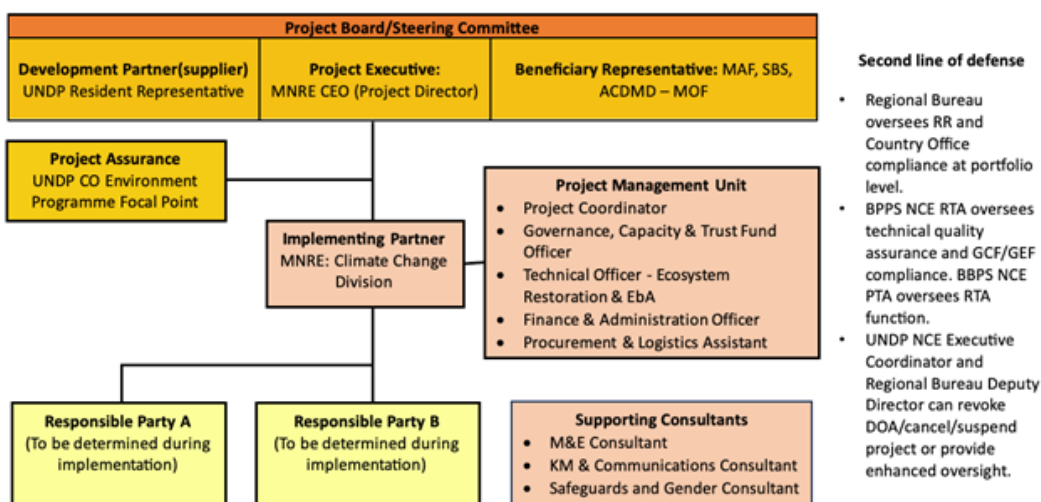


Figure 9. Project Governance structure

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)

Cooperation with ongoing initiatives and projects :

The success of a project of this nature hinges on dynamic, strategic and multi-sector partnerships across a number of government agencies, NGOs, farmers, and local communities. As such the project will be implemented in strong coordination and collaboration with other relevant programs and projects in the country to ensure (1) **Resource Optimization**, including funding, expertise, and manpower, to avoid duplication of efforts and obtain co-financing; (2) **Knowledge and Experience Sharing** to enhance the effectiveness of each project, leading to more innovative and well-rounded solutions; and (3) **Synergy in objectives** to amplify their impact, making it easier to achieve these shared objectives on a larger scale. Specifically, the project will directly collaborate with the following initiatives in Samoa:

Project/Program	Objectives/Focus	How the BGI IP Project will collaborate with the partner
UNDP/GEF BGI IP project “Coastal Resilience Samoa”, 2025 – 2029, GEF ID 11263	The project will ensure nature-positive development and reduce ecosystem degradation in Samoa by valuing nature and applying Nature-based Solutions (NbS) with specific application to food and tourism sectors. This Objective will be achieved through implementation of five project components that include (1) integration of nature values via Nature Capital Accounting (NCA) in key economic sectors through targeted economic, governance and financial interventions; (2) implementation of landscape and seascape NbS in key ecosystems supporting the food and tourism sectors; (3) unlocking private sector capital and finance for NbS action in Samoa through PES and International Visitor Levee; (4) knowledge management, awareness, and gender-inclusive engagement to capture and share knowledge in relation to NbS and natural capital; and (5) a robust Monitoring and Evaluation (M&E) system to systematically track progress, and ensure the effectiveness and sustainability of the NbS models	GEF/SCCF Project will be implemented by the PMU established for BGI IP project and in full coordination with BGI project; The projects will be coordinated by NESSC to ensure their full synergy; GEF/SCCF and BGI IP Projects are designed as fully complementary initiatives with separate reporting lines and will be implemented together to achieve large-scale implementation of NbS and EbA activities to improve climate resilience and biodiversity conservation in Samoa.
National 3 Million Tree Planting Campaign, 2022-2028	The campaign is led by Samoa’s MNRE Forestry Division, with support from schools, village councils, farmers, NGOs, and partners such as UNDP-GEF, the EU-funded PACRES programme, and the University of the South Pacific. The campaign is designed to restore degraded forest and watershed land, increase native-tree cover and biodiversity, stabilize soils and water supplies, and sequester carbon to help counter climate-change impacts	GEF/SCCF Project is developed a fully complementary initiative to the National 3 Million Tree Planting Campaign and will be implemented in full coordination with the Campaign via MNRE as the lead agency
Community-Based Fisheries Management Programme (CBFMP) of the Ministry of Agriculture & Fisheries (MAF), ongoing	More than 120 coastal villages have village fishery plans, no-take zones and by-laws that protect reefs and lagoon species. Builds local enforcement committees, provides giant-clam and sea-grape restocking, and trains fishers in reef-friendly	GEF/SCCF Project will fully collaborate with CBFMP to deliver Outputs 1.3, 2.1-2.3, specifically on restoration of mangroves and coral reefs, establishment and management of

	practices. Recognized by MAF as “nationally and regionally” important program for food security and climate-resilient fisheries.	Community Coral Reef and Mangroves Reserves, and development of Blue PPPs
ADB Alaoa Multipurpose Dam Project (#52111-001), 2024-2030	This project is funded through the Asian Development Bank (ADB) and supported by the Ireland Trust Fund for Building Climate Change and Disaster Resilience in Small Island Developing States. Objective: Construct a multi-purpose dam to reduce flood risks in Apia; provide sustainable water supply; and support flood risk management and biodiversity conservation. The project will establish Biodiversity Offset Fund to finance conservation/restoration in compensation for ecological impacts from dam construction and associated infrastructure.	GEF/SCCF will potentially collaborate with ADB Project to establish EbA/Biodiversity funding window of LDF (Output 1.2), combining suggested funds under one umbrella entity with multiple windows or sub-accounts: (a) an EbA & Conservation window (funded by GEF, donor contributions, International Tourist Levy, PES, etc.) and (b) a Loss & Damage (L&D) window (to finance climate disaster recovery and resilience building measures).
FAO FishFAD Project: “Improving livelihoods through sustainable near-shore Fish Aggregating Device (FAD) fisheries” (FAO-Japan), 2019-2026	Strengthens community FAD programmes so fishers can target migratory tuna offshore instead of reef fish, develops fisher cooperatives, and promotes revenue streams (eco-tourism, processing) while improving safety at sea – a direct adaptation to warming reef conditions.	GEF/SCCF Project will collaborate with FishFAD project (one intersecting year) and will use its experience for development of Output 2.3. Blue and Green PPPs in the project districts
ADB Project “Promoting Climate-Resilient and Sustainable Blue Economies (regional), 2023-2026	Aims to enhance investments in ocean health and climate-resilient, sustainable blue economies among its 14 Pacific Developing Member Countries (DMCs). This initiative is set against the backdrop of these nations facing significant environmental challenges, including the impacts of climate change on their marine ecosystems and economies.	The project was reviewed during PPG to avoid duplication with the GEF/SCCF project; The GEF/SCCF Project will apply relevant best practices and lessons learned from the ADB Project, especially on application of NbS, EbA, and PES; The GEF/SCCF project will coordinate its work plans with ADB project to avoid potential duplication in implementation and develop strong collaboration (both projects are likely to intersect in 2026)
ADB Project “Promoting Climate-Resilient and Sustainable Blue Economies (regional), 2023-2026	Aims to enhance investments in ocean health and climate-resilient, sustainable blue economies among its 14 Pacific Developing Member Countries (DMCs). This initiative is set against the backdrop of these nations facing significant environmental challenges, including the impacts of climate change on their marine ecosystems and economies.	The GEF/SCCF Project will apply relevant best practices and lessons learned from the ADB Project, especially on application of EbA, NbS and PES; The GEF/SCCF project will coordinate its work plans with ADB project to avoid potential duplication in implementation and develop strong collaboration (both projects are likely to intersect in 2026);
Kiwa Initiative (regional), on-going	The Kiwa Initiative is a multi-donor program that aims to strengthen the climate change resilience of Pacific Island ecosystems, communities and economies through Nature-Based Solutions (NbS), that is to say by protecting, sustainably managing and restoring biodiversity. It is founded on an easier access to climate change adaptation and NbS funding for national and local authorities, civil	The Kiwa Initiative was taken in account to avoid duplication with the GEF/SCCF project during PPG;

	society, international and local NGOs and regional organizations in Pacific Island Countries and territories, including the three French overseas territories.	<p>GEF/SCCF Project will use the recommendations and best practices of Kiwi Initiative;</p> <p>The GEF/SCCF project will coordinate its work plans with Kiwi Initiative to avoid potential duplication in implementation and develop strong collaboration;</p> <p>Potentially, Kiwi Initiative can provide in-kind co-financing for some Outputs of GEF/SCCF project</p>
The Samoa-New Zealand Climate Finance Partnership Agreement, 2023-2030	NZ Assistance to Samoa Government to build climate resilient Samoa through collaboration with focus on NbS adaptation and local community climate resilience.	<p>The Partnership was taken in account to avoid duplication with the GEF/SCCF project during PPG;</p> <p>GEF/SCCF Project will use the recommendations and best practices of the Partnership on the EbA and NbS for coastal resilience, climate-smart agroforestry, and community capacity building;</p> <p>The GEF/SCCF project will coordinate its work plans with the Partnership to avoid potential duplication in implementation and develop strong collaboration;</p> <p>Potentially, the Partnership can provide in-kind co-financing for some Outputs of GEF/SCCF Project</p>

Core Indicators

Indicate expected results in each relevant indicator using methodologies indicated in the GEF-8 Results Measurement Framework Guidelines. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Indicator 1 Terrestrial protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
500	500	0	0

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
500	500	0	0

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

							21.00		
--	--	--	--	--	--	--	-------	--	--

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1000	1000	0	0

Indicator 3.1 Area of degraded agricultural lands under restoration

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

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
990.00	990.00		

Indicator 3.3 Area of natural grass and woodland under restoration

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

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
10.00	10.00		

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
500	300	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)

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	300.00		

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

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

Indicator 5.1 Fisheries under third-party certification incorporating biodiversity considerations

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

Type/name of the third-party certification

Indicator 5.2 Large Marine Ecosystems with reduced pollution and hypoxia

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

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

Indicator 5.3 Marine OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
Community Blue Carbon Project Area	NA	500.00	500.00		

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)	787867	683762	0	0
Expected metric tons of CO₂e (indirect)	0	0	0	0

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)	787,867	683,762		
Expected metric tons of CO₂e (indirect)				
Anticipated start year of accounting	2026	2026		
Duration of accounting	20	20		

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

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO₂e (direct)				
Expected metric tons of CO₂e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

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

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

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

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

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	5,000	5,000		
Male	5,000	5,000		
Total	10,000	10,000	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)

Indicator 1.1. Terrestrial protected areas created: under the Output 2.2 the project will establish new CPAs to protect riparian and slope ecosystems of high adaptation value. The total area of established CPAs will cover at least 500 ha of forest ecosystems in the project districts, many of those identified as KBA;

Indicator 2.1. Marine protected areas created: under the Output 2.2 the project will establish of new CPAs to protect coastal ecosystems of high adaptation value, including mangroves, coral reefs, and sand beaches. The total area of established marine CPAs will cover at least 5 ha of the marine and coastal ecosystems in the project districts;

Indicator 3. Area of land ecosystems under restoration: under the Outputs 2.1 and 2.3 the project will support restoration of 990 ha of riparian (CI 3.2) and 10 ha of mangroves (CI 3.4) ecosystems of high adaptation value. Additionally, the project will restore 5 ha of coral reefs. So, the total area of land ecosystems under restoration will be no less than 1,000 ha;

Indicator 4. Area of landscapes under improved practices (outside PAs): under the Output 2.1 the project will put at least 300 ha in the project districts under sustainable agroforestry as a climate adaptation and food security measure.

Indicator 5. Area of marine habitat under improved practices (outside PAs): under the Output 2.1 the project will put 500 ha of mangroves and seagrass meadows under the community Blue Carbon projects.

Indicator 6. Greenhouse Gas Emission mitigated. The following inputs were used for carbon gains calculation using FAO Ex-Act Tool (Version 9.3): the current deforestation rate in Samoa is 0.29% for tropical forest and mangroves based on the data between 2010-2020 <https://worldpopulationreview.com/country-rankings/deforestation-rates-by-country>. The project will protect 500 ha of tropical forest via establishment of terrestrial CPAs and 5 ha of mangroves via establishment of coastal CPA. It will save 5.8% of the CPA area from deforestation in the nearest 20 years after the project start. Additionally, the CI 3 (forest and mangrove restoration) and 4 (agroforestry) above their used as the inputs for carbon gains calculations. The resulted carbon gains by the project including implementation (5 years) and capitalization (15 years) periods are calculated as 683,762 tons of CO2 equivalent (see the Annex G. FAO EX-Act Tool analysis). The area of Blue Carbon project was excluded from the GHG calculations because the project will generate revenue through carbon markets, then the carbon benefits would be sold and transferred to third parties. The project carbon gains will be checked and recalculated again at PPG stage.

Indicator 11. People directly benefiting from the GEF investment: estimated in 10,000 (50% are women), including trained on EbA adaptation government officials, local communities; total number of local people supported under Outputs 2.1-2.3; and local people directly benefiting from restored ecosystems and improved adaptation management of watersheds through healthier environment, higher quality water, decreased erosion, and increased ecosystem and land productivity and climate resilience.

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 false	Adaptation Fund false	Pilot Program for Climate Resilience (PPCR) 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	10.00%
Nature-based management	35.00%
Climate information services	0.00%
Coastal zone management	50.00%
Water resources management	0.00%
Disaster risk management	0.00%
Other infrastructure	5.00%
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 true	Change in mean temperature false	Increased climatic variability true	Natural hazards true
Land degradation true	Coastal and/or Coral reef degradation true	Groundwater quality/quantity false	

CORE INDICATORS – SCCF

	Total	Male	Female	% for Women
CORE INDICATOR 1 Total number of direct beneficiaries	10,000	5,000.00	5,000.00	50.00%
CORE INDICATOR 2 (a) Area of land managed for climate resilience (ha) (b) Coastal and marine area managed for climate resilience (ha)	1,790.00 1,000.00			
CORE INDICATOR 3 Number of policies/plans/ frameworks/institutions for to strengthen climate adaptation	0.00			
CORE INDICATOR 4 Number of people trained or with awareness raised	10,000	5,000.00	5,000.00	50.00%
CORE INDICATOR 5 Number of private sector enterprises engaged in climate change adaptation and resilience	5.00			

SUB INDICATOR 1

	Total	Male	Female
1.1 Number of direct beneficiaries from more resilient physical and natural assets	5500	2,750	2,750
1.2 Number of direct beneficiaries with diversified and strengthened livelihoods and sources of income	500	250	250
1.3 Number of direct beneficiaries from the new or improved climate information services including early warning systems	0	0	0
1.4 Number of youth (15 to 24 years of age) benefiting from the project	2000	1,000	1,000
1.5 Number of elderly (over 60 years of age) benefiting from the project	2000	1,000	1,000
1.6 Increased income, or avoided decrease in income (per capita in \$ across all relevant beneficiaries)	1,000		

SUB-INDICATOR 2

2.1 Hectares of agricultural land

300

2.2 Hectares of urban landscape

0

2.3 Hectares of rural landscape

0

2.4 Hectares of forests

1,490

2.5 Hectares of marine area

0

2.6 Hectares of freshwater area

0

2.7 Number of residential houses

0

2.8 Number of public buildings

516

2.9 Number of irrigation or water structures

0

2.10 Number of fishery or aquaculture ponds or cages

0

2.11 Number of ports or landing sites

0

2.12 Km of road

0

2.13 Km of riverbank

0

2.14 Km of coast

1

2.15 Km of stormwater drainage

0

2.16 Number of new adaptation technologies supported

4

SUB INDICATOR 3

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

(regional, national, sub-national)

0

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

0

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

0

3.4 Number of institutional partnerships or coordination mechanisms established or strengthened

1

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

5

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

1

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

20

3.8. Number of climate risk and vulnerability assessments conducted

0

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	50	25	25
b) Local government	90	45	45
c) Local community organizations	5760	2,880	2,880
d) Extension services	100	50	50

e) Hydromet and disaster risk management agencies	0	0	0
f) School children, university students, and teachers	4000	2,000	2,000
g) Youth	1000	1,000	0

SUB INDICATOR 5

	Total	Male	Female
5.1 Amount of investment mobilized (US\$) from private sector sources	100,000		
5.2 Number of entrepreneurs supported for climate adaptation or resilience	80	40	40
5.3 Total financial value of lines of credit and/or investment funds	300,000		
5.4 Number of MSMEs incubated/accelerated with technical assistance, financial matchmaking, and/or direct financing	10		

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Substantial	Climate risks can impact the effectiveness, sustainability, and scalability of the project's Outputs. Sea level rise, ocean acidification, and increasing frequency and severity of cyclones, floods, and other extreme weather events pose a significant risk to project activities, especially those related to ecosystem restoration and infrastructure development. Such events can cause direct damage to project sites restored ecosystems and target communities, delay implementation timelines, and increase project costs. Mitigation Strategies: At PPG Stage a detailed Climate Vulnerability Assessment Report was developed for the project sites with mitigation measures that will be implemented during the project (Annex 25). Implementing a flexible project management approach that allows for adjustments based on ongoing climate risk assessments (Climate Vulnerability Assessment Report) and monitoring; Employing a diverse set of EbA and conservation practices to enhance ecosystem resilience against a range of climate change impacts; Strengthening local capacities and raising awareness about climate change risks and adaptation strategies among communities, stakeholders, and institutions.
Environmental and Social	Substantial	The SESP screening highlights four inter-related SES risk clusters for the project. First, on-ground EbA works, seawall construction and aggregate extraction could disturb or fragment sensitive coastal and terrestrial habitats

		<p>and spread invasive species. Second, inadequate engineering or climate-scenario testing could cause the hybrid boulder seawall to fail, dislodging rocks and redirecting erosion toward neighboring villages, creating a serious community-safety and maladaptation risk. Third, activities carried out on customary land may inadvertently exclude vulnerable groups, limit women’s access to resources or otherwise lead to inequitable benefit-sharing and stakeholder grievances if FPIC and inclusive decision-making are not assured. Finally, construction phases present occupational-health, heavy-machinery and small-scale fuel-spill hazards that could harm workers or nearby residents if not properly managed. To mitigate these risks, the project will apply an Environmental & Social Management Framework that mandates site-specific ESAs (screening for EbA grants and a PEAR/ESIA for the seawall), integrates mitigation-hierarchy principles into design, and embeds E&S clauses in Bills of Quantity and EbA/Biodiversity funding window of LDF, and PPP manuals. Seawall siting and dimensions must be informed by hydrodynamic and sediment-transport modelling and future sea-level-rise scenarios to avoid maladaptation and structural failure. Inclusive engagement tools: a SEP, FPIC protocols for customary landowners, GAP, and GRM, will ensure broad support and equitable benefits. Contractors will be required to prepare and budget for Occupational-Health & Safety plans, provide PPE and training, and include spill-prevention and site-rehabilitation measures in their method statements. A dedicated safeguards/gender officer within the PMU will oversee compliance and continuous capacity-building. (see Annex D for details)</p>
Political and Governance	Low	<p>Political changes can lead to shifts in priorities, potentially resulting in reduced support or funding for environmental and climate resilience projects. Frequent changes in environmental policies, regulations, or climate strategies can create uncertainty and hinder project planning and implementation. Limited capacity within governmental and local institutions to manage and implement climate resilience projects can impede progress. Corruption and lack of transparency in the administration of projects can lead to misallocation of resources, undermining the effectiveness and credibility of climate adaptation efforts. Mitigating these risks involves developing strong partnerships with all levels of government, ensuring alignment with national and local policies, building institutional capacity, and fostering transparency and accountability. Regular stakeholder engagement, adaptive management practices, and proactive policy advocacy are also critical for navigating and mitigating political and governance risks.</p>
INNOVATION		
Institutional and Policy	Moderate	<p>The project strongly depends on the UNDP/GEF BGI IP Project “Coastal Resilience Samoa” to deliver required policy and regulation for EbA (removal of the Barrier 1). This may take quite a long time for approval by the government. Even when supportive policies exist, weak enforcement mechanisms or lack of institutional capacity can hinder the effective implementation of EbA and related climate resilience measures. Mitigating these risks involves active engagement with policy-makers, regulators, and communities throughout the project lifecycle. This includes advocating for</p>

		supportive policies, participating in policy development processes, ensuring project alignment with existing policies and regulations, and building strong partnerships with all relevant stakeholders.
Technological	Moderate	The project proposes the construction of hybrid seawalls combined with mangrove plantations and other bioengineering techniques. These are relatively novel solutions, particularly in the specific environmental and ecological conditions of Samoa. The efficacy of these technologies in withstanding extreme weather events (e.g., cyclones, storm surges) and in promoting coastal resilience might not be fully proven in this context. Techniques like coral gardening or artificial reefs, while innovative, may face challenges related to local water quality, temperature fluctuations, and ocean acidification. The long-term survival and effectiveness of restored reefs in providing ecosystem services (e.g., wave breaking, biodiversity support) are uncertain. Mitigation measures: Before full-scale implementation, pilot the hybrid seawalls, coral reef restoration techniques, and other bioengineering methods in a controlled and monitored environment. This allows for adjustments based on local conditions and lessons learned. Incorporate flexibility into the project design to adapt technologies as needed based on ongoing monitoring and feedback from the pilot phases.
Financial and Business Model	Substantial	Establishing a sustainable financial mechanism, such as the EbA/Biodiversity funding window of LDF, is critical to support EbA activities. However, securing sufficient initial capitalization and ensuring a steady flow of funds from public, private, and philanthropic sources can be challenging. There is a risk that the LDF might not attract enough contributions, leading to underfunding of key project activities. The project's financial sustainability might be heavily reliant on external funding sources such as international grants, donations, or loans. Any changes in the global economic environment, donor priorities, or financial crises could result in reduced funding availability, threatening the continuity of the project. Mitigation measures: Create comprehensive financial models for the EbA/Biodiversity funding window of LDF and other project components that include scenarios for different levels of funding, potential risks, and contingency plans. Facilitate dialogues between the public sector, private companies, and communities to build trust and identify mutual benefits. Tailor PPP agreements to address private sector concerns, providing clear roles, responsibilities, and financial returns.

EXECUTION

Capacity	Moderate	EbA adaptation capacity of Samoa is relatively low and that can be an issue for the project implementation and sustainability. To address this risk the project has multiple activities to build capacity of the government agencies, communities, NGOs, and private sector on the EbA adaptation models. The project will upgrade operational tools and infrastructure (e.g., nurseries, training centers) to support EbA activities. Also, the project will develop and disseminate best practices and lessons learned from the project to build long-term capacity.
Fiduciary	Moderate	Given the complexity of the project and the involvement of multiple stakeholders, there is a risk that funds may be misallocated or not used as

		<p>intended. This could happen due to inadequate financial controls, lack of oversight, implementation of Cash for Work approach, or errors in financial planning and execution. In addition, there is a fiduciary risk associated with operationalizing the EbA & Biodiversity window under Samoa's Loss and Damage Fund (LDF), particularly if the LDF's governance, financial controls, and oversight/reporting arrangements are not yet fully established or consistently applied at the time the window becomes operational. Also, there is a fiduciary risk associated with the proposed Blue Carbon initiative, as its detailed governance, financial management, carbon-revenue flow, and benefit-sharing arrangements are still to be defined. If these arrangements are not established clearly and transparently before the initiative becomes operational, there is a risk of weak oversight, misallocation or misuse of revenues, disputes over benefit-sharing, and reduced stakeholder confidence. Mitigation measures: Financial management of the project will be conducted in line with UNDP and GEF/SCCF standards with regular financial monitoring, audits, and spot checks. The project will manage Cash for Work related risks through clear eligibility and wage rules, robust financial controls and audits, transparent public reporting, use of digital payment systems where feasible, and time-bound schemes linked to longer-term livelihood and skills development opportunities. Before any Blue Carbon revenue-generating transactions are undertaken, the project will support the preparation and consultation of a revenue management and benefit-sharing framework that clearly defines where revenues will be received and held, institutional roles and approvals, allocation rules, transparency and public reporting requirements, audit and oversight arrangements, and community participation and safeguards. Any project-supported Blue Carbon activities will also be subject to UNDP financial management procedures, regular financial monitoring, and independent audits, and will not proceed to carbon transactions until governance and fiduciary controls are considered adequate.</p>
Stakeholder	Moderate	<p>There is a risk that not all relevant stakeholders (e.g., local communities, NGOs, private sector, government agencies) will be adequately engaged in the project's planning, decision-making, and implementation processes. This could result in a lack of ownership, reduced commitment, and potential resistance to the project, which might undermine its success. Mitigation measures: Engage with stakeholders early in the project to understand their needs, expectations, and potential concerns. This will help in designing project activities that are inclusive and responsive to the diverse needs of different stakeholder groups.</p>
Other		
Overall Risk Rating	Substantial	<p>That means that the project should be monitored quarterly by PMU, MNRE and UNDP at all stages (PPG and implementation) and practice corrective action in case of one or more risks above tend to turn into a real threat for the project development and implementation.</p>

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)

Alignment with the GEF-8 BD, LD and SCCF priorities

GEF8 FA/SCCF	Objective/Fund Priority	Projects contribution to the Objective/Fund Priority
Biodiversity	Objective 1. To improve conservation, sustainable use, and restoration of natural ecosystems	The project's comprehensive approach to EbA and ecosystem restoration, protection and sustainable management aligns with the Objective 1 of supporting countries to meet their biodiversity goals under the GBF.
Land Degradation	Objective 1. Avoid and reduce land degradation through sustainable land management (SLM)	The project contributes to LD Focal Area Objective 1 by implementing sustainable land management (SLM) practices such as agroforestry, and erosion control measures that reduce soil degradation and restore ecosystem functions through CSA and Blue Carbon approaches.
	Objective 2. Reverse land degradation through landscape restoration	The project contributes to LD Objective 2 by restoring riparian and coastal forests and mangroves, thereby reversing land degradation through landscape restoration initiatives in Samoa Additionally, the project contributes directly to the three core LDN response pathways (avoid, reduce, reverse land degradation) through: restoration of degraded terrestrial/coastal ecosystems and rehabilitation of ecosystem functions (reverse), sustainable agroforestry and ridge-to-reef watershed measures to reduce erosion and improve slope stability (reduce), and strengthened governance/financing mechanisms (including the EbA & Biodiversity window under the LDF) to sustain land stewardship and prevent future degradation (avoid).
SCCF	Priority Area: Supporting the adaptation needs of SIDS	Samoa is one of the SIDS prioritized by SCCF. The project directly addresses at least 3 barriers identified by SCCF: Limited institutional capacity to foresee and manage climate risks; Low engagement by the private sector, including small and medium-sized enterprises and entrepreneurs, for developing and providing adaptation solutions; Lack of access to finance from public sources and to markets for adaptation solutions.

Contribution to GBF Targets

Contribution to SDGs

GBF Target

1: To bring the loss of areas of high biodiversity importance close to zero by 2030

Project input to the target

The project targets the conservation and restoration of ecosystems identified as having high biodiversity importance and adaptation value. Activities such as reforestation, mangrove restoration, and coral reef rehabilitation are designed to halt and reverse biodiversity loss.

2: 30% of areas of degraded ecosystems are under effective restoration

The project places a strong emphasis on restoring degraded ecosystems having high adaptation value as a core component of its strategy. Activities such as reforestation, mangrove restoration, and coral reef rehabilitation directly contribute to the restoration of terrestrial and aquatic ecosystems.

3: 30% of ecosystems under PAs and OECMs	The project aims to establish Community Protected Areas (CPAs) as part of its strategy. CPAs will target ecosystems that are crucial for climate adaptation, biodiversity conservation and local livelihoods, including highland and riparian forest, mangroves, coral reefs, and beach areas.
8: Minimize the impact of climate change on biodiversity and increase its resilience	By restoring degraded ecosystems and conserving areas of high biodiversity and adaptation value, the project reduces the vulnerability of these ecosystems and local communities to climate change impacts, such as increased temperatures, changing precipitation patterns, and extreme weather events.
10: Areas under agriculture, fisheries and forestry are managed sustainably	The project promotes agroforestry, which integrates trees and shrubs into agricultural landscapes, enhancing biodiversity, soil health, and crop productivity.
11: Restore, maintain and enhance nature's contributions to people	By engaging in activities such as reforestation, mangrove restoration, and coral reef rehabilitation, the project actively restores ecosystems that are crucial for regulating air, water, and climate. These restored ecosystems improve soil health, enhance water filtration and storage, and increase carbon sequestration, contributing to climate regulation and mitigation.
20: Strengthen capacity-building and development	The project aims on development of national capacity for EbA aimed at local communities, government officials, and other stakeholders in understanding and applying EbA for climate resilience and biodiversity conservation.
23: Ensure gender equality	From its PIF stage, the project integrates gender considerations into its planning and implementation processes. This includes conducting gender analyses to understand the different roles, needs, impacts, and contributions of women and men in biodiversity conservation and climate resilience efforts.

Alignment with Country, Regional, and International Priorities:

SDG	Project direct contribution
SDG 5 (Gender Equality)	The project adopts a gender-responsive approach, ensuring that women and girls have equal opportunities to participate in and benefit from project activities.
SDG 6 (Clean Water and Sanitation)	Through the conservation of watersheds, restoration of the watershed ecosystems, the project contributes to the availability and sustainable management of water.
SDG 13 (Climate Action)	The project directly contributes to SDG 13 by implementing actions to adapt to climate change and its impacts.
SDG 14 (Life below Water)	By protecting and restoring marine and coastal ecosystems of high adaptation value, such as coral reefs and mangroves, the project supports the sustainable use of ocean resources, contributing to SDG 14.
SDG 15 (Life on Land)	The project's efforts to restore degraded forest ecosystems, conserve biodiversity-rich areas, and implement sustainable watershed management practices align with SDG 15.
SDG 17 (Partnerships for the Goals)	By fostering collaboration among government agencies, local communities, NGOs, and private sector, the project exemplifies SDG 17.
National strategy/plan	Project contribution to the priorities and agreements
National Biodiversity Strategy and Action Plan (NBSAP), 2015-2020, modified 15 February 2022	The project's efforts to enhance climate resilience through ecosystem restoration and conservation practices contribute to the NBSAP's objectives of protecting and restoring critical habitats and endangered species. By integrating EbA into Ridge to Reef management and business practices, the project promotes sustainable use of natural resources that is in line with the NBSAP.

Samoa National Environment Sector Plan (NESP), 2017-2021 The project's commitment to conserving and restoring terrestrial and coastal ecosystems directly supports the NESP's goals of ecosystem protection and sustainable management.

The project's emphasis on climate adaptation through EbA is in line with the NESP's objectives to strengthen climate resilience and reduce vulnerability to climate change impacts.

Samoa Climate Change Policy, 2020-2030 The project's objective to enhance climate resilience directly supports the core objectives of Samoa's Climate Change Policy, which prioritizes adaptation measures to protect communities, ecosystems, and infrastructure from climate change impacts. By focusing on the conservation

and restoration of terrestrial and coastal ecosystems as a strategy for climate protection, the project embodies the principles of EbA.

Samoa National Disaster Management Plan (NDPM), 2017-2020
The project's emphasis on conserving and restoring terrestrial and coastal ecosystems utilizes the protective functions of these ecosystems to mitigate natural disaster risks, such as storm surges, flooding, and soil erosion and contributes to the NDMP's objective of reducing vulnerability to natural hazards and enhancing the natural buffering capacity against disasters.

Strategy for the Development of Samoa (SDS)
By integrating EbA into Ridge to Reef management and promoting sustainable business practices, the project contributes to the SDS's goal of sustainable economic development.

Samoa Strategic Programme for Climate Resilience (SPCR), 2010
The project's EbA approach embodies the SPCR's emphasis on integrated solutions for climate resilience.

Nationally Determined Contribution (NDC) of Samoa, 2021-2030
By focusing on the conservation and restoration of terrestrial and coastal ecosystems, the project contributes to the enhancement of carbon sinks.

Samoa National Policy for Gender Equality, 2021-2030
The project incorporates gender mainstreaming strategies right from its design through to implementation, ensuring that both men and women are equally involved in and benefit from all project activities.

Aligned National Action Programme (NAP) to Combat Land Degradation and Mitigate the Effects of Drought, 2015-2020
The project is aligned with Samoa's NAP by promoting SLM, enhancing ecosystem resilience through EbA approaches, and addressing key drivers of land degradation such as deforestation, soil erosion, and over-exploitation of natural resources

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;

Yes

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

Yes

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; Yes

Member of Advisory Body; Contractor; Yes

Co-financier; Yes

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

Executor or co-executor; Yes

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 section B project description?

Yes

Environmental and Social Safeguards

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	High or Substantial		

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 and an anticipated timeline for delivery of relevant outputs has been provided.

Yes

Socio-economic Benefits

We confirm that the project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

Yes

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	Programming of Funds	Grant / Non- Grant	GEF Project Grant(\$)	Agency Fee(\$)	Total GEF Financing (\$)
UNDP	GET	Samoa	Biodiversity	BD STAR Allocation: BD-1	Grant	2,507,078.00	238,172.00	2,745,250.00
UNDP	GET	Samoa	Land Degradation	LD STAR Allocation: LD-1	Grant	66,324.00	6,301.00	72,625.00
UNDP	SCCF- A	Samoa	Climate Change	SCCF-A Country allocation	Grant	2,689,726.00	255,524.00	2,945,250.00
UNDP	GET	Samoa	Land Degradation	LD STAR Allocation: LD-2	Grant	66,324.00	6,301.00	72,625.00
Total GEF Resources (\$)						5,329,452.00	506,298.00	5,835,750.00

Project Preparation Grant (PPG)

Was a 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(\$)
UNDP	GET	Samoa	Biodiversity	BD STAR Allocation: BD-1	50,000.00	4,750.00	54,750.00
UNDP	GET	Samoa	Land Degradation	LD STAR Allocation: LD-2	25,000.00	2,375.00	27,375.00
UNDP	SCCF-A	Samoa	Climate Change	SCCF-A Country allocation	50,000.00	4,750.00	54,750.00
UNDP	GET	Samoa	Land Degradation	LD STAR Allocation: LD-1	25,000.00	2,375.00	27,375.00
Total PPG Amount (\$)					150,000.00	14,250.00	164,250.00

Please provide Justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total(\$)
UNDP	GET	Samoa	Biodiversity	BD STAR Allocation	2,800,000.00
UNDP	GET	Samoa	Land Degradation	LD STAR Allocation	200,000.00
Total GEF Resources					3,000,000.00

Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing(\$)	Co-financing(\$)
BD-1-3	GET	2,507,078.00	17416811
LD-1	GET	66,324.00	460756
LD-2	GET	66,324.00	460757
CCA-2-1	SCCF-A	2,689,726.00	18685676
Total Project Cost		5,329,452.00	37,024,000.00

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(\$)
Recipient Country Government	Administrations of the Falealili 1 (West), Falealili 2 (East), Siumu, Safata 1, Safata 2, Lefaga & Faleaseela, Faasaleleaga 3, Faasaleleaga 4, Faasaleleaga 5 Districts	In-kind	Recurrent expenditures	10000000
Donor Agency	Asian Development Bank	In-kind	Investment mobilized	11800000
Donor Agency	Asian Development Bank	In-kind	Investment mobilized	10000000
Donor Agency	NZ MFAT	In-kind	Investment mobilized	2500000
Donor Agency	European Union	In-kind	Investment mobilized	2724000
Total Co-financing				37,024,000.00

Please describe the investment mobilized portion of the co-financing

Administrations of the project districts (Falealili 1 (West), Falealili 2 (East), Siumu, Safata 1, Safata 2, Lefaga & Faleaseela, Faasaleleaga 3, Faasaleleaga 4, Faasaleleaga 5): US\$10,000,000 – the Government of Samoa District Development Budget, including EbA adaptation, ecosystem conservation and restoration, and sustainable agriculture;

Asian Development Bank: USD\$11,800,000 – funds of the ADB Project Alaoa Multipurpose Dam Project Output 4. Management capacity on flood management and biodiversity conservation enhanced that includes development of flood management plan for Apia City, strengthened development control and flood drainage, upgrade of hydro-meteorological monitoring, forecasting, and disaster early warning systems; and community-based planning, preparedness, response, and evacuation and recovery actions with the local communities, biodiversity management and offsetting plans including trust fund development, national guidelines for environmental flows and environmental restorations plans, natural habitats protection and restoration and capacity development for catchment protection and watershed management;

Asian Development Bank: US\$10,000,000 – funds for Samoa under the ADB Pacific Disaster Resilience Program, Phase 4 to strengthen Samoa’s resilience to climate and disaster related shocks and stresses and resilience to health emergencies

Asian Development Bank: US\$2,500,000 - funds of the ADB Project “Promoting Climate-Resilient and Sustainable Blue Economies”; funding to enhance investments in ocean health and climate-resilient, sustainable blue economies among its 14 Pacific Developing Member Countries (DMCs), including Samoa;

NZ MFAT: US\$2,500,000 - funds of the New Zealand Ministry of Foreign Affairs and Trade’s Climate Finance Project to enhance Samoa’s capacity in climate adaptation and biodiversity conservation;

European Union: USD\$2,724,000 – for the Samoa Water Sector Resilience and Climate Change Adaptation programme, which promotes access to sustainable, safe and affordable water, improved sanitation and hygiene services and climate change adaptation.

ANNEX B: ENDORSEMENTS

GEF Agency(ies) Certification

GEF Agency Type	Date	Project Contact Person	Phone	Email
GEF Agency Coordinator	12/19/2025	Nancy Bennet, Executive Coordinator		nancy.bennet@undp.org
Project Coordinator	12/19/2025	Aishath Azza, Regional Technical specialist		aishath.azza@undp.org

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

Please attach the Operational Focal Point endorsement letter(s) with this template.

Name of GEF OFF	Position	Ministry	Date (MM/DD/YYYY)
Frances Reupena	Chief Executive Officer	Ministry of Natural Resources and Environment	8/22/2024

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.

The Project Results Framework and M&E Plan can be found on the pages 82-89 of the ProDoc.

Contribution to the Sustainable Development Goal (s): SDG 1: No Poverty, SDG 2: Zero Hunger, SDG 3: Good Health and Well-being, SDG 6: Clean Water and Sanitation, SDG 8: Decent Work & Economic Growth, SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action, SDG 14: Life Below Water, and SDG 15: Life on Land.

Contribution to KM GBF Targets: 1, 2, 3, 8, 10, 11, 16, 20, 23

National Priority/Goal: By 2025/26 The Government will maintain a safe environment for Samoa and promote sustainable economic use of natural resources(Pathway for Development of Samoa Strategic Outcome 4 - Secured Environment and Climate Change)

Intended Outcome as stated in the UNSDCF/Country [or Regional] Program Results and Resource Framework:

Regional Priority: Pacific people, societies, economies, cultures and natural environments are resilient to changing conditions and extreme events resulting from climate change, climate variability and geological processes, to enhance the well-being of the people and to promote their sustainable development (Framework for Resilient Development in the Pacific (FRDP));

UN Outcome 1: People and ecosystems in the Pacific are more resilient to the impacts of climate change, climate variability and disasters; and environmental protection is strengthened.

Applicable Output(s) from the UNDP Strategic Plan: *UNDP Strategic Plan Outcome 4:* By 2029, international environmental agreements are mainstreamed into national development frameworks to drive sustainable development; SP IRRF A.4.2.3 Natural resources that are managed under a sustainable use, conservation, access, and benefit-sharing regime

Project title and Quantum Project Number: *Strengthening Climate Adaptation, Biodiversity Conservation, and Combating Land Degradation through Ecosystem-based Adaptation in Samoa; #XXX*

Objective and Outcome Indicators	Data Source	Baseline	Mid-term Target	End of Project Target	Data Collection Methods	Risks/Assumptions
Project Objective:	<i>To enhance climate resilience of Samoa's ecosystems and communities through integrated Ecosystem-based Adaptation approach, that promotes biodiversity conservation and combats land degradation</i>					
	<u>Mandatory Indicator 1:</u> Area of terrestrial Protected Areas (Community Mangrove and Forest Reserves) established in the project framework (GEF Core Indicator 1.1), ha	Covenants signed by village chiefs (matai) and registered with the Samoa Lands and Title Court Field validation of the reserve boundaries	0 ha	>=100 ha of Community Mangrove and Forest Reserves established	>=500 ha of Community Mangrove and Forest Reserves established	Analysis of covenants signed by village chiefs (matai) and registered with the Samoa Lands and Title Court; field validation of boundaries of established community PAs
- <u>Mandatory Indicator 2:</u> Area of marine Protected Areas (Community Coral Reef Reserves) established in the project framework (GEF Core Indicator 2.1), ha	Records in the MAF Fisheries Division Registry of Community Fisheries Management Areas Signed Village By-laws or Council Minutes for new marine reserve rules; Field validation of the reserve boundaries	0 ha	>= 2 ha of Community Coral Reef Reserves established	>= 5 ha of Community Coral Reef Reserves established	Analysis of records in the MAF Fisheries Division Registry of Community Fisheries Management Areas; signed Village By-laws or Council Minutes for new marine reserve rules; and field validation of the	Adequate resources from the EbA/Biodiversity funding window of LDF, government budgets, and private sector partnerships are mobilized and maintained throughout the project to meet area and restoration targets. No catastrophic environmental changes (e.g., massive pest outbreaks, coral bleaching beyond recovery, severe sedimentation) occur that would prevent restored habitats from reaching functional resilience.

					reserve boundaries
<u>Mandato ry Indicator 3:</u> Area of forest and forest land (riparian forest) restored by the project (GEF Core Indicator 3.1), ha	Project activity reports; Field visit of the restoration sites	0 ha	>=300 ha of coastal forest under restoration	>=990 ha coastal forest under restoration	Analysis of project activity reports; and filed validation of the restoration sites
<u>Mandato ry Indicator 4:</u> Area of wetlands (mangroves) restored by the project (GEF Core Indicator 3.4), ha	Project activity reports; Field visit of the restoration sites	0 ha	>=3 ha of mangroves under restoration	>=10 ha of mangroves under restoration	Analysis of project activity reports; and filed validation of the restoration sites
<u>Mandato ry Indicator 5:</u> Area of landscapes brought under sustainable land management in production systems (agroforestry) by the project (GEF Core Indicator 4.3), ha	Project activity reports; Field visit of the agroforestry sites	0 ha	>=100 ha under agroforestry	>=300 ha under agroforestry	Analysis of project activity reports; and filed validation of the restoration sites
<u>Mandato ry Indicator 6:</u> Area of marine habitat under improved practices to benefit biodiversity	Village by-laws /covenant (registered in Lands and Titles Court) covering community Blue	0 ha	>=500 ha of community Blue Carbon initiatives identified (mangrove and seagrass	>=500 ha of mangrove and seagrass area is covered by PDD and submitted	Review of village by-laws /covenant (registered in Lands and Titles Court)

	ity (Blue Carbon projects) (GEF Core Indicator 5.4)	Carbon initiatives Field visit to verify the initiative boundaries and area Project Design Document (PDD) for Voluntary Carbon Market (VCM)) and baseline blue carbon research of mangroves and seagrass conducted	ed for validation under an approved VCM methodology	covering community Blue Carbon initiatives; field visit to verify the initiative boundaries and area; review of the Project Design Document (PDD) for Voluntary Carbon Market (VCM)
	<u>Mandatory Indicator 7:</u> Mitigated Greenhouse Gas Emissions, metric tons of CO2e (20 years of accounting) (GEF Core Indicator 6.1)	Project Quarterly and Annual Reports Project activity reports Field validation of the project sites	0 metric tons of CO2e	>=200,000 metric tons of CO2e calculated over the 20 years	>= 683,762 metric tons of CO2e calculated over the 20 years (see Annex 25. FAO EX-ACT Assessment of carbon gains by the project)	Calculations with FAO Ex-Act Tool based on the project reports and field validation
	<u>Mandatory Indicator 8:</u> Number of direct project beneficiaries disaggregated by gender (individual people) (GEF Core Indicator 11)	Lists of stakeholders in the project activity reports Interviews with local communities	0	>= 4,000 (50% are women)	>= 10,000 (50% are women)	Analysis of lists of stakeholders; community surveys; M&E reports, Mid-Term Evaluation, Terminal Evaluation Report Analysis
Component 1	<i>Enhancing national climate adaptation, biodiversity conservation, and sustainable land management capacity via the integrated and gender inclusive Ecosystem-based Adaptation (EbA)</i>					

Outcome 1. <i>Strengthened national climate adaptation, biodiversity conservation, and sustainable land management capacity through the integrated and gender inclusive Ecosystem-based Adaptation (EbA) approach</i>	Indicator 9: Presence of operational multi-sectoral EbA Coordination Committee	Updated NESSC's ToR and operating procedures; EbA Working Group ToR and list of members; Minutes of NESSC's and EbA Working Group meetings	Not present	Present: NESSC's ToR and operating procedures include EbA coordination, oversight and reporting; EbA Working Group is established at NESSC (with at least 40% of women representation)	Present: NESSC and EbA Working Group have quarterly meetings to plan and coordinate EbA initiatives (with at least 40% of women representation)	Analysis of the updated NESSC's ToR and operating procedures; EbA Working Group ToR and list of members; and minutes of NESSC's and EbA Working Group meetings	Key Risks: Limited participation or commitment from relevant ministries, agencies, NGOs, or private sector could delay formation or weaken the functioning of the EbA Coordination Committee and the LDF Board. Lengthy or stalled government processes for updating NESSC's ToR, creating the EbA Working Group, or passing legal instruments for the LDF may prevent timely operationalization. Failure to mobilize the minimum US \$300,000 due to donor withdrawal, fiscal constraints, or weak fundraising could prevent the LDF from launching or supporting EbA initiatives. MNRE, MAF, and NESSC may lack adequate technical skills, staff continuity, or resources to implement coordination, fund management, and capacity building to the targeted 30% increase.
	Indicator 10: Presence of operational EbA/Biodiversity Funding Window at the Loss and Damage Fund	Government legislative act, cabinet decision, or ministerial regulation formally establishing the EbA/Biodiversity funding window for LDF; Terms of Reference (ToR) for the Board of Trustees or Governing Body on EbA/Biodiversity funding window; TF Capitalization records and	Not present	EbA/Biodiversity funding window of LDF is established by the government decision and have approved government structure/legal status and Board of Trustees/Governing Body (with at least 30% women representation)	At least US \$300,000 capitalized by the EbA/Biodiversity funding window of LDF and used for initial EbA initiatives	Analysis of Government documents on EbA/Biodiversity funding window establishment; ToR of Governing Body; and TF Capitalization records and annual financial statements	Key Assumptions: Government remains committed to formalizing and sustaining the EbA Coordination Committee, updating NESSC's ToR, and establishing the LDF with a recognized legal mandate. Ministries, agencies, civil society, and private sector partners actively engage in EbA planning, coordination, and LDF governance. Donors, government budgets, and private sector partners provide sufficient resources to capitalize and operate the LDF, including funding initial EbA initiatives. MNRE, MAF, and NESSC actively participate in capacity-building activities and apply new skills, enabling measurable increases in national EbA capacity.

		annual financial statements for EbA/Biodiversity funding window					
	Indicator 11: National EbA capacity (measured by UNDP Capacity Scorecard for MNRE, MAF, and NESSC: Annex 22)	UNDP Capacity Scorecard to measure national EbA Capacity	2.99 (2025)	>=3.5	>= 4.64	Interviews of MNRE, MAF, and NESSC members using UNDP Capacity Scorecard; analysis of the findings	
Outputs under Outcome 1	<p>Output 1.1. Multi-sectoral institutional framework led by MNRE established for the coordination of Ecosystem-based Adaptation and associated conservation initiatives (barrier, source and filter ecosystem restoration and protection) under the Community Integrated Management Plans (CIMPs);</p> <p>Output 1.2. EbA & Biodiversity Funding Window of Samoa's Loss & Damage Fund established and operationalized to catalyze financial and technical resources to restore, protect, and enhance the county's ecosystems and biodiversity for climate adaptation; and</p> <p>Output 1.3. Nurseries used for Ecosystem-based Adaptation (nurseries and training centers) are upgraded to support implementation of CIMPs in ecosystem restoration and mixed adaptation solutions.</p>						
Component 2	<i>Implementing gender inclusive Ecosystem-Based Adaptation measures to improve climate resilience of ecosystems and communities, protect biodiversity, and combat land degradation</i>						
Outcome 2. Scaled up gender inclusive Ecosystem-based Adaptation measures in the project area	Indicator 12: Total length of a hybrid seawall constructed by the project, m	Project Quarterly and Annual Reports; Project Activity Reports; Field validation of the construction sites	0 m	>= 300 m	>= 800 m	Analysis of the project Quarterly and Annual Reports; project Activity Reports; and field validation of the construction sites reports	<p>Key Risks: Cyclones, floods, or storm surges could damage or destroy hybrid seawall sections and restored coastal vegetation before they are fully established, reducing both structure length and seedling survival rates.</p> <p>Inadequate engineering design, poor construction quality, or insufficient local capacity for long-term upkeep could lead to structural failure of the seawall or poor plant survival.</p> <p>Potential PPP partners may withdraw due to economic downturns, perceived low returns, or conflicting priorities, reducing the number of functional agreements achieved.</p> <p>Cultural, gender, or land-tenure issues could limit engagement of indigenous people (especially women) in EbA initiatives, impacting participation and equitable benefit-sharing.</p>
	Indicator 13: Area of restored coral reef, ha	Project Quarterly and Annual Reports;	0 ha	0.3 ha	1 ha	Analysis of the project Quarterly and Annual Reports; project	
							<p>Key Assumptions: MNRE, local authorities, and communities remain committed to seawall</p>

	Project Activity Reports; Field validation of the construction sites				Activity Reports; and field validation of the construction sites reports	<p>construction, vegetation restoration, and long-term maintenance, with active participation in PPPs.</p> <p>Qualified local contractors and appropriate materials (boulders, seedlings, nursery stock) are available on time and at reasonable cost.</p> <p>Private companies recognize the benefits of EbA and remain engaged through co-management PPPs, with incentives and shared value clearly defined.</p>
<u>Indicator 14:</u> Percentage of total area under ecosystem restoration demonstrating $\geq 70\%$ of seedling survival rate (coastal forest and mangroves)	Project Activity Reports Field validation of restoration sites	0%	$\geq 60\%$ of total area under restoration with $\geq 70\%$ survival rate	$\geq 90\%$ of total area under restoration with $\geq 70\%$ survival rate	Analysis of the Project Activity Reports and field validation of restoration sites reports	Planting sites for mangroves and coastal forests are correctly selected with suitable hydrology, soil stability, and low initial disturbance, enabling $\geq 70\%$ seedling survival rates.
<u>Indicator 15:</u> Number of functional PPP agreements for co-management of EbA sites	EbA PPP MoUs between MNRE, Communities, and Private sector Interviews with PPP participants; Field visits of the project sites	0	≥ 2	≥ 4	Analysis of EbA PPP MoUs, interviews with PPP participants, and field reports	
<u>Indicator 16:</u> Number of indigenous people (men/women) directly	Project Activity Reports with lists of participants	0	$\geq 2,000$ (50% are women)	$\geq 5,000$ (50% are women)	Analysis of project Activity Reports with lists of participants; and	

	participating in EbA initiatives	Interviews with target local communities				interviews with target local communities	
Outputs under Outcome 2	<p>Output 2.1. Ecosystem-based Adaptation initiatives are implemented on the ground to support CIMP climate resilience priorities, including shoreline and springs protection, mangrove, riparian and coral reef restoration, reforestation of slopes, and agroforestry system;</p> <p>Output 2.2. Community-led Conservation Areas are established to protect the key coastal ecosystems (forest, mangroves, wetlands, coral reefs, and seagrass meadows) having adaptation and biodiversity conservation values;</p> <p>Output 2.3. Public-Private Partnerships and Blue Economy projects focused on Ecosystem-based Adaptation are developed and implemented</p>						
Component 3	<i>Gender Mainstreaming, Knowledge Management and Learning for dissemination of EbA best practices for climate adaptation, biodiversity conservation, and sustainable land management</i>						
Outcome 3. <i>Project EbA best practices and gender-inclusive models are replicated and scaled up by Samoa's districts, projects, and stakeholders</i>	Indicator 17: Percentage of adult population in the target districts demonstrating good understanding of EbA benefits and supportive to EbA projects over grey infrastructure	Simple EbA perception survey in the project districts	11% (percentage of the suggested initiatives from local communities that were EbA/NbS, while the majority were other types of measures such as grey infrastructure or general development activities (Inception mission in June 2025))	At least 30% of random respondents (of which at least 50% women) are aware about EbA benefits and supportive to EbA projects over grey infrastructure	At least 60% of random respondents (of which at least 50% women) are aware about EbA benefits and supportive to EbA projects over grey infrastructure	Analysis of Simple EbA perception survey in the project districts	<p>Key Risks:</p> <p>Even after awareness campaigns, competing priorities, misinformation, or entrenched preferences for grey infrastructure could limit lasting support for EbA.</p> <p>Awareness activities may not effectively reach remote villages, marginalized groups, or those without access to media, resulting in uneven understanding of EbA benefits.</p> <p>Other districts may lack funding, technical capacity, or political will to replicate best practices, even if they are aware of them.</p> <p>If lessons and best practices are not well-packaged or actively shared, their uptake by other districts may remain low.</p> <p>Key Assumptions:</p> <p>The project's awareness strategy uses culturally appropriate, gender-sensitive methods and accessible media to reach at least half of the adult population in target districts.</p> <p>EbA initiatives in target districts produce tangible, positive results that can be showcased as convincing examples to build support over grey infrastructure.</p> <p>Leaders and stakeholders in other districts are open to adopting EbA approaches and have at least minimal resources to start replication.</p> <p>Samoa's national adaptation, biodiversity, and infrastructure planning frameworks remain aligned with and promote EbA approaches, encouraging uptake beyond the project area.</p>

			The baseline will be established at Year 1			
	<p><u>Indicator 18:</u> Number of the project lessons and best practices applied/replicated by other districts of Samoa</p> <p>End-of-project survey/interviews with representatives from all non-target districts</p> <p>Review of district plans, budgets, and reports to see if the approaches are included</p> <p>Media/social media scan for replication stories</p> <p>Project team network mapping — ask project partners which districts they have helped replicate activities in.</p>	0	0	>= 8	<p>Analysis of end-of-project survey/interviews; district plans, budgets, and reports; media/social media; and network mapping reports</p>	
<p>Outputs under Outcome 3.1</p>	<p>Output 3.1. Comprehensive Gender Mainstreaming Strategy is developed and coordinated to incorporate gender equality into EbA initiatives;</p> <p>Output 3.2. Communication and awareness strategy on EbA for climate adaptation and biodiversity conservation developed and implemented;</p> <p>Output 3.3. Gender-inclusive best practices and lessons learned on EbA are made available for use by Samoa’s districts, and shared regionally and internationally for replication.</p>					

Component 4:	Gender Sensitive Monitoring and Evaluation (M&E)					
Outcome 4. Effective project Adaptive Management based on gender sensitive M&E	UNDP QA Annual Reports MTR Report TE Report Indicator 19: Project rating by Quality Assurance Report confirmed by MTR and TE	None	Satisfactory or higher	Satisfactory or higher	Analysis of UNDP QA Report, MTR Report, and TE Report	<p>Key Risks:</p> <p>Slow procurement, unforeseen technical issues, or stakeholder disengagement could cause underperformance, lowering QA, MTR, or TE ratings.</p> <p>Failure to address early warning signs or recommendations from monitoring missions and QA reviews could result in persistent weaknesses by MTR or TE.</p> <p>Key Assumptions:</p> <p>The PMU, MNRE, and partners respond quickly to challenges, maintain strong coordination, and implement adaptive measures when needed.</p> <p>UNDP and key stakeholders remain actively engaged, providing timely technical, administrative, and policy support to maintain performance standards.</p>
Outputs under Outcome 4.	Output 4.1.1. Participatory and gender sensitive M&E system to measure the project effectiveness and tests the project Theory of Change					

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
International Consultants - 1. the GEF PPG Team Leader and will be responsible for quality assurance and timely preparation of all reports and documentation, including the finalized UNDP Project Document (ProDoc) and CEO Endorsement Request, with all mandatory and project specific Annexes and supporting documentation. 2. Expert on climate change adaptation and nature-based solutions will take the lead in coordinating the development of project intervention and baseline assessment on climate related data at the project targeted areas as well as provide the climate rationale to strengthen the project document. 3. Environmental and Social Safeguards Specialist will develop mandatory project Annexes related to application of social and environmental safeguards and support adherence of project development to UNDP's SES and specific requirements and Stakeholder engagement.	90,000.00	48,200.00	48,750.00

Local consultants - 1. Local Climate Change Adaptation Specialist and local PPG lead supporting the coordination the development of project intervention and baseline assessment on climate related data at the project targeted area and support development of stakeholder related annexes as well as support to provide the climate rational to strengthen the project document 2. GIS and landscape mapping Specialist providing services that include cartography, geospatial analysis, developing geodatabase and shapefiles for the project sites to support the development of the project document 3. National Gender and Social Inclusion Specialist providing technical expertise on mainstreaming gender equality and women's inclusion and youth empowerment into the project design and implementation.	33,000.00	11,415.49	19,434.38
Travel for all missions to consult community consultations and proposed projects target sites for data collection, consultations and verification of proposed project inventions during project design	10,000.00	5,375.55	0.00
PPG inception and validation workshops, as well as community/stakeholder consultations at the district & national levels	17,000.00	16,824.58	0.00
Total	150,000.00	81,815.62	68,184.38

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
Puapua	-13.58585	-172.21370	

Location Description:

Activity Description:

Community Coastal Forest Reserve, Coral Reef Restoration, Mangrove restoration, Shoreline and springs protection, Establishing agroforestry systems

Location Name	Latitude	Longitude	GeoName ID
Asaga	-13.60185	-172.20530	

Location Description:

Activity Description:

Community Mangrove Reserve, Forest restoration, Mangrove restoration, Shoreline and springs protection

Location Name	Latitude	Longitude	GeoName ID
Lano	-13.61556	-172.20000	

Location Description:

Activity Description:

Coral Nursery, Forest restoration, Mangrove restoration, Shoreline and springs protection

Location Name	Latitude	Longitude	GeoName ID
Saipipi	-13.63316	-172.19830	

Location Description:

Activity Description:

Forest restoration, Shoreline and springs protection

Location Name	Latitude	Longitude	GeoName ID
Saasaai	-13.63925	-172.19310	

Location Description:

Activity Description:

Community Coastal Forest Reserve, Forest restoration, Shoreline and springs protection

Location Name	Latitude	Longitude	GeoName ID
Malae	-13.64861	-172.18920	

Location Description:

Activity Description:

Coral Reef Restoration

Location Name	Latitude	Longitude	GeoName ID
Siufaga	-13.65478	-172.18650	

Location Description:

Activity Description:

Coral Reef Restoration

Location Name	Latitude	Longitude	GeoName ID
Tuasivi	-13.66836	-172.17740	

Location Description:

Activity Description:

Coral Reef Restoration

Location Name	Latitude	Longitude	GeoName ID
Fogapoa	-13.67291	-172.17920	

Location Description:

Activity Description:

Coral Reef Restoration

Location Name	Latitude	Longitude	GeoName ID
Fatausi	-13.67429	-172.18170	

Location Description:

Activity Description:

Coral Reef Restoration

Location Name	Latitude	Longitude	GeoName ID
Safotulafai	-13.67870	-172.18150	

Location Description:

Activity Description:

Community Coastal Forest Reserve

Location Name	Latitude	Longitude	GeoName ID
Sapapalii	-13.69221	-172.19500	

Location Description:

Activity Description:

Community Coastal Forest Reserve, Mangrove restoration, Establishing agroforestry systems

Location Name	Latitude	Longitude	GeoName ID
Saletagaloa	-13.72653	-172.20720	

Location Description:

Activity Description:

Community Mangrove Reserve

Location Name	Latitude	Longitude	GeoName ID
Foua	-13.72628	-172.21230	

Location Description:

Activity Description:

Community Mangrove Reserve

Location Name	Latitude	Longitude	GeoName ID
Salelologa	-13.74427	-172.21890	

Location Description:

Activity Description:

Plant Nursery, Restoration of old quarry sites, Technical assessment

Location Name	Latitude	Longitude	GeoName ID
Maota	-13.74290	-172.26070	

Location Description:

Activity Description:

Plant Nursery, Technical assessment

Location Name	Latitude	Longitude	GeoName ID
Matafaa	-13.93287	-171.98230	

Location Description:

Activity Description:

Mangrove restoration

Location Name	Latitude	Longitude	GeoName ID
Faleaseela	-13.93234	-171.96840	

Location Description:

Activity Description:

Community Marine Reserve, Coral Reef Restoration, Mangrove restoration

Location Name	Latitude	Longitude	GeoName ID
Lefaga	-13.95996	-171.95830	

Location Description:

Activity Description:

Community Marine Reserve, Coral Reef Restoration

Location Name	Latitude	Longitude	GeoName ID
Savaia	-13.96507	-171.95500	

Location Description:

Activity Description:

Plant Nursery, Forest restoration, Shoreline and springs protection, Technical assessment

Location Name	Latitude	Longitude	GeoName ID
Matautu	-13.97057	-171.95080	

Location Description:

Activity Description:

Coral Reef Restoration, Forest restoration, Shoreline and springs protection

Location Name	Latitude	Longitude	GeoName ID
Saanapu	-13.99371	-171.87690	

Location Description:

Activity Description:

Community Coastal Forest Reserve, Coral Reef Restoration, Mangrove restoration, Establishing agroforestry systems

Location Name	Latitude	Longitude	GeoName ID
Sataoa	-13.98472	-171.86310	

Location Description:

Activity Description:

Community Coastal Forest Reserve, Community Mangrove Reserve, Coral Reef Restoration, Mangrove restoration, Restoration of old quarry sites, Establishing agroforestry systems

Location Name	Latitude	Longitude	GeoName ID
Niusuatia	-13.98241	-171.84120	

Location Description:

Activity Description:

Forest restoration, Shoreline and springs protection

Location Name	Latitude	Longitude	GeoName ID
Vaiee	-13.98567	-171.83180	

Location Description:

Activity Description:

Forest restoration, Shoreline and springs protection

Location Name	Latitude	Longitude	GeoName ID
Fusi	-13.99779	-171.82730	

Location Description:

Activity Description:

Establishing agroforestry systems

Location Name	Latitude	Longitude	GeoName ID
Fausaga	-14.00095	-171.82400	

Location Description:

Activity Description:

Community Coastal Forest Reserve, Forest restoration, Restoration of old quarry sites, Shoreline and springs protection

Location Name	Latitude	Longitude	GeoName ID
Tafitoala	-14.00350	-171.81220	

Location Description:

Activity Description:

Community Coastal Forest Reserve, Community Mangrove Reserve

Location Name	Latitude	Longitude	GeoName ID
Maninoa	-14.00549	-171.79140	

Location Description:

Activity Description:

Coral Reef Restoration

Location Name	Latitude	Longitude	GeoName ID
Siumu	-14.00743	-171.77850	

Location Description:

Activity Description:

Community Coastal Forest Reserve, Community Marine Reserve, Coral Reef Restoration

Location Name	Latitude	Longitude	GeoName ID
Masoe	-14.01179	-171.77980	

Location Description:

Activity Description:

Forest restoration, Shoreline and springs protection

Location Name	Latitude	Longitude	GeoName ID
Saagafou	-14.01179	-171.75480	

Location Description:

Activity Description:

Community Coastal Forest Reserve

Location Name	Latitude	Longitude	GeoName ID
Togitogiga	-14.01598	-171.72160	

Location Description:

Activity Description:

Plant Nursery, Technical assessment

Location Name	Latitude	Longitude	GeoName ID
Saleilua	-14.02591	-171.70790	

Location Description:

Activity Description:

Community Coastal Forest Reserve, Forest restoration, Shoreline and springs protection, Establishing agroforestry systems

Location Name	Latitude	Longitude	GeoName ID
Poutasi	-14.02691	-171.69530	

Location Description:

Activity Description:

Community Coastal Forest Reserve, Community Mangrove Reserve, Coral Nursery, Plant Nursery, Forest restoration, Mangrove restoration, Shoreline and springs protection, Technical assessment

Location Name	Latitude	Longitude	GeoName ID
Vaovai	-14.02549	-171.68220	

Location Description:

Activity Description:

Community Mangrove Reserve, Mangrove restoration

Location Name	Latitude	Longitude	GeoName ID
Tafatafa	-14.03132	-171.65800	

Location Description:

Activity Description:

Forest restoration, Shoreline and springs protection

Location Name	Latitude	Longitude	GeoName ID
Malaemalu	-14.03298	-171.64620	

Location Description:

Activity Description:

Mangrove restoration

Location Name	Latitude	Longitude	GeoName ID
Sapunaoa	-14.03318	-171.62950	

Location Description:

Activity Description:

Coral Reef Restoration, Mangrove restoration

Location Name	Latitude	Longitude	GeoName ID
Salesatele	-14.02929	-171.62400	

Location Description:

Activity Description:

Coral Reef Restoration

Location Name	Latitude	Longitude	GeoName ID
Salani	-14.03432	-171.61630	

Location Description:

Activity Description:

Community Coastal Forest Reserve, Coral Reef Restoration, Forest restoration

Location Name	Latitude	Longitude	GeoName ID
Lotofaga	-14.04462	-171.57530	

Location Description:

Activity Description:

Forest restoration, Shoreline and springs protection

Location Name	Latitude	Longitude	GeoName ID
Vailima	-13.86350	-171.76380	

Location Description:

Activity Description:

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

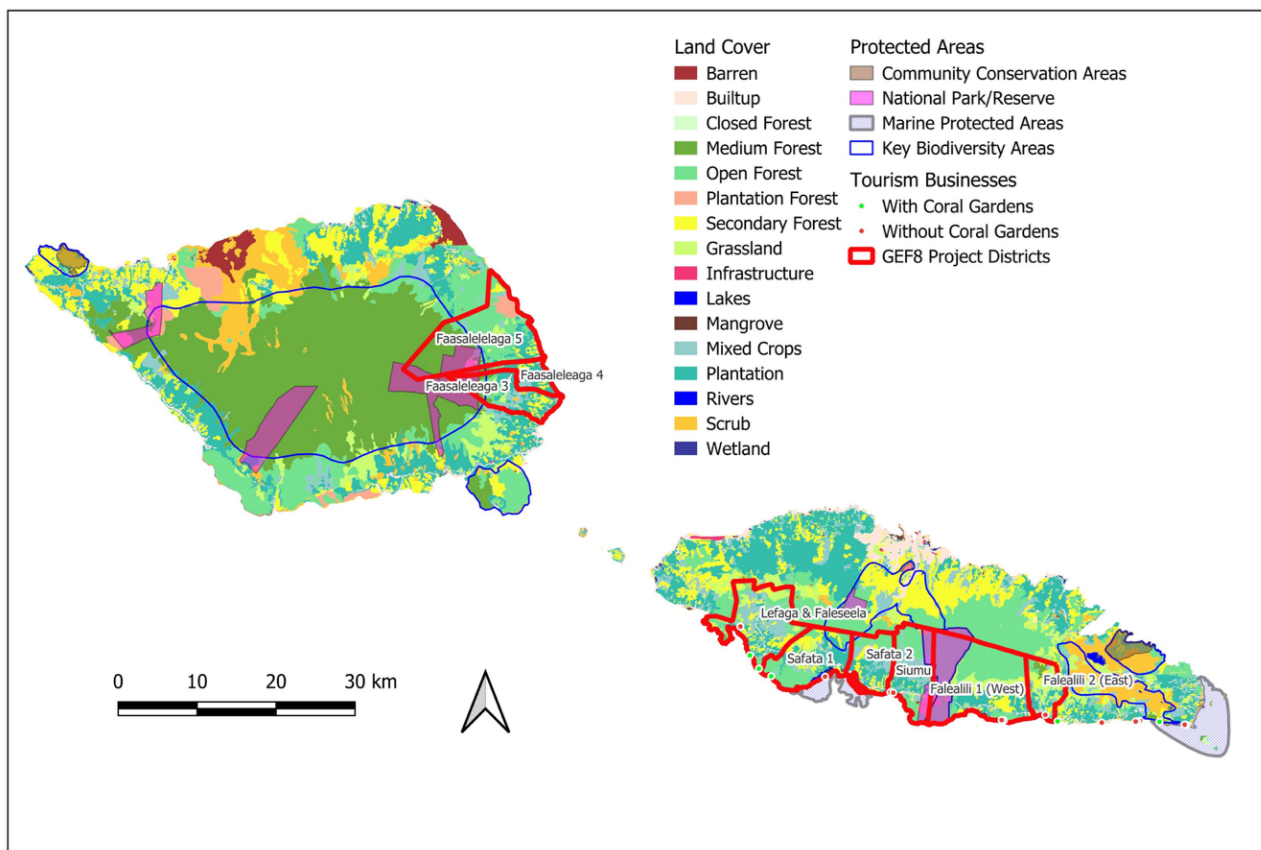


Figure 1. Project Districts: Falealili 1 (West), Falealili 2 (East), Siumu, Safata 1, Safata 2, Lefaga & Faleseela, Faasaleleaga 3, Faasaleleaga 4, Faasaleleaga 5. *The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.*

ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS SCREEN AND RATING

Attach agency safeguard datasheet/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 (as applicable).

Title

ESMF

ANNEX G: BUDGET TABLE

Please upload the budget table here.

Expenditure Category	Detailed Description	Component (USDeq.)						M&E				Total (USDeq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)[1]	
		Component 1		Component 2		Component 3		Sub-Total	M&E		PMC			
		Outcome 1 (GEF)	Outcome 1 (SCCF)	Outcome 2 (GEF)	Outcome 2 (SCCF)	Outcome 3 (GEF)	Outcome 3 (SCCF)		M&E (GEF)	M&E (SCCF)	PMC (GEF)			PMC (SCCF)
Equipment	Computers for NESSC and EbA Working Groups: 2 MacBook Pro, 3 PCs, 3 Surface Pro (Output 1.1): \$20,000, Year 2	20,000.00						20,000.00					20,000.00	MNRE
Equipment	a) Equipment for target nurseries (seedling trays, potting benches, compost bins, pruning tools, wheelbarrows, rakes, grafting knives, water tanks, irrigation systems, water pumps, etc.): \$50,000 (Output 1.3), Years 2-5 b) Equipment for two coral nurseries, PVC nursery tables, rope nursery lines, anchors & moorings, buoys/mar		300,000.00					300,000.00					300,000.00	MNRE

	ker floats, tags, dive compressor + fill accessories, scuba sets, cylinders, snorkel sets, wetsuits, underwater tools, safety kit, water quality kits & loggers, etc.): \$250,000 (Output 1.3), Years 2-5												
Equipment	SmartFlux sensor station for the Blue Carbon Project site: \$60,000, Year 2, (Output 2.1)				60,000.00							60,000.00	MNRE
Equipment	Additional office furniture for PMU for joint management of BGI IP and GEF/SCCF projects: \$2,000 for Year 1									2,000.00		2,000.00	MNRE
Equipment	5 computers and digital camera for PMU: \$4,500(Year 1)										4,500.00	4,500.00	MNRE
Grants	Initial small grants round via LDF EbA/Biodiversity window to support EbA initiatives in the project districts: 20 grants *\$5,000 (in average) = \$100,000 (Output 1.2), Years 4-5. Granting process will follow UNDP LVG Policy - the use of Grant budget line shall follow UNDP LVG policies	100,000.00										100,000.00	MNRE

Grants	Grants for CPAs to support equipment , simple infrastructure, initial operational costs, development of PPPs for CPA management: \$132,000 (Output 2.2), Years 2-5. The use of Grant budget line shall follow UNDP LVG policies			132,000.00			132,000.00				132,000.00	MNRE
Grants	Grants to participating local communities or NGO to initiate PPPs in cooperation with MNRE and private sector (e.g., to buy equipment , contribute to joint mangrove or coral restoration, sustainable agroforestry, FAD, etc.): 437,374 (Output 2.3), Years 2-5. The use of Grant budget line shall follow UNDP LVG policies			437,374.00			437,374.00				437,374.00	MNRE
Contractual services-Individual	Governance, Capacity & Trust Fund Officer (responsible for Component 1): \$1,800/month * 60 months = \$108,000 for Years 1-5	108,000.00					108,000.00				108,000.00	MNRE
Contractual services-Individual	Technical Officer for Ecosystem Restoration & EbA (responsible for GEF/SCCF			108,000.00			108,000.00				108,000.00	MNRE

	Component 2): \$1,800/month * 60 months = \$108,000 for Years 1-5												
Contractual services-Individual	Project Coordinator (same as for the BGI IP Project: additional \$500/month for Years 1-3 (joint implementation of BGI IP and GEF/SCCF project) and \$2,200/month for years 4-5: \$70,800 Years 1-5						-			70,800.00		70,800.00	MNRE
Contractual services-Individual	Project Finance and Administration Officer (same as for the BGI IP Project): additional \$300/month for Years 1-3 (joint implementation of BGI IP and GEF/SCCF project)									10,800.00		10,800.00	MNRE
Contractual services-Individual	Project Finance and Administration Officer (same as for the BGI IP Project): salary for Years 4 and 5, \$1,400/month * 24 months = \$33,600									33,600.00		33,600.00	MNRE
Contractual services-Individual	Procurement & Logistics Assistant : \$1,200/month *60 months = \$72,000, Years 1-5						-			72,000.00		72,000.00	MNRE
Contractual services-Company	Contract with selected organization to develop and implement a training package for NESSC (or SAC) and EbA	15,000.00					15,000.00					15,000.00	MNRE

	Working Group on drafting Village Environmental Charters & EbA MoUs; waste management; EbA forestry and replanting of coastal ecosystems; drafting village implementation & compliance SOPs on EbA; management of Public-Private Partnerships, and reporting on EbA results: \$15,000 (Output 1.1) Years 2-4													
Contractual services-Company	Contract with a selected organization to conduct feasibility study to establish LDF's EbA/Biodiversity funding window (legal, financial & institutional analysis) to identify the best option for Samoa's LDF: \$20,000 (Output 1.2) Year 1		20,000.00					20,000.00					20,000.00	MNRE
Contractual services-Company	Contract with a selected organization for development of capitalization and strategic plans & initial resource mobilization for LDF's EbA/Biodiversity funding window: \$60,000 (Output 1.2) Years 2-3		60,000.00					60,000.00					60,000.00	MNRE

Contractual services-Company	Contract to organize trainings for LDF Board and staff on management, resource mobilization, grant making, and reporting under EbA and Biodiversity funding window: \$50,000 (Output 1.2), Years 2-3		50,000.00				50,000.00				50,000.00	MNRE
Contractual services-Company	Contract to conduct need assessment for MNRE and MAF nurseries and upgrade their infrastructure to improve seedling production (Maota (MNRE) and Salelologa (MAF) nurseries): \$100,000 (Output 1.3), Years 1-3		100,000.00				100,000.00				100,000.00	MNRE
Contractual services-Company	Feasibility assessment of selected mangrove restoration sites and community-based restoration and maintenance of 10 ha of mangroves with Cash for Work approach (~\$16,000/ha): \$160,000 (Output 2.1), Years 2-5			160,000.00			160,000.00				160,000.00	MNRE
Contractual services-Company	Feasibility assessment of selected coastal forest restoration sites and community-based restoration and maintenance of 990			594,440.00			594,440.00				594,440.00	MNRE

	ha of forest: \$594,440 (Output 2.1), Years 1-5													
Contractual services-Company	Feasibility assessment of selected agroforestry sites, design, and establishing agroforestry systems on 300 ha of degraded forest land (~\$1,333/ha): \$400,000; Years 2-5 (Output 2.1)			400,000.00				400,000.00					400,000.00	MNRE
Contractual services-Company	Feasibility assessment of coral reef restoration site and rehabilitation of 1 ha of coral reef via outplanting corals from nurseries (Output 1,3) and (Output 2.1), Years 2-5			150,000.00				150,000.00					150,000.00	MNRE
Contractual services-Company	Surveys, mapping & delineation of the proposed CPA sites, legal support for CPA establishment: \$100,000 (Output 2.2), Year 2-4			100,000.00				100,000.00					100,000.00	MNRE
Contractual services-Company	Village consultations and FPIC for establishment of CPAs: \$15,000 (Output 2.2), Year 2-4			15,000.00				15,000.00					15,000.00	MNRE
Contractual services-Company	CPA management trainings for local communities: \$46,000 (Output 2.2), Year 2-5			46,000.00				46,000.00					46,000.00	MNRE
Contractual services-Company	Development of CPA Management			50,000.00				50,000.00					50,000.00	MNRE

	ent Plans and CPA boundary demarcation: \$50,000 (Output 2.2), Year 2-5													
Contractual services-Company	Feasibility assessment of selected hybrid seawall sites in Savai'i, design and construction of 800 m of the seawall (boulders + mangroves + forest) with Cash for Work approach (~\$116,000/100 m): \$930,000 (Output 2.1), Years 1-4				930,000.00			930,000.00					930,000.00	MNRE
Contractual services-Company	Contract to produce and submit a Project Design Document (PDD) for a pilot Blue Carbon project: \$300,000, Years 1-3, Output 2.1				300,000.00			300,000.00					300,000.00	MNRE
Contractual services-Company	Contract to conduct mapping of potential public and private sector partners with interests in EbA and Blue Economy in Samoa: \$42,152 (Output 2.3), Years 1-2				42,152.00			42,152.00					42,152.00	MNRE
Contractual services-Company	Contracts with selected organizations to produce KM materials, including lessons learned and best practice publications and media: \$22,000					22,000.00		22,000.00					22,000.00	MNRE

	(Output 3.3), Years 2-5													
Contractual services-Company	Contracts with selected organization to produce EbA awareness materials: \$18,500 (Output 3.2), Years 1-5						18,500.00	18,500.00					18,500.00	MNRE
International Consultants	International Consultant to map and calculate actual project carbon gains using FAO Ex-Act Tool: 10 days on Year 3 and 10 days on Year 5, \$650/day: \$13,000 (Output 4.1)						-	13,000.00					13,000.00	MNRE
International Consultants	International Consultant for MTR: \$650/day *30 days = \$19,500 (Output 4.1), Year 3 The number of MTR team members depends on the context and size of the project being evaluated. It is recommended to engage two evaluators, a team leader and team specialist, to allow for the team members to compare notes, verify the accuracy of information collected and recorded, and divide efforts to interview a large						-	19,500.00					19,500.00	UNDP

Local Consultants	M&E Consultant (same as for the BGI IP Project): additional \$300/month for Years 1-3 (joint implementation of BGI IP and GEF/SCCF project) and \$1,200/month for years 4-5 for 12 months: \$39,600 (Output 3.3), Years 1-5					39,600.00	39,600.00				39,600.00	MNRE
Local Consultants	Project Safeguards and Gender Consultant (same as for the BGI IP Project) : additional 4 months per year (\$1,400/month) for Years 1-3 (joint implementation of BGI IP and GEF/SCCF project) and \$1,200/month for years 4-5 for 12 months: \$45,600 (Output 3.1), Years 1-5. The Consultant will support gender mainstreaming and SES for all project Components					45,600.00	45,600.00				45,600.00	MNRE
Local Consultants	Project KM and Communication Consultant (same as for the BGI IP Project) : additional \$500/month for Years 1-3 (joint implementation of BGI IP and GEF/SCCF project)					44,400.00	44,400.00				44,400.00	MNRE

	and \$1,100/month for years 4-5: \$44,400 (Output 3.2), Years 1-5													
Local Consultants	National Consultant to measure national EbA Capacity with UNDP Capacity Scorecard: 20 days on Year 3 and 20 days on Year 5, \$350/day: \$14,000 (Output 4.1)							-	14,000.00				14,000.00	MNRE
Local Consultants	National Consultant for simple EbA perception survey in the project districts: 20 days on Year 3 and 20 days on Year 5, \$350/day: \$14,000 (Output 4.1)								14,000.00				14,000.00	MNRE
Local Consultants	National Consultant for MTR: \$350/day *20 days = \$7,000 (Output 4.1), Year 3 The number of MTR team members depends on the context and size of the project being evaluated. It is recommended to engage two evaluators, a team leader and team specialist, to allow for the team members to compare notes, verify the accuracy of information collected and recorded, and divide							-	7,000.00				7,000.00	UNDP

	efforts to interview a large number of stakeholders.												
Local Consultants	National Consultant for TE: \$350/day *30 days = \$10,500 (Output 4.1), Year 5 The number of TE team members depends on the context and size of the project being evaluated. It is recommended to engage two evaluators, a team leader and team specialist, to allow for the team members to compare notes, verify the accuracy of information collected and recorded, and divide efforts to interview a large number of stakeholders.								10,500.00			10,500.00	UNDP
Training, Workshops, Meetings	a) Technical workshops and trainings for NESSC (or SAR) and EbA Working Group in framework of the Twinning/Exchange Program with New Zealand and Pacific SIDS: \$100,000 (Output 1.1), Years 1-5 b) Technical meetings	164,000.00					164,000.00					164,000.00	MNRE

	of NESSC (or SAC) and EbA Working Group related to GEF/SCCF Project EbA activities (planning, evaluation, reporting) as well as other EbA initiatives in Samoa: \$14,000 (Output 1.1), Years 1-5 c) LDF's EbA/Biodiversity window launch & pledging conference for donors: \$50,000 (Output 1.2), Year 3													
Training, Workshops, Meetings	Trainings for MNRE and MAF nurseries staff and local communities on nursery management and EbA techniques : \$20,000 (Output 1.3), Years 2-3		20,000.00					20,000.00					20,000.00	MNRE
Training, Workshops, Meetings	Annual lessons learning sessions and KM workshops with project partners and local communities: \$15,000 (Output 3.3), Years 1-5					15,000.00		15,000.00					15,000.00	MNRE
Training, Workshops, Meetings	a) Trainings for project staff, implementing partners, community facilitators , and district leaders on gender-responsive EbA planning, gender-sensitive M&E, and						30,000.00	30,000.00					30,000.00	MNRE

	ecosystem TF models and initial travel expenses for LDF staff related to EbA and Biodiversity funding window: \$62,000 (Output 1.2) Years 1, 3-5													
Travel	Travel for PMU staff and project partners to participate in international knowledge exchange meetings: \$6,000/year * 5 years = \$30,000 (Output 3.3), Years 1-5					30,000.00		30,000.00					30,000.00	MNRE
Travel	Travel for Safeguards and Gender Consultant to collect gender data and provide trainings to the project partners on gender mainstreaming: \$9,000 (Output 3.1) Years 1-5					9,000.00		9,000.00					9,000.00	MNRE
Travel	Travel expenses for KM and Communication Consultant to conduct awareness events with communities: \$16,000 (Output 3.2), Years 1-5					16,000.00		16,000.00					16,000.00	MNRE
Travel	Travel expenses for PMU for monitoring of SESP, GRM, Gender mainstreaming Strategy, and Stakeholder Engagement Plan;							-	30,000.00				30,000.00	MNRE

	supervision missions by the PMU to the project sites and learning missions by the PMU to the project sites: \$6,000/year * 5 years = \$30,000 (Output 4.1) Years 1-5													
Travel	Travel expenses for ICs for MTR and TE: 2 trips * \$6,000 = \$12,000 (Output 4.1), Years 3 and 5							-		12,000.00			12,000.00	UNDP
Travel	Travel expenses for NCs for MTR and TE: 2 trips * \$2,000 = \$4,000 (Output 4.1), Years 3 and 5									4,000.00			4,000.00	UNDP
Travel	Additional travel expenses for PMU for management of the project activities in the target districts: \$4,686, Years 1-4							-				4,686.00	4,686.00	MNRE
Office Supplies	Office supplies for PMU (paper, cartridges, etc.): \$5,000 for Years 1-5							-				5,000.00	5,000.00	MNRE
Other Operating Costs	Annual project audit and spot checks of the project partners: \$40,000 for Years 1-5							-		40,000.00			40,000.00	UNDP
Grand Total		569,000.00	550,000.00	1,763,440.00	1,769,526.00	106,600.00	163,500.00	4,922,066.00	75,000.00	79,000.00	125,686.00	127,700.00	5,329,452.00	

Please explain any aspects of the budget as needed here

ANNEX I: RESPONSES TO PROJECT REVIEWS

From GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF.

Comment-Response Matrix: GEF STAP and GEF Council

UNDP/GEF/SCCF Project “Strengthening Climate Adaptation, Biodiversity Conservation, and Combating Land Degradation through Ecosystem-based Adaptation in Samoa”

GEF STAP Review on November 25, 2024

STAP Comment	Agency Response
<p>1. STAP welcomes the description of future narratives based on climate change projections for 2080 to 2100. To further strengthen the narrative, STAP suggests using climate data for 2050. See UNDP Human Climate Horizons. It also encourages the project developers to consider the interactions between climate change and other drivers, such as population increase (mentioned in the PIF), to help identify robust interventions that produce enduring outcomes. Suggest consulting STAP’s advice on future narratives to strengthen the application of future narratives in the project design.</p>	<p>Thank you, agree. In the full project document and CEOER we applied 2040-20250 climate data. Three key drivers were considered for the future narrative scenarios:</p> <p>Driver A: Climate-hazard intensity to 2040 (rate of sea-level rise, cyclone strength, marine-heat wave days);</p> <p>Driver B: Quality of domestic& external governance for resilience (fiscal space, policy coherence, access to concessional finance, enforcement of land-use/reef bylaws); and</p> <p>Driver C: Economic and Population Growth</p>
<p>2. Component 1 is characterized by substantial innovation, with the establishment of the Ecosystem Conservation Adaptation Trust Fund. Monitoring processes that enable rapid learning about how public-private finance impacts GEBs and climate adaptation outcomes will be important to ensure proper and timely adaptive management is pursued.</p>	<p>The Agency agrees with this recommendation and has built a dedicated monitoring and learning architecture around the Output 1.2 (EbA/Biodiversity window of the Loss & Damage Fund). First, the Fund will operate under a results framework fully aligned with the project PRF and M&E plan (Output 4.1), so that every grant or PPP it finances will be required to define baselines, targets, and a simple results chain linking public-private finance flows to concrete GEBs and adaptation outcomes (e.g., hectares of habitat restored or protected, tCO₂e avoided/sequestered, people with reduced climate risk). Grant agreements and PPP MoUs will include standardized indicators and reporting templates; these data will be consolidated by the PMU and the EbA Coordination Committee (strengthened NESSC) to generate annual finance-to-results dashboards that compare types of capital (public, private, community, carbon/levy/PES) with ecological and socio-economic performance in Fund-supported sites.</p> <p>Second, the project’s Knowledge Management and Learning Component (Outcome 3, Output 3.3) institutionalizes rapid learning loops: Fund-supported PPPs and community projects will participate in semi-annual lessons-learned workshops and produce short case studies on what combinations of finance, governance and technical models yield the strongest GEBs and adaptation benefits, including for women and vulnerable groups. Findings will be fed back each year into (i) Fund investment guidelines and screening criteria, (ii) pipeline prioritization by the Fund Board, and (iii) revisions of CIMP implementation plans, ensuring that public-private finance is continuously reallocated toward the highest-performing EbA models through adaptive management.</p>

<p>3. Furthermore, STAP recommends explicitly defining as an assumption, or hypothesis, that EbA approaches will generate GEBs, benefit adaptive capacity, scale, and attract further private capital. This will help identify risks that need to be captured in the project design, such as the scaling of EbA best practices, which are assumed to occur due to this project. In fact, STAP would urge the project developers to consider a separate theory of change for the Fund that defines the impact pathways to achieving the desired outcomes, detailing the assumptions, and the different roles of the partners (private and public) in contributing to the Fund's results.</p>	<p>Thank you! The following assumption has been added to the Outcome 2 in the project ToC: (d) EbA interventions generate GEBs, benefit adaptive capacity, scale, and attract further private capital:</p> <p>In addition, a separate, dedicated Theory of Change for the EbA/Biodiversity Window, fully aligned with the overarching Theory of Change for the Loss and Damage Fund, will be prepared and endorsed during the project Output 1.2 initiation phase. This ToC will detail impact pathways from different financing instruments to ecological and socio-economic outcomes, clarify the respective roles and contributions of public, private, and community partners, and provide a structured basis for adaptive management and learning throughout implementation.</p>
<p>4. Component 2 is characterized by extensive innovation, such as scaling of EbA practices that are being pursued in the Blue and Green Island Integrated Program (e.g. restoring and protecting mangrove, and riparian forests; improving agroforestry practices; establishing blue carbon projects on mangroves and seagrass meadows). A separate theory of change on scaling the proposed EbA measures is possibly necessary to test assumptions, the risks associated with them, and to capture monitoring and learning better.</p>	<p>The Agency appreciates STAP's emphasis on the innovation embedded in Component 2. The results chain underpinning Outcome 2 is relatively straightforward and is already fully integrated into the overall project Theory of Change and the Blue and Green Islands Integrated Programme (BGI IP) results logic. In brief, the project will (i) use updated by BGI IP CIMP-aligned EbA/NbS plans to identify specific EbA and PPP interventions in the project districts; (ii) implement concrete EbA measures to restore and protect ecosystems of high adaptation values such as mangrove, riparian and upland forest restoration, climate-resilient agroforestry, nature-based shoreline protection, and support of Community Conservation Areas; and (iii) provide incentives and co-financing through PPPs, the EbA/Biodiversity Window of the Loss and Damage Fund, and piloting of blue carbon and other PPP-based EbA initiatives. These activities produce direct outputs such as hectares of ecosystems restored and protected, area under agroforestry practices, length of a hybrid seawall, and operational blue-carbon/PPP EbA arrangements. In turn, these outputs lead to Outcome 2 (scaled up EbA interventions) and mid-term impacts of enhanced ecosystem integrity, reduced exposure to storm surges and erosion, more diversified and climate-resilient livelihoods, and strengthened local governance for EbA. At long-term impact level, the result chain contributes to improved adaptive capacity of communities, reduced climate risk, and measurable GEBs in biodiversity conservation, climate adaptation and mitigation, and land degradation neutrality.</p> <p>Because this causal pathway is tightly interlinked with the other project outcomes (governance, capacity, and finance under Outcome 1, knowledge and learning under Outcome 3, and M&E under Outcome 4) and follows the same scaling logic as the BGI-IP (site-level EbA models feeding into national planning, replication through CIMPs and financing windows, and regional learning), we do not propose to develop a fully separate, standalone Theory of Change for Component 2. Instead, the scaling assumptions, risks, and feedback loops identified by STAP (e.g., sustained adoption of EbA practices, replication across districts, and continued private-sector interest) have been made explicit within the unified project-level Theory of Change, and M&E/learning framework, ensuring that monitoring and adaptive management capture the performance and scalability of the EbA measures in a coherent manner across all components of GEF/SCCF project and in alignment with the BGI-IP.</p>
<p>5. Furthermore, component 2 proposes to apply Natural Capital Accounting (NCA) to assess the economic benefits of the restored ecosystems. STAP recommends that this component uses Samoa's experience in NCA. As currently written, it is difficult to understand to what extent this</p>	<p>The Agency appreciates STAP's recommendation and fully agrees on the importance of building on Samoa's existing and emerging work on Natural Capital Accounting (NCA). In line with the overall program architecture, the detailed NCA work (including the development and application of national and sub-national ecosystem accounts, and the</p>

<p>component will leverage knowledge from Samoa's potential previous experience in NCA. The following resource may be helpful to the project developers as they consider the challenges and opportunities in building synergies between national and business natural capital accounts for ecosystem valuation in Samoa: Leveraging natural capital accounting to support businesses with nature-related risk assessments and disclosures</p>	<p>integration of these in economic planning) will be led and financed under the Blue and Green Islands Integrated Programme (BGI IP). The GEF/SCCF project will not duplicate NCA activities; instead, it will use the outputs of the BGI IP NCA work: specifically, the updated CIMP and associated nature-based solutions/EbA plans that are informed by NCA analyses to identify and prioritize the most critical EbA intervention sites in the nine target districts. The ProDoc clarifies this division of labor, and specify coordination mechanisms with the BGI IP NCA technical team so that the project systematically leverages Samoa's NCA experience and the referenced guidance, while focusing its own resources on implementing concrete EbA measures in the high-priority sites identified through those NCA-informed CIMP plans.</p>
<p>6.STAP is pleased the project has a dedicated component on knowledge management and gender mainstreaming. As written, the component seems to emphasize linking the knowledge resulting from this project to the Blue and Green Island Integrated Program, and focus less on gender mainstreaming. If this is accurate, STAP strongly encourages the project team to assess the necessary conditions and actions to support gender norms, and equality, throughout the project logic. STAP also encourages for indigenous and local knowledge on climate adaptation to be embraced throughout the project design. For example, refer to "Working with nature, working with Indigenous knowledge: Community priorities for climate adaptation in Samoa"</p>	<p>The Agency welcomes STAP's guidance and confirms that gender equality and indigenous/local knowledge are central to the Knowledge Management (KM) component 3 and are systematically mainstreamed across all Outcomes in the full project document. Under Component 3, Output 3.1 will develop and implement a comprehensive Gender Mainstreaming Strategy based on participatory gender analysis and baseline assessments in each EbA intervention site, generating sex-disaggregated data and gap analyses for every planned measure. This Strategy will set gender-responsive objectives, targets, and indicators for all project outputs, and will be supported by capacity-building for MNRE, MWCSO, district authorities, and the LDF and NESSC so that gender equality is embedded in EbA planning, LDF decision-making, and CIMP implementation. Also, at PPG stage a comprehensive Gender Analysis and Gender Action Plan has been produced. Outputs 3.2 and 3.3 then operationalize this in KM: the national communication and awareness campaign on EbA will use inclusive formats (radio, social media, community talanoa) that explicitly highlight women's roles and perspectives in ecosystem management and climate adaptation, while the KM Strategy and annual learning sessions will document and disseminate gender-inclusive good practices and lessons, feeding them back into the adaptive management cycle and positioning Samoa as a regional knowledge broker under the BGI IP and GEF/SCCF projects.</p> <p>Indigenous and local knowledge are also a core focus of KM and of the field components. The KM work under Output 3.3 will systematically capture and share community-driven EbA solutions and traditional ecological knowledge: for example, customary rules around sacred forest groves, village-led marine and mangrove reserves, and traditional agroforestry and shoreline protection practices from the nine project districts. These will be synthesized into case studies and solution briefs and shared through platforms such as PANORAMA, the Pacific Climate Change Portal, and the UNDP NbS Accelerator, in line with the literature highlighted by STAP. In Components 1 and 2, gender-responsive and socially inclusive consultations, FPIC processes, and the design of Community Conservation Areas and EbA investments explicitly engage women's committees, matai and other customary leaders, youth, and vulnerable groups; at least 10,000 people, including 50% women, are expected to directly benefit from EbA measures. Component 4 then reinforces this through a participatory, gender-sensitive M&E system that tracks sex-disaggregated participation and benefits, as well as qualitative changes in decision-making power and the use of indigenous knowledge in adaptation planning. Together, these measures ensure that gender norms, equality, and indigenous/local knowledge are fully integrated throughout the project logic and KM framework, not only in the linkages with the BGI IP project but in the way EbA is designed, implemented, and scaled in Samoa.</p>
<p>7.STAP recommends expanding multi-stakeholder partnerships beyond government and the private sector to</p>	<p>The Agency agrees with STAP's recommendation and confirms that the full Project Document already expands multi-stakeholder</p>

<p>achieve sustainable, systemic change at scale and ensure transformative, long-term impact. This should include deeper collaboration with local NGOs, academic institutions, and regional networks focused on climate change adaptation. Such partnerships would help align efforts, pool resources, and broaden the knowledge base for adaptive management across sectors.</p>	<p>partnerships well beyond government and the private sector. In addition to MNRE, MOF, MAF, STA, SCCI and MSMEs, the ProDoc includes a broad coalition of local NGOs, community structures, academic institutions and regional networks as core delivery and learning partners. For example, Samoa Umbrella for Non-Governmental Organizations (SUNGO) and the Samoa Conservation Society (SCS) are members of the Project Board and key partners for Outputs 1.1 and 2.1–2.3 on EbA governance, community protected areas and PPPs, as well as for awareness and M&E. District Development Councils, Village Councils, women’s committees and local community groups are explicitly identified as implementation partners and co-managers of EbA initiatives in the nine target districts, with dedicated roles in safeguards, the GRM and participatory monitoring. Academic institutions (the University of the South Pacific (USP) and the National University of Samoa (NUS)) are project partners for Outputs 3.2 and 3.3 on awareness, knowledge management and Outcome 2 technical backstopping, including co-development of case studies, student research and joint learning events. Regionally, SPREP (including its Kiwa Initiative), SPC, PIDF, PIF and other SIDS platforms are engaged under Outputs 1.2, 2.2, and 3.3 and the South-South and Triangular Cooperation framework to share and co-create EbA and NbS solutions, while UNDP SGP and BIOFIN, and foundations such as the Blue Prosperity Coalition and Blue Nature Alliance, provide complementary finance and technical expertise. Through these arrangements, the project aligns efforts, pools resources and broadens the knowledge base for adaptive management across sectors, thereby supporting the systemic, transformative and long-term impact that STAP is calling for.</p>
<p>8. While gender mainstreaming is acknowledged, it would be valuable to incorporate more specific and measurable gender-responsive actions within the project. This could include targeted interventions to address gender-specific vulnerabilities to climate change, and the development of gender-specific indicators to track progress on women’s participation and leadership in climate adaptation, ecosystem restoration, and community-based decision-making processes.</p>	<p>The Agency concurs with STAP’s recommendation and confirms that the full ProDoc integrates gender considerations across all Outcomes and Outputs. Each component includes explicit gender-responsive activities and sex-disaggregated indicators, for example, targets for at least 50% women’s participation in CIMP/EbA planning processes, district-level consultations, and implementation of EbA solutions; women’s representation in LDF/EbA Window governance and Project Board structures; women’s participation and leadership in community conservation areas, PPPs, and livelihood/enterprise schemes; and sex-disaggregated tracking of beneficiaries of training, grants, and employment opportunities generated through EbA and ecosystem restoration. The Social and Environmental Standards, stakeholder engagement, and GRM arrangements are also gender-responsive, with specific measures to ensure safe participation of women and girls, and to address gender-based barriers to decision-making and benefit-sharing.</p> <p>In addition, the project package includes a stand-alone, fully budgeted Gender Analysis and Gender Action Plan (GAP). Building on this analysis, the GAP defines targeted measures such as: (i) tailored outreach and training for women’s committees and women-led enterprises on EbA livelihoods and ecosystem restoration; (ii) dedicated support for women’s leadership in EbA implementation, community conservation governance structures, and LDF/EbA Window/NESSC decision-making; (iii) measures to ensure that women benefit equitably from grants, jobs, and PPP opportunities; and (iv) gender-sensitive communication and GBV risk-mitigation provisions integrated into stakeholder engagement and the GRM.</p>
<p>9. The project has identified key barriers related to policy, technical, and financial capacities and knowledge management. However, the proposal should incorporate innovative solutions to address these challenges. One approach is integrating governance and policy reforms, sustainable finance mechanisms, and strengthening institutional capacities. Additionally, a focus on robust innovation, continuous learning, and enhancing technical</p>	<p>The Agency appreciates STAP’s recommendation and confirms that the full ProDoc already incorporates a set of mutually reinforcing innovative solutions to address the identified policy, technical, financial, and knowledge management barriers. Key innovations include: (i) the establishment of the EbA/Biodiversity Window within Samoa’s Loss and Damage Fund, which pilots a dedicated national financing window for NbS/EbA and blends public, private, community and potential carbon/PES revenues; (ii) piloting blue carbon approaches in mangroves and seagrass meadows linked to future</p>

<p>capacities through knowledge management would further support the project’s effectiveness and sustainability.</p>	<p>carbon crediting and/or PES schemes; (iii) using hybrid seawalls integrating boulders, mangroves and forest belts for strengthened coastal protection; and (iv) EbA PPPs between private sector, government, NGOs, and communities. These innovations are embedded in a broader package of governance and policy reforms supported by BGI IP project (e.g., NCAs, strengthening CIMP planning and implementation, embedding EbA/NBS/PES in sectoral policies), and institutional capacity development (targeted technical support to MNRE, MWCSO, district councils, and community institutions to plan, implement, and monitor EbA).</p> <p>At the same time, the project deliberately avoids building its entire logic on untested instruments alone, which would pose significant implementation and sustainability risks in Samoa’s highly vulnerable and capacity constrained context. Instead, it adopts a balanced approach that combines these innovative elements with proven, community-driven EbA measures that have already demonstrated effectiveness in Samoa and the wider Pacific—such as mangrove and riparian forest rehabilitation, reforestation of degraded slopes, climate-resilient agroforestry, and community-managed coastal and marine areas.</p>
<p>10. The document requires careful editing. For instance, the content of the ToC Fig is not easily readable and would benefit from clearer structure and formatting. Additionally, the area targeted for riparian forest restoration (990 ha?) is not clearly visible in the document. It would be helpful to include visual aids such as maps or diagrams to make this information more accessible and to support the project’s goals better.</p>	<p>The Agency appreciates STAP’s suggestion and confirms that the full ProDoc has been carefully edited and proof-read to improve clarity, consistency, and readability. The overall Theory of Change has been updated and reformatted so that the figure is sharper and fully readable, with clearly separated impact pathways, assumptions, and links between components; a strengthened narrative accompanies the figure to guide the reader through the logic. The target area for riparian forest restoration is now consistently presented and explicitly labeled in the text, results framework, and budget tables, so that the intended restoration area (990 ha) is clearly visible and traceable across the document. In addition, a new Annex 3 has been developed with high-resolution maps showing the nine project districts and specific intervention sites, including the riparian, mangrove, and upland forest restoration areas and other EbA measures. These visual aids are referenced in the main text and are intended to make the spatial focus of the project more accessible and to better support understanding of how the proposed investments contribute to the project’s goals.</p>

GEF Council Comments: December 2024

Council Comments	Agency Response
<p>Germany welcomes the innovative approaches being named in the project proposal, such as establishing an Ecosystem Conservation Adaptation Trust Fund. Germany encourages the project team to evaluate the efficiency and longevity of new mechanisms like this one, and opportunities to engage other actors, such as from the private sector in the capitalization of the Trust Fund.</p>	<p>Germany’s comment is fully acknowledged. During ProDoc preparation, the Government of Samoa and UNDP revisited the initial idea of creating a stand-alone Ecosystem Conservation Adaptation Trust Fund and decided instead to opt for a more sustainable and efficient model: an integrated EbA/Biodiversity funding window housed within Samoa’s emerging national Loss & Damage Fund (LDF). This option minimizes transaction and governance costs, allows limited national capacities to focus on one consolidated financing platform, and better aligns climate disaster recovery and long-term EbA/biodiversity</p>

	<p>investments under a single fiduciary and decision-making structure. The LDF architecture explicitly includes a dedicated EbA & Conservation window, governed by a multi-stakeholder Board, with clear investment policies and an operations manual tailored to EbA and biodiversity finance.</p> <p>The project will not fully capitalize the LDF, but it will put in place the mechanisms and early resources needed to ensure the EbA/Biodiversity window's longevity and capacity to crowd in other actors, including from the private sector. First, GEF/SCCF resources will finance the design of the funding window, its legal and governance framework, investment policy, operations manual, and basic systems, and will channel an initial tranche of project funds through the LDF to test procedures via a first round of small EbA grants.</p> <p>Second, the project will support a capitalization plan and targeted resource-mobilization efforts, including: (i) a government/donor seed contribution and exploration of a dedicated budget line; (ii) earmarking of domestic revenue instruments such as the planned International Visitor Levy under the BGI IP project, as well as potential payments for ecosystem services; and (iii) structured outreach to bilateral and multilateral partners, foundations, and private sector actors (tourism operators, agribusiness, and prospective blue-carbon buyers), including through donor roundtables and a high-profile pledging event. Collaboration with BIOFIN will help refine the mix of fiscal measures, PES arrangements, and innovative instruments (e.g., green bonds, carbon credits) to attract and sustain private and blended capital.</p>
<p>While gender considerations and the goal of implementing gender inclusive measures is repeatedly named throughout the proposal, it remains elusive what kind of measures will be implemented. Thus, Germany recommends more detailed explanations of the specific measures and indicators being planned to achieve gender equality.</p>	<p>Germany's recommendation is fully taken on board. In the full project package, gender mainstreaming is addressed comprehensively through (i) a dedicated, budgeted Gender Analysis and Gender Action Plan (GAP) that translates the analysis into concrete measures, responsibilities, timelines, and indicators. The Gender Analysis examines women's and men's differentiated roles and vulnerabilities in coastal resource use, land and forest management, tourism, and local governance in the nine target districts. On this basis, the GAP specifies targeted actions such as: outreach and tailored training for women's committees and women-led MSMEs on EbA livelihoods</p>

and financial literacy; measures to ensure women's meaningful participation and leadership in CIMP/EbA planning and implementation, the LDF/EbA Window governance, Project Board and district councils; quotas/targets for women's involvement in community conservation area management and PPPs; gender-sensitive communication campaigns; and GBV-sensitive stakeholder engagement and GRM procedures.

These measures are backed by a clear results framework and additional GAP indicators with gender-specific and sex-disaggregated indicators across all components. Examples include: "at least 50% women among participants of CIMP/EbA implementation," "at least 40% of decision-making roles in LDF/EbA Window at LDF and community conservation governance held by women," "number and percentage of women among direct beneficiaries of EbA livelihood grants and jobs," and "number of women's organizations engaged in project implementation and monitoring." The M&E plan requires systematic collection and reporting of sex-disaggregated data and periodic review of qualitative changes in women's voice and influence in local decision-making. Together, the ProDoc and GAP therefore provide the detailed package of measures and indicators requested, ensuring that gender equality is not only a stated objective but operationalized throughout project design, implementation, and monitoring.

Germany would welcome the inclusion of Indigenous Peoples and Local Communities and their knowledge more systematically throughout the project proposal and emphasizes the need for constant civil society participation across all project stages.

The concern raised is fully addressed in the full project package. The ProDoc systematically positions Indigenous Peoples and Local Communities (IPLCs) and their knowledge as central actors in all four components. Village councils (fono and matai), women's committees, youth groups and other community-based organizations are identified as core partners for co-designing and implementing EbA measures, establishing and managing community conservation areas, and delivering district level CIMP/EbA plans. The Stakeholder Engagement Plan and the Social and Environmental Standards (SESP) explicitly require culturally appropriate, iterative consultations (including talanoa processes) and recognition of customary tenure, decision-making structures, and traditional ecological knowledge in the selection of EbA interventions, restoration techniques, and livelihood options.

Civil society participation is embedded across all project stages. Local NGOs and community platforms (e.g., SUNGO, Samoa Conservation Society and district development committees) are included among key project partners and in technical working groups, are designated as implementing partners for community-level activities, and have defined roles in safeguards implementation, the grievance redress mechanism, and participatory M&E. IPLC representatives will be engaged in annual work-planning, mid-term review, and terminal evaluation, and community monitoring mechanisms will collect data on ecosystem condition and socio-economic benefits using locally appropriate indicators and knowledge. Through these arrangements, the project ensures that IPLCs and their knowledge are not treated as an add-on, but are systematically integrated into governance, design, implementation, learning, and oversight throughout the full project cycle, in line with Germany's recommendation.

Japan: "SDGs Business Verification Survey with the Private Sector for Environment Improvement and Reduction of Risks against Natural Disaster using the Bio-log Filter, Samoa" (October 2019–December 2024) proposed by the Joint Venture of Nansei Environmental Laboratory Co., Ltd. and Wescot West Corporation was adopted and implemented in response to the FY2017 2nd Small and Medium-Sized Enterprises Overseas Development Support Project Public Announcement. References: https://www2.jica.go.jp/ja/priv_sme_partner/document/955/F172064_summary.pdf; https://libopac.jica.go.jp/images/report/1000053293_01.pdf; https://libopac.jica.go.jp/images/report/1000053293_02.pdf; https://libopac.jica.go.jp/images/report/1000053293_03.pdf

Thank you! The Agency confirms that the experience from the JICA-supported initiative "SDGs Business Verification Survey with the Private Sector for Environment Improvement and Reduction of Risks against Natural Disaster using the Bio-log Filter, Samoa (2019–2024)" has been reviewed and integrated into the project design. Lessons on the technical performance and business feasibility of Bio-log Filters as a nature-based disaster risk reduction measure have informed our approach to engaging the private sector in EbA. Specifically, under Output 2.3 the project will treat Bio-log Filters as one of the PPP options for shoreline and riparian protection in vulnerable districts, working with interested private companies and relevant authorities to structure co-financed PPP pilots, potentially using the EbA/Biodiversity Window of the Loss and Damage Fund, so that this tested technology can be deployed, evaluated, and, if successful, replicated as part of the broader EbA PPP portfolio.