

**GREEN
CLIMATE
FUND**

Meeting of the Board

25 – 28 March 2026

Songdo, Incheon, Republic of Korea

Provisional agenda item 10

GCF/B.44/02/Add.11

4 March 2026

Consideration of funding proposals – Addendum XI

Funding proposal package for FP295

Summary

This addendum contains the following six parts:

- a) A funding proposal titled "Establishing Climate Resilient, Regenerative Agricultural (CRRA) systems in Tonga, Vanuatu and Samoa";
- b) No-objection letter issued by the national designated authority(ies) or focal point(s);
- c) Secretariat's assessment;
- d) Independent Technical Advisory Panel's assessment;
- e) Response from the accredited entity to the independent Technical Advisory Panel's assessment; and
- f) Gender documentation.

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Funding Proposal

Project/Programme title:	<u><i>Establishing Climate Resilient, Regenerative Agricultural (CRRA) systems in Tonga, Vanuatu and Samoa.</i></u>
Country(ies):	<u><i>Tonga, Vanuatu and Samoa</i></u>
Accredited Entity:	<u><i>Pacific Community (SPC)</i></u>
Date of first submission:	<u><i>2023/09/15</i></u>
Date of current submission	<u><i>[2026/01/13/]</i></u>
Version number	<u><i>[V.007]</i></u>



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Note to Accredited Entities on the use of the funding proposal template

- Accredited Entities should provide summary information in the proposal with cross-reference to annexes such as feasibility studies, gender action plan, term sheet, etc.
- Accredited Entities should ensure that annexes provided are consistent with the details provided in the funding proposal. Updates to the funding proposal and/or annexes must be reflected in all relevant documents.
- The total number of pages for the funding proposal (excluding annexes) **should not exceed 60**. Proposals exceeding the prescribed length will not be assessed within the usual service standard time.
- The recommended font is Arial, size 11.
- Under the [GCF Information Disclosure Policy](#), project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP. Accredited Entities are asked to fill out information on disclosure in section G.4.

Please submit the completed proposal to:

fundingproposal@gcfund.org

Please use the following name convention for the file name:

“FP-[Accredited Entity Short Name]-[Country/Region]-[YYYY/MM/DD]

A. PROJECT/PROGRAMME SUMMARY			
A.1. Project or programme	Programme	A.2. Public or private sector	Public
A.3. Request for Proposals (RFP)	Not applicable		
A.4. Result area(s)		GCF contribution	Co-financers' contribution
	Mitigation total	Enter number %	Enter number %
	<input type="checkbox"/> Energy generation and access	Enter number %	Enter number %
	<input type="checkbox"/> Low-emission transport	Enter number %	Enter number %
	<input type="checkbox"/> Buildings, cities, industries and appliances	Enter number %	Enter number %
	<input type="checkbox"/> Forestry and land use	Enter number %	Enter number %
	Adaptation total	100 %	100 %
	<input checked="" type="checkbox"/> Most vulnerable people and communities	34 %	34 %
	<input checked="" type="checkbox"/> Health and well-being, and food and water security	34 %	34 %
	<input type="checkbox"/> Infrastructure and built environment	Enter number %	Enter number %
	<input checked="" type="checkbox"/> Ecosystems and ecosystem services	32 %	32 %
	A.5. Expected mitigation outcome <i>(Core indicator 1: GHG emissions reduced, avoided or removed / sequestered)</i>	Not applicable	A.6. Expected adaptation outcome <i>(Core indicator 2: direct and indirect beneficiaries reached)</i>
			Direct: 25,428 males; 25,226 females
			Indirect: 110,259 males; 109,380 females
			8% of total combined population of three countries ¹
			36 of total combined population of three countries
A.7. Total financing (GCF + co-finance)	43,690,709 USD	A.9. Project size	Small (Upto USD 50 million)
A.8. Total GCF funding requested	42,056,443 USD <i>For multi-country proposals, please fill out annex 17.</i>		

¹ As per the 2021 household census in Tonga, 2020 household census in Vanuatu and 2021 household census in Samoa.

A.10. Financial instrument(s) requested for the GCF funding	<input checked="" type="checkbox"/> Grant <u>42,056,443USD</u> <input type="checkbox"/> Loan <u>Enter number</u> <input type="checkbox"/> Guarantee <u>Enter number</u>		<input type="checkbox"/> Equity <u>Enter number</u> <input type="checkbox"/> Results-based payment <u>Enter number</u>
A.11. Implementation period	5 years (2026-2031)	A.12. Total lifespan	20 years (2026-2046)
A.13. Expected date of AE internal approval	<i>2/10/2026</i>	A.14. ESS category	C
A.15. Has this FP been submitted as a CN before?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	A.16. Has Readiness or PPF support been used to prepare this FP?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
A.17. Is this FP included in the entity work programme?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	A.18. Is this FP included in the country programme?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
A.19. Complementarity and coherence	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
A.20. Executing Entity information	<p>As the Accredited Entity, SPC will also be a co-Executing Entity. The other co-Executing Entities will be:</p> <ul style="list-style-type: none"> - Government of Tonga, acting through the Ministry for Meteorology, Energy, Information, Disaster and Climate Change (NDA office), Ministry of Finance and Ministry of Agriculture, Food, Forests and Fisheries - Government of Vanuatu, acting through the Ministry of Climate Change Adaptation, Meteorology, Geo-hazards, Environment, Energy and Disaster Management (NDA office), Ministry of Finance and Economic Management, Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity, and - Government of Samoa, acting through the Ministry of Finance (NDA office) and Ministry of Agriculture and Fisheries. 		
A.21. Executive summary (max. 750 words, approximately 1.5 pages)			

1. **The programme *Establishing climate resilient, regenerative agricultural systems in Tonga, Vanuatu and Samoa* is a climate adaptation investment to enhance the resilience of local food production to the impacts of climate change.** The programme will catalyse a paradigm shift to Climate Resilient and Regenerative Agriculture (CRRRA) to build the adaptative capacity of small holder farmers as well as the land and ecosystems on which they depend, to secure a resilient supply of nutritious locally supplied food crops.
2. Strengthening the resilience of the agriculture sector is listed as a priority intervention in the GCF Country Programme, NDC and agriculture sector strategy for each country² and the programme has been co-developed with each Ministry of Agriculture³.
3. Observed climatic changes across the three countries show an increase in annual and seasonal maximum temperatures since the 1950s, which is projected to increase further by up to 1°C by 2030. Future rainfall projections are not clear, although extreme rainfall days are projected to increase. Tropical cyclones are common (on average 1–3 per season but with significant variation across years) and projected to increase in intensity in the future. Sea levels have risen by around 4–6 mm per year since 1993, higher than the global average, and are projected to rise by 3–17 cm by 2030.
4. **Climate change impacts are putting food supply at risk:** Smallholder farmers are still the primary supplier of local food: 60% of households grow food crops for their own consumption but sell the surplus to the local market. However, this self-sufficient model is changing (a trend seen across the region) with a significant shift to the import of processed food stuff (e.g. imports are 25% of food supply in Vanuatu), causing high rates of obesity and non-communicable diseases
5. Climate change is a key contributor to food insecurity by affecting the productivity of food crops for local supply. All three countries are experiencing the negative effects of erratic rainfall on agricultural yields, while agricultural droughts are regularly occurring in Tonga in particular. More intense cyclones are destroying crops and causing soil erosion and loss of soil nutrients that affect crop yields. The move away from sustainable traditional agricultural practices to more intensive commercial ones is compounding the climate impact on yields, in particular, mono-cropping, deforestation and the increasing use of chemical agricultural inputs. This is reducing the soil's ability to manage droughts and soil erosion, thereby reducing the resilience of the agricultural system.
6. **CRRRA practices are not 'new' but face significant barriers to widespread adoption.** They are a package of possible solutions across the value chain of food crops that include traditional sustainable agriculture practices that are in decline (e.g. crop rotation, intercropping) and newer solutions that have been piloted (e.g. micro irrigation, rainwater harvesting). They include resilience solutions to minimize the impact of climate on agriculture yields (e.g. crop storage, climate resilient seeds) and farmers (e.g. alternative incomes) and regenerative solutions to increase the resilience of the agriculture systems particularly in terms of increasing soil and plant health (e.g. mulching, agro-forestry, organic fertilizer). The most appropriate set of CRRRA practices for any farmer depends on the specific crops and context (e.g. baseline soil quality).
7. Small holder farmers are very aware of climate impacts but are not aware/ convinced of the viability of any particular solution. There is a trend away from farming, particularly for the younger generation, as they cannot see the long-term potential for a secure livelihood. There is no available evidence on the costs/ benefits of CRRRA practices for their specific farm/ locality and the risks of blindly experimenting is therefore too high. The Ministries of Agriculture themselves do not have the data and evidence to guide farmers on the most relevant practices (which has also led to inconsistent policy measures) and they lack the capacity, particularly through its extension services, to support individual farmers.
8. **The programme will demonstrate the viability and benefits of CRRRA for smallholder farmers producing food crops for the local market** through piloting with focus food crop systems in each country⁴,

² GCF Country Programmes are available for [Tonga](#) and [Vanuatu](#). Samoa doesn't currently have a GCF Country Programme. Key other policy documents include the Joint National Action Plan for Climate Change Adaptation and Disaster Risk Management Tonga 2018-28, Tonga Agriculture Sector Plan, Vanuatu Climate Change and Disaster Risk Reduction Policy 2016-30, Vanuatu Agriculture Sector Policy 2015-30, Samoa National Climate Policy, Samoa Food Systems Pathways 2030, Samoa Agriculture Sector Plan 2022-27.

³ Ministry of Agriculture, Food, Forests and Fisheries (MAFFF) in Tonga, Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity (MALFFB) in Vanuatu and Ministry of Agriculture and Fisheries (MAF) in Samoa

⁴ The project will initiate implementation in all three countries simultaneously, with activities tailored to the priority crops/systems in each country. Evidence and lessons from each country will be shared across countries to inform scaling-up. The viability of CRRRA will be first

providing evidence of financial and other benefits to support scaling-up through training, peer-to-peer learning and knowledge dissemination. It will also strengthen the enabling environment to support and sustain nation-wide and regional transitions to CRRA. This will be achieved through two mutually reinforcing Outcomes:

Outcome 1: Enabling Environment strengthened for the transition to CRRA: This will address the barriers and opportunities that respectively discourage and support the adoption of CRRA within the policy, institutional and market ecosystems in which farmers operate. This is critical to sustaining and scaling the impact of the programme on all rural communities.

Outcome 2: Practices, systems and technologies adopted for CRRA: 8,784 farmers (supporting 50,654 individuals) are expected to implement CRRA practices within the lifetime of the programme. This will provide significant direct resilience and food security benefits to the households, while also providing evidence of the viability of CRRA, which will strengthen the enabling environment (under Outcome 1) and enable the scaling of CRRA across the region. This assumes that 70% of the 12,510 smallholder farmers who will be directly supported by the programme through intensive training, business case support, inputs etc adopt CRRA practices within the lifetime of the programme. The adoption rate will increase significantly over a 10-20 year period given the time required to embed behavioural changes in the agriculture sector.

9. **The combined impact of these outcomes will induce a paradigm shift in the resilience of food production systems in the three countries and beyond,** demonstrating the viability of CRRA to increase crop productivity in a way that protects yields, local food supply and livelihoods in the immediate and long-term given the increasing impacts of climate change (and in line with GCF- 2 Strategic Plan, Target 4). As a result of the CRRA practices adopted under the programme, 20,730 hectares of land in total will be restored with improved ecosystems and increased soil health (through improved soil organic matter, soil nutrient content and soil biological activities) (in line with GCF-Strategic Plan. Target 5)

demonstrated in food production systems that are at most risk and/or hold most opportunity for increasing the supply of nutritious local food: Mixed horticulture production in Tonga, intercropping of food crops with kava in Vanuatu, and intercropping of food crops with taro in Samoa. However, the evidence generated in one country will be relevant to the other two countries, and for a much wider set of food production systems. Therefore, by the end of the project, the scaling of CRRA is expected across a wide set of crops.

B. PROJECT/PROGRAMME INFORMATION

B.1. Climate context (max. 1000 words, approximately 2 pages)

Adaptation Context

10. **The socio-economic context of Tonga, Vanuatu and Samoa makes them highly vulnerable to the impact of climate change on agricultural systems.** The small island developing states are geographically isolated and exposed to extreme meteorological hazards. Their economies are largely dependent on natural resources, with the mostly rural population still focused on primary production agriculture despite urbanization and international migration trends (FS, Section 2).

Table 1: Key indicators of socio-economic context of Tonga, Vanuatu and Samoa⁵

	Tonga	Vanuatu	Samoa
Geography	Four clusters of coral and volcanic islands. Total area of 747 km ² in the Central South Pacific	80 islands. Total area of 12,190 km ² in the Western Pacific	Nine volcanic islands. Total area of 2,830 km ² in the central South Pacific
Population / % in extreme poverty⁶	100,179/ 3.1% (2016)	300,019 / 13.1% (2010)	205,557 / 1.2% (2013)
Households growing/ selling crops as source of income ('small holder farmers')	6,486 (40% of total)	30,453 (44% of total)	7,261 (25.5% of total)
% of smallholder farmers that are fully commercial	1%	5.3%	1.6%
Average estimated hectares of land per smallholder farmer	2.8	1.9	2.35
% GDP from agriculture	16.2% (including forestry)	15%	9.4%
Hectares land used for agriculture/ % of potential agriculture land	26,873 hectares/ 64%	87,775 hectares/ 18%	43,067 hectares/ 44%
2022 Gross per capita Production of Food Index⁷ (with % change since 2010)	97 (25% decrease)	70 (31% decrease)	76 (38% decrease)
% of adult population obese	74%	59%	59% (men)/ 81% (women)
% population food insecure	8% of children cannot afford 3 meals a day and 13% cannot afford fruit and vegetables daily.	21% face moderate food insecurity (compromising on food variety, reducing quantity, skipping meals)	24.2% face moderate food insecurity and 2.6% severe levels (no food for a day or more)

11. **The agri-food system in each country is in a crisis state:** Per-capita food production index is declining in each country (while the world average per capita has been increasing and is now 104). It is declining most significantly for root crops and other starchy vegetables in Tonga and Samoa region (but production has always been low in Vanuatu region at around <40kg per capita/year) and this level of production is sufficient to meet dietary energy needs of less than 25% of the population. Imports of food particularly rice and other cereals, sugar and confectionary, wheat and meat is increasing, leading to extremely high rates of non-communicable diseases and resulting in economic impacts as well as undermining traditional farming systems and cultures. The production and consumption of food in the region is undergoing profound change that will be felt for generations⁸.

⁵ See Table 1 of Feasibility Study for a more detailed summary, with sources of data provided in Sections 2.1-2.3.

⁶ Meaning people living on less than equivalent of USD 1.90 per person per day.

⁷ FAOSTAT

⁸ Andrew etc.al (2022). 'Continuity and change in the contemporary Pacific food system'. *Global Food Security*. 32 (2022) 1000608

Table 2: Summary of agriculture sector profile in Tonga, Vanuatu and Samoa

	Tonga	Vanuatu	Samoa
Hectares of production of main food crops	Temporary crops (9,645) – dominated by cassava, and then taro-talo tonga, yam and other root crops; Permanent crops (1,298) – particularly paper mulberry, vanilla, pineapple and pandanus	Temporary crops (80,330) – dominated by yam, and then cabbage island, watermelon and capsicum; Permanent crops (70,459) – dominated by citrus fruit and then breadfruit and navel.	Temporary crops (11,754) – particularly taro, ta'amu and vegetables; Permanent crops (2,247) – particularly coconut, cocoa, breadfruit and banana.
Main export crops	Taro, cassava, watermelon and other root crops	Kava, coconut (copra), cocoa	Coconut, taro, cocoa
Key trends in crop production	Squash was previously an important export crop but has dropped significantly. Perennial crops (kava, tobacco, vanilla) have declined by 50% since 2001. 51% of land was fallow in 2015.	Very significant increase in kava production (19,608 in 2020 to 29,802 in 2022), with 66% for sale due to estimated doubling of price for kava between 2012-19 ⁹ .	32% decrease in the number of agricultural households selling crops in last decade. Taro was previously an important export crop but was devastated by Taro Leaf Blight outbreak in 1993 and has been on slow recovery since.
Water source	Majority Rainfed, with limited freshwater resources	Majority rainfed, with varied availability of freshwater across islands. 9% smallholder farmers irrigating their land.	59% rely on rainwater, and 38% on the main water supplies.
Crop production system	81% use monocropping, 71% use some form of agricultural chemicals (12% use organic fertilizer), 7% use organic fertilizer.	32% use monocropping, 2% use some form of agricultural chemicals, 9% use organic fertilizer.	27-89% use monocropping (depending on crop), 41% use some form of agricultural chemicals (6% use chemical fertilizer), 5% use organic fertilizer.

12. **The impact of climate change on crop production is a major driver of food insecurity.** In terms of observed historical climate trends¹⁰, annual and seasonal maximum temperatures have been increasing since the 1950s, with maximum temperatures recording increases of 0.1-0.22°C per decade. There has been substantial variation in annual and seasonal rainfall since 1950, with El Niño and La Niña effects causing significantly reduced and increased rainfall respectively. Tropical cyclones are common (on average 1-3 per season but with significant variation across years and more frequent during El Niño years). Sea levels have risen by 4–6 mm per year since 1993, higher than the global average, and the level of ocean acidification has been slowly increasing since the 18th century.

Tonga:

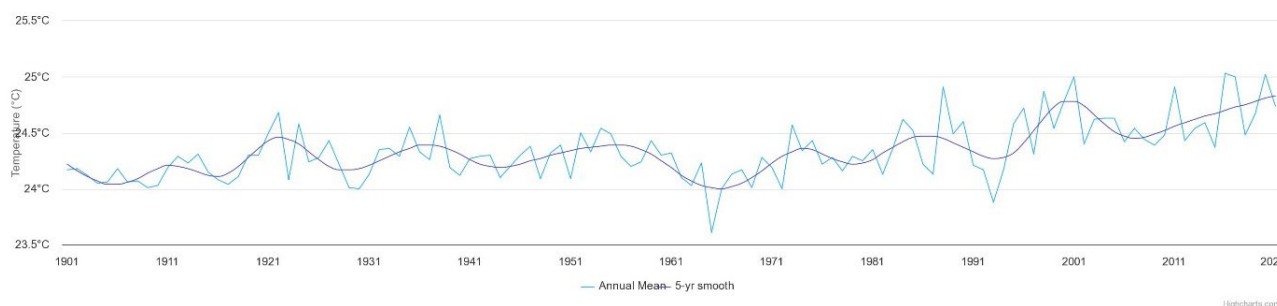
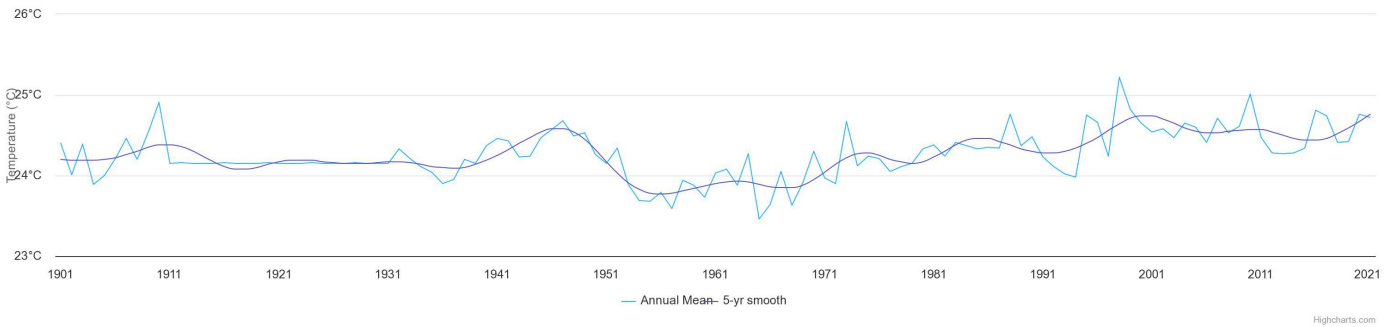


Figure 1: Summary of historical observed climate trends in Tonga, Vanuatu and Samoa

⁹ Judge, P (2022). 'Unleashing the potential of the kava industry'.

¹⁰ Climate analysis for the three countries drawn from: Australian Bureau of Meteorology and CSIRO (2014), CSIRO and SPREP (2021a), World Bank and the Asian Development Bank (2021a), Pacific Climate Change Science Program (PCCSP) (2011a), Australia Bureau of Meteorology et al (2014), Daniel, J et al, (2020). Aleksandrova, M et al (2021), Reti, MJ (2007)

Vanuatu:



Samoa:

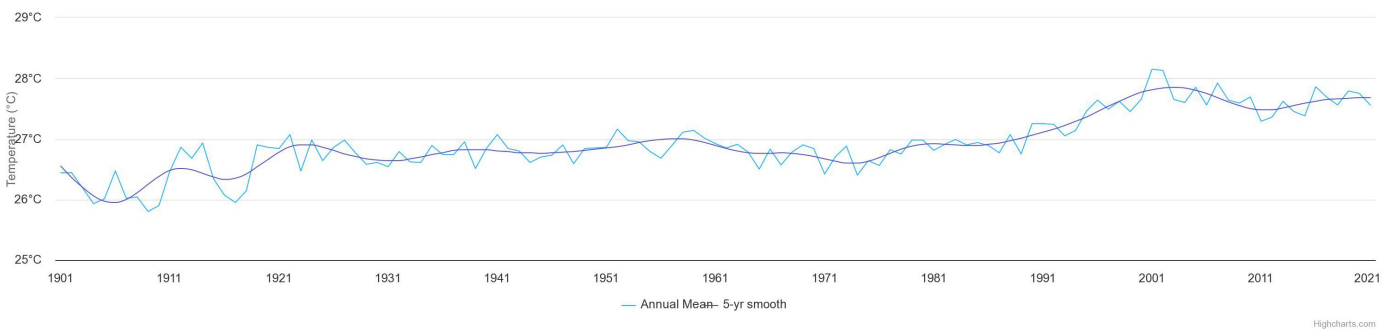
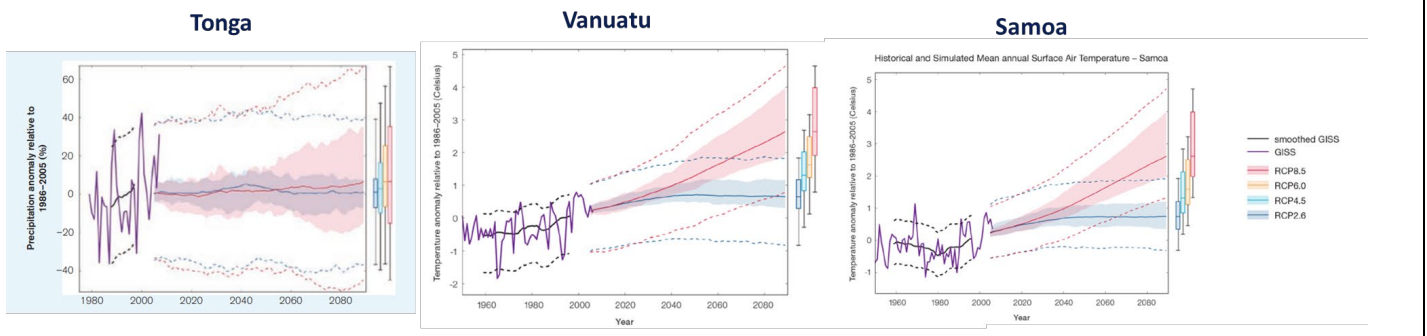


Figure 2: Observed Average Annual Mean-Temperature for 1901-2021 for each country¹¹

13. **There is very high confidence in the direction of long-term change across the three countries,** specifically increases in mean and extreme air and sea temperatures, sea level rise and ocean acidification. There is uncertainty in the rainfall projections but clear trend of more extreme rainfall days. Projections show a decrease in the frequency of tropical cyclones by the late 21st century but an increase in the proportion of the more intense storms. Drought projections are not consistent, but there are indications that drought severity and duration will increase, due to increase in temperature and slight decrease in rainfall.



¹¹ Figures extracted from the World Bank's Climate Change Knowledge Portal for each country: Tonga - Climatology | Climate Change Knowledge Portal (worldbank.org); Vanuatu - Climatology | Climate Change Knowledge Portal (worldbank.org); Samoa - Climatology | Climate Change Knowledge Portal (worldbank.org)

Figure 3: Historical and simulated surface air temperature time series for the region¹²

Scenario	Mean Surface Air Temp (Annual)		Max Temp (1-in-20 Year Event)		Min Temp (1-in-20 Year Event)		
	2050	2090	2050	2090	2050	2090	
RCP2.6	0.6 (0.4, 1)	0.6 (0.2, 1.1)	0.7 (0.1, 1)	0.7 (-0.1, 1.1)	0.6 (0, 0.9)	0.6 (0.1, 0.9)	Tonga
RCP4.5	0.9 (0.6, 1.4)	1.2 (0.8, 2.1)	0.9 (0.2, 1.2)	1.3 (0.6, 1.8)	0.9 (0.5, 1.3)	1.3 (0.7, 1.9)	
RCP6.0	0.8 (0.6, 1.3)	1.6 (1.2, 2.4)	NA	NA	NA	NA	
RCP8.5	1.2 (0.8, 2)	2.6 (1.8, 4.1)	1.4 (0.7, 2)	2.9 (1.7, 4.2)	1.3 (0.7, 1.9)	2.9 (2.1, 4.2)	

Scenario	Mean Surface Air Temp (Annual)		Max Temp (1-in-20 Year Event)		Min Temp (1-in-20 Year Event)		
	2050	2090	2050	2090	2050	2090	
RCP2.6	0.7 (0.5, 1.1)	0.7 (0.3, 1.2)	0.7 (0.2, 0.9)	0.7 (0.3, 0.9)	0.6 (0.2, 1)	0.6 (0.1, 0.9)	Vanuatu
RCP4.5	0.9 (0.6, 1.5)	1.3 (0.8, 2)	0.9 (0.5, 1.2)	1.3 (0.7, 2)	1 (0.3, 1.2)	1.3 (0.7, 1.8)	
RCP6.0	0.9 (0.6, 1.3)	1.6 (1.2, 2.5)	NA	NA	NA	NA	
RCP8.5	1.3 (0.8, 2)	2.7 (1.9, 4)	1.4 (0.7, 2)	2.9 (1.9, 4.2)	1.4 (0.9, 1.8)	3 (2.1, 3.9)	

Scenario	Mean Surface Air Temp (Annual)		Max Temp (1-in-20 Year Event)		Min Temp (1-in-20 Year Event)		
	2050	2090	2050	2090	2050	2090	
RCP2.6	0.7 (0.5, 1.1)	0.7 (0.3, 1.2)	0.6 (0, 0.9)	0.8 (0.3, 1.1)	0.6 (0, 0.9)	0.7 (0.3, 0.9)	Samoa
RCP4.5	1 (0.7, 1.4)	1.3 (0.9, 2.1)	0.9 (0.3, 1.3)	1.3 (0.6, 2)	0.9 (0.5, 1.3)	1.2 (0.7, 2)	
RCP6.0	0.9 (0.6, 1.4)	1.6 (1.1, 2.5)	NA	NA	NA	NA	
RCP8.5	1.3 (1, 1.9)	2.7 (2, 4)	1.4 (0.9, 2.1)	2.9 (1.5, 4.1)	1.4 (0.8, 2.1)	2.9 (2.1, 4.2)	

Figure 4: Overview of temperature change projections (°C) under four emissions pathways¹³

14. **The impact of climate change will continue to be profoundly felt in the agriculture sector, further reducing productivity across the crop value chain, including by:**

- **More intense and erratic rainfall**, disrupts planting and harvesting cycles, causes erosion of topsoil and increase in weeds both of which deplete the soil of nutrients, increase water logging which rots roots. All of these factors contribute to reduced yields or entire crops being destroyed.
- **Temperature increases and extreme heat**, affect the timings and rate of physiological developments in crops, decrease soil moisture which reduces yields. For example, in Samoa, field trials show average yields of taro reduced by an average of 9.6 tons per acre for a 3°C temperature increase¹⁴. Studies have also indicated that temperatures above 31°C will make cocoa crop unviable in some parts of Samoa¹⁵.
- **Increase outbreak of pests and diseases and the spread of invasive species**, as a result of favourable wet/dry environmental conditions and depletion of soil nutrients. For example, the Government of Vanuatu is currently concerned about the evidence of kava dieback, a disease that is affected by environmental factors including soil nutrients, which is already found in some islands and can seriously affect kava production.
- **Increased severity and incidence of droughts**, cause slow growth and low yields of crops due to decreased moisture and soil fertility. This is already a key risk in Tonga, due to the limited availability of freshwater, particularly affecting horticulture. During dry seasons, farmers producing crops for market use groundwater to irrigate their crops, which is putting water availability for households at potential risk.
- **More intense cyclones and severe winds**, destroy crops and cause loss of seeds and top soil and result in landslides which deplete soil nutrients and reduce yields. For example, Tropical Cyclone Evan in 2012 affected 75% of agricultural land in Upolu island in Samoa, destroying almost the entire banana and

¹² Australian Bureau of Meteorology and CSIRO (2014). [Climate Variability, Extremes and Change in the Western Tropical Pacific: New Science and Updated Country Reports](#).

¹³ World Bank (2021), Climate Risk Profiles for [Tonga](#), [Samoa](#), [Vanuatu](#) and

¹⁴ Crimp, R et al. (2017). 'Understanding the response of taro and cassava to climate change'. Canberra: ACIAR.

¹⁵ CSIRO and SPREP (2022). "NextGen' Projections for the Western Tropical Pacific: Climate hazard-based impacts for Cocoa production in Samoa'. Commonwealth Scientific and Industrial Research Organisation (CSIRO) and Secretariat of the Pacific Regional Environment Programme (SPREP), CSIRO Technical Report, Melbourne, Australia.

breadfruit crops, significantly damaging coconut plantations and causing an estimated 30% loss of total agricultural sector GDP in 2013¹⁶.

- **Sea level rise**, cause coastal inundation, salinization and soil erosion which reduces the size of productive agricultural land. A 2007 mapping of the salinity of groundwater in village wells shows seawater intrusion had caused groundwater salinization across the northern parts of the main Tongatapu island¹⁷.

15. Climate impacts will be compounded by the ongoing transition amongst small holder farmers from sustainable, traditional agricultural practices to more intensive practices, such as monocropping and continuous cropping, deforestation and particularly in Tonga and Samoa the widespread use of chemical fertilizer and pesticides. This is making the soil and other ecosystem services less able to withstand and manage the impacts of climate change. For example, intensive farming practices reduce the level of Soil Organic Matter (SOM) and as a result reduces the crops' water and nutrient holding capacity.

16. **The climate and non-climate drivers across the value chain of agricultural crops contribute to a set of critical sustainable development impacts** (the figure below provides an example of this assessment for Tonga, with FS section 7.5 providing all). In particular:

- National and household food security: Up to 90% of all households grow some crops for their own consumption, while around 60% are small holder farmers selling their surplus to a local market. The climate impact on their yield output will threaten their ability to feed themselves and reduce the supply of locally produced foodstuff. This will escalate the trend to consumption of cereals, meat and processed imported food products (and associated health risks) and the move away from agriculture by the younger generation.
- National and household income: Reduced agricultural output will reduce the financial resilience of small holder farmers selling surplus crops to the local market, which will have a knock-on effect on national economic growth in each country. Agriculture is the biggest contributor to the economic costs expected (up to 12.7% of annual GDP by 2100)¹⁸.

17. There is an important gender dimension to the vulnerability of the agriculture sector in each country to climate change, due to climate change magnifying women's relative poverty and women being underrepresented in decision making for resource management. In each country there has been an increase in men travelling overseas for seasonal agriculture, as the domestic agriculture market is not productive enough to provide an equivalent livelihood¹⁹. This places a larger burden of workload and labour on women who are left behind.

¹⁶ [Government of Samoa \(GoS\) \(2013\). 'Post-Disaster Needs Assessment, Cyclone Evan 2012.'](#)

¹⁷ [White, I. A. Falkland and T. Fatai. \(2011\). 'Vulnerability of Groundwater Resources in Tongatapu.' Engineers Australia. 26 June – 1 July 2011, Brisbane, Australia.](#)

¹⁸ [Asian Development Bank \(ADB\) \(2013\). 'The Economics of Climate Change in the Pacific.' Manila: ADB.](#)

¹⁹ [Campbell, J. and O. Warrick \(2014\). Climate Change and Migration Issues in the Pacific. UNESCAP, Fiji.](#)

SOCIO-ECONOMIC IMPACTS:

- No food self sufficiency: 33% of household consumption on food
 - Health impacts: 74% adult population is obese.
 - Stagnant growth in sector between 2005-12.
- Income insecurity: 38% of households rely on selling crops.

Tonga: Food crops for domestic production

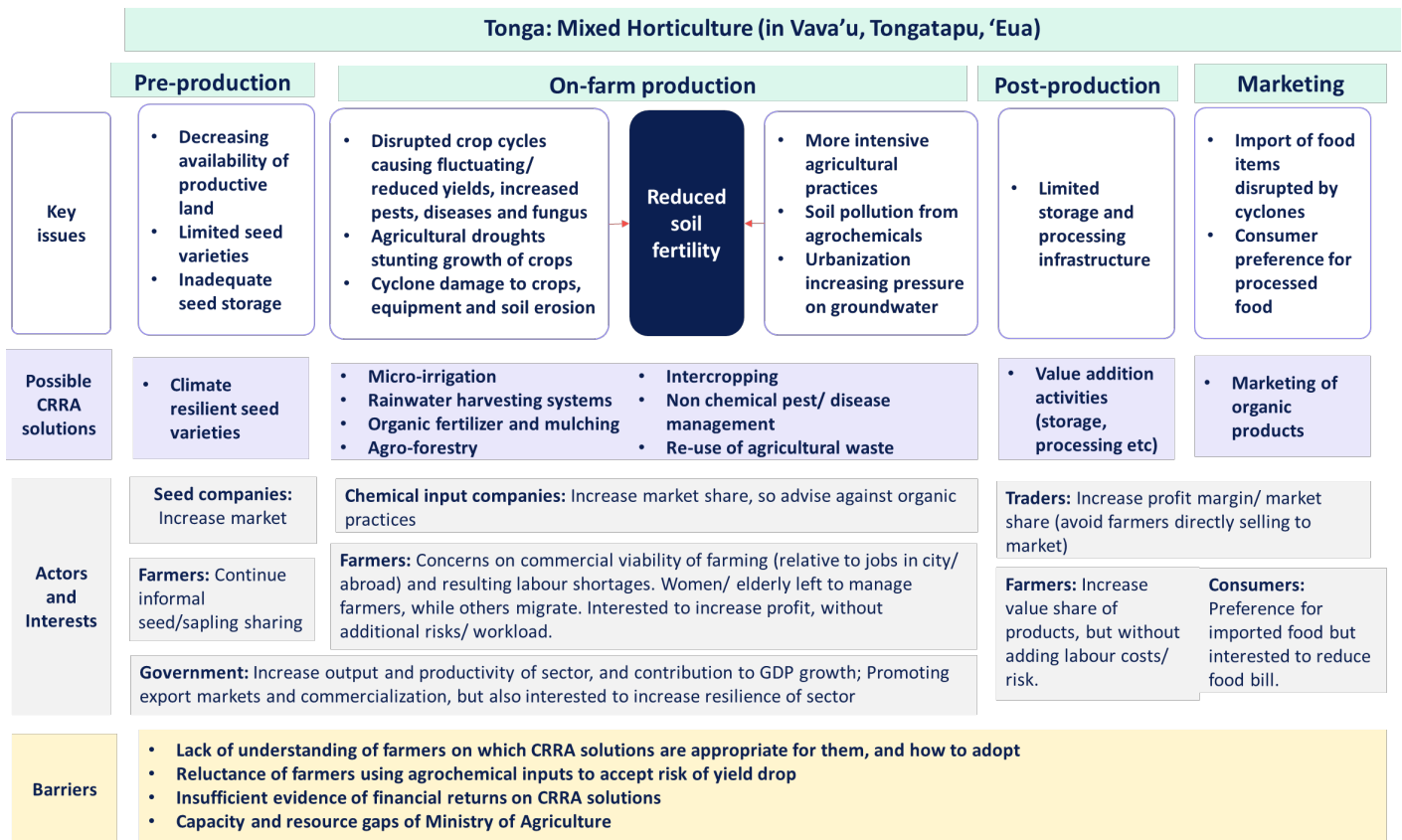
	Pre-production	On-farm production	Post-production	Marketing
Key market indicators	<ul style="list-style-type: none"> Small landholdings (~3 ha) Land ownership: Barriers for women Informal network of seed/ sapling cultivation and sharing. 	<ul style="list-style-type: none"> 42,000 hectares of arable land: 51% fallow and 41% used for temporary crops (1,298ha, particularly cassava) and permanent crops (1,298 ha) Reliant on fresh groundwater: Overextraction (64% of extracted groundwater saline on one island) Hand irrigation is most common method Increasing use of agro chemicals 	<ul style="list-style-type: none"> Fluctuating yields (estimated drop by ~50% since 2013) Storage and processing facilities limited to export crops 	<ul style="list-style-type: none"> Small % of horticulture being sold to local market (4% of veg produced)
Sample costs/revenue for watermelon (TOP = Tongan Pa'anga)	~TOP 1,100 per ha/year: seed, sapling, insecticide, fertilizer ~TOP 312 per ha/year: labour costs	~TOP 1,440 per ha/year: labour costs	~TOP 200 per ha/year: transportation costs	~TOP 4,440 per ha/year revenue
Climate impacts	<ul style="list-style-type: none"> Sea level rise, erosion and saline intrusion reducing availability of productive land. 	<ul style="list-style-type: none"> Erratic rainfall trends disrupting crop cycles and yields (e.g. squash and watermelon flowering too early), and increasing pests, diseases and fungal issues Agriculture droughts (insufficient soil moisture) stunts growth of annual crops (squash, yams, vegetables etc) Increasing frequency of cyclones damaging crops and equipment (TC Ian caused \$21m crop damage) and reducing soil nutrition 	<ul style="list-style-type: none"> Cyclone damage to stored crops (particularly for squash) 	<ul style="list-style-type: none"> Cyclones cut off imports of food, creating food shortages in market
Reduced soil fertility				
Non-climate drivers	<ul style="list-style-type: none"> Inadequate seed storage practices Limited seed varieties 	<ul style="list-style-type: none"> Move away from traditional multi-crop system (based on yam production) to continuous production of certain crops. Increased soil pollution (from agro chemicals), particularly for squash Urbanization increasing competition for groundwater 	<ul style="list-style-type: none"> Limited storage and processing infrastructure 	<ul style="list-style-type: none"> Changes in consumer food preferences No demand for organic products
Enabling environment	<ul style="list-style-type: none"> Limited promotion and roll out of new crop varieties Credit available for annual costs: MAFFF rural finance support services, micro-credit programmes, informal network 	<ul style="list-style-type: none"> Information services: Limited capacity of extension workers, input suppliers key source of information High production prices: Low availability/ high price of labour; High prices of imported fertilizer and agro chemical, increased machinery costs 	<ul style="list-style-type: none"> Limited financing for capital costs: High upfront costs for some storage and processing facilities (but potential opportunity of remittances). 	<ul style="list-style-type: none"> Farmer cooperatives are common: Providing an opportunity to pool resources and marketing

Figure 5: Example of climate change impact assessment on value chain of food crops in Tonga²⁰

²⁰ This figure is a summary of information provided in the FS Annex, in particular, Section 7.2 (Potential Impacts of Changing Climate on Natural and Human Systems) and Section 7.5.1 (Summary Value Chain Market Assessment of Food Crops for Domestic Production in Tonga). Equivalent sections are also included in the FS for the Vanuatu and Samoa

18. **The programme will enable each national government to increase the resilience of the agriculture sector and build food security, supporting the uptake of relevant CRRA practices by small holder farmers producing food crops for local markets.** CRRA is an umbrella term for a set of practices that prevent fluctuations in agricultural yields due to unpredictable and extreme weather and protect food security and household incomes in case there is any drop in productivity. CRRA practices promote a holistic approach to increasing the resilience of the entire agricultural system, including through soil and plant health and wider ecosystem services.
19. CRRA practices feature across the agriculture value chain. A sub-set of relevant (and not relevant) CRRA practices has been identified given the particular climate vulnerabilities in each country and those already being promoted by other projects (FS section 8.2). See figure below for an example market assessment of CRRA for Tonga. However, farmers need to evaluate and select the specific combination of practices which are relevant for their particular context.

Figure 6: Example of market assessment for CRRA solutions for the value chain of food crops in Tonga



B.2 (a). Theory of change narrative and diagram (max. 1500 words, approximately 3 pages plus diagram)

20. **The barriers to the transition to CRRA in each country have been identified through a market assessment of food crop systems in each country** (see previous figure 3 for an example from Tonga) using data/ literature review and national/ local consultations with stakeholders across the value chain of the food crops led by the three Ministries of Agriculture. The most significant three types of barriers across each country include:
21. **Barrier 1: Lack of understanding by agricultural households on which CRRA practices are relevant and to enable adoption of practices.** Farmers have limited access to expert and farm-specific advice and information on appropriate CRRA practices, particularly given the capacity constraints of agricultural extension workers (e.g. in Vanuatu, only 5% of farmers received any assistance by the government on agriculture

between 2022-24). This limits the potential of the farmer to adopt a practice as farmers need to see positive impacts of practices for them to inform adoption steps,

22. **Barrier 2: Insufficient evidence on the financial viability and returns from CRRA:** The upfront costs of CRRA practices can be high (e.g. rainwater harvesting systems, organic certification) but most involve little investments, but the potential increased labour costs and/or temporary loss of yield will need to be carefully planned for (e.g. switch to crop rotation or organic farming). The financial return from adopting CRRA practices is not well understood by farmers, and agricultural households are not typically engaged in long-term financial planning. Investment decision-making is also happening in a context of an increasing shortage of agricultural labour available, due to urbanization and migration to other countries for seasonal work, which adds a significant cost to any CRRA practice requiring increased labour inputs. The stakeholder consultations revealed that the upfront costs are a less significant barrier than the lack of information available to governments and farmers on the costs/benefits of such practices. It was felt that if farmers are convinced of the benefits, they will be able to access finance.
23. **Barrier 3: Capacity, partnership and resource gaps within the Ministries of Agriculture to promote CRRA:** This includes limited capacity to manage the multiple donor-funded agricultural projects underway or planned, particularly in terms of the extension workers and given the challenge in recruiting skilled personnel. There is very limited/no baseline and monitoring data on many of the indicators relevant to agricultural resilience, particularly in terms of soil health, groundwater levels, biodiversity etc which makes it difficult to quantify the benefits of CRRA. In addition, there are policy barriers that are disincentivizing CRRA (e.g. by promoting mechanization and monocropping) and some missing policy enablers that could incentivize CRRA (e.g. organic certification schemes). In general, there is an opportunity for the Ministry of Agriculture to make use of capacity, resources and expertise that sits in other departments, research institutes and the private sector to drive a more holistic and evidenced-based approach to agriculture policy and programming.
24. **Based on this barrier analysis, the programme's Theory of Change is geared towards enabling the transition to CRRA for food crop systems in Tonga, Vanuatu and Samoa through two mutually reinforcing outcomes:** Firstly, to strengthen the overall enabling environment to support, sustain and scale-up adoption of CRRA across the three countries(Outcome 1) and secondly, to provide intensive direct support to smallholder farmers producing food crops for the local market through piloting, scaling and evaluating CRRA practices thereby providing the evidence on the costs-benefits of CRRA to catalyse nationwide adoption and regional scaling (Outcome 2).

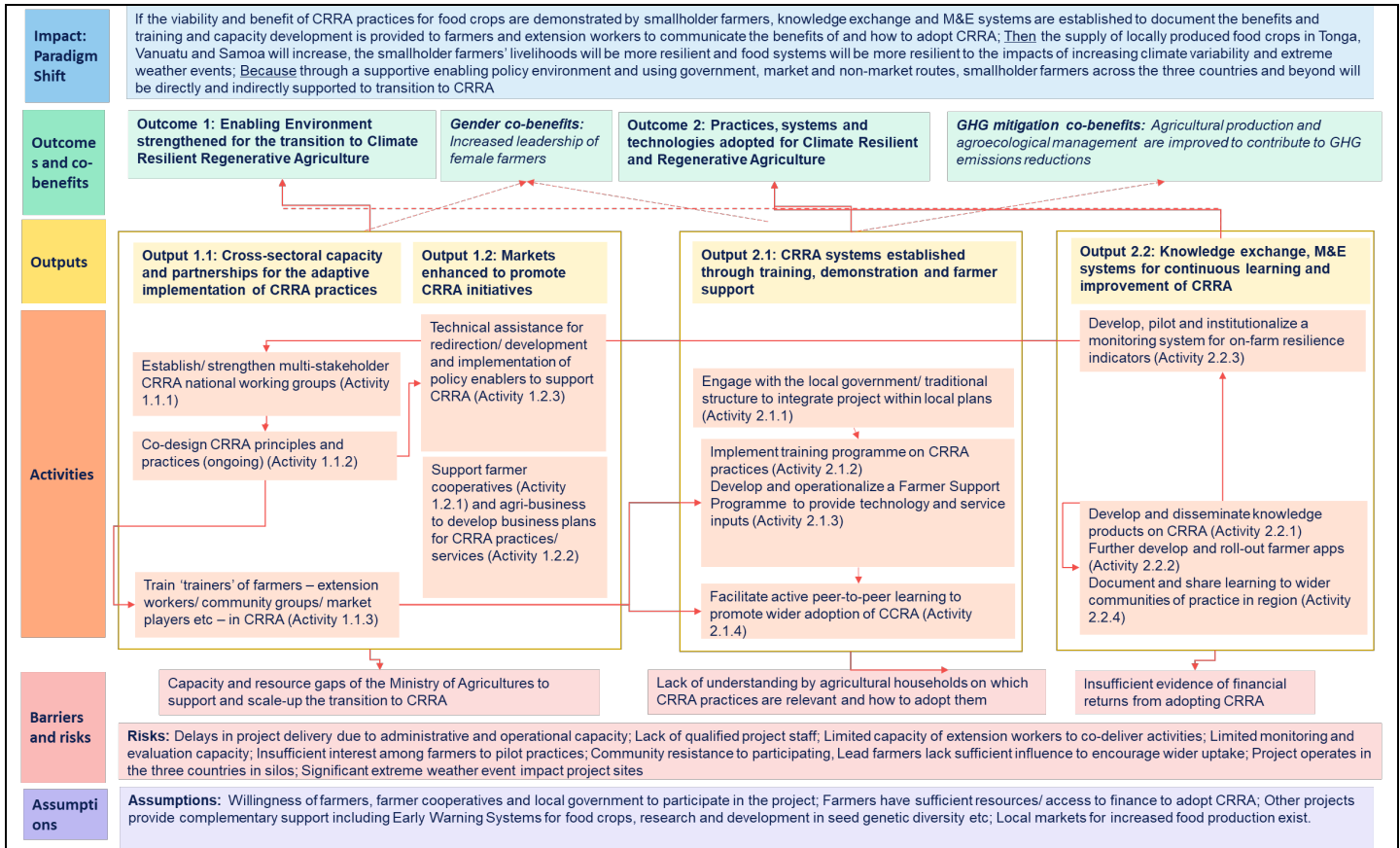


Figure 7: Theory of Change

25. **The programme goal statement explains the causal linkages between the programme outputs, outcomes and the goal that the programme will contribute towards.** If the viability and benefit of CRRA practices for food crops are demonstrated by smallholder farmers, knowledge exchange and M&E systems are established to document the benefits and training and capacity development is provided to farmers and extension workers to communicate the benefits CRRA to encourage its adoption; Then the supply of locally produced food crops in Tonga, Vanuatu and Samoa will increase, the smallholder farmers' livelihoods will be more resilient and food systems will be more resilient to the impacts of increasing climate variability and extreme weather events; Because through a supportive enabling policy environment and using government, market and non-market routes, smallholder farmers across the three countries and beyond will be directly and indirectly supported to transition to CRRA.
26. The programme will be delivered through two Outcomes to address the barriers listed above:
27. **Outcome 1: Enabling Environment strengthened for the transition to Climate Resilient Regenerative Agriculture:** This outcome addresses the barriers and opportunities for the adoption of CRRA within the policy, institutional and market ecosystem within which farmers are operating. This will ensure the impact of the programme is sustained and scaled-out to all smallholder farmers nationwide.
28. This includes a multi-partnership approach under Output 1.1. to identify the most suitable context-specific CRRA practices, using evidence generated from demonstration by 'Learning Farms' and others (see outcome 2). This evidence will then be used to train and support actors who regularly interact with farmers on such practices, including agricultural extension workers, community groups, farmer associations, market actors (e.g. traders/ input sellers) and others using a Training-of-Trainers (ToT) model (Activity 1.1.3). A multi-partnership CRRA Working Group in each country will be established (Activity 1.1.1) and supported to facilitate an iterative process of documenting and learning from evidence on the ground and then updating the guidance being provided to stakeholders (Activity 1.1.2). Under Output 1.2. government policies, programmes and subsidies which currently disincentivize CRRA will be reformed and new policy/ market enablers to positively promote CRRA will be supported through technical assistance (Activity 1.2.2). It will also strengthen the capacity and viability of market actors (e.g. agri-businesses, farmer cooperatives) who can support the further adoption and

scaling of CRRA through the provision of inputs and services, such as rapid soil testing kits and micro-irrigation systems (Activity 1.2.2-3).

29. **Outcome 2: Practices, systems and technologies adopted for Climate Resilient and Regenerative Agriculture.** This will directly and indirectly support smallholder farmers to understand, adopt and monitor and evaluate the benefits of CRRA practices. This will provide significant direct resilience benefits, while also providing the evidence required for outcome 1.
30. **The programme will work intensively with a targeted group of 30 smallholder farmers under Output 2.1 as ‘Learning Farms’ focusing on one particular food crop production system, in each country.** To help select these farmers, and ensure local support for the programme as a whole, local government/ traditional systems of governance will be engaged and the programme will become part of their local development plans (Activity 2.1.1) The programme will agree a personalized package of support to each Learning Farm which includes regular engagement, training and ‘problem-solving’ throughout the process of identifying and adopting relevant CRRA practices and evaluating their effectiveness and adapting the practice as required (Activity 2.1.2). A ‘Farmer Support Programme’ (FSP) will reduce the risks for these farmers by covering the additional upfront costs associated with them, such as seedlings, labour costs, organic certification, solar-powered drip irrigation systems etc. (Activity 2.1.3). The results from the Learning Farms will be carefully monitored, analysed and reviewed by the CRRA Working Group to inform the guidance produced under Outcome 1 (Activity 1.1.2)
31. **These ‘Learning Farms’ will then be used to showcase the viability and benefits throughout their community and beyond, through a series of scaling measures, directly leveraged by the programme to reach 12,510 smallholder farmers.** This includes on-farm workshops, trainings (using the ToT from Activity 1.1.3) and extending the FSP to other interested and trained smallholder farmers (approximately 1,000 smallholder farmers) (Activities 2.1.2-4). In addition, under Output 2.2. the programme will share evidence on the viability and benefits of CRRA practices nationwide through trained and supported extension workers, media and social media and through farmer associations and civil society groups (Activity 2.2.2) and using SPC and others’ ongoing regional engagements to promote the evidence and learning on CRRA to all other Pacific Island Countries (Activity 2.2.4). The programme will also update the existing smartphone agricultural app in Samoa and Vanuatu, and develop a new app in Tonga, as a means of disseminating guidance on CRRA practices to the growing number of smallholder farmers with digital access (Activity 2.2.3)
32. **Each Ministry of Agriculture will create, operationalize and sustain a national data management system** for collecting, analysing and reporting on-farm indicators to measure the level of resilience of agricultural systems (Activity 2.2.3). This will be developed and piloted on Learning Farms, and then scaled nationwide. It will provide nationwide benchmarks on the resilience of smallholder farmers and allow the CRRA Working Group to compare with the results from the Learning Farms and strengthen the evidence base on the evidence and viability of CRRA (under Activity 1.1.2)
33. **The direct beneficiaries of the programme are the 8,784 smallholder food crop farmers (who support 50,654 household members) who are expected to adopt CRRA practices within the lifetime of the programme.** The farmers will benefit from more resilient and secure livelihoods, increased household food security (given nearly all consume the crop before selling a surplus) and improved farm soil and ecosystem health. This is a conservative estimate based on the assumption that 70% of those farmers directly engaged by the programme and who benefit from increased knowledge, skills, capacity and resources to select, adopt and monitor CRRA practices will adopt CRRA practices within the programme lifetime. The adoption rate will increase significantly after a further 5-15 years given the strengthened enabling environment will sustain and scale the incentives and support provided to CRRA practices. In each country, the direct beneficiaries will come from a focus food crop system, selected on the basis of its current risk from climate change and the potential for it to increase the supply of locally produced food (see table below). This prioritization is needed to ensure a very tailored and context-specific set of CRRA practices can be identified and demonstrated across enough hectares of land to provide reliable evidence of its costs and benefits. However, all three focus food crop systems are relevant for each country, and therefore knowledge exchange between the countries will enable relevant CRRA practices to be scaled throughout. Some geographic prioritization is also required given the distributed nature of the population and islands (particularly in Vanuatu, which comprises 80 islands across 1,300km) to ensure the programme can reach a concentrated set of smallholder farmers.

Table 3: Justification for focus crop system and direct beneficiary targeting

Focus food crop system	Rationale	Focus islands	Rationale
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<p>Tonga</p>	<p>Mixed Horticulture, including vanilla, pineapple, watermelon, banana, peanut, tomato, louakanu and other fruit and vegetables</p>	<p>Horticulture is reliant on rainwater and at particular risk of increasing drought and erratic rainfall. CRRRA practices will increase water holding capacity in the soils and reduce evaporation, thus reducing water demand for agriculture.</p> <p>There is also widespread use of agricultural chemicals for horticulture production in Tonga which is worsening the soil's ability to retain water and be more resilient to climate change impacts, as well as polluting food crops and damaging ecosystems.</p> <p>As climate change will heavily impact food security, improving horticulture production, will increase the supply of nutritious fruit and vegetables, and also address the public health emergency of non-communicable diseases.</p>	<p>Vava'u, Tongatapu, 'Eua</p>	<p>Represent 86% of smallholder farmers selling surplus crop and 90% of the land area of Tonga. There is limited groundwater available in these islands and farmers are likely to increase extraction for irrigation during dry periods. This could put water availability for other uses, including drinking water at risk.</p>
<p>Vanuatu</p>	<p>Intercropping of kava with food crops, including taro, yam, sweet potato, peanut etc.</p>	<p>Kava production has massively increased in recent years, with farmers stopping production of food crops (and relying on less nutritious imported foods). The dominance of one crop is increasing the vulnerability of farmers to extreme weather events and outbreaks of pests and diseases, as seen when recent tropical cyclones have destroyed the entire crop and left islands cut off from food imports.</p> <p>Climate impacts on soil health and fertility (particularly through cyclones and landslides) will affect kava yields which will impact agricultural households' livelihoods, and then food security. Monocropping of kava is further contributing to the depletion of soil organic matter, which would otherwise contribute to soil health and increase resilience to drought, flooding and severe storms.</p> <p>Intercropping with nutritious crops will also boost the supply of locally available nutritious food products, thereby contributing to better community health outcomes and food security.</p>	<p>Pentecost, Santo and other islands in the same provinces</p>	<p>Represent 42% of smallholder farmers selling surplus crop in Vanuatu. These are islands where intensive monocropping of kava is most prevalent and are particularly at risk of extreme weather events and pests/ diseases destroying crops and/or cutting off supply routes for food products.</p>
<p>Samoa</p>	<p>Intercropping of taro with other food crops, including root crops, edible legumes, herb and spices</p>	<p>Taro production has been in decline, even before outbreak of taro leaf blight, due to increasing temperatures, worsening soil quality and extreme weather events. Projected future climate suggests this decline will continue/ worsen going forward. A trend towards more intensive agricultural practices, including monocropping and continuous cropping, is also reducing the soil's ability to be resilient to climate impacts.</p> <p>Intercropping with nutritious crops will also boost the supply of locally available nutritious food products, thereby contributing to better community health outcomes and food security.</p>	<p>Upolu, Savai'i</p>	<p>Represent 80% of smallholder farmers selling surplus crop, and the entire agricultural land apart from the urban area of Apia.</p>

The programme will also provide indirect adaptation benefits to a large proportion (57%) of the entire population of Tonga, Vanuatu and Samoa (343,993 individuals). The indirect benefit will flow to two groups of individuals. Firstly, all 31,721 smallholder farmers selling surplus crop (who support 160,750 household

members) across the three countries will indirectly benefit through a variety of national level enablers that encourage the scaling-up of CRRA. This includes the new policy enablers designed to incentivize CRRA and new/strengthened agri-businesses providing inputs and services required for CRRA. Secondly, the individuals in non-crop producing households in the focus provinces (183,242 individuals) will benefit with an increased and more resilient supply of nutritious food crops in the local market. directly or indirectly receiving adaptation benefits from the programme. directly or indirectly receiving adaptation benefits from the programme.

34. The regenerative aspect of CRRA will also improve ecosystem and eco-system services, in terms of improved soil health, reduced pollution of water bodies and increased on-farm biodiversity for all smallholder farmers. As a result of the CRRA practices adopted within the programme lifetime, 20,730 hectares of land will be restored/ improved. In addition to the direct food security, resilience and eco-system benefits provided to the agricultural households and wider communities, the CRRA practices adopted will result in some mitigation co-benefits. Although the final selection of CRRA practices by agricultural households will determine the scale and nature of the GHG emissions reductions, the most common route expected is through the reduced use of chemical fertilizers and pesticides and sequestration of CO2 through agro-forestry practices. It is estimated that 80% of the total 20,730 hectares of restored land would benefit from CRRA practices (totaling 16,584 hectares). The programme will monitor and report on the improvements in soil health which will include indicators such as soil organic matter, improved soil nutrient content and increased soil biological activities. It is important to note that significant improvements in soil organic matter take time, typically months to years for more labile fractions to respond to changes in inputs and decades for stable pools of soil organic matters to show detachable changes. Changes in soil organic carbon (which is an element of soil organic matter) would take 10 to 15 years, due to large, stable fractions of soil organic matter which takes longer to form and decompose. While these changes may not be visible in the programmes lifetime, the use of CRRA has been proven to contribute to overall soil health improvements and can contribute to the longer term GHG emission reductions through these systems. In addition, the programme will also work with a smaller number of farmers (depending on their challenges) to support with relevant solar technologies such as solar dryers and cold storage units solar dryers and cold storage units
35. **The programme will target the participation of female farmers and increase their visibility and leadership within the farming community.** This includes selecting at least 50% of Learning Farms to be female- led who will then teach and educate the wider community on CRRA practices, as well as targeting 35% female-led agri-businesses to support and ensuring an equal representation of female farmers in the programme’s showcasing and dissemination activities.
36. **This programme’s ToC is built upon a set of assumptions (see log-frame) including that it will not happen in isolation, but build upon and complement a range of agricultural sector projects in each of the three countries targeting particular CRRA practices** (see FS, section 5). This programme will add value to these other initiatives, for example, by linking farmers to their source of financial and technical support (e.g. ADB and World Bank projects in Tonga building markets for agricultural products) and providing data and improved evidence from the new farm monitoring system (e.g. data collected from this programme on soil health and crop types can improve SPC’s regional projects strengthening Early Warning Systems for monitoring and dealing with the outbreak of pests and diseases and increasing soil health) . The agricultural component of the GCF’s VCCRP project in Vanuatu is the most aligned to the design of this programme (and discussions between the two projects are ongoing since 2022). Crucially, VCCRP is targeting subsistence farmers, whereas this programme is focused on commercial and semi-commercial smallholder farmers, but there will be areas of synergy (for example, increasing uptake of the community nurseries created under VCCRP).²¹

B.2 (b). Outcome mapping to GCF results areas and co-benefit categorization

Outcome number	GCF Mitigation Results Area (MRA 1-4)				GCF Adaptation Results Area (ARA 1-4)			
	MRA 1	MRA 2	MRA 3	MRA 4	ARA 1	ARA 2	ARA 3	ARA 4

²¹ The [Vanuatu Community-based Climate Resilience Project \(VCCRP\)](#), (2023-2028) supports a community-led approach to identify and addressing specific vulnerabilities, which includes supporting the adoption of climate resilient agriculture practices

	Energy generation and access	Low-emission transport	Building, cities, industries, appliances	Forestry and land use	Most vulnerable people and communities	Health, well-being, food and water security	Infrastructure and built environment	Ecosystems and ecosystem services
Outcome 1: Enabling environment strengthened for transition to CRRRA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	X	<input type="checkbox"/>	X
Outcome 2: Practices, systems and technologies adopted for CRRRA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	X	<input type="checkbox"/>	X

Co-benefit number	Co-benefit					
	Environmental	Social	Economic	Gender	Adaptation	Mitigation
Co-benefit 1: Agriculture production and agro-ecological management practices are improved to contribute to GHG emissions reductions:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Co-benefit 2: Increasing the number and visibility of female agricultural leaders in the communities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>

B.3. Project/programme description (max. 2500 words, approximately 5 pages)

37. **At the core of the programme is a ‘learning by doing’ approach, whereby the experience, results and limitations/ challenges of the CRRRA Learning Farms will be carefully monitored, documented and assessed.** This addresses the need of smallholder farmers for context-specific evidence (which they ideally see first-hand) of the viability and cost-benefits of CRRRA before they will be convinced to invest time and resources into adopting such practices. The experience of Learning Farms to identify and adopt relevant CRRRA practice will inform the advice and support being provided to the wider group of smallholder farmers as well as the work to strengthen the enabling environment for sustaining and scaling CRRRA nationwide.

38. The table below summarizes how the two programme outcomes contribute to the GCF Performance Measurement Framework.

Table 4: Contribution of outcomes to GCF Results Areas

Outcome	GCF Results Areas
Enabling Environment strengthened for the transition to Climate Resilient Regenerative Agriculture	ARA 2: Health, well-being, food and water security: Through policy enablers to incentivize CRRRA and strengthening agri-businesses supplying required inputs and services for CRRRA, the programme will support nationwide uptake of CRRRA by smallholder farmers producing food crops for sale, which will increase the volume and resilience of the local supply of nutritious food crops (e.g. through intercropping and crop rotation of cash crops) resulting in better health outcomes.
	ARA 1: Most vulnerable people and communities. Tonga, Vanuatu and Samoa represent some of the most vulnerable people in the world, in particular in terms of exposure to natural hazards. The programme is targeting the widespread adoption of CRRRA practices by all smallholder farmers who provide food crops to the local market, to protect the supply of food during extreme weather events.
	ARA 4: Ecosystems and ecosystem services: The enabling environment will be strengthened to address current policies and schemes that are unintentionally worsening soil and ecosystem health (e.g. those that promote monocropping) and strengthen the capacity of the government (in particular the extension services), agri-businesses and others to provide the necessary inputs and services (e.g. soil testing) to promote the regenerative aspects of CRRRA.

Practices, systems and technologies adopted for Climate Resilient Regenerative Agriculture	ARA 1: <i>Most vulnerable people and communities:</i> The direct support to smallholder food crop producing farmers to adopt CRRA will protect the livelihoods of such farmers from fluctuating yields due to cyclones, temperature increases and erratic rainfall. They have very low adaptive capacity, with only around 2 hectares of land per farmer, and 95-99% are semi-commercial, meaning they need to prioritize producing crop production for household consumption before they can sell any surplus. The criteria for selecting Lead Farmers and FSP beneficiaries will also include their level of exposure and vulnerability to climate impacts, to target the direct support to those at most risk.
	ARA 2: <i>Health, well-being, food and water security:</i> The direct support to smallholder farmers to adopt CRRA will increase their household level food security through increased production of food crops (given the vast majority are just semi-commercial), as well as wider supply within the community.
	ARA 4: <i>Ecosystems and ecosystem services:</i> The direct support to smallholder farmers to adopt CRRA will increase on-farm biodiversity and ecosystem services, particularly through increased soil health (through indicators such as soil organic matter).

39. **Outcome 1: Enabling Environment strengthened for the transition to CRRA.** The Enabling Environment refers to the policies, institutions, market systems and crucially the evidence base that will support and sustain the widespread transition to CRRA across the entire agricultural systems of the three countries. It addresses the following primary barriers identified in section B.2:

- *Lack of understanding by the government and market actors on which CRRA practices are relevant for which farmers and in which contexts, and how to support the adoption of them:* It will develop a cadre of extension workers, market players and non-government actors able to provide long-term information and advice on CRRA, and provide accurate policy guidance targeted to the specific local context.
- *Capacity and resource gaps of the Ministries of Agricultures:* It will strengthen the delivery capacity of each Ministry and the policy enablers to sustain and scale-up CRRA nationwide.
- These enabling environment activities will also explore the best strategies to engage Development Banks and/or other relevant financial institutions as part of broader market and institutional strengthening, without creating any formal lending obligations under the programme.

40. The budget for Outcome 1 is USD 11,071,076 of which USD 10,708,493 is GCF financing and USD 362,583 is co-financing. This outcome has two outputs: one is focused on institutional partnerships and the other on market actors (particularly agri-businesses and farmer cooperatives) to enable CRRA.

41. **Output 1.1: Cross-sectoral capacity and partnerships for the adaptive implementation of CRRA practices.** This will increase the institutional capacity of government, private and non-government stakeholders to identify the most relevant CRRA practices to address the impacts of climate change on crop production systems in each country. These stakeholders will in turn use their existing channels for supporting and influencing farmers to encourage the uptake of these practices. The table below summarizes the key activities under this output.

Table 5: Summary of Output 1.1. Activities

Activities	Description	EE responsibilities
Activity 1.1.1: Establish and sustain national CRRA Multi-Stakeholder Working Groups	The programme will establish, support and embed a permanent technical advisory group ('CRRA Working Group') within the existing governance set-up of each Ministry of Agriculture. It will include Ministry of Agriculture representatives from research and extension services, national agriculture research centers, farmer associations, women groups, and key private sector and civil society organisations. In all countries, national Development Banks as well as the most applicable financial institution advised by the national government will be included as members of the CRRA Working Groups to identify the best collaboration strategies between CRRA technical guidance and future financial support mechanisms. It will facilitate the direct uptake of research and evidence on CRRA from the programme (and beyond if relevant) into policy and practice (see Activity 1.2.3). It will also ensure that programme activities are sufficiently budgeted for and integrated into annual workplans of relevant ministries. In year 1 the TORs and reporting arrangements will	SPC: Technical capacity building to each CRRA Working Group, including via regional training session. National governments: Convening and managing CRRA Working Groups

	be agreed, and all three Working Groups will participate in an intensive regional training on CRRA.	
Activity 1.1.2: Working Groups co-design context-specific CRRA principles and practices	<p>The CRRA Working Groups will meet at least every 6 months to evaluate available quantified evidence generated from the Learning Farms, and other supported farmers, (outcome 2) on the actual viability and costs-benefits of CRRA practices for specific types of farmers (e.g. land size/type and crop systems) and use this to publish guidance targeted to other agricultural households and stakeholders in the agricultural value chain. This guidance should cover:</p> <ul style="list-style-type: none"> • How to evaluate and identify CRRA practices relevant for different farm conditions and contexts • Inputs and costs associated with CRRA practices (and signposting relevant financial support), including information relevant to Development Banks and other financial institutions for future product design • Practical steps in adopting the CRRA practices, across the crop cycle including how to overcome common challenges • Expected benefits in different time horizons, including financial returns • Risks associated with adopting the CRRA practices and how to minimize these <p>In year one, the CRRA Working Group will expand on the Feasibility Study value chain assessment (see FS, section 7.5) and make public a detailed quantified baseline assessment of the resilience of the value chain for each focus crop production system, using farm-level data generated by the new national monitoring system, see Activity 2.2.3) and draw on existing published evidence including documented traditional sustainable practices to provide some initial guidance. However, from year two onwards, every 6 months new guidance will be published based on data from the piloting of CRRA by the Learning Farms and other experiences. This could be updated versions of the same guidance, or more in-depth guidance on particular crop or aspect of the process.</p> <p>A group of 6 International CRRA Advisors will be convened to support and review the guidance material.</p> <p>Development Banks and/or other FIs will participate in these discussions to strengthen their understanding of the viability and risk profile of CRRA investments.</p>	<p>SPC: Technical support to development of guidelines, including managing international advisors.</p> <p>National governments: Managing CRRA Working Groups including the production of guidelines.</p>
Activity 1.1.3: Develop and implement training of trainers (ToT) programme on CRRA	<p>The programme will identify and train a diverse cadre of approximately 50 public and private stakeholders in each country who already have established networks and relationships with agricultural households. These will be identified by the government based on their experience of delivering trainings in the past, and using selection criteria set out in the FS. This includes extension workers, but also farmer groups, community-based organisations, women’s associations and market actors such as crop exporters and buyers. Where relevant, staff of Development Banks and other financial institutions may also participate in selected ToT sessions as trainees to strengthen their understanding of CRRA practices and farm viability. A minimum of 35% of the participants will be female. The ToT will be designed and delivered in partnership with agricultural research and training institutes and adopt interactive adult-learning techniques including on-farm sessions. Following an initial intensive training session, refresher trainings will happen throughout the duration of the programme.</p>	<p>SPC: Lead the design of locally specific training material, using adult-learning techniques. Technical support and evaluation of training sessions.</p> <p>National governments: Select and convene ToT. Contribute to the design and lead the delivery of the training sessions.</p>

42. **Output 1.2: Markets enhanced to promote and incentivize CRRA initiatives.** This will strengthen market forces that will support and sustain the transition to CRRA in the long term. This output is therefore a key aspect of the programme’s exit strategy. The table below summarizes the key activities under this output.

Table 6: Summary of Output 1.2. Activities

Activities	Description	EE responsibilities
<p>Activity 1.2.1: Support farmers to develop viable business plans for adoption and marketing of CRRA practices</p>	<p>The programme will target approximately 480 food crop producing smallholder farmers in the focus provinces (see Table 3) in each country (in addition to the 60 Learning Farms) and build their skills and capabilities to identify and pursue the business opportunities presented from CRRA. They will be selected based on a set of criteria (see FS, Section 14.1) including vulnerability to climate impacts, a strong interest in CRRA and to represent a diversity of context and baselines. They will be supported through twenty days of intensive small-group training and coaching, repeated between years 2-4, to move from foundational to advanced modules. This will be supplemented with workshops co-organized with farmer groups, including women farmer groups, to reach a wider set of agricultural households, and one-on-one support as required throughout the programme. The programme will develop and publish curriculum (using services of an external organisation with expertise in adult-learning techniques and skills training) that is replicable across the region, and which then gets adapted for the specific locations and agricultural value chains. The topics that will be covered includes:</p> <ul style="list-style-type: none"> • Developing a business plan for adopting relevant CRRA practices given their farm’s specific projected losses from climate change. Such practices could include on-farm adaptations, but also post-production such as value chain addition and building markets for their products, e.g. organic certification (<i>such a business plan will be a requirement for accessing the Farmer Support Programme</i>). • Basic requirements of book-keeping and documentation, particularly important in case required to apply for grants/loans to expand their business; • Financial planning to manage unexpected losses from crop failure or destruction from extreme weather events; • Possible role of farmer groups in supporting their members to adopt and scale-up CRRA, for example publicizing the costs-benefits and helping with market access. <p>In all countries, Development Banks and or FI will be involved in selected training sessions as trainers and workshop facilitators, particularly on financial literacy, business planning and options for future investment. The programme will also seek to establish at least one partnership with a financial institution at national level to engage on CRRA-related farm business models, share learning from the programme and explore pathways for post-programme upscaling of viable CRRA investments, without creating any obligation for lending under the programme</p>	<p>SPC: Lead the design of locally specific training material, using adult-learning techniques. Technical support and evaluation of training sessions.</p> <p>National governments: Select and convene agricultural households and farmer groups. Contribute to the design and lead the delivery of the training sessions and workshops. An external firm will provide expert guidance on the design of training modules.</p>
<p>Activity 1.2.2: Support agri-businesses and farmer associations to develop viable business plans for provision of CRRA related inputs and services</p>	<p>The programme will support approximately 90 existing and start-up small- and medium-sized enterprises (SME) agri-businesses and farmer associations across the three countries to scale-up or start new services that will sustain and increase the widespread adoption of CRRA practices. This includes existing and new SME providers of soil health testing services, agricultural advisory services, micro-irrigation technology installation and maintenance, rainwater harvesting systems installation and maintenance, small-scale food processors, Agri-tourism providers and others. In addition, farmer associations providing relevant value-chain support to its members will be invited to participate. The SMEs and associations will be selected based on a competitive</p>	<p>SPC: Lead the design of locally specific training material, using adult-learning techniques. Technical support and evaluation of training sessions.</p> <p>National governments: Select and convene agri-businesses. Contribute to the design and lead the</p>

	<p>application process and selected based on a set of criteria (see FS, Section 14.1) including their relevance to scaling CRRA, viability of the business and the need for training. At least 35% of the agri-businesses supported should be female-led.</p> <p>The programme will train and mentor these SMEs and farmer associations through a series of skill-building modules, including intensive 10-day national training. They will be expected to cover their own travel and boarding (to signal their commitment to this investment in their business). In all countries, Development Banks and FIs will be invited to participate as trainers and workshop facilitators to strengthen linkages between CRRA-supportive agri-businesses and future financing opportunities.</p> <p>The programme will develop and publish curriculum (using services of an external organisation with expertise in adult-learning techniques and skills training) that is replicable across the region, and which then gets adapted for the specific locations and agri-businesses of each country. The programme will also showcase the services of the businesses and ‘match-making’ between farmers and relevant commercial providers. For example, facilitating partnerships between eco-tourism providers and lead farmers piloting CRRA. The FSP will also support selected farmers to use such services, to kick-start the market and wider set of farmers who will then be paying for such services.</p>	<p>delivery of the training sessions and workshops.</p> <p>An external firm will provide expert guidance on the design of training modules.</p>
<p>Activity 1.2.3: Technical assistance to the Ministries of Agriculture to design policy enablers to encourage the adoption of CRRA and reform projects and subsidies which disincentivize CRRA</p>	<p>The programme will strengthen policy enablers to provide clear market signals that support CRRA. This includes reforming some existing government schemes and subsidies which encourage unsustainable practices that work against the principles of CRRA (e.g. mechanization that encourages monocropping and clearing the land). In addition, designing new enablers to encourage or incentivize scaling-out of CRRA across each country, such as promoting organic markets (e.g. new certification schemes), transition funds, payment for ecological services, conditional cash transfers and potential fiscal measures such as adjustments to import taxes or tariffs on chemical herbicides and fertilizers to disincentivize inputs that undermine soil health. This will include consultations with Development Banks and FI where fiscal or incentive mechanisms may influence future financing for CRRA.</p> <p>The programme will provide technical assistance to each Ministry of Agriculture to identify opportunities to reform existing and develop new policy enablers for CRRA and then adopt and evaluate them. The CRRA Working Group will review the analysis and recommendations of the technical experts and suggest a priority set of policy actions/ reforms required to the Ministry of Agriculture (or other ministries). Working closely with the programme team and when required external experts they will develop and draft policy reform/ design options. It is expected that at least one policy/scheme will be reformed/ developed to support CRRA, such as reforms to subsidy schemes that promote monocropping or the development of new incentive programmes like organic certification support.</p>	<p>SPC: Provide technical support to the policy design process, including through procurement of relevant technical experts.</p> <p>National governments: Manage the policy review process, including the work of technical experts and local consultations.</p> <p>External firm will be hired when necessary to provide Technical Assistance on specific topics.</p>

43. **Outcome 2: Practices, systems and technologies adopted for CRRA.** This outcome will directly and indirectly support food crop producing smallholder farmers to understand, adopt and monitor and evaluate the

benefits of CRRA practices. This will provide significant direct resilience benefits, while also providing the evidence required for Outcome 1. It addresses the following primary barriers identified in section B.2:

1. *Lack of understanding by smallholder farmers on which CRRA practices are relevant and how to adopt them:* It will provide ongoing coaching and training to targeted smallholder farmers on how to identify, adopt and monitor relevant CRRA practices.
2. *Insufficient evidence of financial returns:* It will provide intense support to smallholder farmers to demonstrate the viability and benefits of particular CRRA practices and use this evidence to encourage and support wider uptake.
3. *Capacity and resource gaps of the Ministries of Agriculture:* It will establish a permanent government data monitoring system for on-farm resilience indicators.

44. The budget for Outcome 2 is USD 29,073,287 of which USD 28,417,806 is GCF financing and USD 655,480 is co-financing. This outcome has two outputs: One focused on supporting 90 Learning Farms from the focus provinces (see Table 3) to identify, adopt and evaluate relevant CRRA practices which will lead to direct resilience benefits but also field ‘test’ CRRA to provide the evidence base that will convince a wider set of farmers in the focus provinces to replicate the practices; and the other output creates a sustainable institutional mechanism for monitoring the effectiveness of CRRA which will contribute to the monitoring and evaluation of this programme, but also of CRRA in general beyond the programme lifetime. The evidence generated under this outcome will also be used to inform future engagement with Development Banks and financial institutions on potential post-programme investment support for CRRA

45. **Output 2.1: CRRA systems established through training, demonstration and farmer support.** This output will provide direct resilience benefits to the Learning Farmers and others benefiting from peer-to-peer learning, which will increase over the course of the programme and beyond. It will focus on the priority crop production systems within each country: Mixed horticulture in Tonga; intercropping of kava with food crops in Vanuatu; and intercropping of taro with other food crops in Samoa. The table below summarizes the key activities under this output.

Table 7: Summary of Output 2.1. Activities

Activities	Description	EE responsibilities
Activity 2.1.1. Engage with local government and Chiefly structure and integrate project activities within community and provincial development plans as appropriate.	This programme will support each government’s efforts to decentralize planning and delivery at the local level and mobilize community level support for CRRA and ownership over the programme’s activities. This will help facilitate effective peer-to-peer learning from the experiences of the lead farmers in piloting CRRA. The exact process will differ in each country, respecting different set-ups for local government and traditional community leader systems. However, the initial objective will be to sensitize local leaders on CRRA and get the programme activities integrated into any local development planning process. The programme will have formal and informal consultations and programme review meetings with these leaders at key points during the delivery of the programme. This also allows the community to voice any concerns about programme activities.	SPC: Represent regional dimension of the programme during community level engagement. National governments: Manage relationships at the local level including formal workshops and ongoing engagement.
Activity 2.1.2: Implement training programmes for farmers on CRRA practices, systems and technologies	The programme will identify 30 smallholder farmers in the focus provinces (see Table 3) of each country – primarily semi-commercial farmers selling some of their crops for income, but potentially a couple of commercial organizations – who will be supported to identify the specific CRRA practices relevant to them, pilot them, monitor and report on the costs, benefits and viability and share their experiences with their community and beyond. These ‘Learning Farms’ will be selected based on their willingness and ability to start piloting CRRA within the first year of engagement, which includes the following criteria: <ul style="list-style-type: none"> • Clear vulnerability to climate impacts, with farms prone to droughts, floods, erosion etc. • Some baseline understanding of climate change and a strong commitment and interest to participate in the programme. 	SPC: Lead the design of locally specific training material, using adult-learning techniques. Provide technical support to the selection of lead farmers and design of specific package of support. National governments: Select and convene lead farmers. Develop and deliver package of support for each farmer and monitor process and results.

	<ul style="list-style-type: none"> • A willingness to commit some or all of their agricultural land for piloting the CRRA practices and a strong commitment to monitor and report their progress/ challenges. • They are well respected and visible members of their local community and beyond and have a high potential to influence wider adoption (e.g. leaders of farmer associations). • They represent a diverse set of contexts and baselines, with different sizes of plots, incomes and resources and while some may have already experimented with some CRRA practices (and will be supported to expand/scale up to other practices) other farmers should be starting from a relatively low baseline. This will ensure the programme has 90 unique 'models' for CRRA to monitor and learn from. • It includes at least 50% of females, meaning the female is the lead farmer in the agricultural household. <p>The programme will support each lead farmer to establish an in-depth baseline assessment of the resilience of their crop production systems. In all countries, Development Banks will also be included as trainees within selected CRRA training sessions to build their practical understanding of how CRRA practices improve farm-level viability and resilience.</p> <p>Learning Farms will be supported through a structured and continuous process of mentoring, training and engagement. In year 1 a comprehensive 'package' of support will be discussed and agreed with each lead farmer, formalized in a Letter of Agreement in the local language. This will cover the training and inputs provided by the programme, and what is expected from the farmer in terms of collecting monitoring data and acting as a 'learning farm' for others to visit and learn from.</p> <p>The programme will provide flexible and responsive technical support throughout the duration of the programme in the form of one-on-one mentoring by extension workers and programme staff, on-farm training sessions for clusters of lead farmers, on-demand problem solving and advice and provincial level workshops to share experiences amongst the group.</p> <p>The experiences and results of the Learning Farms will be carefully monitored and documented by the farmers themselves and the programme team. These will be consolidated at the programme level (drawing out relevant trends across types of farmers), and compared with the national baseline data being collected under Activity 2.2.3. The overarching analysis presented to the CRRA Working Group (see Output 1.1).</p>	
<p>Activity 2.1.3: Develop and operationalize a Farmer Support Programme (FSP) for CRRA</p>	<p>A FSP will cover any additional upfront costs/ investments associated with adopting CRRA practices that the 90 Learning Farms will likely incur and will also be open for applications from other smallholder farmers in the focus provinces (see Table 3). Approximately 1,000 farmers in total will benefit from the FSP, depending on the amount distributed per farm.</p> <p>A FSP will have country-windows of equal value, so that farmers will be applying to the programme team based in each country (and procurement and operation rules will be adapted as required to align with national regulations).</p> <p>For Learning Farms, this will be a type of incentive to encourage participation in the programme and opening up their farms to training and showcasing and to minimize the financial risks associated with switching to CRRA.</p> <p>The exact costs and inputs associated with the adoption of CRRA will vary considerably, depending on the exact practice they adopt and what technology and equipment they already have. The majority of targeted smallholder farmers will adopt CRRA practices that do not require any technology or equipment upfront</p>	<p>SPC: Technical oversight and approval of inputs agreed with lead farmers and other agricultural households. Procurement of high-value inputs.</p> <p>National governments: Manage process of agreeing with each agricultural household package and timing of inputs to be provided. Procurement of low-value inputs and monitoring of effective use of inputs.</p>

investments, such as crop rotation, intercropping, integrated pest management etc. For these, some annual/one-off inputs will be required, such as seedlings, simple machinery (e.g. grass/bush cutters), farm tools, compost material etc. It will also cover any significant additional labour costs, giving the shortage of labour has made this a significant financial consideration.

There are some potential CRRA practices that require more costly upfront investments, such as organic certification, drip irrigation systems, rainwater harvesting systems, solar dryers, solar freezers, solar cold storage, greenhouses and tunnel houses. For these, the programme will first direct farmers to available sources of financing from the national DBs, and support them to incorporate in their business plan (Activity 1.2.1) a repayment strategy. However, it is assumed that a small number of costly inputs will need to be directly procured and provided by the programme (up to the ceiling of USD 10,000) to demonstrate to the DBs and the farmers the financial viability of these products.

This engagement with Development Banks will be voluntary and demand-driven and will not impose any obligation on farmers to take on finance.

The Feasibility Study also specifies the costs/ inputs that are ineligible under the FSP, such as market access road construction/ upgrades and modalities and conditions for the FSP (FS, section 14.2.1).

A total of USD 10 million is available for the FSP, and while the costs for each agricultural household will vary, if a maximum of USD 10,000 of inputs are provided to each then 90 Learning Farms, and 910 other smallholder farmers can be supported across the three countries. For USD 10,000 the farmer would receive one costly input (e.g. tunnel plastic greenhouse, drip irrigation system) and the required saplings, composting material, farm tools etc. For many of the farmers they will not require any costly inputs and the value would be much less than USD 10,000, meaning that a much greater number of farmers will actually be supported. In case farmers require inputs that exceed USD 10,000 (e.g. those requiring a solar-powered cold storage) the programme will facilitate their engagement with DBs and support the process of accessing external financing.

The modalities for the FSP will be slightly different for Learning Farms and for other farmers, given the competitive element required for the latter. For Learning Farms, their specific needs will be assessed, and an agreement will be reached on which CRRA practices they will pilot and monitor and what inputs and support will be provided by the programme (see previous activity). From the second year onwards, the FSP will be opened for applications from other agricultural households who meet the eligibility criteria. The application process will be shared widely within the focus islands (see Table 3), encouraging applications from women and other marginalized groups including by promoting within women's groups, community organisations and churches.

There will be annual calls for application, with selection criteria including:

- Level of vulnerability of the agricultural household to the impacts of climate change (e.g. self-reported experience of fluctuating yields in recent years due to weather conditions).
- Strength of the business plan submitted in terms of the expected resilience benefits in the short- and long-term and the importance of the investment to their core business (the business plan can be developed under the training provided in Activity 1.2.1). As part of the business plans, farmers must show they have contributed a minimum of 20% of the total

	<p>upfront and ongoing costs associated with the switch to CRRA practices.</p> <ul style="list-style-type: none"> • The level of influence of the agricultural household within their local community and wider networks, and therefore the expected replication and scaling-up that will occur. • Diversity of contexts and baselines, with different sizes of plots, incomes and resources and while some may have already adopted some CRRA practices others should be starting from a relatively low baseline. • At least 35% of the beneficiaries are female. <p>Once selected, the programme will sign a LoA with each agricultural household outlining the schedule for in-kind disbursement of equipment, raw materials, tools etc, as well as a commitment by the farmer to participate in training organized by the programme (see Activity 2.1.4) on how to use and maintain the equipment (including after the programme end).</p>	
<p>Activity 2.1.4: Facilitate active peer-to-peer learning to promote wider adoption and replication of CRRA practices</p>	<p>The Learning Farms will be the most effective vehicle for the scaling-up of CRRA, through informal peer-to-peer learning using their established relationships, such as via networks of sellers to an exporter, farmer associations and through their community links. The programme will also support more formal exchange of knowledge and learning, including:</p> <ul style="list-style-type: none"> • Targeted on-farm training sessions, led by the ToTs, which will involve selected other agricultural households within the network of the lead farmer and beyond. At least 35% of the participants will be female. These sessions will be rolled-out across the target islands from year two onwards, aiming to reach 6,720 agricultural households in total. • ‘Open Farm Workshops’ targeting the local community including schools, churches, community organisations etc. These will be fun and informal opportunities for community members to view and speak to the lead farmers, as well as experts, to understand why and how CRRA is being piloted. These workshops will be organized in the target islands in years 3-4, aiming to reach 2,700 agricultural households in total. <p>The learning and evidence generated by the lead farmers will deepen as the programme progresses. To ensure sufficient time for the dissemination and scaling-up process, the showcasing of the lead farmers will be open about the level of progress, and highlight not just the results (and challenges) experienced at that point, but also those that are expected in the future. In all countries, Development Banks will be included in selected peer-to-peer learning activities as observers to strengthen their understanding of how CRRA practices translate into improved farm performance and resilience.</p>	<p>SPC: Lead the design of locally specific training material, using adult-learning techniques. Provide technical support to delivery of training and workshops.</p> <p>National governments: Select and convene target agricultural households. Deliver and monitor effectiveness of trainings and workshops.</p>

46. **Output 2.2: Knowledge management, monitoring and evaluation system established for continuous learning and improvement of CRRA practices.** This output will establish a robust institutional mechanism for collecting on-farm monitoring data of key resilience indicators. This will feed into the monitoring and evaluation (M&E) of this programme but also strengthen the evidence base for CRRA more generally and support the wider national system of monitoring and reporting on climate change. The table below summarizes the key activities under this output.

Table 8: Summary of Output 2.2. Activities

Activities	Description	EE responsibilities
<p>Activity 2.2.1: Develop and disseminate knowledge products to promote wider adoption</p>	<p>The programme will enable the much wider scaling-up of CRRA through dissemination of the evidence and learning generated from the lead farmers across the country, this includes:</p> <ul style="list-style-type: none"> • Using a ‘hot desk’ function within Ministries of Agriculture which allows any agricultural household to call a qualified 	<p>SPC: Manage design and delivery of regional knowledge products and workshops. Provide</p>

<p>and replication of CRRA practices</p>	<p>worker and ask for advice. Following the ToT (see Output 1.1) the extension workers will have the knowledge to answer questions with regards to identifying and adopting CRRA and to 'problem-solve' any issues the farmers are facing.</p> <ul style="list-style-type: none"> Producing a range of communication material (leaflets, brochures, videos) in local languages on the costs/benefits of CRRA and practical advice on how to adopt CRRA to adapt to the impacts of climate change. This material will be circulated through farmer associations, buyers, community groups but also digitally via the Ministry of Agriculture and other websites, farmer association Facebook pages etc. Specific knowledge products will be developed on the role of Development Banks and other financial institutions in supporting the uptake of CRRA, including lessons on farm economics, risk reduction and investment readiness The Ministries of Agriculture's and SPC's websites will be updated with dedicated resources related to CRRA including those produced by the programme, including videos, and 'voices from the field' providing real-time updates on progress. An annual national workshop will be organized every year, to provide a larger platform for the lead farmers to showcase their work. This could be part of the national Agricultural Shows and/or Conferences that are regularly convened in each country and/or a standalone event organized specifically for the programme. The programme will also be showcased at the regional level using SPC's Pacific Agriculture Week organized every two years and which brings together the Ministries of Agriculture and other sector organisations from across the region. 	<p>quality assurance of national products.</p> <p>National governments: Manage design and delivery of national products and workshops.</p>
<p>Activity 2.2.2: Further develop and support the roll-out of farmer mobile phone apps</p>	<p>The programme will support each government to make use of the widespread use of smart phones to get information and advice to farmers immediately, and also an efficient way of getting data from farmers. Each Ministry of Agriculture is at a different stage of developing an agricultural app to explore this potential. In Vanuatu it is still at the design stage, with a prototype developed (with support from a now closed external project) but which requires further work. In Samoa, the AgriTouch app is up and running but with only around 100 users, and requires some upgrades and rolling-out (but there are no concrete plans due to capacity constraints). Upgrades are expected to include the integration of additional tools such as the new agri-food systems and climate tool and enhancements that enable two-way data flows with farmers In Tonga, the government is at the very beginning stages of designing the app.</p> <p>The programme will support the Ministries of Agriculture in Vanuatu and Samoa to conduct a functional review of the current design of the current available apps and how they could be improved in terms of the information being provided, functionality, data storage and protection etc. A re-development and roll out plan will be developed, which will include an interactive element that allows farmers to input their resilience monitoring data (see Activity 2.2.3) to provide them with more customized advice. In Tonga, the programme will work with the Ministry to bring together a group of public and private sector stakeholders, including women's groups and farmers associations, to review their specific needs and the experiences of other countries to design a prototype for the app.</p> <p>The developed/ redeveloped app will be piloted and evaluated by the lead farmers and once finalized it will be promoted to other target agriculture households (see previous activities). In the final</p>	<p>SPC: Provide technical support to the design and piloting of apps.</p> <p>National governments: Manage local/regional consultants to facilitate local consultations and decision-making on design, piloting and evaluation of apps.</p>

	<p>year of the programme, each Ministry will be supported to prepare a sustainability plan for the app which will outline how annual updates, technical maintenance, data storage, cybersecurity, and content refreshes will be financed. This may include ministry budget allocations, partnerships with ict providers, or light-touch self-financing mechanisms (user-fees, advertisements etc) to ensure the app remains current and functional beyond the programme lifetime</p>		
<p>Activity 2.2.3: Develop sustainable national monitoring systems for climate resilience and regeneration of agricultural systems</p>	<p>The programme will establish permanent national institutional mechanisms for monitoring outcome level indicators for climate resilience and regenerative at the farm level. It will be fully owned and governed by each government and will therefore require significant institutional capacity building to design and operate such a system. The design will differ across each country, to allow it to be completely integrated into the government’s own data management system. However, there will be consistency in some of the core data that will be collected that is required for composite resilience and regeneration indicators. The CRRA indicators will be farm-level, require only simple data collection technology and complement what is already being collected under the agricultural survey and other standardized process. This will likely include:</p> <ul style="list-style-type: none"> • Productivity: Tonnage of crop produced per hectare/ variability of crop yields; • Income: Annual household net income from agricultural activity; • Crop diversity: Number of different types of crops and varieties • Soil health: Content of soil organic matter, soil nutrients and soil biological activities. • Water availability: Soil moisture • Agro-forestry: Number of trees of different species/ dimensions • Area affected by soil erosion. <p>The programme will co-design the indicators, as well as the data collection process, with each Ministry. The system will ideally involve farmers themselves recording the data (with FSP beneficiaries being required to input into the system), but will still require a role for extension workers for validation and use of data collection tools. The ‘kobo toolbox’ has proven effective under other projects for digitalized data management. The data will be stored and analysed by the Ministry of Agriculture (and used to inform sector and landscape-level policies and plans), but both the raw data and reporting will be made public. The system will then be piloted with the programme’s Learning Farms, getting feedback from both farmers and extension workers on the ease and utility of the process, and refining the system as required. It will then be slowly rolled out to other farmers and locations, with regular points of reflection and refinement incorporated. It will contribute to the development of a detailed baseline, and measuring the actual impact of CRRA practices being piloted under the programme, under outcome 1. During the final year of the programme a sustainability plan will be developed which identifies and addresses any remaining capacity gaps to ensure the system runs effectively in the long-term.</p>	<p>SPC: Provide technical support to each national government to design and pilot the monitoring system.</p> <p>National governments: Manage local/regional consultants to facilitate local consultations and decision-making on design, piloting and evaluation of monitoring system.</p>	
<p>Activity 2.2.4: Document and share learning from the project to wider</p>	<p>The programme will package and disseminate this programme-level learning in several ways. Some of it will inform internal monitoring, evaluation and learning activities, and a series of in-depth studies will be carried out at the beginning, mid-point and end of the programme. These studies will use mixed-methods research methodologies, adapting appropriate sampling strategies</p>	<p>SPC: Manage design and delivery of regional knowledge products and workshops. Provide quality assurance of national products.</p>	

<p>communities of practice in the region</p>	<p>to provide a representative picture of the programme’s reach and impact.</p> <p>The programme will also disseminate the evidence and learning externally. This includes national annual learning workshops involving all major programme stakeholders to share and document internal reflection and learning on the effectiveness of the programme in facilitating uptake of CRRA. 'Practitioner voices' - a series of informal blogs from individuals involved in delivering the programme on their personal reflections and learning – will be created and published on the online knowledge platforms created under output 2.1. A final regional workshop – targeting other funders - will showcase learning and results and allow the government and farmers themselves to present their experiences. A summary of the overall learning of the programme will be published in a high-quality, easy-to-read paper. This will also be turned into an accompanying academic journal, to disseminate the data but also analysis on good practices and learning for uptake of CRRA to adapt to climate change. Documentation and regional learning events will explicitly include lessons on the role of Development Banks in supporting CRRA adoption.</p>	<p>National governments: Manage design and delivery of national products and workshops.</p>
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B.4. Implementation arrangements (max. 1500 words, approximately 3 pages plus diagrams)

47. **Accredited Entity (AE): The legal agreement between the GCF and the Pacific Community (SPC) as AE will be a grant agreement through a Funded Activity Agreement (FAA).** The Climate Finance Unit (CFU) within SPC’s Climate Change and Environmental Sustainability division will act as the primary focal point for the GCF and responsible for overseeing financial management and reporting for the programme, as well as be accountable for achievement of the expected outputs and outcomes of the programme. The CFU will remain independent from the Executing Entity functions performed by the Land Resource Division (LRD) of SPC.
48. **Executing Entities (EE)** There will be a regional and three national co-Executing Entities (EE) with each respective government responsible for implementing the programme. At the regional level, a Programme Management Unit (PMU) will be created within SPC’s LRD. A Regional Team Leader, supported by technical specialists and programme support staff will have clearly spelt out roles and responsibilities (see below). At the national level, SPC as the AE will enter into legally binding sub-agreements (grant agreements) with each government as co-Executing Entities to deliver the agreed programme activities. Procurement for the programme will be handled the regional PMU for high-value purchases and local PMUs for low value purchases. National PMUs will use governmental procurement processes that have been vetted for previous projects (e.g. GCF- and World Bank-funded projects) in alignment with SPC procurement processes and following capacity assessments by SPC to ensure they follow the principles of accountability, transparency, fairness and value for money. The table below summarises the capacity of the AE and co-EEs.

Table 10: Summary of key stakeholders’ experience and track record

Stakeholder	Experience and track record
<p>AE: SPC Climate Finance Unit (CFU)</p>	<p>SPC has a strong track record as an AE and is one of the largest international development organisations in the Pacific, established in 1947. It has delivered projects in 22 Pacific Island countries and territories, including Tonga, Vanuatu and Samoa. The Climate Change and Environmental Sustainability Division has overseen projects across the region in partnership with GIZ, European Union and the GCF. Since becoming accredited on 28 February 2019, SPC has had two projects approved: FP191 in Vanuatu (Enhancing Adaptation and Community Resilience by Improving Water Security in Vanuatu) and FP169 in Federated States of Micronesia (Climate change adaptation solutions for local authorities).</p>
<p>EE: SPC Land Resources Division (LRD)</p>	<p>The LRD will utilize the SPC’s system and processes. The Division is already implementing projects with each of three Ministries of Agriculture and has close working relationships that will ensure a strong and effective delivery partnership.</p>

<p>EE: Government of Tonga</p>	<p>Tonga’s MEIDECC was a co-EE for the now successfully completed FP090 (Tonga renewable energy project). Based on this and learning from other climate finance projects they are playing a closer oversight role in all climate finance projects</p>
<p>EE: Government of Vanuatu</p>	<p>The Vanuatu MoCC is the co-EE for GCF FP035 (via the Department of Meteorology and Geohazards) and is the executing entity for a number of donor-funded projects, including via the GEF. Since a capacity review in 2014 the Government of Vanuatu has made efforts to strengthen capacity for managing climate finance. In particular: Establishing the VPMU with strengthened coordination, monitoring, evaluation and reporting capacity.</p>
<p>EE: Government of Samoa</p>	<p>Samoa’s Ministry of Finance is the EE for GCF FP037 accountable to UNDP for managing, monitoring and evaluation project outputs. This established a fund flow and management arrangement that will be utilized for this project, including the development of workplans by implementing agencies and requests for advances etc.</p>

49. Financial institutions in each country will be important partners in the delivery of the programme, including as members of the CRRA Working Group (see Output 1.1), partners in the delivery of business planning development and implementation for agri-businesses, farmer associations and farmers (see Output 1.2) and potential financiers of farmers investments required to adopt CRRA (see Activity 2.1.3). Engagement will be led by the Ministries of Agriculture in each country given their established partnerships and ongoing work in ensuring access to finance for the sector. Any potential agreement to be signed, for example with the three Development Banks (DBs) - Development Bank of Samoa, Vanuatu Rural Development Bank, and Tonga Development Bank – who already provide credit for inputs (e.g. seeds, equipment), expansion loans and implement government-backed subsidized interests rates and funds for farmer focused schemes (e.g. Tonga Government’s Development Loan at 3% interest rate for agriculture sector) would be done at country level. The programme will explore whether other sources of farmers need to be engaged, including commercial banks (e.g. ANZ, BSP, Westpac), microfinance institutions and credit unions, and international donor-led rural credit schemes.
50. **Programme Implementation** In each country a Team Leader, reporting to both SPC and the respective Government’s Ministry of Agriculture, will oversee and support the implementation of programme activities, together with 6 other specialists and programme management staff located within the Ministry and 3 at the provincial/ island level. The roles and responsibilities of these teams are consistent across each country (see below). The specific implementation arrangements for each country are summarized in the figure which is in line with other GCF projects under implementation in each country.

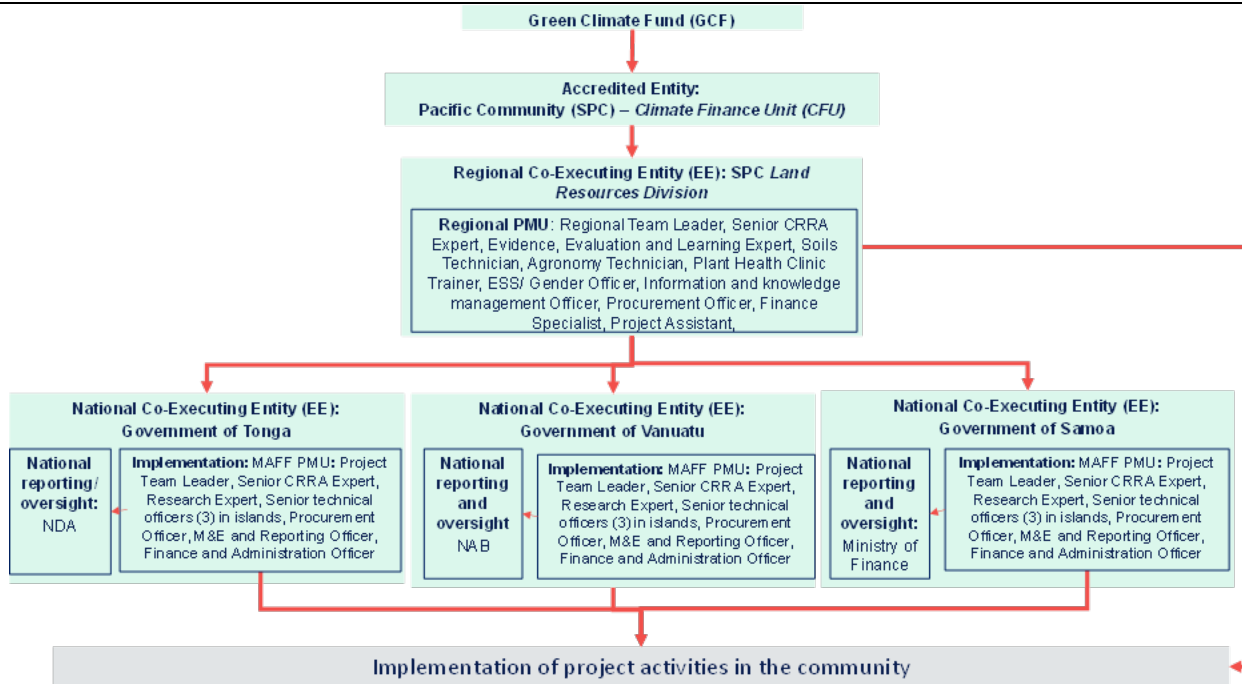


Figure 8: Summary of implementation arrangements

51. PMUs will be established at the regional level and within each Ministry of Agriculture. The overall structure is described below, and the specific individual positions summarized in the table below.

- Regional:** The regional PMU within SPC's Land Resources Division will coordinate and oversee delivery across the three countries. This will include a Regional Team Leader, as well as regional specialists in different aspects of CRRA as well as programme management staff to manage the gender, ESS, knowledge management and monitoring and evaluation requirements.
- Tonga:** The programme will be managed and implemented by a PMU within the Ministry of Agriculture (MAFF's) Corporate Services Division, with some activities implemented and/or supported by the Research Division. The National Team Leader will work with permanent staff in the division and national/provincial level specialists recruited to provide targeted capacity support to the extension workers in implementing the programme activities. The NDA (Department of Climate Change, MEIDECC) will play an oversight and report on Tonga's climate change commitments nationally and under the UNFCCC.
- Vanuatu:** The programme will be implemented by the Department of Agriculture and Rural Development (DARD) within MALFFB. The National Team Leader will sit within a PMU in DARD providing day-to-day leadership and support to permanent government staff in implementing the programme activities. Specialists, including those located in the focus islands, will provide support to extension workers in delivering the programme activities. The National Advisory Board will play an oversight and report on Vanuatu's climate change commitments nationally and under the UNFCCC.
- Samoa:** The programme will be led and implemented by the Crops Division in the Ministry of Agriculture (MAF) based in Nuu. The National Team Leader will sit in a PMU within the division working with government counterparts to manage both government and programme specialists to deliver programme activities. This includes specialists hired to work in Savaii which has its own separate unit of the Ministry of Agriculture and separate staff. The NDA (Ministry of Finance) will play an oversight and report on Samoa's climate change commitments nationally and under the UNFCCC.

Table 11: Roles and responsibilities of programme staff

Individual	Role and responsibilities	Funding source
Regional level: SPC		
Deputy Director	<ul style="list-style-type: none"> Oversight of the programme and accountability to the SPC governing board for effective and timely delivery. 	SPC
Regional Team Leader	<ul style="list-style-type: none"> Overseeing, co-line managing and supporting the work of the National Team Leaders to ensure national delivery of programme activities is happening in an impactful and timely manner; Facilitating ongoing coordination and exchange of learning between each of the three ministries and national delivery teams; Liaising with GCF and SPC's Climate Finance Unit; Managing the regional delivery team. 	GCF
Senior CRRA Expert	<ul style="list-style-type: none"> Directly delivering certain agreed activities within each country, according to shared programme workplan, this would likely involve procuring and managing the inputs of any specialist international service providers required; Providing on-demand and ongoing technical support to the national delivery teams, including quality assuring all outputs; Managing the international advisory group for CRRA. 	GCF
Soil Technician	<ul style="list-style-type: none"> Provide ongoing technical support to farmers and extension officers in country on soil health related to CRRA; Work with the CRRA Expert and other team members to ensure that the soil aspects of the programme are considered for the overall success of the system; Conduct soil survey, analysis, interpretation and advise to countries on the soil health improvement of the CRRA systems in the respective sites; Provide support on the development of soil health guidelines to support plant health improvement for the CRRA system in the programme sites; Provide technical support on soil nutrient management for the different crops within the farm sites; Provide support for the development and implementation of on the ground training and research support to farmers and extension officers in-country. 	GCF
Agronomy Technician	<ul style="list-style-type: none"> Provide ongoing technical agronomy support to farmers and extension officers in the countries in relation to CRRA; Work with the CRRA Expert to ensure that the combination of crops in the farming systems can support the concept of regenerative agriculture; Support countries by advising on the crop production parameters to be collected which will inform accurate data analysis for improvement of systems; Provide technical support and guidance on the development of training material required to support transfer of best practices to farming communities; Provide technical support to the development of farmers' business plans. 	GCF
Plant Health Clinic Trainer	<ul style="list-style-type: none"> Provide specialist technical inputs on pest and disease management across the programme sites, particularly in terms of integrated pest management practices; Support the PMU on capacity building for extension services and agricultural households on pest/ disease management options. 	GCF
Evidence, Evaluation and Learning Expert	<ul style="list-style-type: none"> Coordinating and supporting the design and delivery of the baseline assessment process, ensuring high-quality research standards and outputs; Overseeing and supporting the design, piloting and institutionalization of the national data management system for farm level resilience indicators; Consolidating reporting from each country and at the regional level on behalf of the CFU; Leading the mid-term and final evaluation process for the programme; Facilitating internal learning processes to provide reflection points on progress and document learning for external audiences. 	GCF
Information and Knowledge Management Officer	<ul style="list-style-type: none"> Supporting the production of high-quality national knowledge management products and leading the production of regional synthesis knowledge; Leading on internal and external convenings, workshops and events at the regional level. 	GCF

ESS/ Gender and Social Inclusion Officer	<ul style="list-style-type: none"> Develop tools and systems for ensuring gender is integrated across all programme activities; Ensure gender action plan is delivered and find additional opportunities for targeted investments in strengthening equality. Develop tools and systems for ensuring environmental and social safeguards are integrated across all programme activities; Ensure Environmental and Social Management Framework (ESMF) is delivered and find additional opportunities for targeted investments in strengthening equality. Provide capacity building support to National teams and required. 	GCF
SPC Procurement Officer	<ul style="list-style-type: none"> Oversight of procurement of programme inputs to ensure compliance with SPC/ GCF requirements. 	SPC
Finance/ Admin Advisor	<ul style="list-style-type: none"> Oversight of programme finance and administration to ensure compliance with SPC/ GCF requirements. 	SPC
Finance Specialist	<ul style="list-style-type: none"> Accountable for ensuring all programme activities adhere to GCF and SPC policies and standards, including the use of SPC's grievance redress mechanism and anti-laundering/ counter terrorism financing provisions, as well as procedures for efficient use of resources, financial management and procurement. 	GCF
Procurement Officer		GCF
Programme Assistant		GCF
National teams in Tonga, Vanuatu and Samoa		
Director/ CEO Ministry of Agriculture	<ul style="list-style-type: none"> Oversight of the programme and accountability to the government for effective and timely delivery. 	Gov
Technical specialists in Ministry of Agriculture	<ul style="list-style-type: none"> Guidance and contribution to design and delivery of programme activities, finding synergies with other government programmes and integration within institutional processes and systems. 	Gov
NDA	<ul style="list-style-type: none"> Oversight of reporting from programme to SPC/ GCF and within the government system. 	Gov
National Team Leader	<ul style="list-style-type: none"> Maintain clear lines of communication between SPC and the government; Lead programme implementation and delivery of workplans; Ensure programme activities adhere to gender action plan and carefully monitor the programme's environmental performance; Coordinate with other donor funded programmes in the country; Support communication and collaboration across the three countries and beyond. 	GCF
Senior National CRRA Expert	<ul style="list-style-type: none"> Manage the delivery of all activities and the work of the technical officers; Lead author on all national knowledge management products and technical reports Manage and support the operations of the CRRA Working Group; Provide on-demand advice and support to the government on CRRA. 	GCF
National Research Expert	<ul style="list-style-type: none"> Provides technical support to the government agriculture research centers for data collection and analysis parts of activities; Leads on establishment of resilience data monitoring system. 	GCF
Technical officers (3)	<ul style="list-style-type: none"> Based in the focus islands/ geographies co-delivering programme activities with the extension workers; Build day-to-day capacity of extension workers, providing mentoring and on-the-job coaching. 	GCF
Extension workers (5-7 per country)	<ul style="list-style-type: none"> Based in the focus islands/ geographies co-delivering programme activities with the technical officers. 	Gov
M&E and reporting officer	<ul style="list-style-type: none"> Undertake monitoring, evaluation and reporting for the programme. 	GCF
Procurement Officer	<ul style="list-style-type: none"> Manage procurement process below a threshold and support SPC with paperwork required for all procurement. 	GCF
Finance/ Administration Officer	<ul style="list-style-type: none"> Manages cashflow, financial compliance and consolidated financial reporting; Administrative support to the delivery of the programme and the management of the team. 	GCF

52. **Programme governance:** The programme will work within and strengthen existing coordination and accountability mechanisms which exist nationally and regionally (summarized in the figure below). This will support the sustainability of the programme results and further strengthen institutional capacity. National Programme Steering Committees - co-chaired by the Ministry of Agriculture and the NDA in each country – will report into the existing national level coordination group for climate change and climate finance projects. Technical advisory groups – the national CCRA Working Groups and an international advisory group on CRRA

– will ensure the programme activities and outputs are relevant, effective and become incorporated within policy and practice.

53. At the regional level, the programme will operate within SPC’s existing governance arrangements, for which the ultimate governing body is the Conference of the Pacific Community, which is charged with high-level, strategic orientation of the organisation. SPC will create two bodies that will support and coordinate activities across the three countries and ensure that regional benefits also emerge from the programme. A Regional Programme Coordination Committee will virtually meet monthly to facilitate effective coordination of activities across the three countries and ensure there is cross-country learning and experience sharing. The core members will be the three national Team Leaders and chaired by the Regional Team Leader, although the relevant Directors from each Ministry of Agriculture will also be invited to participate. An International CRRA Advisory Group will involve six regional/ global CRRA experts who will support and mentor the national CRRA Working Groups and technically review the outputs.
54. At the national level, the programme will work through existing governance structures, including cross-sectoral coordination bodies for the country’s overall response to climate change and any agricultural sector specific coordination and governance mechanisms. A Programme Steering Committee – co-chaired by the NDA and Ministry of Agriculture – will be the primary decision-making body for the programme. In each country a CRRA Working Group will be a technical advisory group that plays a key role in designing and evaluating the advice and support being given to farmers. The governance arrangements for each country are described below:.
- **Tonga:** The National Climate Change Coordination Committee is the highest governance body for climate change in the country, responding for coordinating and reporting on the government’s overall efforts on climate change. A JNAP Task Force provides more operational level coordination support across ministries which the Department of Climate Change in MEIDECC Coordinates. MAFF reports into this climate change coordination structure for projects and actions related to climate change. A Programme Steering Committee will coordinate across the NDA and MAFF and report into the National Coordination Committee.
 - **Vanuatu:** The National Advisory Board (NAB) is the ultimate decision-making body for climate finance projects in the country. The DG of the MoCC as both the NDA for the GCF and co-EE for this programme, is governed by the NAB. The NAB is chaired by the MoCC but includes representatives from across relevant government ministries, including MALFFB. Its mandate is to bring together leaders from within government but also civil society to promote greater levels of coordination among donor funded projects. MALFFB reports and provides updates to the NAB when it meets 3-4 times a year. A Programme Steering Committee will coordinate across the NDA and MALFFB and report into the NAB.
 - **Samoa:** The CRSC coordinates and oversees the country’s response to climate change and is composed of CEOs from 14 sectors and the Climate Resilience Investment Coordination Division (CRICD) of the Ministry of Finance acts as a Secretariat. In addition, specifically on agriculture, there is an Agriculture Sector Steering Committee which provides guidance and oversight of the Agriculture Sector Plan. This Committee will also operate as the Programme Steering Committee with the NDA invited to co-chair for any decisions related to this programme.

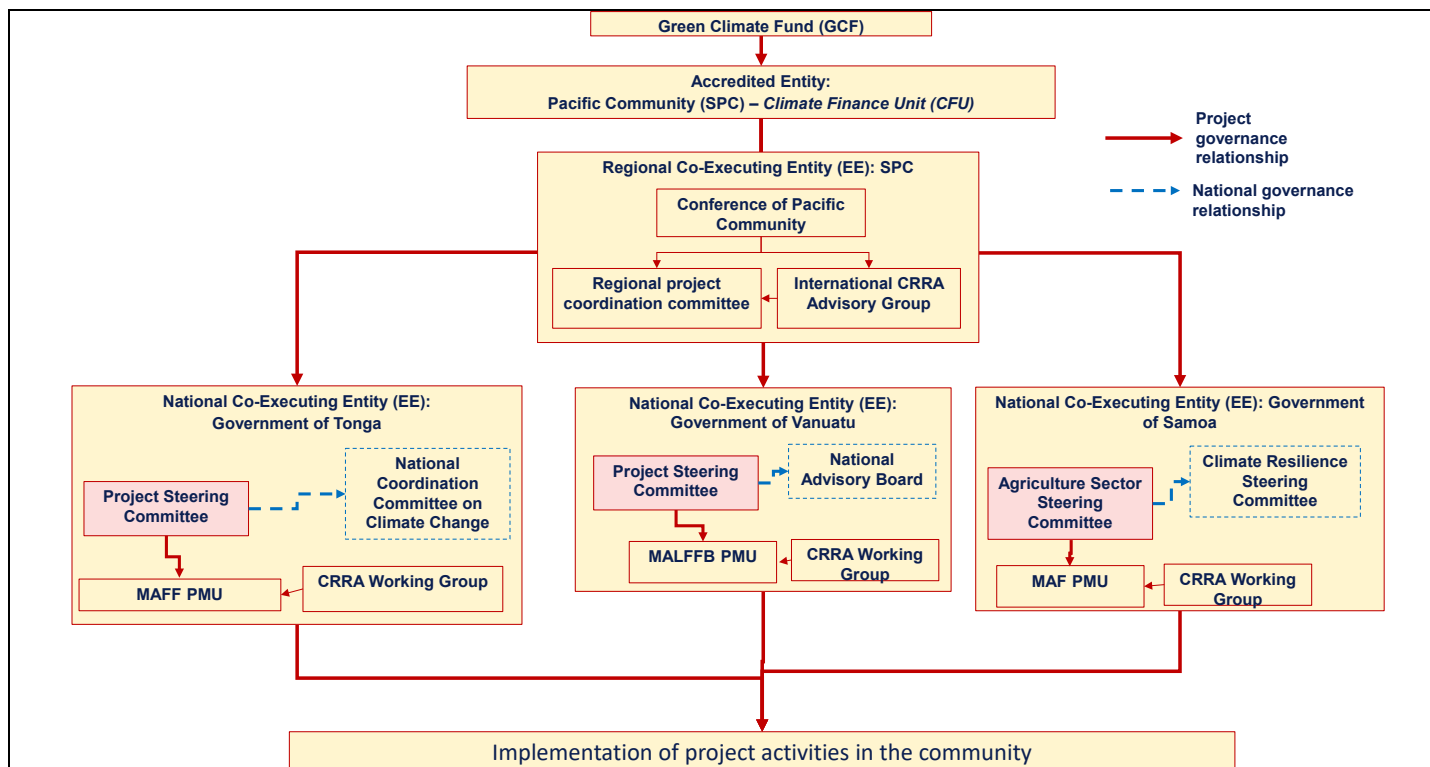


Figure 9: Summary of governance structure for the programme

55. **Programme-level Monitoring, Evaluation, Accountability and Learning (MEAL) system:** A focused MEAL component will ensure that the programme generates robust, credible, and actionable evidence on progress, results, and impact, while strengthening national monitoring and reporting systems in Tonga, Vanuatu and Samoa. The MEAL system will track implementation, support adaptive management, build national capacity, and produce evidence to inform regional and global learning on CRRA. This system supports high-quality reporting against the programme logframe, GCF Investment Criteria, countries’ NDCs, and national agricultural strategies. It will deliver a complete monitoring and evaluation system for the programme, including ongoing monitoring of outputs and outcomes, independent evaluations, and learning processes. National governments will benefit from strengthened systems, and capacities for programme monitoring and reporting.

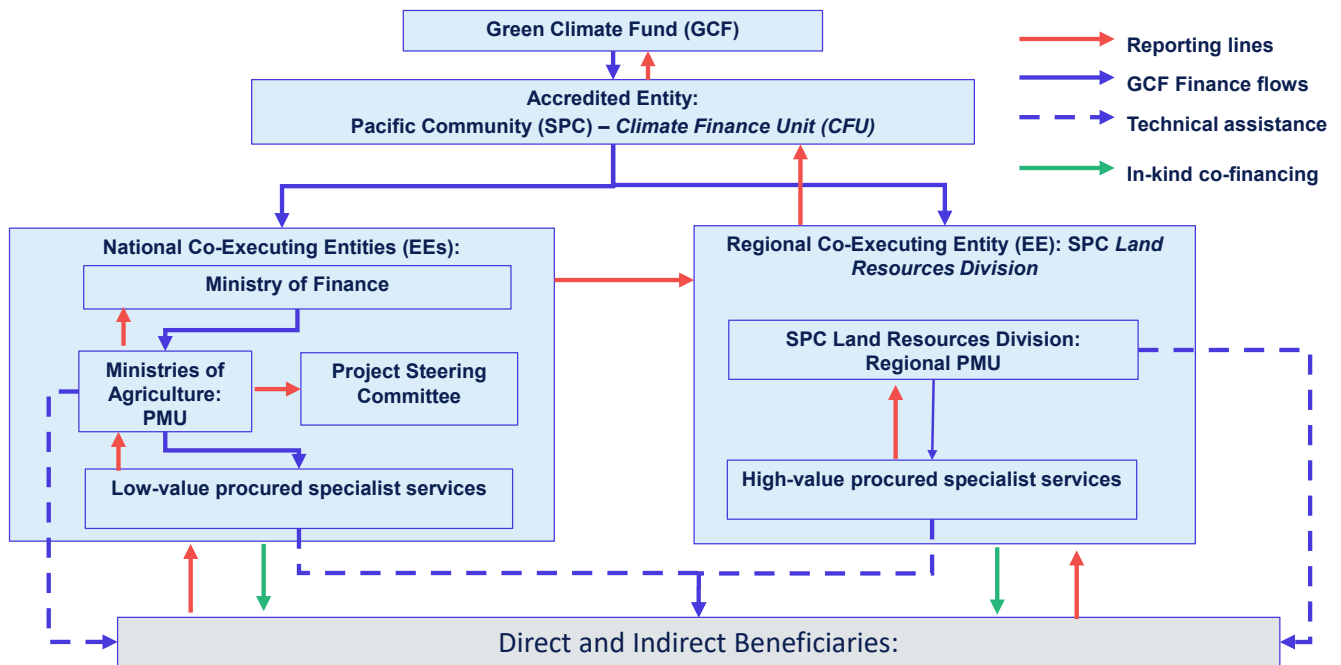
Table 12: Summary of MEAL Activities

Activities	Description	EE responsibilities
Programme-level monitoring, reporting, evaluation and adaptive management processes	This activity will establish and operationalise the MEAL framework and plan for the programme across the three countries to track implementation progress, demonstrate results, support adaptive programme management. It will include setting up monitoring tools, data collection protocols, indicator tracking systems, conducting the baseline assessment to establish pre-programme conditions for key logframe indicators, and alignment of annual workplans. Regular programme-level monitoring will be conducted throughout implementation, including field visits, data verification, and documentation of progress against annual workplans and the programme logframe. Monitoring will incorporate gender, environmental and social safeguards, and stakeholder engagement requirements to ensure programme performance is assessed holistically. Findings from routine monitoring will inform the preparation of all required programme reporting, including Annual Performance Reports (APRs) and mid-year progress updates. The activity will also organise reflection and learning sessions to support adaptive management and ensure integration between programme monitoring and the national farm-level resilience data systems	Regional: Provide oversight, technical guidance, quality assurance of all monitoring processes, consolidate regional reporting, provide training and coaching to national M&E Officers, ensure alignment with GCF reporting requirements. National: Collect and validate monitoring data, integrate monitoring into annual workplans, report progress through established national

established under Outcome 2. Annual performance reports will be prepared, and results will be fed into national climate finance reporting systems through the NDAs. This activity will also coordinate the programme's independent Mid-term Review and Terminal Evaluation.

governance and programme structures.

56. **Fund flow:** Funds will flow from GCF to SPC and then to each national reserve bank according to the legally binding grant agreements signed with each national co-EE (see figure below). This decentralized fiduciary arrangement will involve SPC providing direct funding tranches separately to each co-EE, following endorsement of workplans and budgets (see governance arrangement below). This is the approach followed by ongoing GCF-funded projects in each country, as well as other donor-funded programmes. It provides a higher level of transparency and control at the national level with project spending as expenses are shown alongside other sector spending and also allows the Ministries of Agriculture to manage and coordinate across all of their budget resources.
57. As the regional co-EE, SPC's LRD will use funds to manage and coordinate the overall delivery of the programme as well as directly implement agreed programme activities in coordination with each respective Ministry of Agriculture. In addition, they will procure any international experts and services required for programme delivery.
58. Within each country, the appropriate decentralized financial management approach will be followed. The Ministry of Finance or equivalent will transfer funds to the Ministry of Agriculture as per agreed budgets and workplans. Existing administrative functions for reporting against funds received would be followed by the Ministry. No new spending unit would need to be created. SPC will also provide support to each Ministry through a dedicated regional Programme Finance Officer to ensure compliance with all SPC and GCF-specific requirements.



Legal Agreements governing reporting lines:

1. Funded Activity Agreement: GCF with SPC
2. Subsidiary Grant Agreement: SPC with national governments
3. Contractual Service Agreement: SPC/ national governments with service providers

Figure 10: Summary fund flow and reporting arrangements^{22,23}

B.5. Justification for GCF funding request (max. 1000 words, approximately 2 pages)

²² Thresholds for high-value and low-value procurement will be agreed and formalised with each country as part of the Grant Agreements between AE and EE

²³ Contractual Service Agreements refer to contracts with individual consultants or firms to provide specific technical inputs

59. This section presents the justification for GCF investment to build the resilience of the agriculture sector in Tonga, Vanuatu and Samoa, in light of the findings of the Economic and Financial Analysis presented in Annex 3. It specifically addresses the GCF's critical additionality in catalyzing a nationwide transition to CRRA that would not occur otherwise, due to significant financial, technical, and market barriers that existing climate financiers and national budgets are not positioned to overcome.
60. **Financial barriers:** The three national governments have limited resources available for the agriculture sector in general, and an even more narrow resource base for piloting and scaling up CRRA. They are in general highly dependent on external development assistance, with the average aid share of revenue between FY18-FY21 being 44% in Tonga, 15% in Samoa and 28% in Vanuatu²⁴. Covid-19- related border closures and natural disasters led to deep and protracted recessions across the three economies: In 2020 Tropical Cyclone Harold struck Tonga and Vanuatu causing damages and losses equivalent to 11-25% of GDP and in January 2022 a volcano and tsunami caused damages and losses equivalent to 36% of GDP²⁵. The IMF/World Bank Low-Income Country Debt Sustainability Analysis rates Tonga and Samoa at a 'high risk' of debt distress, and Vanuatu at a 'medium risk'²⁶. Public expenditure on agriculture is low: In Samoa it was 3.3% of total expenditure in FY14/15, 2.1% in FY15/16 and 6.7% in FY16/17²⁷; In Tonga that MAFF received 1.2% of the total development budget for FY2020/21²⁸ and in Vanuatu only 1.8% of its annual budget was through the MALFFB of which 0.5% was for agriculture and rural development specifically
61. GCF's additionality is demonstrated by the specific gap it fills in the current climate finance architecture and the consequences of inaction. Without this intervention, the devastating climate impacts on agriculture and food security will continue to intensify and accelerate the current crisis in local food production. The mapping of ongoing projects highlights that most are small-scale, fragmented, and focused on specific technologies or subsistence farmers (e.g., GCF's VCCRP in Vanuatu), not on integrated CRRA systems for smallholder commercial farmers. No other financier is addressing the core barrier: the lack of replicated, evidence-based proof of concept for CRRA that can de-risk adoption for farmers and justify larger public and private investments. Bilateral donors and development banks typically fund within narrower sectoral mandates or are hesitant to fund the intensive, long-term technical assistance and farmer incentives required for this paradigm shift. Without this strategic, grant-based investment from the GCF, CRRA will likely remain limited to isolated research studies and small pilot projects, incapable of triggering the necessary nationwide transition. The GCF is uniquely positioned to provide patient, adaptive, and risk-tolerant capital to overcome this first-mover disadvantage. With this grant, the three governments will be able to kick-start a fundamental transition to CRRA by generating the irrefutable evidence and strengthening the enabling environment needed to attract further investment and sustain scaling in the long-term.
62. The GCF support to the programme will take the form of grants, after careful consideration of the financing landscape in each country. The Farmer Support Programme (FSP) will procure and distribute directly to Learning Farms and selected other crop producing households. Offering concessional loans is considered not viable primarily because while CRRA does offer increased incomes, it also offers wider public goods such as ecosystem services and a resilient supply of food. The key barrier to adoption of these practices are non-financial, as smallholder farmers are not yet sufficiently convinced of the benefits of CRRA and there would therefore be little demand for a loan to adopt such practices. The programme would not be able to achieve the level of adoption of CRRA within the five-year period that is considered necessary to catalyse the much wider scaling up of CRRA. The FSP is therefore a short-term measure to reduce the risk associated for the early adopters of these otherwise profitable practices. The beneficiaries of the FSP will in turn be expected to open up their farms for monitoring and evaluation of the viability of CRRA and to showcase the results within their network and community. Once the financial viability has been demonstrated in their communities, other farmers will be encouraged to take the risk in adopting CRRA without any grants or input support. For higher cost inputs (e.g. solar dryers) there are already concessional finance available from the Development Banks and others that farmers can access.
63. **Economic and financial analysis:** A financial analysis on a sample of six CRRA practices showed that all, with one exception, offer profitable returns to the farmer even without the GCF covering the costs of upfront

²⁴ [World Bank \(2023\). 'Strengthening Government Finances to Enhance Human Capital in the Pacific.'](#)

²⁵ Ibid.

²⁶ Since the start of the pandemic, public debt increased by three percentage points of GDP in each of the three countries, due to declining GDP and increased borrowing to cover shortfalls in government revenues and Covid-19 related spending. Ibid.

²⁷ [Neves, R. et.al \(2019\). 'Samoa: Public Expenditure Financial Accountability Assessment.'](#)

²⁸ [CSFT \(2021\). 'Citizens Budget Guide: Tonga 2020-21.'](#)

investments and marginal costs for the first five years. This is in line with the underlying assumption of the programme design that financial barriers are not the primary reason why smallholder farmers are not already adopting these practices. Rather there are significant non-financial barriers, particularly in terms of the lack of knowledge and skills of farmers about how to select and adopt relevant practices for their particular farm. Annex 3b shows that cumulative net benefits become positive around Year 5 in the base case, with breakeven shifting to approximately Year 6 and Year 7 under one-year and two-year benefit delay scenarios respectively.

64. It is also somewhat artificial to consider these practices in isolation, as the programme will be supporting farmers to adopt multiple such practices. The vast majority of farmers will be supported to adopt practices that have minimal upfront investments, such as crop rotation, intercropping, agro-forestry, cover cropping, and typically offer less immediate increased revenue. The installation of climate resilient technology, such as drip irrigation systems and solar dryers, will be offered in combination of these other practices. Therefore, the FSP covering the cost of this technology should be seen as part of a package of support offered that incentivizes the broad transition to CRRA.
65. The table below summarizes the Net Present Value for each sample practice under a Business as Usual (BAU) scenario and with the CRRA practice adopted (both with the additional costs covered by the Farmer Support Programme (FSP)) and without). Sensitivity analysis was also which showed that increasing the hurdle rate and reducing cash flows both reduce NPV, but remains positive. Adjusting the climate scenario (and the associated key economic driver, of CRRA offsetting the declining yields as a result of climate change) impacts the net revenue and NPV under the BAU after 20 years, with a reduced net revenue and NPV for the RCP 2.6 scenario (which assumes a 1% annual reduction in crop yields) and increased NPV for the RCP 6 scenario (which assumes a 3% annual reduction in crop yields). As such the NPV for net revenue increment is reduced under the RCP 2.6 scenario and increased under the RCP 6 scenario. It remains positive in all cases, with one exception (CRRA Practice #5).

Table 13: Net Present Value (NPV) of sample of six CRRA practices (in USD)

	5 Years	10 Years	15 Years	20 Years
CRRA Practice #1: Switch from synthetic to organic fertilizer for watermelon production in Tonga				
NPV - Business as Usual	2,155	3,258	3,707	3,766
NPV - with programme, no Farmer Support Programme (FSP)	446	3,772	6,377	8,419
NPV - with programme, with Farmer Support Programme (FSP)	3,647	6,973	9,578	11,620
NPV - Net Revenue Increment (Programme with FSP vs BAU)	1,492	3,715	5,871	7,854
CRRA Practice #2: Introduction of solar powered drip irrigation for lime trees in Tonga				
NPV - Business as Usual	10,903	17,796	22,028	24,517
NPV - with programme, no Farmer Support Programme (FSP)	- 189	8,277	14,143	18,168
NPV - with programme, with Farmer Support Programme (FSP)	14,789	23,255	29,121	33,146
NPV - Net Revenue Increment (Programme with FSP vs BAU)	3,886	5,459	7,093	8,630
CRRA Practice #3: Switch from mono-cropping of kava to intercropping with yams and sweet potatoes in Vanuatu				
NPV - Business as Usual	119,287	203,258	262,327	303,847
NPV - with programme, no Farmer Support Programme (FSP)	119,287	203,258	262,327	303,847
NPV - with programme, with Farmer Support Programme (FSP)	117,867	207,461	275,700	327,671
NPV - Net Revenue Increment (Programme with FSP vs BAU)	- 1,421	4,203	13,373	23,823
CRRA Practice #4: Introduction of solar dryer for kava production in Vanuatu				
NPV - Business as Usual	119,287	203,258	262,327	303,847
NPV - with programme, no Farmer Support Programme (FSP)	114,441	200,684	260,413	301,656
NPV - with programme, with Farmer Support Programme (FSP)	124,207	210,449	270,178	311,422
NPV - Net Revenue Increment (Programme with FSP vs BAU)	4919	7192	7,851	7,574

CRRA Practice #5: Switch from mono-cropping of taro to intercropping with sweet potato in Samoa

NPV - Business as Usual	49,802	84,223	107,935	124,205
NPV - with programme, no Farmer Support Programme (FSP)	44,508	79,382	1,06,706	1,28,115
NPV - with programme, with Farmer Support Programme (FSP)	48,785	83,659	1,10,983	1,32,392
NPV - Net Revenue Increment (Programme with FSP vs BAU)	- 1,017	- 565	3,048	8,187

CRRA Practice #6: Introduction of macuna as a fallow crop with taro production in Samoa

NPV - Business as Usual	49,802	84,223	1,07,935	1,24,205
NPV - with programme, no Farmer Support Programme (FSP)	49,468	99,271	1,38,293	1,68,868
NPV - with programme, with Farmer Support Programme (FSP)	50,284	99,988	1,38,932	1,69,446
NPV - Net Revenue Increment (Programme with FSP vs BAU)	481	15,764	30,997	45,240his

66. The economic analysis of the programme considers the net incremental adaptation benefits to climate change the programme yields for society. It calculates the economic cost-benefits of the transition to CRRA within Tonga, Vanuatu and Samoa by programme end (year 5) and over the full 20-year lifetime of the programme. This incorporates all investment and operational costs of the programme (GCF and co-financing), as well as a limited amount of monetized revenues from resulting externalities such as avoided losses. The 20-year lifetime of the programme reflects the time takes for agricultural practices to embed and scale, and for the strengthened enabling environment to deliver results.
67. The marketable benefits include the cumulative net financial benefits for participating in agricultural households, compared to the business-as-usual scenario. The Economic Internal Rate of Return (EIRR) of the programme, considering only the marketable benefits, is positive (14%) by programme end (with economic Net Present Value (NPV) of USD 4.8 million), which increases by year 10 to an EIRR of 51% with economic NPV of USD 104 million. The economic returns are positive despite the intensive and costly nature of reaching a large number of farmers in these countries, and the time and resources it takes to convince and support each individual farmer to adopt CRRA²⁹.
68. A sensitivity analysis showed that the programme design is resilient to most negative shocks and changes in the underlying assumptions including changes in the discount rate, reductions in the expected flow of benefits and delays to the benefits. In some scenarios, the economic returns turn positive only after project end and before year 10. In addition, adjusting two of the key economic drivers of the project to be more conservative – the CRRA adoption rate, and the assumed benefits of CRRA in offsetting the decline in agricultural yield as a result of climate change – reduce the NPV but it remains positive by year 10.
69. The sample of CRRA practices provides a huge range and variety of non-marketable benefits to society, including food security, reduced soil erosion and improved water quality (via reduced run-off of chemical inputs). Non-marketable benefits are valued using shadow prices that attempt to reflect the amount that people would have to pay to obtain an equivalent amount via the market. Therefore, only those social benefits that can be monetized using a shadow price can be included in the Economic Analysis, which is limited to GHG and water savings benefits. As a result, the analysis significantly underestimated these non-marketable benefits and their addition does not significantly change the EIRR and NPV of the programme. The table below summarizes the monetized non-marketable economic benefits that were incorporated into the Economic Analysis.

Table 14: Summary of practice specific economic non-marketable values

CRRA Practice	Benefit	Unit description	Per ha/ per year	Total per year
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²⁹ The economic returns are also underestimated. In particular, because not all beneficiaries are considered in the analysis, including the agri-businesses supported under the project and the indirect benefits flowing to other targeted farmers (a significant portion of whom are expected to adopt CRRA as a result of the project within the 20-year period). At the same time, the entire costs of the project are included within the analysis, which includes outputs focused not on the direct implementation support to farmers for adopting CRRA, but on strengthening the wider enabling environment.

CRRA Practice #2: Introduction of solar powered drip irrigation for vegetable production in Tonga	USD value of avoided GHG emissions	1.57 tCO ₂ per system per ha/per year	USD 71	USD 116,644
	USD value of water savings	1,166 m ³ / per ha of water has been saved per year	USD 233	USD 383,660
CRRA Practice #4: Introduction of solar dryer for kava production in Vanuatu	USD value of avoided GHG emissions	5070 tCO ₂ per solar dryer per harvest (once every 7 years)	USD 32,593 (average, if benefits divided equally across 7 year)	USD 26,614

70. The table below incorporates both the marketable and non-marketable economic results by programme end (5 years) and until the end of the programme lifetime (20 years)

Table 15: Summary of Economic Results for Marketable and Non-Marketable Benefits by the programme

Indicator	5 YEARS	10 YEARS	15 YEARS	20 YEARS
Project EIRR, marketable benefits	16.2%	53%	56%	56%
Project NPV, marketable benefits	6,033,363	105,063,811	228,448,727	357,021,759
Project EIRR, marketable & non-marketable benefits	16.4%	53%	56%	56%
Project NPV, marketable & non-marketable benefits	6,095,316	105,174,306	228,597,255	357,200,088

71. In terms of cost effectiveness, using a blunt measure of USD (based on GCF's total contribution) per direct beneficiary (individuals directly benefiting from a crop producing household adopting CRRA by programme end) is USD 830 and the cost per hectare of land with improved ecological services is USD 2,029. This is to be expected given the small, disbursed populations and very high transport and logistics costs in these countries, as well as the very intensive support required for small-scale farmers to be convinced of adopting new practices. It is difficult to compare this with any other projects, given the diversity in context and the specific nature of the programmes' design, the lack of published data and the different definitions of 'direct beneficiaries'. In Annex 3 (EFA) the information available on a relevant set of GCF- and other funders' projects in the Pacific is provided. This shows that there is a wide range of costs-per-beneficiary (from USD 31 to USD 6,279) but the average is USD 952. The 20-year lifetime of the programme is a more relevant timeframe to consider, given the time required to scale up agricultural practices, and within 20 years (considering the estimated increase in CRRA adoption during this period) the cost per beneficiary is USD 308 and per hectare is USD 707. The training and workshop costs of the programme is the most significant. However, given the number of farmers that will be reached through this training (12,510 agricultural households and 2,340 farmer associations/ agri-businesses), the cost-per-individual trained is USD 966 including a mix of regional and national trainings. Annex 3 (EFA) provides some comparison with other SPC delivered trainings.16

B.6. Exit strategy (max. 500 words, approximately 1 page)

72. Sustaining and scaling-up the adoption of CRRA is itself the core objective of the programme given that it is not possible to reach all agricultural households directly within the lifetime of the programme. The programme's exit strategy therefore includes a number of core design features, including specific activities but also overall programme implementation and governance arrangements. This includes the following:

73. **Working with a wide variety of stakeholders who can influence and support farmers in the long-term:**
The programme does not just rely on a single mechanism for getting advice and support to farmers but rather utilizes and strengthens a wide variety of communication channels with farmers. This includes government extension workers but crucially also via market players, such as farmer associations, buyers and exporters and even suppliers of agricultural inputs and service. This set of long-term partners will also include Development Banks and other selected financial institutions engaged through training, knowledge products and learning platforms established under Outcomes 1 and 2. In addition, influential local stakeholders such as community

leaders and community-based organisations. All of these individuals and organisations will be trained and engaged by the programme and be considered ‘partners’ for the duration. These are permanent sources of influence and information for farmers and will continue to provide information on CRRA beyond the lifetime of the programme.

74. ***Embedding capacity within the government and strengthening existing governance arrangements:*** The programme delivery team will work side-by-side with permanent government staff, which includes experts in CRRA working with counterparts in government who are expected to integrate this learning within future programmes. The programme will also work closely with the entire extension working cadre, addressing crucial skills gaps. The programme will ensure full local ownership of the programme by integrating it within annual workplans for the relevant ministries. This is crucial to ensure that it becomes a routine part of the government’s business. Activity 2.1.1 will also secure the participation of local government officers as well as traditional leaders in the focus islands to increase the likelihood that outputs and outcomes will be sustained.
75. ***Designing policy enablers that will sustain and scale-up the adoption of CRRA:*** The programme will provide technical assistance to each Ministry of Agriculture to evaluate the opportunities for policy reform and development of new policies that will support and incentivize the scaling-up of CRRA in the longer-term. For example, this includes transition grants to support the uptake of organic practices, or subsidized costs for particular CRRA inputs required. These policy enablers will sustain the impact of the programme, and scale-up the actual adoption of CRRA. This is also expected to remove policy barriers that currently exist, for example, programmes that promote mechanization, which in turn encourages monocropping, and affect the resilience to climate change impacts.
76. ***Strengthening market forces to promote CRRA.*** The programme is treating agricultural households who sell surplus crop for income as business actors. It aims to adjust their perceptions of risks and returns from CRRA by demonstrating the results of pilots and providing evidence of costs and benefits. Targeted training will improve agricultural households’ capabilities in business planning and management, such as bookkeeping and identifying value addition options from CRRA. This will ultimately adjust their long-term approach to addressing the impacts of climate change and evaluating the costs/ benefits from various investments in CRRA. These improvements in farm business performance and financial literacy will also strengthen farmers’ readiness to engage with appropriate financial products where this is aligned with their investment needs.
- Embedding DBs as long-term partners promoting CRRA scaling-up.*** The Ministries of Agriculture will build on their ongoing work, funds and financial enablers in place with the DBs in each country to ensure finance is available and accessible specifically for CRRA. DBs will be members of the CRRA Working Group, and therefore be witnessing and evaluating the financial viability (as well as any challenges) of CRRA for farmers. They will be co-creating guidance to farmers on adoption of CRRA, identifying financial enablers that can be utilised. The programme will support the government and DBs under the TA component to identify opportunities to further increase access to finance for CRRA adoption and when relevant design new financing mechanisms. DBs as part of the Working Group will also be co-authoring the Exit Strategy for the programme, and how the scaling can be further mobilised.
77. ***Creating an ecosystem of private sector actors that have a commercial interest to scale-up CRRA:*** The government is an important but not the only stakeholder involved in developing a sustainable and climate resilient agricultural sector. Farmers already rely on a range of private sector actors across the value chain of their products, including those supplying inputs and those purchasing their products. The programme will work with many of these under the ToT initiative, but will also select a group of high potential service providers that can support CRRA in the long-term. Such entrepreneurs and established businesses will have already seen a market opportunity to supporting CRRA and through the programme will be supported to leverage this. As a result, through their own marketing and outreach and their actual services, they will be encouraging and facilitating the further uptake of CRRA. This will ensure that private sector and financial-sector actors alike retain a long-term commercial and institutional interest in CRRA beyond programme closure.
78. ***Designing and operationalizing institutional mechanisms that will exist beyond the programme’s lifetime:*** The programme does not create any programme-specific output, but rather embeds outputs within the government system to ensure they are sustained after the lifetime of the programme. This includes:
- Re-development and roll-out of the existing pilot agricultural apps in Samoa and Vanuatu which are already ‘owned’ by the government and are not reliant on future programme funding.

- Establishment and operationalization of the farm-level data monitoring system for resilience indicators which will be part of the government's existing data management system and improve on the current set up of reporting on climate change.

Creation of CRRRA Working Groups that will be a technical advisory function embedded within the existing advisory groups of the Ministries of Agriculture. In these and other cases, the programme will develop at the initial stages a capacity development plan for the type of support the programme will provide and then transition to full ownership by the government staff.

79. ***Building the evidence base on CRRRA to demonstrate the viability and costs/ benefits to the governments and other funders:*** One of the core objectives of the programme is to build the evidence base for CRRRA which currently does not exist. This includes data on the viability of CRRRA for different contexts and the costs and benefits of different practices, which will be available on several websites, agricultural apps and platform. This is critical to ensure that the government continues to invest in and promote CRRRA beyond the programme. It also provides a strong case for other funders to add their support to these investments. This evidence base will also serve as a long-term public good for Development Banks to inform future engagement in CRRRA-related investments.
80. ***Sustaining the viability and operation of equipment and inputs: Under the FSP certain technology and equipment inputs will be provided to Learning Farms and a selection of others.*** These will be procured from companies providing at least 18 months of coverage for any maintenance requirements. The programme will cover any additional maintenance required within the lifetime of the programme, using local service providers. If required, the programme will target businesses providing this service under the capacity support being provided to agri-businesses. The agreement reached with each farmer will then make each farmer commit to covering the cost of any maintenance beyond the lifetime of the programme. As a result of the programme, there will be an ecosystem of local service providers available, making the maintenance easier and cheaper for farmers.
81. ***Mid-term and financial reviews of core components to find opportunities to further ensure sustainability:*** Both at the programme level, but also for specific activities (e.g. agricultural apps, data monitoring system) there will be time and budget dedicated to reviewing how far the outputs have been embedded into the government system and what more can be done to ensure their sustainability. This is usually done as part of a final evaluation, when there is not any time or budget left to act on the findings. Instead, this programme will undertake a sustainability review at the mid-way point of the programme, as well as at the beginning of the final year.

C. FINANCING INFORMATION						
C.1. Total financing						
(a) Requested GCF funding (i + ii + iii + iv + v + vi + vii)	Total amount			Currency		
	\$ 42.06			million USD (\$)		
GCF financial instrument	Amount	Tenor	Grace period	Pricing		
(i) Senior loans	<u>Enter amount</u>	<u>Enter years</u>	<u>Enter years</u>	<u>Enter %</u>		
(ii) Subordinated loans	<u>Enter amount</u>	<u>Enter years</u>	<u>Enter years</u>	<u>Enter %</u>		
(iii) Equity	<u>Enter amount</u>			<u>Enter % equity return</u>		
(iv) Guarantees	<u>Enter amount</u>	<u>Enter years</u>				
(v) Reimbursable grants	<u>Enter amount</u>					
(vi) Grants	\$ 42.06					
(vii) Results-based payments	<u>Enter amount</u>					
(b) Co-financing information	Total amount			Currency		
	\$ 1.63			million USD (\$)		
Name of institution	Financial instrument	Amount	Currency	Tenor & grace	Pricing	Seniority
SPC	<u>In kind</u>	<u>\$ 0.67</u>	<u>million USD (\$)</u>	<u>Enter years</u> <u>Enter years</u>	<u>Enter%</u>	<u>Options</u>
Government of Tonga	<u>In kind</u>	<u>\$ 0.31</u>	<u>million USD (\$)</u>	<u>Enter years</u> <u>Enter years</u>	<u>Enter%</u>	<u>Options</u>
Government of Vanuatu	<u>In kind</u>	<u>\$ 0.36</u>	<u>million USD (\$)</u>	<u>Enter years</u> <u>Enter years</u>	<u>Enter%</u>	<u>Options</u>
Government of Samoa	<u>In kind</u>	<u>\$ 0.29</u>	<u>million USD (\$)</u>	<u>Enter years</u> <u>Enter years</u>	<u>Enter%</u>	<u>Options</u>
(c) Total financing (c) = (a)+(b)	Amount			Currency		
	<u>\$43.7</u>			<u>million USD (\$)</u>		
(d) Other financing arrangements and contributions (max. 250 words, approximately 0.5 page)	The three national governments have committed in-kind support for the delivery of the programme, this includes the staff time of permanent government employees, office space and facilities. The programme will also leverage ongoing government programmes on agriculture, and other donor funded programmes, such as the establishment and management of nurseries. The SPC will also provide in-kind support in terms of the staff time of existing senior technical experts and operational staff.					
C.2. Financing by component						
Component	Output		GCF financing	Co-financing		

		Indicative cost Options	Amount Options	Financial Instrument	Amount Options	Financial Instrument	Name of Institutions
Outcome 1: Enabling environment strengthened for transition to CRRA	Output 1.1: Cross sectoral capacity and partnerships for the adaptive implementation of CRRA practices	\$ 3,953,489	\$ 3,738,379	Grants	\$ 215,110	In-kind Choose an item.	SPC and National Governments
	Output 1.2: Markets enhanced to promote and incentivize CRRA initiatives	\$7,185,225	\$ 6,970,115	Grants	\$ 215,110	In-kind Choose an item.	SPC and National Governments
Outcome 2: Practices, systems and technologies adopted for CRRA	Output 2.1: CRRA systems established through training, demonstration and farmer support	\$ 22,951,923	\$ 22,573,781	Grants	\$ 378,143	In-kind Choose an item.	SPC and National Governments
	Output 2.2: Monitoring, evaluation and knowledge systems established for continuous learning and improvement of CRRA practices	\$6,222,169	\$ 5,844,026	Grants	\$ 378,143	In-kind Choose an item.	SPC and National Governments
Programme-level Monitoring and Evaluation System	Programme-level monitoring and evaluation	\$1,142,720	\$1,142,720	Grants			
Programme Management Costs		\$2,235,183	\$1,787,423		\$ 447,760		
Indicative total cost (USD)		\$ 43,690,709	\$ 42,056,443		\$1,634,266		

C.3 Capacity building and technology development/transfer (max. 250 words, approximately 0.5 page)

C.3.1 Does GCF funding finance capacity building activities?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
C.3.2. Does GCF funding finance technology development/transfer?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Capacity building is a key element of this project and takes place under both Outcomes. A summary of the training and GCF funding for each is given in the table below.		
Activity #	Sub-Activity	GCF Financing (USD)
1.1.1	<i>Sub-Activity 1.1.1.2:</i> Conduct regional technical training of all three CRRA Working Groups on CRRA and finalize of programme work plan (includes travel costs)	43,700
1.1.3	<i>Sub-Activity 1.1.3.1:</i> Develop training materials and delivery plan on CRRA, in collaboration with established training institutes/ associations, targeting capacity needs, interests, and potential influence in farming practices of the different ToT stakeholder groups.	72,000
	<i>Sub-Activity 1.1.3.2:</i> Conduct and evaluate training to ToT stakeholder groups, prioritising on-farm sessions and engaging with lead farmers	803,752
1.2.1	<i>Sub-Activity 1.2.1.1:</i> Design and deliver intensive 20-day training sessions/ small group coaching sessions of a select group (of which 50% will be women) of Learning Farms and other targeted farmers	3,593,850
1.2.2	<i>Sub-Activity 1.2.2.1:</i> Train and support a select group of 90 existing entrepreneurs/ companies (of which 35% will be women-led to develop business plans for developing allied services that will support CRRA, and to put in place the initial actions required to achieve this	1,095,750
2.1.2	<i>Sub-Activity 2.1.2.3:</i> Deliver on-farm training, refresher training and continuous handholding for each learning farm, for adopting and monitoring benefits of CRRA practices	4,049,940
2.1.4	<i>Sub-Activity 2.1.4.3:</i> Deliver on-farm training sessions at select learning farms on CRRA practices with interested other farmers	4,963,109,146
2.2.3	<i>Sub-Activity 2.2.3.4:</i> Provide intensive training and mentoring to support national organisations to roll out data collection process across country	304,225
<p>82. In terms of financing technology development, under Activity 2.2.2 the programme will further develop and support the roll-out of agricultural mobile phone apps in each country. The total budget for this activity is USD 631,826.</p>		

D. EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

This section refers to the performance of the project/programme against the investment criteria as set out in the GCF's [Initial Investment Framework](#).

D.1. Impact potential (max. 500 words, approximately 1 page)

83. The programme will contribute to the GCF's overarching adaptation impact – contributing to increased climate-resilient sustainable development – by directly supporting 8,784 small-holder farmers (supporting 50,654 individuals) in Tonga, Vanuatu and Samoa to adopt CRRA practices within the five-year duration of the programme, resulting in significant household-level resilience and food security benefits. This represents 69% of the total combined number of individuals in smallholder farmers households selling food crops to the local market in the focus provinces, and 27% of all such farmers in each country, and 8% of the entire combined population. The number of farmers expected to adopt CRRA is expected to reach 12,510 withing the 20-year total 'lifespan' of the programme, given the proposal assumes that only 70% of the farmers reached through intensive training, workshops, agricultural, business planning support etc will adopt CRRA within the five-year period. The strengthened enabling environment and sustained incentives and support structures that will be established by the programme will scale the adoption rate significantly. The table below provides a breakdown of these direct beneficiaries:

Table 17: Summary of direct beneficiaries of adaptation benefits under the programme

DIRECT BENEFICIARIES	TOTAL: for three countries		Tonga		Vanuatu		Samoa	
	agri- HH/ business	Individuals	agri- HH/ business	Individuals	agri- HH/ business	Individuals	agri- HH/ business	Individuals
Total individuals benefiting from adoption of new CRRA practices: Assumes 100% of lead farmers and 70% of other farmers reached are adopting CRRA within the lifetime of the programme.	8,784	50,654 (Men: 25,428; Women: 25,226)	2,928	16,104 (Men: 7,891; Women: 8,213)	2,928	14,054 (Men: 7,102; Women: 6,953)	2,928	20,496 (Men: 10,453; Women: 10,043)
<i>% of total population</i>		8%		16%		5%		10%
<p>GCF Outcome Level:: ARA 1 (C1 2 - Direct Beneficiaries Reached; I 2.1 - Beneficiaries adopting improved and/or new climate resilient livelihood options) and ARA 2 (C 2 - Direct Beneficiaries Reached; SI 2.2 - Beneficiaries with improved food security; SI 2.5 - Beneficiaries adopting innovations that strengthen climate change resilience)</p> <p>Programme results: Output 2.1 (No agricultural households implementing CRRA)</p>								

84. The 50,654 direct beneficiaries include:

- **Learning Farms:** 90 smallholder farmers (benefiting 519 individuals) across all three countries operating as 'Learning Farms'. These will provide the most intensive support to adopt CRRA by the programme. *It is assumed that 100% of this group will adopt CRRA practices within the lifetime of the programme.*
- **Other target smallholder farmers:** 12,510 agricultural households (benefitting 72,141 individuals) across all three countries will be directly engaged by the programme and have increased skills, understanding and resources to adopt CRRA (including Learning Farmers and other target farmers). This represents 64% of the total crop-producing households selling surplus crops in the three countries, and 23% of the total combined populations) The target for scaling-out the learning from the Learning Farms to other target crop producers in the province has been calculated using a bottom-up estimate of the number of farmers who will be reached and engaged by various activities under the programme. Given that many of these activities will be targeting the same farmers, a conservative estimate has been used by. Only those farmers engaged via the peer-to-peer learning activities (open farm workshops, on-farm trainings and national workshops) have been counted (totalling 12,420 other target farmers, beyond the Learning Farms). It is assumed that 70% of this group will adopt one or more CRRA practice as a result of the support provided by the programme within the lifetime of the programme

(i.e. 8,694 agricultural households, supporting 50,135 individuals). However, the remaining farmers are expected to adopt within the longer 20-year lifespan of the programme.

85. **This will result in CRRA practices being newly implemented on approximately 20,730 hectares of agricultural land.** This represents a critical mass of agricultural land under CRRA practices (13% of total, with breakdown presented in the figure below) and an important milestone to demonstrate a high likelihood of widespread transition to CRRA and therefore a paradigm shift in agricultural systems in each country. Of this total land covered by CRRA, it is assumed that 80% of the practices adopted will provide co-benefits in terms of contributing to GHG emissions reductions.

Table 18: Summary of hectares brought under CRRA practices, including those contributing to GHG emissions reductions

	TOTAL for three countries	Tonga	Vanuatu	Samoa	Corresponding log-frame indicator
Land covered by new CRRA practices (hectares) - Uses average hectares per smallholder farmers adopting CRRA	20,730	8,286	5,563	6,881	GCF Outcome Level: ARA 4 (C14 - Hectares of natural resources brought under improved low-emission and/or climate-resilient management practice; SI 4.1 - Hectares of terrestrial forest, terrestrial non-forest, freshwater and coastal marine areas brought under restoration and/or improved ecosystems)
% of total agricultural land	13%	31%	6%	16%	
Land covered by new CRRA practices that specifically enhance soil quality (hectares) - assumes 80% of CRRA practices adopted will enhance soil quality	16,584	6,629	4,451	5,505	GCF Co-Benefit 1: Agricultural production and agroecological management practices are improved to contribute to GHG emissions reductions

86. **Indirect beneficiaries:** The programme will provide indirect benefits to 36% of the entire population of Tonga, Vanuatu and Samoa (219,639 individuals). The indirect benefit will flow to two groups of individuals who are not directly engaged by the programme, but receive spillover effects. Firstly, all small holder farmers selling surplus crop (representing an additional 31,721 farmers who support 160,750 household members) across the three countries will indirectly benefit through a variety of national level enablers that encourage the scaling-up of CRRA (this represents 69% of all crop-producing farmers selling a surplus crop in the three countries, and 27% of the entire combined populations). This includes the new policy enablers designed to incentivize CRRA and new/strengthened agri-businesses providing inputs and services required for CRRA. The regenerative aspect of CRRA will also improve ecosystem and eco-system services, in terms of improved soil health, reduced pollution of water bodies and increased on-farm biodiversity for all smallholder farmers. Secondly, the individuals in non-crop producing households in the focus provinces (58,888 individuals) will benefit with an increased and more resilient supply of nutritious food crops in the local market (this represents an additional 10% of the total combined populations). As the adoption of CRRA scales nationwide in the 5-15 years after the programme, the food security benefits also scale to the non-focus provinces, which increases the indirect beneficiaries to 338,130 within the 20-year lifespan on the programme (representing 56% of the entire combined populations).

Table 19: Summary of indirect beneficiaries of adaptation benefits under the programme

INDIRECT BENEFICIARIES	TOTAL: for three countries		Tonga		Vanuatu		Samoa		Corresponding log-frame indicator
	agri- HH/ business	Individuals	agri- HH/ business	Individuals	agri- HH/ business	Individuals	agri- HH/ business	Individuals	
Other crop-producing farmers (not directly engaged by the project) covered by the new policies, media information campaigns, farm level resilience data monitoring system	31,721	160,750	2,316	12,738	26,283	126,158	3,122	21,854	GCF Outcome Level: ARA 1 (C12 - Indirect Beneficiaries Reached; SI 2.1 - Beneficiaries adopting improved and/or new climate resilient livelihood options) and ARA 2 (C 2 - Indirect Beneficiaries Reached; SI 2.2 - Beneficiaries with improved food security) Project Results: Output 2.2 (# agricultural households covered under the new farm-level resilience data management
Other individuals benefiting from increased supply of local food crops in focus provinces		58,888		18,390		25,594		14,904	
Total indirect beneficiaries		219,639		31,128		151,753		36,758	
	% of total population		36%		31%		51%		18%

87. In addition, any learning from the programme by other countries in the region and outcome of this in terms of replication and scaling-up of CRRA has not been included in this estimate of reach and beneficiaries. This will be monitored and reported as an impact of the programme.
88. The programme will contribute to several of the GCF's Fund-level adaptation and enabling environment outcomes including:
- **ARA1 Most Vulnerable People and Communities:** All farmers in these countries are extremely vulnerable to the impacts of climate change, and the programme will target those farmers within the focus provinces facing the most serious climate impacts.

- ARA2 Health, Well-Being, Food and Water Security: The programme will increase food security of the households and communities by increasing the supply of nutritious, chemical free agricultural products.
 - ARA4: Ecosystems and Ecosystem Services: By promoting CRRA, the programme will support practices that increase agricultural systems resilience by addressing the resilience of the ecosystems on the farm. The practices will lead to increased soil health, reduced pollution of water bodies, increased biodiversity of farms etc.
 - Core Indicator 5 (Degree to which GCF investments contribute to strengthening institutional and regulatory frameworks for low emission climate-resilient development pathways in a country-driven manner). The programme will strengthen the policy enabling environment to sustain and scale up CRRA beyond the lifetime of the programme.
 - Core Indicator 7 (Degree to which GCF investments contribute to market development/ transformation at the sectoral, local, or national level). The programme will target developing the business skills to expand and sustain approximately 90 agri-business across all three countries.
 - Core Indicator 8 (Degree to which GCF investments contribute to effective knowledge generation and learning processes, and use of good practices, methodologies and standards). A core component of the programme will establish a national monitoring system for measuring on-farm resilience indicators, which will allow this and other programmes to effectively monitor and evaluate the cost-benefit of CRRA and promote it to a wider regional audience.
89. The majority of the programme's activities will be delivered outside of the national capital, in the focus provinces of each country. It will therefore help GCF's reach at the local level and demonstrate the fund's capacity to support practical adaptation solutions on the ground, working with local leaders and traditional community leader structures. All smallholder crop producing farmers in all three countries will be reached indirectly via the policy enablers, information and knowledge exchange and national farm level resilience monitoring system, while food security will be enhanced for all households in the focus provinces, with total indirect beneficiaries totalling 219,639.

D.2. Paradigm shift potential (max. 500 words, approximately 1 page)

90. The programme will contribute to a paradigm shift in the current and future sustainability and resilience of agricultural systems in Tonga, Vanuatu and Samoa. The agriculture sector in each country is at a crossroad: The switch to more intensive agricultural production systems is reducing farmers' resilience to climate change impacts. By demonstrating the viability of CRRA practices – some of which are traditional and indigenous to the islands and others which are new – yields will be better protected from extreme weather events, and productivity and incomes will be secured in the long-term.
91. CRRA has not been systematically applied in any country in the Pacific region including Tonga, Vanuatu and Samoa. This absence of systematic application presents a strong demonstration effect, as the programme will provide one of the first integrated models for CRRA at a farm system level across the region. There are farmers applying one or more CRRA practice, such as organic farming, micro-irrigation and particularly those that align with traditional practices. However, this tends to just be dealing with one of multiple climate and non-climate drivers of vulnerability. There is no documented experience of CRRA being applied at a farm system level.
92. There is therefore currently no 'model' for CRRA in any of the country, although many traditional practices are relevant (but are being rejected for more intensive commercial practices). In fact, the trend towards increased monocropping, chemical inputs and deforestation for cash crops is making agricultural systems less resilient and regenerative. By integrating multiple practices across diverse farming systems, the programme will establish a replicable model that can inform national and regional adoption.
93. Each of the three governments has made clear policy commitments towards CRRA, although not necessarily using this specific term. This includes in their NDCs with targets on agro-forestry, climate resilient seeds etc, as well as more comprehensively within their respective agricultural growth plans/ strategies. Therefore, the foundation for sustaining the outputs and outcomes of the programme is in place. However, the governments currently lack the institutional capacity and systems and crucially the evidence base on which CRRA practices are relevant (and what the exact costs-benefits are) required to further catalyse CRRA in the long term.
94. The programme will contribute to each of the GCF's assessment factors from the Investment Framework:
- *Potential for scale-up and replication*: CRRA is a package of practices that is inherently scalable, and the programme will produce a replicable model for CRRA which works across different contexts. The scaling of the programme's results is integrated within the targeting of the beneficiaries. At the core, a group of 90 Learning

Farms will receive the most intensive level of support to adopt CRRRA practices (output 2.1). Through a variety of methods, including peer-to-peer learning, via market players in the value chain, trainings etc, these Learning Farms will provide the evidence and learning that will build the skills and knowledge of 12,420 other farmers in their networks/ communities, of which 70% are expected to adopt CRRRA within the lifetime of the programme and 30% beyond the programme lifetime. The programme will put in place a set of enablers to ensure the scaling of CRRRA beyond the programme lifetime, including a strong body of evidence and proven practice on the viability of a range of different practices, the CRRRA Working Group (including DBs) as a permanent institutional body, policy incentives, trained extension workers and business plans of farmers and agri-businesses that are oriented to CRRRA. Through structured engagement with market actors and financial institutions, the programme will also demonstrate how integrated CRRRA farm systems can reduce production risk and improve long-term farm viability. In parallel, at least one financial institution will be formally engaged at national level (with targets set of leveraging finance for CRRRA) to explore pathways for post-programme CRRRA upscaling, using the programme's evidence base and farm business performance data.

- *Institutional knowledge and learning:* Under Activity 1.2.3 the programme will provide technical assistance to reform or develop new policy enablers, these will be reviewed by the CRRRA working groups with priority policy actions selected to meet context specific country needs. Capacity building is embedded within the design of the programme. While it does include some dedicated training sessions by national and regional experts, it is mostly a learning-by-doing model and focusing on building not just individual skills but also wider organisation-level systems. This will be reinforced through the participation of Development Banks and selected financial institutions in CRRRA training, peer learning and access to monitoring data.
- *Contribution to the creation of an enabling environment:* By strengthening the enabling environment (outcome 1) a wider set of farmers will learn about and adopt CRRRA. This includes via extension workers, market players and other influential stakeholders that will be trained in CRRRA, together with new policy enablers that will be designed to encourage CRRRA adoption (output 1.1). In addition, the agri-businesses that will be supported to deliver CRRRA inputs and services will through their own marketing scale-up the information on CRRRA (output 1.2).
- *Contribution to the regulatory framework and policies:* The programme will provide technical assistance to each Ministry of Agriculture to review their current policy enablers – policies, regulations, incentives and schemes – for the extent to which they support and encourage CRRRA. A roadmap will be developed to support any reform required, and to identify opportunities for new policy enablers, and further technical support will be provided to pursue some of these opportunities through the design and implementation process.
- *Overall contribution to climate resilient development pathways:* The programme has a high degree of potential to impact the overall resilience of each country's development pathway, given the significant contribution of the agricultural sector to both livelihoods and economic growth. This aligns with each government's national priorities set out in their NDCs and various climate change policies and action plans that set out how strengthening the resilience of the agriculture sector is a key component of their growth and development pathway. The regional aspects, and the activities designed to showcase the programme's results to other governments in the region, is expected to inform resilient pathways at the regional level.
- In addition, the sustainability of the programme's impact will be secured using policy enablers and market forces. This includes the enhanced capacity of the three national governments and a strengthened evidence base to allow the continued roll out CRRRA practices nationwide and across a range of agricultural systems. The programme will mainstream CRRRA principles within the design of future policies and programmes, and design specific new policy enablers to incentivize CRRRA thereby 'locking-in' support for CRRRA. Market forces will also sustain CRRRA in the long term, including the medium- and long-term business plans of commercial and semi-commercial farmers' for CRRRA and of agri-businesses offering inputs and services that will provide the inputs required for CRRRA. This will be complemented by structured engagement per country with at least one financial institution to explore post-programme financing pathways for CRRRA upscaling.

D.3. Sustainable development (max. 500 words, approximately 1 page)

95. The programme will generate a number of co-benefits, in particular on mitigation and gender:

Climate mitigation co-benefits: While mitigation of GHG emissions is not the focus and primary purpose of this programme, it will result in agricultural practices that improve soil organic matter in the long term, which will contribute to reduced GHG emissions pathways in the agricultural sectors in the long term through increases in soil organic carbon. It is estimated that 80% of the total agricultural land under CRRRA during the programme lifetime (16,584 hectares across the three countries) will involve CRRRA practices that contribute to GHG emission reductions. This co-benefit also strengthens linkages to SDG15 by contributing to improved soil health and

quality, reinforcing the programme's role in sustainable land management. What is important to note is that these increases may not be immediately seen during the lifetime of the programme but through adoption pathways, and longer-term use of CRRRA practices, it will support to reduce GHGs. The scale of such benefits will depend on which CRRRA practices are ultimately adopted, and the data to confirm actual savings will only emerge as a result of the monitoring and reporting institutional mechanism that will be established by the programme. The primary contributing factor of the programme towards GHG emissions reductions will be increased sequestration of CO₂ within the soil through agro-forestry practices. Tree planting, in this case as part of an integrated agro-forestry system, sequester carbon in the soil, and also add organic matter through biomass. These improvements in soil organic matter and soil health are central to Co-benefit 1 and align with SDG2, SDG13, and SDG15. Long-term studies in the US have shown that organic methods of farming which involve adding organic matter to the soil are effective at removing CO₂ from the atmosphere and fixing it as organic matter in the soil. Plots where compost was added showed that carbon was sequestered into the soil at the rate of 8,220 kg CO₂ ha/yr. By contrast, fields under standard tillage relying on chemical fertilizers lost 1,233 kg of CO₂ ha/yr³⁰. Reduced use of chemical inputs, and also preventing the expected adoption of such chemicals by farmers in the future, will also avoid GHG emissions due to the manufacture, transportation and field use of synthetic fertilizers. The synthetic N fertilizer supply chain was responsible for estimated emissions of 1.13GtCO₂e in 2018 (10.6% of agricultural emissions and 21% of global GHG emissions)³¹ In addition, the programme will promote the use of solar-powered agro-technologies such a drip irrigation systems, cold storage and crop dryers which should reduce the use of polluting diesel power generators.

Gender co-benefits: As a result of the above resilience benefits, a number of wider gender benefits are expected. In particular, through increased visibility and leadership of female farmers by selecting at least 50% of the Learning Farmers to be women who will then teach and educate the wider community on CRRRA practices and ensuring an equal representation of women farmers when showcasing and disseminating the results of the programme.

96. The programme will further make a direct contribution to achieving each country's efforts to meet the UN Sustainable Development Goals (SDGs). The table below summarizes the relevant SGDs and how the programme will contribute:

Table 20: Contribution of the programme to SDGs

SDG	How the programme will contribute (and relevant logframe indicators)
1 (End poverty in all its forms everywhere), particularly targets 1.2, 1.5, 1.7	The Financial Analysis of the sample CRRRA practices shows that they offer profitable returns to farmers, in the short-term and increasingly in the longer term as they address climate related impacts such as soil degradation that under a baseline situation would reduce their agricultural output and therefore revenue. As a result of the strengthened enabling environment, agricultural policy in each country will also be strengthened to consider the resilience of farmer livelihoods and incomes given climate programmeions. (SI 2.1, CI 5, CI 7, Programme results output 1.2)
2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture), particularly targets 2.1, 2.2, 2.3 and 2.4	Within the lifetime of the programme, farmers and communities supported by the programme will have a more diverse source of agricultural products available in the household and market. This will be principally achieved through crop diversification and the intercropping of food crops with the focus crop. This will contribute to improved nutrition within the community, but also will provide a supply of food crops in the event that a natural disaster cuts off the supply of imported foods. CRRRA's impact on improved soil health and soil organic matter also contributes to carbon sequestration (SI 2.1, SI 2.2, CI 5, Programme results output 2.1, Co-benefit 1)
5 (Achieve gender equality and empower all women and girls), particularly targets 5.1, 5.5	The programme will result in increased visibility and leadership of female farmers by selecting at least 50% of Learning Farms to be headed by women who will then teach and educate the wider community on CRRRA practices. (Co-benefit 2)

<p>6 (Ensure availability and sustainable management of water and sanitation for all), particularly targets 6.3, 6.4</p>	<p>The programme will promote CRRA practices that protect water availability for households by promoting efficient use of water on the farm. This will reduce current or future requirement for groundwater extraction (as rainfall patterns become increasingly erratic). In particular, increasing the organic matter in the soil will increase the soil's water-holding capacity, infiltration rate and water capture efficiency. (SI 4.1, Programme results output 2.1)</p>
<p>13 (Take urgent action to combat climate change and its impacts), particularly targets 13.1, 13.2, 13.3</p>	<p>Loss and damage from natural disasters and the most extreme weather events, as well as outbreaks of pests and disease, cannot be completely prevented, the programme will also increase agricultural households' ability to financially withstand such events. This includes through diversified crop (and crop variety) production, so the household still has a source of income in the event a single crop or variety fails. In addition, by improving the financial planning of the households to ensure incomes are properly invested in the farm and there is a financial 'buffer' available. This benefit will be demonstrated as and when an extreme weather event/ pest outbreak occurs. Many CRRA practices have mitigation co-benefits, particularly through carbon sequestration due to increased soil organic matter, as well as those that reduce the use of fossil-fuel powered electricity, such as solar dyers, solar-powered cold storage. (SI 2.1; SI 2.2; Programme results output 1-2, Co-benefit 1).</p>
<p>15 (Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss), particularly targets 15.1, 15.2, 15.3, 15.5, 15.9.</p>	<p>CRRA stresses the important connection between on-farm biodiversity and functioning wider ecosystems and the resilience of the agricultural systems. Therefore, this programme will strengthen these aspects in order to increase agricultural resilience to climate change, which will also lead to certain important biodiversity benefits, including: reduced pollution of water bodies, increased and protected rates of beneficial insects and their host plants, increased agro-forestry practices, improved soil health providing carbon sequestration benefits. CRRA can include ecological approaches include planting insectaries that host the beneficial anthropoids (natural enemies) of the pests to achieve effective long-term management, and companion planting with pest repellent plants. (SI 4.1, Programme results output 1-2, Co-benefit 1).</p>

D.4. Needs of recipient (max. 500 words, approximately 1 page)

97. The programme is designed to put the agricultural household – and their particular vulnerabilities, interests and capacity – at the heart of the design of the programme. It will address the primary climate impacts already having a devastating impact in each country. In particular:
- *Erratic rainfall:* Crop production in each country relies on seasonal rainfall patterns which determine crop cycles. The increasingly erratic trends in rainfall is already affecting productivity, which includes unseasonal rainfall resulting in increased pests and diseases and fungal issues. For example, one commercial farmer consulted during the design process in Tonga reported that her yield had dropped from 4.5 tonnes to 2.5 tonnes from one acre since 2013 due to untimely rainfall.
 - *Temperature rises: Is threatening the viability of current crops.* Scientific research has shown the limits of plants tolerance to higher temperatures. For example, Field trials show average yields of taro reduce as temperature increases (by an average of 9.6 tonnes per acre for 3°C temperature increase)³².
 - *Agricultural droughts:* Insufficient soil moisture to meet the needs of a crop is already affecting crop production. In Tonga, during dry periods commercial farmers are using groundwater to irrigate their crops, increasing the risk of competition for groundwater between domestic and agriculture use.
 - *More intense cyclones:* Cyclones and the accompanying heavy winds, rainfall and storm surges, destroy agricultural crops, farm buildings and fences, which will worsen as the cyclones get more intense. Tropical Cyclone Harold hit the main agricultural producing areas in Vanuatu in 2020, affecting 160,000 people, and 60% of croplands was severely damaged including losses of households' stored crops and seeds and crops for exports³³. The majority of losses (VUV 14 billion) was in the agriculture sector (which does not include the estimated 37 billion in lost income for farmers over the next 20 years)³⁴.

³² Crimp, R et.al. (2017). 'Understanding the response of taro and cassava to climate change'. Canberra: ACIAR.

³³ Food and Agriculture Organization (FAO) (2020). 'Tropical Cyclone Harold caused widespread damage to the agriculture sector.' Rome: FAO.

³⁴ Government of Vanuatu (GoV) (2020). 'Vanuatu: Post-Disaster Needs Assessment.' Port Villa: Government of Vanuatu.

- *Sea level rise*: Marginal areas of farmland on the coast are expected to experience higher moisture and increased salinization due to inundation or flooding, reducing their suitability for agriculture.
98. The selection of CRRA practices that will be offered is based on a careful consideration of the current adaptive capacity of agricultural households. In particular, the trend towards intensive land management practices that are contributing to the overuse of natural resources and loss of ecosystem services. It also reflects the changing profile of the agriculture labour force, with young men increasingly travelling to Australia and the Pacific for seasonal work. This has increased the role of women in harvesting and the overall crop production system. The specific CRRA practices will be finalized with each Learning Farm only after an in-depth study of their current context and needs, and the capacity support will be tailored to address their particular barriers to adopting CRRA.
99. There is a clear need for additional climate finance to tackle the impacts of climate change in Tonga, Vanuatu and Samoa. Pacific Island Countries in general face a large climate finance ‘gap’, with the average additional annual spending needs estimated at 6.5–9% of GDP (Fouad et.al., 2020). In terms of climate financing needs of each country:
- Tonga requires an estimated USD 671 million to cover the costs of the government’s identified climate change programmes and plans, for which there is currently an estimated USD 289 million funding gap over the next 10 years (60% of 2018 GDP) (IMF, 2020b).
 - Vanuatu requires more than 15% annually for average climate adaptation investments, to limit average economic losses below 0.01% of GDP (Fouad et.al., 2010).
 - Samoa requires an estimated USD 650 million over 2022-26 (equivalent of 17% of annual GDP) to meet climate adaptation and mitigation goals together with spending for social resilience (of which USD 22 million is required for adaptation to climate change in the agriculture and fisheries sector) (IMF, 2022c).
100. From 2002 to 2020, all funders worldwide committed USD 50.7 billion in development finance to Pacific Island Countries. Of this amount, USD 41.3 billion (81.5%) was provided as ODA grants, while USD 4.3 billion (8.5%) was provided in the form of ODA loans. However, of the 18 countries in the region, Vanuatu is 7th in terms of amount of development finance received, Samoa is 8th and Tonga, is 10th (Aid Atlas, nd). The current estimates of development finance flows for each country on Aid Atlas (www.aid-atlas.org) is summarized in the table below.

Table 21: Summary of climate finance flows

	Tonga	Vanuatu	Samoa
Total Development Finance Committed (and disbursed) 2002-20	USD 1.42 billion (USD 1.26 billion)	USD 2.3 billion (USD 1.89 billion)	USD 2.1 billion (USD 1.279 billion)
Total Development Finance for Agriculture, Forestry and Fishing	USD 39.15 million	USD 130.10 million	USD 82.88 million
Total Development Finance for General Environmental Protection	USD 43.72 million	USD 58.45 million	USD 66.19 million
Volume of GCF grants	USD 33.4 million	USD 21.3 million	USD 61.8 million
Development finance categorized as ‘climate adaptation’	USD 115 million	USD 215 million	USD 206 million

D.5. Country ownership (max. 500 words, approximately 1 page)

101. The programme is closely aligned with the needs and priorities of each government, as demonstrated by the adaptation commitments in each NDC and the various agricultural sectoral plans and policies.
- **Tonga:** The Government of Tonga has explicitly recognized the need to move towards climate resilience and regenerative agriculture. In the Tonga Agriculture Sector Plan (TASP) the government recognizes the risk of climate change, and the opportunity that a more integrated approach to farming presents: *“Tongan agriculture is at a crossroads. With a narrow focus on addressing immediate needs for economic growth there could be an intensification of agriculture with consequent depletion of groundwater resources, long-term degradation of soils, and further pollution of lagoons. However, with a longer-term focus on the real threats associated with climate change, combined with a focus on short-term needs, a more balanced approach is possible, which addresses*

environmental, social and economic considerations in a fully integrated manner" (GoT, 2015). This approach is now being implemented through a number of programmes and initiatives, including:

- The Government is putting a lot of priority on the benefits of agro-forestry, especially given it is low cost and an indigenous practice. They have a target of planting a million trees by 2025.
 - They also have programmes that promote biogas and its use as a liquid fertilizer for agriculture.
 - Since 2018 they have been promoting domestic home gardens, and particularly encouraging women and young people to grow food crops in their households. They have held competitions for the best home garden.
 - Adding value to agricultural products. For root crops this includes increasing processing into flour or chips. Women at the forefront of these efforts.
- **Vanuatu:** The Government of Vanuatu has recognized the growing vulnerability of the agricultural sector to climate and disaster risks including as a result of the growing dominance of kava crop production. One of the key policy directives to address the impacts of climate change included within the Agriculture Sector Policy (2015-30) involves: "*Promoting site-appropriate soil improvement technologies, e.g. agro-forestry, alley cropping, intercropping, contour farming, compositing and cover crops in all agricultural practices.*" (DARD, 2015). While the National Kava Strategy (2016-2025) primarily focuses on increasing the production of high-quality kava products, it does recommend intercropping with other crops and other sustainable practices. The Ministry is implementing this strategy and related policies through a National Kava Programme and various cross-cutting programmes. Some relevant initiatives include:
 - Encouraging farmers to carry out crop rotation and farming nitrogen fixing crops when letting the soil rest, such as through peanuts. This includes training farmers and providing information on mixed farming practices.
 - The government continues to promote the production of kava, despite it being a growing and successful sector. They provide subsidized tractors and machinery that are promoting larger systems of mono-cropping, and have in the past provided sampling plants. Some of those consulted reported this was actually having a negative impact on the resilience of the sector.
 - The Ministry is in the process of designing a financial incentive mechanism to promote alternative cash crops and diversification of crops.
 - Following a review of the national agro-forestry strategy, the government is now promoting agro-forestry with kava.
 - **Samoa:** The Government of Samoa has recognized the need for a sustainable and resilient agricultural system to address the worsening impacts of climate change, for both livelihoods as well as for public health reasons. The Samoa Food Systems Pathway 2030 brings together these two objectives to promote sustainable, resilient and healthy food systems. It also recognizes that "*land and soil health is an ongoing concern given increased use of unsafe farming practices (e.g. chemicals, mechanization, and poor waste discharge) and limited rehabilitation of the ecosystem to facilitate a regenerative, circular and food system environment.*". It notes that there has been a decline in engagement of agricultural households in the production of taro, which is affecting the domestic supply of the crop. It aligns with this programme's approach of preserving/ promoting traditional sustainable practices. It notes that "*Traditional knowledge about agricultural practices for resilient landscapes, and environmental conservation and restoration practices (e.g. soil fertility improvement, crop rotations, intercropping, and planting nitrogen-fixing crops) have long existed in Samoa*". Therefore, it calls for boosting nature-positive production by promoting traditional knowledge in agriculture. Some of the relevant ongoing initiatives of the Ministry of Agriculture that are implementing this strategy include:
 - Field trials for sweet potato, aiming to develop 9 varieties, that are nutritious but also in high demand for export;
 - Piloted an agricultural app ('agri-touch') which includes crop specific information and weather advisories. There has currently been limited downloads (approximately 100) and the Ministry are now looking to scale it up and get it fully integrated into the government system (currently the data is being stored by the service provider who developed it).
102. Each national government is a co-Executive Entity for the programme and will therefore co-lead the decision-making and implementation of the programme. Each government is in the process of strengthening their internal governance and processes to ensure effective implementation and oversight of GCF programmes, and all climate finance projects. This has been supported by some GCF readiness grants, as well as implementing 1-2 GCF projects in each country. This programme will further strengthen these evolving systems and structures, rather than creating new ones. The design of the programme has carefully considered the delivery capacity within each Ministry of Agriculture, particularly the extension workers and their ability to reach all the required Learning Farms,

including those in the most isolated areas. The programme will therefore support Senior Technical Officers who will work side-by-side with each Extension Worker to co-deliver the programme activities and provide on-the-job training and capacity building.

103. Each national government has co-designed the programme with SPC and facilitated local consultations with stakeholders, including farmers' associations and civil society groups with a particular attention to women's groups. The design process was highly participatory and led by each Ministry of Agriculture with technical support from SPC to facilitate and document the process. This was particularly important given it is a regional programme, as each country government needed to feel strong ownership over the process but also time was required to ensure that a common strategy and delivery model evolved across each three countries.

D.6. Efficiency and effectiveness (max` . 500 words, approximately 1 page)

104. This programme will address the underlying vulnerability of agricultural households in Tonga, Vanuatu and Samoa from the impacts of climate change using the most cost-effective approach available. There is strong evidence that climate resilient, regenerative agriculture can address the drivers of vulnerability to climate change and makes agricultural systems, households and communities in Tonga, Vanuatu and Samoa more resilient. In fact, many of the most relevant CRRA practices are indigenous practices that are being lost in the move to more commercial and intensive systems. However, there is limited documented evidence on the costs and benefits of these practices across the different geographies in these countries. Most CRRA practices do not involve significant upfront capital expenditure and involve low-cost adjustments to crop planting practices, such as intercropping and crop rotation.

105. There is no one single prescription for CRRA that is relevant across all geographies and farmers as CRRA needs to be carefully designed to address the specific needs, resources and context of a particular farm. Therefore, identifying the 'solution' for each farmer is itself a key component of the programme. This will ensure the project efficiently targets its support and increases the likelihood of long-term sustained uptake of CRRA practices. The project has been designed from a bottom-up exercise of understanding the specific vulnerabilities and adaptive capacity of farmers in each country, but also understanding their interests and priorities. To be successful, this project will need to be aligned to their existing priorities but also to try and influence these priorities. In this sense, the project is focused on overcoming the barriers to adoption of CRRA practices, but also utilizing the opportunities.

106. The Economic and Financial Assessment (EFA) of the project has provided an initial estimate of the cost-effectiveness of CRRA practices, which will be further built upon and developed as an output of the project itself. The six sample CRRA practices used in the EFA all offer profitable returns to the farmer even without the Farmer Support Programme covering the initial upfront costs. The project therefore targets the significant non-financial barriers to the adoption of CRRA, particularly in terms of the lack of knowledge and skills of farmers about how to select and adopt relevant practices for their particular farm. As such, the project will kick-start the transition to CRRA which is itself financially sustainable.

107. The estimated Economic Internal Rate of Return (EIRR) of the project (55% within the lifetime of the project) is well above the opportunity cost of capital. The project will result in a range of significant economic and financial direct benefits and co-benefits including:

108. **Livelihood direct benefits for most vulnerable people and communities:** The project will provide direct resilience benefits to those agricultural households and farmers that it supports to adopt CRRA practices relevant to their specific farm context. It is expected that a portion of the target farmers reached by the project (through training, information, peer-to-peer learning etc) will adopt the practices being promoted. Given the three countries' extreme vulnerability to the impacts of climate change, all farmers in these countries can be considered particularly vulnerability. However, through a criterion for selecting the lead farmers, and for targeting the wider farmers, the project will also prioritize those within the communities with particular vulnerability. The direct beneficiaries are expected to improve their livelihoods, as a result of the following:

- Increased/ maintained yields despite climate change: Within the lifetime of the project, farmers supported or influenced by the project will protect or enhance their current yield of the crop by adopting CRRA practices that improve the resilience of the plant and soil from increased temperatures and erratic rainfall. In the longer-term these benefits will escalate as the impacts of climate change worsen (and yields would have otherwise reduced further).

- Avoided or reduced damage to crops from natural disasters and pest/disease outbreaks: Within the lifetime of the project, farmers supported or influenced by the project will adopt CRRRA practices that should make the focus crop better able to withstand some effects of natural disasters. However, this will depend on the type and severity of the natural disaster. For example, agro-forestry and cover cropping can protect crops from strong winds, but the most intense cyclones will also destroy the trees.
 - Increased financial resilience of agricultural households to crop destruction: Loss and damage from natural disasters and the most extreme weather events, as well as outbreaks of pests and disease, cannot be completely prevented, the project will also increase agricultural households' ability to financially withstand such events. This includes through diversified crop (and crop variety) production, so the household still has a source of income in the event a single crop or variety fails. In addition, by improving the financial planning of the households to ensure incomes are properly invested in the farm and there is a financial 'buffer' available. This benefit will be demonstrated as and when an extreme weather event/ pest outbreak occurs.
109. **Health, wellbeing, food and water security direct benefits:** The project will increase food security of the direct beneficiary agricultural households it supports to adopt CRRRA as well as the wider community and country. Within the lifetime of the project, farmers and communities supported by the project will have a more diverse source of agricultural products available in the household and market. This will be principally achieved through crop diversification and the intercropping of food crops with the focus crop. This will contribute to improved nutrition within the community, avoid health-care related costs, provide a supply of food crops in the event that a natural disaster cuts off the supply of imported foods, and avoid loss of human life associated with food insecurity.
110. **Ecosystems and ecosystem services direct benefits:** CRRRA stresses the important connection between on-farm biodiversity and functioning wider ecosystems and the resilience of the agricultural systems. Therefore, this project will support farmers to adopt practices that increase their farm systems' resilience to climate change, as well as deliver important biodiversity benefits, including:
- Reduced pollution of water bodies by reducing the rates of chemical fertilizer use (and prevented the projected increased use) and the resulting run-off. Farmers will be encouraged to switch to and adopt organic fertilizers and non-chemical pesticides and insecticides.
 - Increased and protected rates of beneficial insects and their host plants by promoting their use as a natural practice of reducing pests. Farmers will be encouraged to grow host plants that attract 'beneficial species' that are natural enemies of farm pests³⁵.
- Protected water availability for households by the adoption of water conservation agricultural practices that will reduce current or future requirement for groundwater extraction (as rainfall patterns become increasingly erratic). In particular, increasing the organic matter in the soil will increase the soil's water-holding capacity, infiltration rate and water capture efficiency.

³⁵ Natural Enemies Handbook (2000), Published by University of California, USA.

E. LOGICAL FRAMEWORK

E.1. Project/Programme Focus

- Reduced emissions (mitigation)
- Increased resilience (adaptation)

E.2. GCF Impact level: Paradigm shift potential (max 600 words, approximately 1-2 pages)

111. The project will catalyse a transition to Climate Resilient and Regenerative Agriculture (CRRA) in Tonga, Vanuatu and Samoa. It will take a holistic approach to strengthening the resilience of agricultural systems in these countries by building the adaptive capacity of the farmer and household as well as the land and ecosystem which they depend on. It will be the first large-scale demonstration in the region of the viability of CRRA. Such practices are not new, they mostly build on traditional systems of each country including intercropping, agro-forestry and letting the soil recover which are being slowly lost in the trend towards intensive cash crop production. It also incorporates accepted resilience practices such as micro-irrigation, rainwater harvesting systems and strengthening the financial coping mechanisms of the household. However, CRRA practices have to date not been applied as a package at a large scale in the Pacific. Therefore, this project will lead to direct resilience benefits for the farmers supported to identify and adopt relevant CRRA practices, but it will also evaluate and document the costs and benefits of CRRA in real-life settings and provide the vital evidence base to influence scaling-up across the region.

112. The project will contribute to the first and third paradigm shifting pathways that the GCF has identified in its Agriculture and Food Security Sectoral Guide: *Promoting resilient agroecology* and *Reconfiguring food systems*. For each the project will utilizes all four of the identified drivers, but in particular, aligns with the following:

- Catalysing climate innovation: Including integration of novel climate-responsive technologies, services and programs.
- Transforming planning and programming: Strengthening policy coherence and cross-institutional coordination.
- Coalition and knowledge to scale-up success: Supporting private sector actors mainstreaming climate risk in business model, internal policies and investments; and Monitoring, evaluation and learning to inform scaling based on contextual relevancy and priority issues.

Assessment Dimension	Current state (Baseline)		Potential target scenario (Description)	How the project/programme will contribute (Description)
	Description	Rating		
Scale	The worsening impact that climate change will continue to have on agriculture productivity in each country threatens economic growth,	<u>Low</u>	This project represents the largest investment in CRRA – as an integrated set of resilient agricultural practices - in the Pacific region to date and will provide the much-needed evidence base to show the viability and benefits of CRRA across a diverse set of contexts and for a large	The scaling of the project’s results is integrated within the targeting of the beneficiaries. At the core, a group of 90 Learning Farms will receive the most intensive level of

	<p>food security and sustainable development. Between 70-90% of all households in these countries rely on some form of agriculture for household food security. It is a source of income for around 60% and contributes between 10-25% of national GDP in each country.</p> <p>Per-capita food production index is declining in each country (while the world average per capita has been increasing). It is declining most significantly for root crops and other starchy vegetables in Tonga and Samoa region (but production has always been low in Vanuatu) and this level of production is sufficient to meet dietary energy needs of less than 25% of the population. ³⁶</p> <p>A regional economic impact assessment of climate change, which found that losses suffered in the Pacific region could range from 2% to 12.7% of annual GDP by 2100, concluded that the negative effect on agriculture contributes around half of these economic costs (5.4% of GDP by 2100 under a high emissions scenario). Each of the three countries are expected to incur significant losses: reaching 6.2% of GDP by 2100 for Vanuatu and 3.8% for</p>	<p>number of agricultural households. It expects to provide information, training and support on CRRA that result in a total of 12,510 agricultural households having enhanced knowledge and skills on CRRA. The design assumes that 100% of Learning Farms and 70% of other farmers reached will adopt one or more practices within the lifetime of the project (totalling 50,654 individuals in 8,784 agricultural households). This would equate to CRRA practices covering 20,730 hectares of land and 22% of the total population in crop-cultivating households, selling surplus crops, across the three countries.</p> <p>All the farmers provided with improved knowledge and skills are expected to adopt CRRA in the 5-15 period after the project (meaning the direct beneficiaries reach 12,510 farms, supporting 72,141 individuals within the 20- year period).</p> <p>CRRA is a package of practices and therefore inherently scalable. By the end of the project there will be a strong body of evidence and proven practice on the viability of a range of different practices. Further to this, relevant policy updates and enabling mechanisms established at national levels will ensure CRRA is mainstreamed into practices across the target countries. With the enhanced evidence base and policy updates the three governments will therefore continue to expand the scale of adoption of CRRA.</p> <p>Therefore, indirect beneficiaries include the other crop-cultivating farmers in the country covered by the new national enablers and expected to adopt CRRA as a</p>	<p>support to adopt CRRA practices (output 2.1). Through a variety of methods, including peer-to-peer learning, via market players in the value chain, trainings etc, these Learning Farms will provide the evidence and learning that will build the skills and knowledge of a total of 12,510 agricultural households, of which 8,784 are expected to adopt CRRA within the lifetime of the project.</p> <p>By strengthening the enabling environment (outcome 1) a wider set of farmers will learn about and adopt CRRA. This includes via extension workers, market players and other influential stakeholders that will be trained in CRRA, together with new policy enablers that will be designed to encourage CRRA adoption (output 1.1). In addition, the agri-businesses that will be supported to deliver CRRA inputs and services will through their own marketing scale up the information on CRRA (output 1.2).</p>
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³⁶ Food and Agriculture Organization (FAO) (2022).FAO Stat'. Available at: [FAOSTAT](https://www.fao.org/faostat)

	<p>Samoa (not calculated for Tonga). This economic analysis does not factor the potential large cost of rare but catastrophic extreme weather events³⁷.</p>		<p>result (31,721 farmers supporting 160,750 individuals) and the non-crop cultivating households benefitting from increased food security (58,888 individuals within the lifetime of the project). The total indirect beneficiaries represent 36% (219,639) of the total combined population of the three countries, and due to the inbuilt scaling mechanisms in the project, will reach 56% within the 20-year period.</p> <p>SPC through its permanent presence in the region will monitor and report on this long-term scaling and support the governments in the future.</p>	
<p>Replicability</p>	<p>CCRA has not been systematically applied in any country in the Pacific region including Tonga, Vanuatu and Samoa. There are farmers applying one or more CRRAs practices, such as organic farming, micro-irrigation and particularly those that align with traditional practices. However, this tends to just be dealing with one of multiple climate and non-climate drivers of vulnerability Very few or even no farmer is currently addressing the integrated set of climate impacts and non-climatic drivers that are affecting agricultural productivity and the resilience of their livelihoods. There is no documented evidence of farmers effectively implementing a package of CRRAs practices to manage these risks</p>	<p><u>Low</u></p>	<p>By the end of the project, the three national governments will have a replicable model for CRRAs which has been demonstrated across a large number of agricultural households with different contexts. This includes not just which specific CRRAs practices are relevant for different local contexts, but also a model for how to effectively provide information and advice to farmers, working through not just the extension workers but also market players.</p> <p>There will also be an institutional set-up and enhanced capacity that will enable the government to replicate this approach to other agricultural systems beyond the focus crops and to other locations in the country. This includes, the CRRAs Working Group will be a permanent mechanism that has the information and capacity to produce guidance on a range of agricultural products. A range of other 'systems' will also be in place to support CRRAs across a much wider set of crops, including trained extension workers, an ecosystem of CRRAs-supportive</p>	<p>There is a strong emphasis in the design of the project on collecting data and evidence on the viability and climate, financial and other benefits of CRRAs (particularly output 2.2). This is intended to provide the evidence base to convince not just other farmers to adopt CRRAs practices but also the three governments (and others) to replicate the project for other crops/locations. Output 2.2 also includes documenting and sharing the results and learning from the project, which is considered a key part of the ToC rather than just a standard M&E requirement.</p> <p>To ensure replication happens the project also creates/ strengthens the institutions and market forces</p>

³⁷ Asian Development Bank (ADB) (2020). 'The Economics of Climate Change in the Pacific.' Manilla: ADB

	<p>systemically and across the value chain I.</p>		<p>agri-businesses and a data monitoring system capturing relevant resilience farm-level data.</p> <p>As a regional project, the expectation is that the learning and evidence generated from this project will be replicated in other countries in the region. SPC will facilitate this through their ongoing engagement with other countries.</p>	<p>that will be required to sustain and replicate the results of the project beyond the lifetime of the project (outcome 1). This includes the CRRA Working Group (output 1.1) whose mandate goes beyond just the focus crop for the project-specific staff and targets government extension workers and other stakeholders through training as ToT (output 1.1). This builds national technical capacities, providing key national actors with the skills and capabilities to support CRRA adoption by a wider set of farmers across further value chains and locations.</p> <p>There is also a regional dimension to the design of the project. The three countries coordinate and communicate regularly through regional workshops, such as the Pacific Week on Agriculture (co-hosted with SPC) as well as through regional forums and working groups e.g. Pacific Island Forum. Engagement in these forums and events provides the correct venue for countries to share lessons and knowledge on CRRA at the regional level. Ultimately, this will enable secondary countries to identify suitable practices, policies or</p>
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				<p>frameworks to replicate in their individual contexts, enabling project results to be replicated outside of the project target countries.</p> <p>This will be supported by the programme's international advisory group, expected to be composed of primarily regional experts, who will support the CRRA Working Group (output 1.1) in advocating CRRA replication by the other country governments they work with. Lastly, output 2.2 includes specific activities related to convening regional stakeholders in project funded events to showcase the results and learning of the project, kickstarting further engagement in the CRRA space and increasing awareness and interest for continued engagement in the above-mentioned forums.</p>
<p>Sustainability</p>	<p>Each of the three governments has made clear policy commitments towards CRRA, although not necessarily using this specific term. This includes in their NDCs with targets on agro-forestry, climate resilient seeds etc, as well as more comprehensively within their respective agricultural growth plans/strategies. Therefore, the foundation</p>	<p><u>Medium</u></p>	<p>The project will design and operationalize institutional mechanisms that will exist beyond the project's lifetime: The project does not create any project-specific output, but rather embeds outputs within the government system to ensure they are sustained after the lifetime of the project. This includes: Re-development and roll-out of the existing pilot agricultural apps in Samoa and Vanuatu which are already 'owned' by the government and are not reliant on future project funding; Establishment and operationalization of the farm-level data monitoring system for resilience indicators which will be part of the</p>	<p>The project will employ the following sustainability strategies, which are described in more detail in section 22 of the feasibility study.</p> <ul style="list-style-type: none"> • Establish and operationalize institutional mechanisms that are permanent and designed to exist beyond the project lifetime with the government incorporating the routine costs,

	<p>for sustaining the outputs and outcomes of the project is in place.</p> <p>However, the governments currently lack the institutional capacity and systems and crucially the evidence base on which CRRA practices are relevant (and what the exact costs-benefits are) required to further catalyse CRRA in the long term. In addition, there are some policies/ schemes in place which (often unintentionally) are actually working against their own priorities on resilient and sustainability agriculture (see section 10 of Feasibility Study).</p>		<p>government's existing data management system and improve on the current set up of reporting on climate change; and Creation of CRRA Working Groups that will be a technical advisory function embedded within the existing advisory groups of the Ministries of Agricultures. By the end of the project, the three national governments will have the capabilities, evidence and supportive enabling environment to continue to roll out CRRA practices nationwide and across a range of agricultural systems. This will include mainstreaming CRRA principles within the design of future policies and projects, and designing specific new policy enablers to incentivize CRRA.</p> <p>Market forces will also sustain and catalyse CRRA in the long term. Commercial and semi-commercial farmers' business plans will be oriented towards CRRA and targeting higher profits through organic certification or niche markets such as supplying eco-tourism sector. Agri-businesses will be offering inputs and services that will serve the needs of this growing set of farmers practicing CRRA, which will in turn encourage more entrepreneurship.</p>	<p>in particular, the CRRA Working Group system of providing technical advice (output 1.1) and an embedded monitoring and reporting system for farm level resilience data (output 2.2)</p> <ul style="list-style-type: none"> • Strengthen the capacity of the governments' extension workers as the permanent and consistent mechanism for providing advice and support to farmers through a ToT approach for long-term knowledge retention post-project (output 1.1). • Work with market players and create a commercial rationale for them to sustain the scaling of CRRA, this includes exporters who can influence their supplier farmers (output 1.1) and agri-businesses providing CRRA services (output 1.2). • Build on SPCs' ongoing mandate and engagement with these and other Ministries of Agriculture in the region to sustain and scale the results (output 2.2 and throughout).
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E.3. GCF Outcome level: Reduced emissions and increased resilience (IRMF core indicators 1-4, quantitative indicators)

GCF Result Area	IRMF		Baseline	Target	Assumptions / Note
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	Indicator	Means of Verification (MoV)		Mid-term	Final ³⁸	
<u>TOTAL</u>	<u>Core 2: Direct and indirect beneficiaries reached³⁹</u>	Existing government statistics (agricultural surveys, national census, HIES etc) Project progress/completion reports, with record of activities (broken down by sex) using statistical average of HH members for direct beneficiaries, and using agreed indirect beneficiary calculation Extension workers monitoring reports	Direct 0 males 0 females Indirect 0 males 0 females	Direct: 16,885 8,476 males 8,409 females Indirect 73,213 36,753 males 36,460 females	Direct: 50,654 (8% of total population) 25,428 males 25,226 females Indirect: 219,639 (36% of total population) 110,259 males 109,380 females	Consolidated total for ARA1 and ARA2, reflecting unique direct and indirect beneficiaries. The same totals are used across ARA1 and ARA2 to avoid double counting.
<u>ARA1 Most vulnerable people and communities</u>	<u>Core 2: Direct and indirect beneficiaries reached</u>	Existing government statistics (agricultural surveys, national census, HIES etc) Project progress/completion reports, with record of	Direct 0 males 0 females Indirect 0 males 0 females	TOTAL Direct: 16,885 8,476 males 8,409 females Indirect 73,213 36,753 males	TOTAL Direct: 50,654 (8% of total population) 25,428 males 25,226 females Indirect: 219,639 (36% of total population) 110,259 males	The direct beneficiaries represent the agricultural households by project's end who are expected to adopt CRRRA practices. This is assumed to be 100% of Learning Farms, and

³⁸ The final target means the target at the end of project/programme implementation period. However, for core indicator 1 (GHG emission reduction), please also provide the target value at the end of the total lifespan period which is defined as the maximum number of years over which the impacts of the investment are expected to be effective.

³⁹ Direct beneficiaries refer to individuals who will directly receive project support, services or resources enabling them to strengthen resilience through CRRRA. The total number of beneficiaries was derived through a bottom-up aggregation of all individuals expected to be reached across all project activities, adjusted for overlap across interventions using a 48% duplication reduction factor. Within this group, 36,157 individuals (6% of the total population) are estimated to adopt CRRRA practices within the project lifetime. Indirect beneficiaries are individuals expected to experience resilience, livelihood, or food security benefits as a result of the project's broader influence and spill-over. The total indirect beneficiaries (344,166; 57% of the combined population across the three countries) were calculated based on national agricultural census data and the population of crop-cultivating households in focus provinces. This figure reflects those indirectly benefiting from the adoption and dissemination of CRRRA practices and information within the wider farming communities, excluding overlap with direct beneficiaries

		<p>activities (broken down by sex) using statistical average of HH members for direct beneficiaries, and using agreed indirect beneficiary calculation</p> <p>Extension workers monitoring reports</p>		<p>36,460 females</p> <p>TONGA Direct 5,368 Males – 2,630 Females – 2,738 Indirect 10,376 Males – 5,084 Females – 5,292</p> <p>VANUATU Direct 4,685 Males – 2,367 Females – 2,318 Indirect 50,584 Males – 25,560 Females – 25,024</p> <p>SAMOA Direct 6,832 Males – 3,484 Females – 3,348 Indirect 12, 253 Males – 6,249 Females – 6,004</p>	<p>109,380 females</p> <p>TONGA Direct 16,104 (16% of total population) Males – 7,891 Females –8,213 Indirect 31,128 (31% of total population) Males – 15,253 Females – 15,875</p> <p>VANUATU Direct 14,054 (5% of total population) Males – 7,102 Females – 6,953 Indirect 151,753 (51% of total population) Males – 76,681 Females – 75,072</p> <p>SAMOA Direct 20,496 (10% of total population) Males – 10,453 Females –10,043 Indirect 36,758 (18% of total population) Males – 18,747 Females – 18,011</p>	<p>70% of other farmers reached and supported with training, information and the FSP. Food security benefits are expected to increase as farmers are supported to adopt CRRA and produce additional food crops, particularly through intercropping with cash crops and crops in general that are more resilient to the impacts of climate change.</p> <p><i>To avoid double counting, the same target for direct and indirect beneficiaries is used for the CI and SIs</i></p>
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<p><u>ARA1 Most vulnerable people and communities</u></p>	<p><u>Supplementary 2.1: Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options</u></p>	<p>Existing government statistics (agricultural surveys, national census, HIES etc) related to income</p> <p>Monitoring system for farm-level resilience indicators established under the project to verify project progress/ completion reports/ extension workers monitoring reports on agricultural outputs, total revenue and income streams</p>	<p>Direct 0 males 0 females</p> <p>Indirect 0 males 0 females</p>	<p>TOTAL</p> <p>Direct: 16,885</p> <p>8,476 males</p> <p>8,409 females</p> <p>Indirect 73,213 36,753 males 36,460 females</p> <p>TONGA</p> <p>Direct 5,368 Males – 2,630 Females – 2,738 Indirect 10,376 Males – 5,084 Females – 5,292</p> <p>VANUATU</p> <p>Direct 4,685 Males – 2,367 Females – 2,318 Indirect 50,584 Males – 25,560 Females – 25,024</p>	<p>TOTAL</p> <p>Direct: 50,654 (8% of total population) 25,428 males 25,226 females</p> <p>Indirect: 219,639 (36% of total population) 110,259 males 109,380 females</p> <p>TONGA</p> <p>Direct 16,104 (16% of total population) Males – 7,891 Females – 8,213 Indirect 31,128 (31% of total population) Males – 15,253 Females – 15,875</p> <p>VANUATU</p> <p>Direct 14,054 (5% of total population) Males – 7,102 Females – 6,953 Indirect 151,753 (51% of total population) Males – 76,681 Females – 75,072</p>	<p>The SI represents the agricultural households by project's end who are expected to adopt CRRA practices . This is assumed to be 100% of Learning Farms, and 70% of other farmers reached and supported with training, information and the FSP. The beneficiaries will benefit from receiving increased incomes from their land as a result of CRRA transition, through improved yields, value addition activities and being better able to reduce and/or withstand the impacts of climate change on their agricultural land</p> <p><i>To avoid double counting, the same target for direct and indirect beneficiaries is used for the CI and SIs</i></p>

				<p>SAMOA Direct 6,832 Males – 3,484 Females – 3,348 Indirect 12, 253 Males – 6,249 Females – 6,004</p>	<p>SAMOA Direct 20,496 (10% of total population) Males – 10,453 Females –10,043 Indirect 36,758 (18% of total population) Males – 18,747 Females – 18,011</p>	
<p><u>ARA2 Health, well-being, food and water security</u></p>	<p><u>Core 2: Direct and indirect beneficiaries reached</u></p>	<p>Existing government statistics (agricultural surveys, national census, HIES etc) Project progress/completion reports, with record of activities (broken down by sex) using statistical average of HH members for direct beneficiaries, and using agreed indirect beneficiary calculation Extension workers monitoring reports</p>	<p>Direct 0 males 0 females Indirect 0 males 0 femes</p>	<p>TOTAL Direct: 16,885 8,476 males 8,409 females Indirect 73,213 36,753 males 36,460 females</p> <p>TONGA Direct 3,832 Males – 1,878 Females –1,954 Indirect 15,130 Males – 7,414 Females – 7,716 TOTAL</p>	<p>TOTAL Direct: 50,654 (8% of total population) 25,428 males 25,226 females Indirect: 219,639 (36% of total population) 110,259 males 109,380 females</p> <p>TONGA Direct 16,104 (16% of total population) Males – 7,891 Females –8,213 Indirect 31,128 (31% of total population) Males – 15,253</p>	<p>The direct beneficiaries represent the agricultural households by project's end who are expected to adopt CRRRA practices . This is assumed to be 100% of Learning Farms, and 70% of other farmers reached and supported with training, information and the FSP. Food security benefits are expected to increase as farmers are supported to adopt CRRRA and produce additional food crops, particularly through intercropping with cash crops and crops in</p>

				<p>Direct: 16,885</p> <p>TONGA Direct 5,368 Males – 2,630 Females – 2,738 Indirect 10,376 Males – 5,084 Females – 5,292</p> <p>VANUATU Direct 4,685 Males – 2,367 Females – 2,318 Indirect 50,584 Males – 25,560 Females – 25,024</p> <p>SAMOA Direct 6,832 Males – 3,484 Females – 3,348 Indirect 12, 253 Males – 6,249 Females – 6,004</p>	<p>Females – 15,875</p> <p>VANUATU Direct 14,054 (5% of total population) Males – 7,102 Females – 6,953 Indirect 151,753 (51% of total population) Males – 76,681 Females – 75,072</p> <p>SAMOA Direct 20,496 (10% of total population) Males – 10,453 Females –10,043 Indirect 36,758 (18% of total population) Males – 18,747 Females – 18,011</p>	<p>general that are more resilient to the impacts of climate change.</p> <p><i>To avoid double counting, the same target for direct and indirect beneficiaries is used for the CI and SIs</i></p>
<p><u>ARA2 Health, well-being, food and water security</u></p>	<p><u>Supplementary 2.2: Beneficiaries (female/male) with</u></p>	<p>Monitoring system for farm-level resilience indicators established under the project, to verify project progress/</p>	<p>Direct 0 males 0 females</p> <p>Indirect 0 males</p>	<p>TOTAL Direct: 10,131 5,086 males 5045 females Indirect</p>	<p>TOTAL Direct: 30,393 (5% of total population) 15,257 males 15,136 females</p>	<p>The SI represents the agricultural households by project's end who are expected to adopt CRRRA practices that specifically lead to</p>

	<p><u>improved food security</u></p>	<p>completion reports and extension workers monitoring reports, on benefits resulting from adoption of CRRA (e.g. increased yield of food crops).</p> <p>Existing government surveys on food security, supplemented with a FIES survey of representative sample of direct and indirect beneficiaries in focus provinces (at mid- and end-point)</p>	<p>0 females</p>	<p>19,629 9,854 males 9,775 females</p> <p>TONGA Direct 3,221 Males – 1,578 Females – 1,643 Indirect 6,130 Males – 3,004 Females – 3,126</p> <p>VANUATU Direct 2,811 Males – 1,420 Females – 1,391 Indirect 8,531 Males – 4,311 Females – 4,220</p> <p>SAMOA Direct 4,099 Males – 2,091 Females – 2,009 Indirect 4,968 Males – 2,534 Females – 2,434</p>	<p>Indirect: 58,888 (10% of total population) 29,562 males 29,326 females</p> <p>TONGA Direct 9,662 (10% of total population) Males – 4,735 Females – 4,928 Indirect 18,390 (18% of total population) Males – 9,011 Females – 9,379</p> <p>VANUATU Direct 8,433 (3% of total population) Males – 4,261 Females – 4,172 Indirect 25,594 (9% of total population) Males – 12,933 Females – 12,661</p> <p>SAMOA Direct 12,298 (6% of total population)) Males – 6,272 Females – 6,026 Indirect 14,904 (7% of total population)</p>	<p>increased food production (to benefit the household, and indirectly the consumers of surplus crops sold to market). This is assumed to be 60% of the farmers adopting CRRA (see SI 2.5). Food security benefits are expected to increase as farmers are supported to adopt CRRA and produce additional food crops, particularly through intercropping with cash crops and crops in general that are more resilient to the impacts of climate change. The indirect beneficiaries are those non-crop producing households within the focus provinces who are purchasing the additional crops.</p>
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					Males – 7,601 Females – 7,303	
<u>ARA2 Health, well-being, food and water security</u>	<u>Supplementary 2.5: Beneficiaries (female/male) adopting innovations that strengthen climate change resilience</u>	Monitoring system for farm-level resilience indicators established under the project, to verify project progress/ completion reports and extension workers monitoring reports, on benefits resulting from adoption of CRRA (e.g. resilience of yield, soil health, diversified income).	Direct 0 males 0 females Indirect 0 males 0 females	TOTAL Direct: 16,885 8,476 males 8,409 females Indirect 73,213 36,753 males 36,460 females TONGA Direct 5,368 Males – 2,630 Females – 2,738 Indirect 10,376 Males – 5,084 Females – 5,292 VANUATU Direct 4,685 Males – 2,367 Females – 2,318 Indirect 50,584 Males – 25,560 Females – 25,024 SAMOA Direct 6,832	TOTAL Direct: 50,654 (8% of total population) 25,428 males 25,226 females Indirect: 219,639 (36% of total population) 110,259 males 109,380 females TONGA Direct 16,104 (16% of total population) Males – 7,891 Females – 8,213 Indirect 31,128 (31% of total population) Males – 15,253 Females – 15,875 VANUATU Direct 14,054 (5% of total population) Males – 7,102 Females – 6,953 Indirect 151,753 (51% of total population) Males – 76,681 Females – 75,072	The SI represents the agricultural households within the lifetime of the project who are expected to adopt CRRA practices. This is assumed to be 100% of Learning Farms, and 70% of other farmers reached and supported with training, information and the FSP. They will benefit from the adoption of CRRA innovations, that could include technology innovations (e.g. solar powered dryers) but in most cases these would be nature based innovative solutions. <i>To avoid double counting, the same target for direct and indirect beneficiaries is used for the CI and SIs</i>

				<p>Males – 3,484 Females – 3,348 Indirect 12, 253 Males – 6,249 Females – 6,004</p>	<p>SAMOA Direct 20,496 (10% of total population) Males – 10,453 Females – 10,043 Indirect 36,758 (18% of total population) Males – 18,747 Females – 18,011</p>	
<p><u>ARA4 Ecosystems and ecosystem services</u></p>	<p><u>Core 4: Hectares of natural resources brought under improved low-emission and/or climate-resilient management practice</u></p>	<p>Monitoring system for farm-level resilience indicators established under the project, to verify project progress/ completion reports and extension workers monitoring reports, on benefits resulting from adoption of CRRAs (e.g. hectares covered by different types of CRRAs practices).</p> <p>Existing government surveys on agricultural practices to compare/ verify project results.</p>	<p>0 hectares.</p> <p>There are farmers implementing specific CRRAs practices, including those that are traditional practices. However, there are no known farmers implementing a range of CRRAs practices as a package.</p>	<p>TOTAL: 6,910 hectares of agricultural land TONGA: 2,762 VANUATU: 1,854 SAMOA: 2,294</p>	<p>TOTAL: 20,730 hectares of agricultural land (13% of total combined agricultural land) TONGA: 8,286 (31% of total agricultural land) VANUATU: 5,563 (6% of total agricultural land) SAMOA: 6,881 (16% of total agricultural land)</p>	<p>The hectares of land upon which the direct beneficiaries adopt CRRAs by project's end will have restored and improved ecosystems. In particular, this relates to improving soil health that is better able to manage fluctuations in rainfall and withstand droughts, floods and soil erosion.</p> <p>This assumes no new disincentive or external factor is introduced as a significant barrier to CRRAs in the project area, and the area is not severely disrupted by extreme weather events before the</p>
<p><u>ARA4 Ecosystems and ecosystem services</u></p>	<p><u>Supplementary 4.1: Hectares of</u></p>	<p>Monitoring system for farm-level resilience</p>	<p>0 hectares.</p>	<p>4,933 TONGA: 1,972 VANUATU: 1,324</p>	<p>14,798 hectares of agricultural land TONGA: 5,915</p>	

	<p><u>terrestrial forest, terrestrial non-forest, freshwater and coastal marine areas brought under resoration and/or improved ecosystems</u></p>	<p>indicators established under the project, to verify project progress/ completion reports and extension workers monitoring reports, on benefits resulting from adoption of CRRAs (e.g. hectares covered by different types of CRRAs practices).</p> <p>Existing government surveys on agricultural practices to compare/ verify project results.</p>	<p>There are farmers implementing specific CRRAs practices, including those that are traditional practices. However, there are no known farmers implementing a range of CRRAs practices as a package.</p>	<p>SAMOA: 1,637 TOTAL: 6,910 hectares of agricultural land TONGA: 2,762 VANUATU: 1,854 SAMOA: 2,294</p>	<p>VANUATU: 3,971 SAMOA: 4,912 TOTAL: 20,730 hectares of agricultural land (13% of total combined agricultural land) TONGA: 8,286 (31% of total agricultural land) VANUATU: 5,563 (6% of total agricultural land) SAMOA: 6,881 (16% of total agricultural land)</p>	<p>resilience and regenerative strengthening had an impact</p>
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E.4. GCF Outcome level: Enabling environment (IRMF core indicators 5-8 as applicable)

Core Indicator	Baseline context (description)	Rating for current state (baseline)	Target scenario (description)	How the project will contribute	Coverage
<p><u>Core Indicator 5: Degree to which GCF investments contribute to strengthening institutional and regulatory frameworks for low emission climate-resilient development pathways in a country-driven manner</u></p>	<p>The national governments have committed to sustainable and resilient agricultural practices as part of their NDCs and many aspects of CRRAs are also featuring in their national agricultural growth plans/ strategies. However, there is a serious lack of capacity to implement these priorities. This includes a lack of</p>	<p><u>medium</u></p>	<p>By the end of the project the three national governments will have the capabilities to continue to roll-out CRRAs practices nation-wide and across a range of agricultural systems. This will include mainstreaming CRRAs principles within the design of future policies and projects and designing specific new policy</p>	<p>Under Activity 1.2.3 the programme will provide technical assistance to reform or develop new policy enablers, these will be reviewed by the CRRAs working groups with priority policy actions selected to meet context specific country needs. Capacity building is embedded within the design of the project. While</p>	<p><u>Multi-countries</u></p>

	<p>understanding and skills of extension workers, limited partnerships with researchers and market players, and crucially, the lack of an evidence base (and data management system to collect this evidence) to make the case to farmers to adopt these practices.</p>		<p>enablers to incentivize CRRA.</p> <p>These capabilities include advanced levels of knowledge and skills of agricultural extension workers, as well as institutional mechanisms such as the CRRA Working Group that will be a permanent mechanism that has the information and capacity to produce guidance on a range of agricultural products and a data monitoring system capturing relevant resilience farm-level data.</p>	<p>it does include some dedicated training sessions by national and regional experts, it is mostly a learning-by-doing model and focusing on building not just individual skills but also wider organisation-level systems. For example, technical experts will support the CRRA Working Group to be established, including facilitating consensus on the TORs for the group and then supporting it to deliver its functions. The intensity of the support provided will decline over the duration of the project until the group is working without any external support. A similar model of capacity building will be used for the wider Ministries of Agriculture and the extension workers, as well as the lead farmers themselves.</p>	
<p><u>Core indicator 7: Degree to which GCF Investments contribute to market development/transformation at the sectoral, local, or national level</u></p>	<p>There is no market for CRRA-produced agricultural products in these three countries, other than a limited export market for organically certified products.</p>	<p><u>low</u></p>	<p>The project will not create a new certification scheme for CRRA. Rather it will strengthen market forces to align with and further catalyse the transition to CRRA. First and foremost, this means strengthening the capacity of farmers, primarily through farmer cooperatives/ associations,</p>	<p>The project will provide farmer cooperatives/associations and agri-businesses with business planning training and support looking specifically at how CRRA can increase profits in the long-term.</p>	<p><u>Multi-countries</u></p>

			to be effective small businesses with a long-term strategy for reducing costs and increasing incomes through CRRA. In addition, creating an ecosystem of agri-businesses which are oriented towards serving the needs of farmers implementing CRRA principles.		
<u>Core indicator 8: Degree to which GCF investments contribute to effective knowledge generation and learning processes, and use of good practices, methodologies and standards</u>	One of the most critical barriers to CRRA in the region is the lack of evidence and field-level data on the actual costs and benefits associated with CRRA. There is little quantified data to present to farmers to convince them that the financial returns are worth considering.	<u>low</u>	At the end of the project, there will be a robust evidence base of data and analysis on the viability and cost-benefits of CRRA relevant to a range of Pacific Island Countries. In addition, the learning from the project on how to advise and support farmers effectively to adopt CRRA will also be available for the benefit of other projects and practitioners.	The project will strengthen the data monitoring system as a whole for CRRA, rather than just create a one-off study of the practices. This means designing and institutionalizing a system that is fully integrated into the government's own data monitoring system for collecting relevant resilience indicators at the farm level. The project will also use this to prepare analysis on the costs-benefits of CRRA using the lead farmers as test cases. This, together with wider learning from the project's processes, will be documented and widely shared within the region.	<u>Multi-countries</u>

E.5. Project/programme specific indicators (project outcomes and outputs)

Project/programme results (outcomes/ outputs)	Project/programme specific Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions / Note
				Mid-term	Final	
Outcome 1: Enabling environment strengthened for transition to CRRA						
Outcome 1: Enabling environment strengthened for transition to CRRA	USD of financial resources committed by Development Banks or other financial institutions to support CRRA related interventions	Financial agreements signed with farmers/ Ministries of Agriculture by DBs and others	0	65,000 (per country)	165,000 (per country)	<i>The commitments made by DBs and other financial institutions will most directly relate to loan, credit or other agreement signed with farmers to enable them to support CRRA, which would be reflected in their business plans (see indicator below). Other forms of commitment could include at the institutional level (e.g. setting up new revolving fund) with the Ministries of Agriculture. The target is very conservative, given the design consultations with farmers and the government indicated their reluctance to take on debt, but will be revisited at the MTR</i>
Output 1.1: Cross sectoral capacity and partnerships for the adaptive implementation of CRRA practices	# of CRRA Guidelines produced by each national CRRA Working Group	Guidelines, project reports, government reports	0	3 (1 per country)	9 (3 per country)	<i>This includes the first set of guidelines published which will be updated at least every year with new evidence emerging from the project.</i>
	# Trainers-of-Trainers (ToT) with increased understanding of CRRA (disaggregated by gender)	Pre- and post-training survey, project reports	0	66 (22 per country and 43 male/ 23 female)	66 (22 per country and 43 male/ 23 female)	<i>Assumed ToT will be trained in the initial year of the project.</i>
	# New/ reformed policies adopted that	Policy documents	0	3 (1 per country)	9 (3 per country)	<i>The adoption of the policy could mean via approval of</i>

Output 1.2: Markets enhanced to promote and incentivize CRRA initiatives	incentivize and encourage CRRA					<i>cabinet or legislature, depending on nature of policy.</i>
	# New business plans prepared by targeted farmers/ farmer organisations/ cooperatives/ CRRA agri-businesses with support from DBs and/or FIs	Business plans, Survey/ questionnaire, government reports	0	390 business plans	1,170 business plans	<i>The business plans would include those for individual farmers and/or farmers associations/cooperatives and agri-businesses. This assumes that 50% of the total number of farmer and agri-businesses trained prepare a business plan.</i>
Outcome 2: Practices, systems and technologies adopted for CRRA						
Output 2.1: CRRA systems established through training, demonstration and farmer support	# target agricultural households with increased understanding of CRRA practices (disaggregated by gender)	Pre- and post-training survey, project reports, survey/ questionnaire, app downloads, dissemination reach of information products, social media engagements	0	4,170 agricultural households (35% female farmers)	12,510 agricultural households (50% female farmers)	<i>This includes direct recipients of support, training and information from the project (including on-farm trainings, CRRA and business plan trainings, farmer support programme, via app). It covers lead farmers and other target farmers. This is the equivalent HH target for the individual direct beneficiaries targeted by the project (CI2)</i>
	# of target agricultural households receiving support from the Farmer Support Programme (FSP) to adopt CRRA practices (disaggregated by gender)	FSP/ project reports, field inspections	0	333 agricultural households (35% female farmers)	1,000 agricultural households (50% female farmers)	<i>This includes both Learning Farms and other small-holder farmers that successfully apply to the FSP . It assumes that on average USD 10,000 worth of inputs is provided to each farmer, meaning that in total 1,000 farmers can be supported.</i>
Output 2.2: Monitoring, evaluation and knowledge systems established for continuous learning and	# target agricultural households covered under the new farm-level resilience data management system	New farm-level resilience data management system	0	10,574 agricultural households	31,721 agricultural households	<i>Assumes all targeted beneficiaries of the project are covered by the new systems within the lifetime of the project.</i>

improvement of CRRA practices						<i>The number of individuals represented by these households relates to a portion of Core Indicator 2 (Indirect beneficiaries) in terms of the total number of crop-cultivating households in each country.</i>
	# knowledge/ learning products disseminated nationally, regionally and globally	Reports, presentations, videos, agricultural app improvements, information products, social media pages, other knowledge products	0	10	30	<i>This includes knowledge products that are packaging learning from the project rather than technical reports that are input to the project.</i>
Project/programme co-benefit indicators						
Co-benefit 1: Agricultural production and agroecological management practices are improved to contribute to GHG emissions reductions	Number of new hectares of agricultural land under CRRA practices that specifically contribute to GHG emissions reductions, including agro-forestry, reduced use of fossil-fuel generated power, reduced chemical inputs, reduced postharvest loss.	New farm-level resilience data management system; Project reports; Project beneficiary survey	0	5,528	16,584	<i>These indicators can be used to estimate its emission reduction contribution. It assumes that 80% of all hectares covered by households that adopt CRRA as a result of the project (see Output 2.1 and ARA4) include the particular CRRA practices that contribute to emission reductions.</i>
Co-benefit 2: Increasing the number and visibility of female agricultural leaders in the communities	% of the project's lead farmers who are female	Project reports	0	35%	50%	<i>This assumes there is sufficient interest from female farmers</i>
	% of the project's target CRRA agri-businesses that are led by females	Project reports	0	35%	35%	<i>This assumes there is sufficient interest from female farmers</i>
	% of female farmers supported by the project to showcase their results and experiences	Project reports	0	35%	50%	<i>This assumes there is sufficient interest from female farmers</i>

	at the national and regional level.				
E.6. Project/programme activities and deliverables					
Activities	Description	Sub-activities			Deliverables
Activity 1.1.1: Establish and sustain national CRRA Multi-Stakeholder Working Groups	The project will establish, support and embed a permanent technical advisory group ('CRRA Working Group') within the existing governance set-up of each Ministry of Agriculture	<p><i>Sub-Activity 1.1.1.1:</i> Convene multi-sector working group in each country, including representatives from Ministry of Agriculture (and extension workers), agricultural research institutes responsible for monitoring system (see output 2.2), farmer associations etc. and develop TORs, governance arrangements and workplan for the group. At least 35% of the Working Group members should be women.</p> <p><i>Sub-Activity 1.1.1.2:</i> Conduct regional technical training of all three CRRA Working Groups on CRRA and finalize of project work plan.</p> <p><i>Sub-Activity 1.1.1.3:</i> Review evidence collected and project progress in CRRA Working Group meetings every 6 months to prepare CRRA guidelines.</p> <p><i>Sub-Activity 1.1.1.4:</i> Annual meeting of all three CRRA Working Groups with regional project team to share learning and review progress across the regional project.</p>			<p><i>Deliverable 1.1.1.1:</i> Agreed TORs and workplan for each national CRRA working Group (3)</p> <p><i>Deliverable 1.1.1.2:</i> Regional training of CRRA Working Group reports (3)</p> <p><i>Deliverable 1.1.1.3:</i> CRRA Working Group meeting minutes (>24 total)</p> <p><i>Deliverable 1.1.1.4:</i> Annual regional meeting minutes of CRRA Working Groups (5)</p>
Activity 1.1.2: Working Groups co-design context-specific CRRA principles and practices	The CRRA Working Groups will meet at least every 6 months to evaluate available evidence on the viability and costs-benefits of relevant CRRA guidelines and publish guidance targeted to agricultural households and other stakeholders in the agricultural value chain	<p><i>Sub-Activity 1.1.2.1:</i> Convene an in-person international advisory body of select CRRA experts to review and advise the Working Group, and participate in Regional Training session of all three CRRA working groups (see Activity 1.1.1) to finalize TORs and responsibilities.</p> <p><i>Sub-Activity 1.1.2.2:</i> Prepare analysis using data from the learning farms (see <i>Sub-Activity 2.1.2.5</i>) and evidence from other sources (including documenting traditional practices as required) and provide technical support to the Working Groups to review this evidence and then prepare and update periodically, context-specific CRRA principles and practices that form the basis of the advice provided to farmers.</p> <p><i>Sub-Activity 1.1.2.3:</i> International advisors provide (remote) technical review of Working Groups' CRRA principles and practices.</p>			<p><i>Deliverable 1.1.2.1:</i> Agreed TORs and working plan of International Advisory Body (1)</p> <p><i>Deliverable 1.1.2.2:</i> Updated National CRRA Guidelines (>9 total). See <i>Deliverable 2.1.2.6</i> for the analysis/ evidence provided to the Working Group as input into these guidelines.</p> <p><i>Deliverable 1.1.2.3:</i> Consolidated peer review comments of international advisors on draft national CRRA Guidelines (>9)</p>
Activity 1.1.3: Develop and implement training of trainers (ToT) programme on CRRA	The project will identify and train a diverse cadre of approximately 50 public and private stakeholders in each country who already have established networks and	<p><i>Sub-Activity 1.1.3.1:</i> Develop training materials and delivery plan on CRRA, in collaboration with established training institutes/ associations, targeting capacity needs, interests, and potential influence in farming practices of the different ToT stakeholder groups.</p> <p><i>Sub-Activity 1.1.3.2:</i> Conduct and evaluate training to ToT stakeholder groups, prioritising on-farm sessions and engaging with lead farmers.</p>			<p><i>Deliverable 1.1.3.1:</i> National ToT delivery plan and training material (3)</p> <p><i>Deliverable 1.1.3.2:</i> National ToT training reports and evaluations (3).</p> <p><i>Deliverable 1.1.3.3:</i> ToT comments/ presentations at CRRA Working Group</p>

	relationships with agricultural households	<i>Sub-Activity 1.1.3.3:</i> Invite ToT stakeholder groups to participate in CRRA Working Groups to communicate their experiences of supporting farmers to adopt CRRA.	Meetings (included within <i>Deliverable 1.1.1.3</i>)
Activity 1.2.1: Support farmers associations to develop viable business plans for adoption and marketing of CRRA practices	The project will target approximately 480 agricultural households in each country and build their skills and capabilities to identify and pursue the specific value-addition opportunities from CRRA	<p><i>Sub-Activity 1.2.1.1:</i> Design and deliver intensive 20-day training sessions/ small group coaching sessions of a select group (of which 35% will be women) of lead farmers and other targeted farmers, to improve their immediate and long-term income from their farm. In each country, there will be four sessions every year in Years 2-4, with around 40 farmers per session. This will include training in good farm business management practices including strengthening their financial resilience to extreme weather events, develop business plans and adopt value addition practices. In all countries, Development Banks and or FI will be involved in selected training sessions as trainers and workshop facilitators, particularly on financial literacy, business planning and options for future investment</p> <p><i>Sub-Activity 1.2.1.2:</i> Scale-out the business planning training via Farmer Associations and their members, through annual Farmer Workshops, targeting 90 farmers in each country (Years 2-4).</p>	<p><i>Deliverable 1.2.1.1:</i> Consolidated national project reports every year summarizing support and training being provided to lead and other farmers and number of business plans developed. (15 in total)</p> <p><i>Deliverable 1.2.1.2:</i> Incorporated within reporting for <i>Deliverable 1.2.1.1</i></p>
Activity 1.2.2: Support agri-businesses and farmer associations to develop viable business plans for provision of CRRA related inputs and services	The project will support approximately 90 established and start-up agri-businesses across the three countries to scale-up or start new services that will sustain and increase the widespread adoption of CRRA practices.	<i>Sub-Activity 1.2.2.1:</i> Train and support a select group of 90 existing entrepreneurs/ companies (of which 35% will be women-led to develop business plans for developing allied services that will support CRRA, and to put in place the initial actions required to achieve this. This will involve national level intense training sessions (approximately 20-day of training annually for Years 2-4) and will involve engagement and interaction between the agri-businesses and relevant farmers. In all countries, Development Banks and FIs will be invited to participate as trainers and workshop facilitators to strengthen linkages between CRRA-supportive agri-businesses and future financing opportunities.	<i>Deliverable 1.2.2.1:</i> Consolidated national project reports every year summarizing support and training being provided to each agri-business, number of business plans produced and uptake of business as a result (15 in total)
Activity 1.2.3: Technical assistance to the Ministries of Agriculture to design policy enablers to encourage the adoption of CRRA and reform projects and subsidies which disincentivize CRRA.	The project will strengthen policy enablers to provide clear market signals that support CRRA. This includes reforming some existing government schemes and subsidies which encourage unsustainable practices that work against the principles of CRRA	<p><i>Sub-Activity 1.2.3.1:</i> Carry out cost-benefit analysis of existing government schemes, agricultural projects and subsidies and particularly whether and how they are supporting the adoption of CRRA practices, and identify opportunities for policy enablers across the value chain of CRRA products to incentivize such practices.</p> <p><i>Sub-Activity 1.2.3.2:</i> CRRA Working Groups review the findings of the analysis and prioritize the areas of policy reform required.</p> <p><i>Sub-Activity 1.2.3.3:</i> Develop a roadmap for reforming existing projects, financial schemes and subsidies and designing new ones, to be discussed and approved through the relevant national governance structures.</p>	<p><i>Deliverable 1.2.3.1:</i> National report on challenges and opportunities to strengthen policy enabling environment for CRRA (3)</p> <p><i>Deliverable 1.2.3.2:</i> CRRA Working Group conclusions on policy actions to prioritize summarized in meeting notes (included within <i>Deliverable 1.1.1.3</i>)</p> <p><i>Deliverable 1.2.3.3:</i> Internal roadmap approved by the Ministry of Agriculture and other relevant ministries for</p>

		<p><i>Sub-Activity 1.2.3.4:</i> Provide technical assistance to the Ministries of Agriculture to adopt and implement at least one of the identified priority policy reforms required.</p>	<p>reforming/ developing new policy enablers for CRRA (3).</p> <p><i>Deliverable 1.2.3.4:</i> New/ reformed national policies/ schemes/ subsidies for enabling/ incentivizing CRRA drafted by the government (3)</p>
<p>Activity 2.1.1. Engage with local government and traditional structure and integrate project activities within community/ provincial plans as appropriate</p>	<p>This project will respect and support each government's efforts to decentralize planning and delivery at the local level and mobilize community level support for CRRA and ownership over the project's activities</p>	<p><i>Sub-Activity 2.1.1.1:</i> Socialize CRRA concepts and practices to key community leaders, including traditional leaders, Chiefs, community/ provincial government officers and civil society leaders, and build awareness of climate change impact on agriculture and agriculture impact on climate change.</p> <p><i>Sub-Activity 2.1.1.2:</i> Encourage and support the local government officers to integrate the project activities within annual development plans or any community plan specifically on addressing climate change.</p> <p><i>Sub-Activity 2.1.1.3:</i> Formal convening of community leaders at mid-point and final year of the project, but also regular updates from PMU every 6 months on project activities and results and discuss any challenges or concerns emerging from the community.</p>	<p><i>Deliverable 2.1.1.1:</i> MoU or equivalent between project and relevant local and community leaders to participate in the project (Approx 15 but dependent on exact location of lead farmers).</p> <p><i>Deliverable 2.1.1.2:</i> Local/ community development plans with project activities included (Approx 8 but dependent on exact location of Learning Farms/ existence of live plans)</p> <p><i>Deliverable 2.1.1.3:</i> Brief written notes consolidating all update meetings with local leaders (27 total)</p>
<p>Activity 2.1.2: Implement training programmes for farmers on CRRA practices, systems and technologies</p>	<p>The project will identify 20 leading farmers in each country – primarily agricultural households selling some of their crops for income, but potentially a couple of commercial organizations – who will be supported to identify the specific CRRA practices relevant to them, pilot them, monitor and report on the costs, benefits and viability and share their experiences with their community and beyond</p>	<p><i>Sub-Activity 2.1.2.1:</i> Select and convene 30 Learning Farms in each country (of which at least 50% will be female-led) for provincial workshops for initial sensitization to the project and CRRA practices.</p> <p><i>Sub-Activity 2.1.2.2:</i> Prepare integrated training, piloting, monitoring plan and materials, specific for each Learning Farm, for adopting and monitoring benefits of CRRA practices. This will be summarized in a Letter of Agreement with each Learning Farm, which also outlines expectations of the PMU on the farmer, and that they will contribute a minimum of 20% of total costs of adopting CRRA. In addition, operationalise the Project-level GRM and SEAH safeguards to receive and address concerns in a timely, confidential, and accessible manner for all stakeholders.</p> <p><i>Sub-Activity 2.1.2.3:</i> Deliver on-farm training, refresher training and continuous handholding for each lead farmer to support the adoption of CRRA practices and monitoring of associated benefits. This includes training on selecting appropriate crop-rotation and companion-cropping combinations (including alternate-season planning and 1-3 year rotation cycles) to minimise pest carryover, maintain soil health, and reduce pesticide reliance through integrated pest management (IPM).</p>	<p><i>Deliverable 2.1.2.1:</i> Letters of Agreement (LoA) with each Learning Farm outlining specific training, piloting and support to be provided, and expectations on farmers (90)</p> <p><i>Deliverable 2.1.2.2:</i> Farm-specific package of support (training, piloting and support plan) (90)</p> <p><i>Deliverable 2.1.2.3:</i> See <i>Deliverable 1.2.1.1:</i></p> <p><i>Deliverable 2.1.2.4:</i> Data reports from Learning Farms (27 data uploads)</p> <p><i>Deliverable 2.1.2.5:</i> Consolidated national reports (24) (to CRRA Working Groups) on evidence from learning farms</p>

		<p>In addition, deliver occupational health and safety (OHS) training and provide appropriate protective equipment to workers involved in the installation of tunnel houses, rainwater harvesting systems, and/or drip-irrigation systems. Deliver context-specific, culturally sensitive training on PSEAH principles, standards, and protocols for contractors, trainers, service providers, and workers, including clear guidance on available grievance redress mechanisms (GRMs). Conduct GRM awareness-raising sessions and develop community-facing knowledge products in local languages outlining all available reporting channels, PSEAH procedures, and referral pathways for survivor support. All training under this sub-activity will be delivered by trainers trained through the ToT programme under Activity 1.1.3.</p> <p><i>Sub-Activity 2.1.2.4:</i> Collect data and feedback every 6 months on progress and costs/ benefits of adopting CRRA practices from learning farms, and input into internal project data tracking sheet.</p> <p><i>Sub-Activity 2.1.2.5:</i> Analyse and package the monitoring data and provide a set of recommended actions every 6 months (Y2-5) to integrate learning from the lead farmers into the CRRA guidance (for review by CRRA Working Groups).</p> <p><i>Sub-Activity 2.1.2.6:</i> At the end of the project, support each Learning Farm to update business plan prepared at project mid-term (activity 1.2.1) and prepare a sustainability plan on how to scale up CRRA practices.</p>	<p><i>Deliverable 2.1.2.6:</i> Sustainability/ updated business plan for CRRA for each Learning Farm(90)</p>
<p>Activity 2.1.3: Develop and operationalize a farmer support programme for CRRA</p>	<p>A FSP will cover any additional upfront costs/ investments associated with adopting CRRA practices that the lead farmers will likely incur. This will be a type of incentive to encourage participation in the project and opening up their farms to training and showcasing and to minimize the financial risks associated with switching to CRRA. It will also be available for other targeted agricultural households to apply for on a</p>	<p><i>Sub-Activity 2.1.3.1:</i> Operationalize the farmer support programme (modalities, competitive selection of providers etc.) and prepare information notes in each country, in local languages, for Learning Farms and other farmers to be circulated and explained during the training conducted under Activity 2.1.1 and Activity 2.1.4. As part of the programme, ensure to monitor and report full compliance with national labour laws by restricting project-supported agricultural tasks for persons under 18 years old to the country-specific definitions of safe, light, and non-hazardous work. Additionally, develop and disseminate community-facing knowledge products on CRRA Principles and Practices, inclusive of the beneficiary selection criteria and processes.</p> <p><i>Sub-Activity 2.1.3.2:</i> Procure and distribute required inputs to support CRRA practices among lead farmers, with 50% of recipients being women. Ensure the use of good quality material and flexible plastics which are not artificially heated or cooled to protect against severe</p>	<p><i>Deliverable 2.1.3.1:</i> Information notes (3) for farmers on farmer support programme in local languages</p> <p><i>Deliverable 2.1.3.2:</i> Detail inputs provided to each Learning Farm (90) as part of consolidated national project reports every 6 months summarizing support and training being provided to farmers (See <i>Deliverable 1.2.1.1:</i>)</p> <p><i>Deliverable 2.1.3.3:</i> Detail inputs provided to all other farmers (approx. 910) as part of consolidated national project reports every year summarizing support and training being provided to farmers (See <i>Deliverable 1.2.1.1:</i>)</p>

	<p>competitive basis, to kick-start the scaling-up of CRRA.</p>	<p>weather. This is on the basis of the LoA with each Learning Farm under <i>Sub-Activity 2.1.2.2</i>.</p> <p><i>Sub-Activity 2.1.3.3:</i> Accept applications from other farmers for the FSP via the PMU (including the provincial level officers) and competitively select every quarter. The PMU will finalize and validate the needs with each individual farmer, and a final LoA will be signed with each. The inputs will be procured and distributed amongst the other targeted farmers (approx..910). With at least 35% of recipients being female farmers.</p> <p><i>Sub-Activity 2.1.3.4:</i> Provide training on use and maintenance of any technology or other relevant inputs, and monitor the use and value of these inputs, during the training conducted under Activity 2.1.2 and Activity 2.1.4. In addition, deliver training on the operation and maintenance (O&M) of rainwater harvesting and drip irrigation systems, inclusive of safe handling, periodic cleaning, mosquito prevention, leak detection, and proper disposal of worn components.</p>	<p><i>Deliverable 2.1.3.4:</i> see <i>Deliverable 1.2.1.1</i></p>
<p>Activity 2.1.4: Facilitate active peer-to-peer learning to promote wider adoption and replication of CRRA practices</p>	<p>The Learning Farm will be the most effective vehicle for the scaling-up of CRRA, through informal peer-to-peer learning using their established relationships, such as via networks of sellers to an exporter, farmer associations and through their community links. The project will also support more formal exchange of knowledge and learning</p>	<p><i>Sub-Activity 2.1.4.1:</i> Organize open farm workshops (3 per year, for each country for Y3-4) for select Learning Farms to showcase CRRA practices to other farmers in the locality, as well as schools, churches and other community groups.</p> <p><i>Sub-Activity 2.1.4.2:</i> Prepare training materials for on-farm training sessions on CRRA practices at select Learning Farms (of which 50% should be women-led) with interested other farmers, including through the farmer association and other networks of farmers.</p> <p><i>Sub-Activity 2.1.4.3:</i> Deliver on-farm training sessions at select Learning Farms on CRRA practices with interested other farmers (of which at least 35% should be women), including through the farmer association and other networks of farmers. Approximately 3 training sessions (on average 5-days in length for each training session) every quarter for years 2-5.</p>	<p><i>Deliverable 2.1.4.1:</i> Workshop reports (18) included as part of consolidated national project reports every year summarizing support and training being provided to farmers (<i>See Deliverable 1.2.1.1:</i>)</p> <p><i>Deliverable 2.1.4.2:</i> National training material for other farmers to learn from lead farmers (3)</p> <p><i>Deliverable 2.1.4.3:</i> Reports on trainings (48) included as part of consolidated national project reports every year summarizing support and training being provided to farmers (<i>See Deliverable 1.2.1.1:</i>)</p>
<p>Activity 2.2.1: Develop and disseminate knowledge products to promote wider adoption and replication of CRRA practices</p>	<p>The project will enable the much wider scaling-up of CRRA through dissemination of the evidence and learning generated from the lead farmers across the country</p>	<p><i>Sub-Activity 2.2.1.1:</i> Prepare communication material, including videos, leaflets in local languages, on costs, benefits and practical advice on how to adopt CRRA practices.</p> <p><i>Sub-Activity 2.2.1.2:</i> Disseminate communication material through a range of channels, including in-person through farmer associations, buyers, CBOs, on the Ministry website and through existing social media channels.</p>	<p><i>Deliverable 2.2.1.1:</i> Communication material (>30)</p> <p><i>Deliverable 2.2.1.2:</i> National reports every year on dissemination and downloads of communication material (<i>See Deliverable 1.2.1.1</i>).</p>

		<p><i>Sub-Activity 2.2.1.3:</i> Develop and update dedicated webpages on existing national websites and the SPC website to showcase experience, learning and research (including monitoring data) targeting both farmers but also research community and other funders.</p>	<p><i>Deliverable 2.2.1.3:</i> Updated webpages (3)</p>
<p>Activity 2.2.2: Develop / Upgrade and support the roll-out of farmer mobile phone apps in each country</p>	<p>The project will support each government to make use of the widespread use of smart phones to get information and advice to farmers immediately, and also an efficient way of getting data from farmers.</p>	<p><i>Sub-Activity 2.2.2.1:</i> Carry out a functional review of the current design of the app in Vanuatu and Samoa, and the feasibility of different options for integrating CRRRA practices within them.</p> <p><i>Sub-Activity 2.2.2.2:</i> Provide technical assistance to the Ministry of Agriculture in Tonga to develop a prototype agricultural app, learning from the experiences of the other two countries.</p> <p><i>Sub-Activity 2.2.2.3:</i> Plan and develop the required design or re-design of the apps to provide features that will support CRRRA practices, such as the type of advice being provided, and allowing farmers to input their resilience monitoring results (see Activity 2.2.3) for more customized advice.</p> <p><i>Sub-Activity 2.2.2.4:</i> Pilot the roll-out of the app/ redeveloped app features with select group of lead farmers (of which at least 50% should be female) to evaluate functionality and benefits, and further refine as required.</p> <p><i>Sub-Activity 2.2.2.5:</i> Encourage uptake of the farmer app within the trainings conducted under Activity 2.1.1, Activity 2.1.4. and knowledge products under Activity 2.2.1.</p> <p><i>Sub-Activity 2.2.2.6:</i> Develop and implement a sustainability plan for each app so they are self-sufficient for future updates and scaling-up.</p>	<p><i>Deliverable 2.2.2.1:</i> Functional review of each app in Vanuatu and Samoa (2)</p> <p><i>Deliverable 2.2.2.2:</i> Prototype document for an agricultural app in Tonga (1)</p> <p><i>Deliverable 2.2.2.3:</i> (Re-) design document for each app (3)</p> <p><i>Deliverable 2.2.2.4:</i> Pilot evaluation report for each app (3)</p> <p><i>Deliverable 2.2.2.5:</i> see <i>Deliverable 1.2.1.1</i></p> <p><i>Deliverable 2.2.2.6:</i> Sustainability plan for each app (3)</p>
<p>Activity 2.2.3: Develop sustainable national monitoring systems for climate resilience of agricultural systems</p>	<p>The project will establish permanent national institutional mechanisms for monitoring outcome level indicators for climate resilience at the farm level. It will be fully owned and governed by each government and will therefore require significant institutional capacity building to design and operate such a system.</p>	<p><i>Sub-Activity 2.2.3.1:</i> Develop monitoring protocols for technical requirements and process of collecting and monitoring data for core resilience indicators.</p> <p><i>Sub-Activity 2.2.3.2:</i> Develop long-term plan for building self-sufficient institutional system for monitoring core resilience indicators at the farm level that are required for resilience and mitigation measures.</p> <p><i>Sub-Activity 2.2.3.3:</i> Pilot data collection for monitoring core indicators in learning farms as part of Activity 2.1.2, evaluate effectiveness and adjust monitoring protocols as required.</p> <p><i>Sub-Activity 2.2.3.4:</i> Provide intensive training and mentoring to support national organisations to roll out data collection process across country, including via the Soils Portal.</p>	<p><i>Deliverable 2.2.3.1:</i> Design document for national data management system for farm resilience indicators (3)</p> <p><i>Deliverable 2.2.3.2:</i> Capacity development plan for developing, rolling out and sustaining national data management system for farm resilience indicators (3)</p> <p><i>Deliverable 2.2.3.3:</i> Evaluation report of pilots of national data management system for farm resilience indicators (3)</p>

		<p><i>Sub-Activity 2.2.3.5:</i> Establish and operationalize a system for publishing raw downloadable data on online portals such as the Pacific Soils Portal (see Activity 2.2.1.3) for the benefit of wider partners and research communities and for Ministries of Agriculture to prepare and publish analysis on the CRRA data as part of their annual reporting process.</p>	<p><i>Deliverable 2.2.3.4:</i> Consolidated national report on capacity and technical support provided to operationalize national data management system for farm resilience indicators (3)</p> <p><i>Deliverable 2.2.3.5:</i> Uploads of raw data and analysis reports on national websites (15)</p>
<p>Activity: 2.2.4: Document and share learning from the project to wider communities of practice in the region</p>	<p>The project will package and disseminate this project-level learning in several ways. Some of it will inform internal monitoring, evaluation and learning activities, and a series of in-depth studies will be carried out at the beginning, mid-point and end of the project. The project will also disseminate the evidence and learning externally</p>	<p><i>Sub-Activity 2.2.4.1:</i> Organize national annual learning workshops involving all major project stakeholders to share and document internal reflection and learning on the effectiveness of the project in facilitating uptake of CRRA. Organize side-events and stalls at annual national Agricultural Shows, Agricultural Conferences and Pacific Week of Agriculture and Forestry (2025/ 2027/2029) for demonstration farmers and agribusinesses to respectively showcase their achievements and support to the project.</p> <p><i>Sub-Activity 2.2.4.2:</i> Publish 'practitioner voices' - a series of informal blogs from individuals involved in delivering the project on their personal reflections and learning - on knowledge platforms (Activity 2.2.1.3).</p> <p><i>Sub-Activity 2.2.4.3:</i> Organize final regional workshop to showcase learning and results but focused on other funders and partners to also identify opportunities to scale up through other programmes.</p> <p><i>Sub-Activity 2.2.4.4:</i> Publish final learning paper, and accompanying academic journal, to disseminate the data but also analysis on good practices and learning for uptake of CRRA.</p> <p><i>Sub-Activity 2.2.4.5:</i> Carry out in-depth studies to support the ongoing M&E of the project. This includes in year one studies to guide the selection and targeting of beneficiaries (e.g. Household level needs assessments, value chain analysis). At the mid-point of the project a functional review of the project will be conducted to guide any course correction required. In the final year, studies will support the collection of evidence on the contribution of the project to the expected outcomes and goal.</p>	<p><i>Deliverable 2.2.4.1:</i> National annual learning workshop reports (3)</p> <p><i>Deliverable 2.2.4.2:</i> Practitioner voices uploaded (>30)</p> <p><i>Deliverable 2.2.4.3:</i> Final regional workshop report (1)</p> <p><i>Deliverable 2.2.4.4:</i> Final learning paper (1) and accompanying academic journal (1)</p> <p><i>Deliverable 2.2.4.5:</i> In-depth studies at beginning, mid- and end-point of project (3)</p>
<p>Project-level monitoring, reporting and adaptive management processes</p>	<p>The project will operationalise a project level M&E system to track implementation progress against set targets for the project, report progress and</p>	<p><i>Sub-Activity M&E. 1:</i> Establish project level M&E system and data collection tools for the project. Conduct a baseline assessment using TAPE and other baselines assessment tools for the project in all three countries. The baseline will assess the farmers knowledge about the</p>	<p><i>Deliverable M&E. 1:</i> Updated M&E framework and plan with indicator tracking table, data collection tools, baseline assessment report</p>

	<p>facilitate learning and adaptive management to ensure project outcomes are achieved</p>	<p>app, farmers perception on CRRA and gender specific information in project sites. and build M&E capacity of PMU and partners</p> <p><i>Sub-Activity M&E.2:</i> Conduct routine monitoring and data collection across project activities in all three countries. Monitoring visits will be conducted by the National PMUs every quarter starting from year 2 of project implementation. Regional PMU will conduct one monitoring visit to each country per year from year 2 onwards. In addition, monitor and report on ESS compliance, compliance with national Waste Management Acts, inclusive of proper waste disposal in local waste-management systems, recycling, and/or reusing of installation materials or equipment, residual or hazardous waste, and organic waste. Also, monitor and report compliance with national Water Resource Management Acts, inclusive of ensuring all irrigation relies solely on rainwater collection systems and that no project activity involves drilling, wells, or abstraction from regulated water sources.</p> <p><i>Sub-Activity M&E.3:</i> Produce monitoring reports and facilitate learning and adaptive management. Progress information collected through routine monitoring will be used to compile Annual Performance Reports to GCF.</p> <p><i>Sub-Activity M&E.4:</i> Coordinate independent project Mid-term Review and Terminal Evaluation. By mid-term of project implementation, an independent review will be commissioned to assess project progress against outcomes and targets, to guide any course correction required. At the end of the project, a terminal evaluation will also be commissioned.</p>	<p><i>Deliverable M&E.2:</i> Quarterly progress reports</p> <p><i>Deliverable M&E.3:</i> Project Annual Performance Reports</p> <p><i>Deliverable M&E.4:</i> Mid-term review report and Terminal Evaluation report</p>
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E.7. Monitoring, reporting and evaluation arrangements (max. 500 words, approximately 1 page)

113. The project’s Monitoring, Evaluation, Accountability and Learning (MEAL) framework and plan are described in full in Annex 11. It will produce evidence to support reporting at multiple interconnected levels including:
- Progress in achieving the expected outputs and outcomes of the project as per the Theory of Change and logframe, including the specific deliverables;
 - Contribution to key GCF investment Criteria and the Adaptation Performance;
 - Contribution to achieving each country’s NDC and relevant agricultural growth strategies/ plans;
114. The MEAL framework and plan therefore build on and integrate each country’s national system for reporting on climate finance and progress towards international climate commitments as well as SPC’s monitoring and reporting systems that adhere to GCF requirements. This includes not just the indicators and data being used to measure progress, but also the roles and responsibilities within each government. The NDAs play a crucial role within the project implementation arrangements primarily because of the importance of coordinating and reporting across climate finance projects in each country.

115. The responsibility for managing the MEAL framework and plan is held by the Regional Team Leader, which then gets cascaded down to each National Team Leader in the PMUs. This has been done to elevate its importance and ensure that it directly feeds into the workplan and day-to-day delivery decisions of the project. In addition, at the regional and national levels, there will be specialists in 'Evidence and Evaluation'. Their role will be two-fold: To support the team leaders to report on progress within the project itself, but also to lead Output 2.2 and the establishment and operation of new data management systems for collecting farm-level resilience information, as well as for ensuring proper research methods for collecting and evaluating evidence from the lead farmers. These specialists therefore provide a crucial link between the role of the project in strengthening the evidence base for CRRRA as a whole and the measurement of the impact of the project itself. A regional Evidence, Evaluation and Learning Expert will support the Regional Team Leader in consolidating reporting from each country, coordinating the design and delivery of the baseline assessment, mid-term and final evaluation processes. The M&E reporting officers in the national PMUs will coordinate MEL activities across the project in each country.
116. **Monitoring:** The Regional Team Leader, working closely with each National Team Leader, will develop annual workplans that reflect the targets and activities within the logframe. This will also be reflected in SPC's formal agreement with each of the co-Executive Entities. The inception meeting within the first six months of the project will make any necessary adjustments to the results framework, reflecting on evidence collected by the baseline assessment. The project design and deliverables involve a number of reflection points every six months – for example, progress and data emerging from the lead farmers, update meetings with local community leaders and CRRRA Working Group Meetings. Therefore, the Team Leaders will use this evidence to formally monitor and report on progress with each Ministry of Agriculture and NDA every year, but there will also be an internal monitoring and reflection meeting at the mid-way point of the year.
117. **Evaluation:** The project's mid-term evaluation process will include an internal impact evaluation and an independent process evaluation. A final impact evaluation will take place no later than three months prior to the operational closure of the project. During the inception period, the initial Evaluation Questions will be refined, also reflecting any modifications made to the Theory of Change if required. However, the focus will be on an evaluation process that is participatory, involving key stakeholders delivering the project to come up with some constructive and realistic suggestions for improving the relevance, efficiency, effectiveness, equity and impact of the project.
118. **Accountability:** There are two critical accountability pathways: Firstly, via SPC to the GCF to show progress and alignment with the GCF Investment Criteria and the approved scope of the project. SPC will be primarily responsible for ensuring full accountability to GCF, working with each respective NDA to gather the required information. Secondly, there will be clear accountability at the national level in each country, with a governance and reporting arrangement aligned to established processes for reporting on climate finance projects and international commitments, as well as national strategies/policies on agricultural development. The NDA's primary role in the project is to facilitate this national level accountability and reporting, as well as to coordinate across other relevant climate finance projects.
119. **Learning:** Learning will be considered a priority of the project, rather than an afterthought as often happens. A Knowledge Management and Learning Specialist at the regional level will facilitate meaningful learning within and across the three countries, which will start from the very inception of the project and run throughout. This will include internal learning, bringing together the core delivery team to reflect on challenges and opportunities to enhance

impact and efficiency, as well as documenting learning from the project to share externally. The latter is a core part of the project's theory of change in terms of scaling-up and sustaining the impact of the project.

F. RISK ASSESSMENT AND MANAGEMENT		
F.1. Risk factors and mitigations measures (max. 3 pages)		
Delays in project implementation due to administrative and operational capacity constraints within each country		
Category	Probability	Impact
<u>Technical and operational</u>	<u>Medium</u>	<u>Low</u>
Description		
The project has intentionally designed a decentralized fund flow and governance arrangement to strengthen government ownership and sustainability. However, this will add additional administrative and reporting requirements on each government that might delay implementation.		
Mitigation Measure(s)		
The project is designed to utilize existing governance and budgetary systems, and benefits from ongoing efforts to strengthen institutional capacity in this regard. However, given the complexity of the multi-country component, SPC will coordinate the procurement above a certain threshold centrally for all three countries, using their existing GCF-aligned systems and standards. This will allow the national PMUs to focus on delivery. However, a national Procurement Officer will be recruited to add extra support, particularly for the compliance of GCF's particular requirements. A dedicated regional Project Finance Officer will work with each government to guide and mentor them through the process.		
Difficulty in hiring qualified national experts to fill required project roles and staff-turnover		
Category	Probability	Impact
<u>Technical and operational</u>	<u>High</u>	<u>High</u>
Description		
There is a shortage of qualified, high-quality experts to deliver and support the various donor funded projects. National experts are also attracted by positions abroad. Vacant posts will delay the implementation process. In addition to difficulties in recruitment, staff turnover within national institutions poses an ongoing risk, as existing personnel may leave for higher-paying opportunities or external positions. Such turnover could disrupt continuity in implementation, weaken institutional memory, and reduce the effectiveness of capacity-building efforts.		
Mitigation Measure(s)		
The project workplan recognizes the time it will take at the pre-mobilization stage to find and hire high-quality staff. Approximately 4-5 months for recruitment has been factored into the implementation plan. If required regional experts will fill roles temporarily until the post is filled. This is also why the regional PMU has an extensive team, as it will help train and support national PMUs and individual experts and build national expert capabilities in the process. To reduce the impact of staff turnover, the project will ensure that training, documentation, and knowledge products are institutionalized rather than held by individuals, and that multiple staff are trained in core responsibilities to prevent gaps. Retention will also be supported through ongoing mentoring and support provided under the regional PMU.		
Government Changes, Policy Shifts, and Economic/Financial Instability		
Category	Probability	Impact
<u>Technical and operational</u>	<u>Medium</u>	<u>High</u>
Description		
Changes in government leadership, or turnover of key staff within Ministries may result in shifts in national priorities, delays in decision-making, or reduced institutional engagement in project implementation. High staff turnover can undermine continuity, institutional memory, and long-term capacity development. In parallel, economic or fiscal instability, such as reduced national budgets, inflation, or external economic shocks, may disrupt or slow implementation.		
Mitigation Measure(s)		

Engagement will target both senior officials and permanent technical staff to reduce reliance on individual officeholders. Capacity-building materials, procedures, and technical guidance will be institutionalized to safeguard institutional memory despite turnover.

Economic and financial risks will be monitored periodically through dialogue with Ministries of Finance and Agriculture. . The project will apply adaptive management measures, including re-sequencing activities or increasing regional support where national capacity is temporarily reduced through the regional PMU.

Risks to effectiveness and efficiency of project activities due to limited capacity of Agricultural Extension workers

Category	Probability	Impact
<u>Technical and operational</u>	<u>Medium</u>	<u>Medium</u>
Description		
In some cases, this refers to a limited number of extension workers available, but across the board the workers lack the required skills to promote CRRA.		
Mitigation Measure(s)		
The project design is built around the fact that agricultural extension workers lack capacity. While the project does not expect to increase the number of extension workers (especially given the shortage is more a result of the difficulty in finding qualified people to hire) it will strengthen the skills, motivation and capacity that are in place. The project is also not reliant solely on the workers. It will use alternative avenues for advising and supporting farmers, including through the private sector, community groups and through peer-to-peer learning. Project staff will be located in each focus geography to mentor the local extension worker, but also to facilitate delivery of activities so the project is not dependent on the worker.		

Risks to effectiveness and efficiency of project delivery, monitoring and reporting due to limited capacity within the Ministries of Agriculture.

Category	Probability	Impact
<u>Technical and operational</u>	<u>Medium</u>	<u>Medium</u>
Description		
There are multiple competing demands on personnel which could affect their ability to deliver, coordinate and oversee project activities.		
Mitigation Measure(s)		
The most important measure will be to include the project within the annual work plan of the Ministries to ensure that their time and contribution to the project are properly resourced and recognized. The implementation arrangements also recognize the competing demands on the time of officials in the Ministry of Agriculture and as such include additional project delivery capabilities.		

Insufficient interest and willingness amongst farmers to act as CCRA lead farmers.

Category	Probability	Impact
<u>Technical and operational</u>	<u>Low</u>	<u>High</u>
Description		
The project relies on lead farmers being willing to pilot and experiment CRRA but there could be a number of farmers who would rather not take any risk of changing their current practices.		
Mitigation Measure(s)		
The project will identify lead farmers that already have a basic understanding of the benefits of CRRA and are open to piloting. Some will already be participating in government initiatives (e.g. Farmer Field Schools) or other initiatives related to climate smart agriculture. The project will work with each lead farmer to mitigate any risks associated with piloting the practices, for example, selecting only a portion of farm for piloting on. In addition, the FSP will cover any input costs required.		

Lack of support within the community to support the uptake of CRRA.

Category	Probability	Impact
<u>Technical and operational</u>	<u>Low</u>	<u>Medium</u>
Description		
Given the very strong influence of the wider community this could ultimately affect the wider uptake of CRRA and limit the expected impact of peer learning from the lead farmers.		
Mitigation Measure(s)		
The design of the project incorporates the need not to just focus at the farmer level but also at the wider community level. This includes engaging with the traditional Chiefs and government officers at the local level. When they exist, the project can also be incorporated into community or local level development plans. The engagement will involve making the case for CRRA and inviting the community as a whole to participate in open farm workshops.		
Lead farmers within focus crops and locations don't influence wider uptake of CRRA.		
Category	Probability	Impact
<u>Technical and operational</u>	<u>Low</u>	<u>Medium</u>
Description		
The project assumes that the evidence generated from the focus crops and in the target locations will have wider applicability for other agricultural systems and nationwide. However, CRRA can be very context specific and may not have wider relevance.		
Mitigation Measure(s)		
There is sufficient research that shows that CRRA in general has relevance and will provide benefits across all agricultural systems, products and locations. However, the specific CRRA practices do need to be designed with the location specific context in mind. Therefore, any evidence generated from the lead farmers will also be assessed in terms of their wider applicability to other locations and farmers. This will therefore create an accurate assessment of what can be replicated by other farmers. Similarly, some activities will be focused on CRRA in general, rather than the specific focus crop, which should help facilitate wider dissemination and influence.		
The three countries operate in silos which impedes benefits of being a regional project		
Category	Probability	Impact
<u>Technical and operational</u>	<u>Low</u>	<u>Low</u>
Description		
Most of the causal pathways within the project's Theory of Change rest on actions at the national level. However, the exchange of learning and experience between the three countries is expected to increase the effectiveness and efficiency of national delivery.		
Mitigation Measure(s)		
The Regional Coordination Committee is intended to avoid this situation. In addition, the Regional Team Leader is specifically responsible for maximizing synergies across the three countries. There will be a series of opportunities across the project duration for the three governments to also interact and engage directly		
Significant extreme weather impacts on project sites.		
Category	Probability	Impact
<u>Other</u>	<u>Medium</u>	<u>Medium</u>
Description		
It is likely that one of the project sites will experience an extreme weather event during the project duration. This would impact the lead farmers directly as well as likely delay project delivery.		
Mitigation Measure(s)		
The project will pivot and support the disaster recovery efforts as much as possible, supporting the established structures and mechanisms that exist. The emergency will likely impact the delivery timelines, but ultimately the project		

is designed to test and collect evidence on the viability of CRRA in a real life setting which includes under extreme weather conditions. Therefore, the ability of CRRA to help farmers withstand the various impacts of the event will also be carefully evaluated

AML/CFT, Prohibited Practices and Sanctions-Related Risks

Category	Probability	Impact
<u>ML/FT</u>	<u>Low</u>	Select

Potential risks related to Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT).

The SPC has adopted Financial Policies for anti-money laundering and counter-terrorism financing to prescribe the principles and minimum safeguards to protect SPC from being misused for money laundering or terrorism financing. Although the risks of money laundering and terrorism financing are considered “low” for the three countries, SPC will take steps to ensure that its funds are not used to finance any illegal acts related to money laundering or terrorism financing. The Director-General will implement a continuous risk-based approach to identify, assess and understand SPC’s money laundering and terrorism financing risks, and will take appropriate steps to mitigate those identified risks. The SPC will undertake due diligence in engagement with the development partner, supplier, implementation partner or any other entity involved in the activities of the SPC as part of Know Your Customer due diligence to ensure identity and safeguard the practices of the entity. Detailed due diligence will enable the SPC to assess and assess the risk of money laundering or terrorist financing. There are currently no international sanctions against Vanuatu, Tonga or Samoa. As for the prohibited practices, the SPC has procedures to ensure their avoidance including a whistle-blower policy. Manuals and emails for reporting of prohibited practices can be found at <https://www.spc.int/accountability>.

G. GCF POLICIES AND STANDARDS

G.1. Environmental and social risk assessment (max. 750 words, approximately 1.5 pages)

120. In developing this funding proposal, an initial risk assessment for the intended activities has been conducted as per GCF ESS requirements and following SPC's Social and Environmental Responsibility Policy, which complies with GCF ESS standards on ESS. Annex 6 - Environment and Social Management Framework - has been developed for the project and presents a detailed environmental and social risk assessment. The project activities in both Outcomes 1 and 2 are expected to be limited both in scale and risk given they focus mainly on 'soft' activities like trainings, capacity building and technical assistance. In Output 2.1, the Farmer Support Programme would promote nature based CRRA practices for improving farm and economic resilience a few of which comprise small drip irrigation systems, rainwater harvesting which have minimal adverse local impacts. The project is deemed to be in alignment with ESS category C standards.

121. For a full breakdown of assessed risks and mitigation approaches proposed for the project please refer to Annex 6, table 10. A summary of potential environmental and social risks are given below.

Environmental risks-

- Improper implementation of crop rotation or intercropping may cause nutrient build-up and pests and diseases from other crops to spread and infect more crops
- Rainwater harvesting and drip irrigation systems may create conditions that facilitate vector-borne disease spread if water storage or irrigation components are improperly maintained.
- Low-quality tunnel house cladding may deteriorate quickly under heat or heavy rain, creating additional plastic waste and reducing the effectiveness and longevity of the structure
- Small-scale installation and agricultural activities may generate minor non-hazardous waste (e.g., plastics, containers, damaged equipment), requiring proper disposal to prevent small-scale environmental impacts
- Soil and water may be at risk of contamination, however CRRA irrigation relies solely on rainwater and does not involve boreholes, wells, surface-water extraction, or use of communal water sources.

Social risks-

- Inconsistent delivery of quality engagement, grievance resolution, and environmental safeguards across different locations as exact activity sites will only be confirmed during implementation.
- Inadequate or non-inclusive engagement may result in uneven participation, reduced uptake of CRRA practices, and miscommunication of project intentions among women, youth, and other marginalised groups.
- Concerns, complaints, or SEAH-related issues may go unreported or escalate if stakeholders lack a safe, confidential, and culturally appropriate channel to raise matters during implementation.
- Non-compliance with environmental policies across Samoa, Tonga, and Vanuatu without robust ESS-specific monitoring and reporting, which may undermine harmonised safeguards compliance with GCF's RESP and SPC's SER Policy.
- Workers installing tunnel houses, rainwater harvesting, and/or drip irrigation systems may encounter OHS accidents or injuries in the regular course of work.
- Sexual exploitation, abuse, or harassment (SEAH) may occur among project workers, trainers, contractors, or facilitators during recruitment, supervision, or interactions within the project team or delivery partners.
- Small-scale installation and agricultural activities may generate minor non-hazardous waste (e.g., plastics, containers, damaged equipment), requiring proper disposal to prevent small-scale environmental impacts.
- Persons under 18 may participate in agricultural tasks as part of sociocultural norms, creating potential health and safety risks if work conditions are not appropriately safeguarded.
- Community conflicts may arise if beneficiary selection, stakeholder representation in the CRRA Working Group, or identification of farmer master trainers is perceived as unfair or exclusionary.
- Women, farmers, and community members may be excluded from the CWG, from meaningful consultations during project activities, and beneficiary lists.

- SEAH may occur towards community members during trainings, equipment delivery, or installations if project personnel or contractors misuse their positions in interactions with community members

122. **Disclosure** - As per GCF's Information Disclosure Policy, there is no advance disclosure via web posting requirement for the environmental and social safeguards related documents for Category C projects. To ensure transparency, documents have been shared with the relevant National Designated Authorities and Line Ministries ahead of submission to the GCF Secretariat. E&S impacts and risks, grievance redress mechanisms and stakeholder engagement for the project will be shared by the project PMUs to relevant stakeholders at appropriate times during implementation. This includes during the project inception phase and continued reporting to the project steering committees throughout implementation, as detailed in the Stakeholder Engagement Plan (SEP).

123. **Grievance redressal** - SPC is committed to receiving and addressing concerns or grievances from any affected persons or communities, related to the environmental and social impacts of the activities. The project has a community-, project-, AE-level GRM and will ensure GCF's IRM is available to project stakeholders. At any time, an affected member of a community may raise their concerns by bringing up the complaint during the community awareness meetings, emailing the PMU or SPC, or if no access to email then filling the complaint form and posting it to the SPC Melanesia and/or Polynesia Regional Office. To ensure grievance redress accessibility at community level, community members may submit grievances directly with their local government officer or traditional leader who in turn will forward the complaint to the project Team Leader. PMUs will inform all stakeholders of available grievance mechanisms throughout project implementation.

124. **Stakeholder engagement**- National level and community level consultations were held between February to May 2023. A full list of attendees and organisations consulted is in Annex 7 in Annex I (pages 26-33).

- The proposal has been designed in close collaboration with the MAFs and agriculture sector partners to ensure it aligns with the needs of the target beneficiaries and the national policies and regulations including those related to Environmental and Social Safeguards.
- Key women's groups and Women Affairs departments were also consulted to ensure appropriate gender mainstreaming. Annex 8: Gender Analysis and Action Plan includes a summary of the consultations and how they were integrated into project design.
- A final validation meeting was held with stakeholders on 30 June 2023 in Vanuatu, 5 July 2023 in Samoa and 31 July 2023 in Tonga. Project documentation was submitted to all participants for no objection to the proposed project. All comments were suitably addressed for the submission to the GCF secretariat.

G.2. Gender assessment and action plan (max. 500 words, approximately 1 page)

125. Annex 8 – the Gender Assessment and Action Plan – presents the gender mainstreaming exercise undertaken during the project preparation phase. The study assesses the ways in which gender intersects with climate change and disasters in rural agricultural communities in Tonga, Vanuatu and Samoa. It assesses gender roles within agricultural households and across the crop value chain vis-à-vis environmental and socioeconomic trends; control over assets and resources; the shift from subsistence to commercial agriculture; the challenges to addressing gender issues; and the entry points to empower rural women and address gender issues through CRRRA initiatives.

126. The table below summarizes the most relevant findings from the gender assessment within each country in terms of the socio-economic and cultural context for women, which explains why women have less capacity to adapt to the impacts of climate change.

Table 22: Summary of relevant gender dimensions from each country

Tonga	Vanuatu	Samoa
<ul style="list-style-type: none"> • Due to prevalent patriarchy and patrilineality women face barriers in land ownership and inheritance. 	<ul style="list-style-type: none"> • Men have control over land and natural resources, while women have access or use rights. • Less than 1 in 5 women have a bank account, and collateral/ up-front cash 	<ul style="list-style-type: none"> • Traditional beliefs and customs define women's access to land and natural resources. • Women typically engaged in family care, subsistence farming and

<ul style="list-style-type: none"> • Women’s role in the households is typically domestic work and caregiving, while men are culturally seen as the breadwinner for the family. • Women play an important but often unrecognized role within agricultural households. • Women have a lower participation rate in the formal labour sector, although active in handicrafts such as using banana leaves, including exporting to neighbouring countries. • Women are underrepresented in political decision-making, with few holding office at the national level. • There is a high prevalence of gender-based violence, including domestic violence and intimate partner violence. 	<p>requirements of financial institutions limits their access to capital. However, village micro- loans/savings schemes are widespread.</p> <ul style="list-style-type: none"> • Women’s role in the household is typically caring for the family, managing food gardens, collecting water and fishing. Women often involved in producing and selling handicraft. Women’s contribution and workload to agriculture is not typically recognized in the community/ household. • Women are not well represented in the formal private sector, but active in micro/ small enterprises such as handicrafts, food production etc. • Women’s heavy workload restricts their access to training and extension services, both of which tend to target male members of the household. • Women have very low representation in legislative and local governance. • There is a high prevalence of violence against women in the household, and inadequate redress mechanisms. 	<p>generating income through small enterprises. They play an important role in production of value-added processing of agricultural products (e.g. processing cocoa into paste, and taro into chips).</p> <ul style="list-style-type: none"> • There is poor recognition of women’s role within agricultural households, and less likely to be defined as farmers within official statistics. • There is 10% reservation for women in the national legislative assembly, but traditional village norms do not encourage women to participate in the council. • Violence against women is prevalent and even normalized within society.
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127. The project adheres to the GCF’s Gender Policy and Action Plan, SPC’s Social and Environmental Responsibility (SER) policy as well as each government’s national and international commitments to gender mainstreaming.

128. To achieve the project’s expected outcomes and ultimate goal, it will specifically address the key barriers to women’s active participation in the transition to CRRA. This includes:

- *Gendered division of roles in crop production systems:* Traditionally women have been generally primarily responsible for production of food (e.g. ‘home gardens’ in Tonga) and high-value processing and handicrafts from crop products (e.g. banana leaves) for additional income. This is changing, particularly as young men are increasingly travelling overseas for seasonal work and women are now engaged in all stages of crop production. In Vanuatu, women traditionally were not allowed to be involved in the production of consumption of kava, but now in most households every individual will have their own plot of kava and it is women who are running kava bars and stores. However, formal governance and decision-making structures, for example district level agricultural committees in Tonga, are still dominated by men.
- *Access to and control over productive resources:* Land rules differ in each country, but generally restrict women’s ownership of land. In Tonga, most land belongs to the ‘nobles’ and men can rent this land and inherent land use rights while women face great restrictions in leasing land are not entitled to own land. In Vanuatu customary laws form the basis of the relationship between people and land customary laws and it is reported that male-headed households had greater access to customary land than female-headed households. In Samoa, land and inheritance rights are guided by indigenous views on ancestral and local heritage. People who get married into a family, ‘affines’, are not always entitled to inheritances of their spouses and are seen as outsiders.
- *Access to effective agricultural extension services:* Women’s heavy workload is a key reason why they struggle to participate in trainings and opportunities offered by agricultural projects and initiatives. In addition, many assume that male members of the agricultural household are the decision-making and main farmer. There is a dedicated Women Section to the extension services in Tonga, but there are reports that these are limited to mostly subsistence crops and the same training is repeated each year. In Samoa, the government has tried but struggled to increase the number of female extension workers.
- *Lack of recognition for women’s entrepreneurial skills:* Through mostly the informal sector, women demonstrate considerable entrepreneurial capabilities, but this is not recognized within society. For example, in Tonga, women are reportedly earning considerable income from selling large banana leaves,

including through an informal export trade. This is not counted in the national accounts nor widely discussed.

- *Limited number of women farmer organisations:* There are only a small number of farmer associations or cooperatives specifically targeting female farmers.
- *Limited access to finance:* Commercial banks typically require land or other collateral to secure loans which most women cannot provide. Some of the national and development banks are offering financial products targeting women, such as the South Pacific Business Development (SPBD) which offers women's groups microfinance with 25% interest rates. There are good examples of women-owned micro-credit initiatives in each country, but it was reported that these have to be kept small to be effective and they have not been able to absorb large amounts of donor funding.

129. The project has identified the following co-benefit as a part of its Section E: Logical Framework

Co-benefit #	Indicator	Means of Verification	Baseline	Mid-term	Final	Assumptions/ Notes
Increasing the number and visibility of female agricultural leaders in the communities	% of the project's Learning Farmers which are female- led	Project reports	0	35%	50%	<i>This assumes there is sufficient interest from female farmers</i>
	% of the project's target CRRA agri-businesses that are led by females	Project reports	0	35%	35%	<i>This assumes there is sufficient interest from female -led agri businesses</i>
	% of farmers supported by the project to showcase their results and experiences at the national and regional level who are female.	Project reports	0	35%	50%	<i>This assumes there is sufficient interest from female farmers</i>

130. This co-benefit will act on the finding the women's contribution to the agricultural sector is not recognized within the community, formal private sector and local governance mechanisms. This is underutilizing their entrepreneurial and leadership capabilities and potential to drive and support the transition to CRRA.

131. The target for the proportion of Learning Farms which are female-led and the participation of women in showcasing events is more ambitious than that for the agri-businesses. This is because the project has more control over finding the 15 female-led Learning Farms in each country who will participate and encouraging them to participate in showcasing events. This will happen by engaging and working with women's groups and other community groups. The project will also make events and workshops accessible to females, recognizing their commitments and responsibilities within the home. In contrast, there are very few agri-businesses currently led by females and the project has more limited control in securing equal participation.

132. The project will operationalize gender mainstreaming throughout the project activities as per the Gender Action Plan outlined in Annex 8. This includes indicators for each activity, including the portion of women participating in governance mechanisms, such as the CRRA Working Groups, project trainings and events, and the production of gender-sensitive training curriculum and methods. In summary:

- Outcome 1: Gender mainstreaming will increase women's active participation in the institutions, policy-making process and market systems which support CRRA. This includes ensuring women are represented in the CRRA Working Group and therefore the particular needs and interests of women and girls is considered when designing the CRRA Guidelines. It will also result in female farmers being recognized for the expertise and experienced and being selected as ToT to train the Learning Farms and other farmers. Female led businesses will also be supported to expand their operations to support and sustain the transition to CRRA.
- Outcome 2: Gender mainstreaming will provide direct resilience benefits to female-run Learning Farms, through support, training and inputs to adopt CRRA and also use their own community and female networks and groups to advocate for and support the scaling-up of CRRA across the country. The particular needs and priorities of the female farmers will be incorporated into the personalized package of support provided to each Learning Farm, which will in turn inform the support and training provided to other

farmers. This outcome will also establish a new institutional mechanism for collecting resilience indicators at the farm level, which will include disaggregated data by gender and other indicators.

G.3. Financial management and procurement (max. 500 words, approximately 1 page)

133. Financial Management: SPC's Financial Management Information System (FMIS) is built upon Microsoft Dynamics NAV-based enterprise resource planning system that has been deployed to all of its regional offices, which provide SPC with financial management functionalities. Using FIMS approves the flow of financial information, supports financial monitoring and reporting, increases transparency and visibility, and strengthens internal control. SPC maintains organization wide separation of income and expenditure by donor and project so that financial and other data can be recorded, classified and summarized to facilitate internal management and external reporting requirements.
134. SPC as the Accredited Entity to the GCF will have overall responsibility for quality assurance and oversight of project implementation in accordance with its policies and procedures. In addition to this, the AE will be responsible for the financial execution of GCF funds according to SPC rules and regulations mainly contained and detailed in the SPC Handbook (including those referred to financial monitoring, audit and procurement). Oversight and quality assurance may include monitoring missions, spot checks and participation in coordination and steering committee meetings. The project will be subject to SPC's audit regime will be conducted in conformity to accepted international standards on auditing as documented in GCF accreditation processes and approval from the GCF Board. This includes the external audit and internal audit functions with oversight provided by SPC's independent Audit and Review Committee. Audits are conducted on an annual basis or on more frequent basis at the request of the SPC governing body or as specified in any legal agreements with external donors. As such, audits for this project will all be carried out in compliance with SPC audit regime and the obligations detailed in SPC's Accreditation Master Agreement as well as the Funded Activity Agreement for this project.
135. SPC applies a structured integrity due diligence process to all beneficiaries and investees, including verification of legal status, governance, financial controls, and integrity risks. As part of this process, SPC conducts an Operational Capacity Assessment supported by documentary evidence and performs checks to identify and confirm ultimate beneficial owners (UBOs). UBO and integrity information is reviewed at the time of assessment and reassessed during implementation whenever risk triggers arise. SPC maintains full due-diligence files and supporting documentation for review by GCF upon request.
136. When under implementation, financial management will remain in compliance with SPC policies and aligned with each government's public financial management rules and systems. This will support the ongoing sustainability of the project, as it will already be operating under the framework that will continue even after GCF funding stops.
137. SPC provides structured compliance-related training to all PMU staff and Executing Entities during project onboarding and inception. This includes mandatory induction sessions covering SPC and GCF compliance requirements, with modules on financial management, procurement rules, reporting obligations, Prohibited Practices, and environmental and social safeguards. These sessions are delivered jointly by SPC's Finance, Procurement, Legal, and ESS divisions and are tailored to the roles of staff, with additional targeted training provided to personnel in higher-risk functions such as finance officers, procurement officers, and field implementation teams.
138. Training is provided at project start-up and reinforced periodically through refresher sessions, virtual clinics, and on-demand technical support. Effectiveness is monitored through attendance records, completion tracking, and follow-up reviews during supervision missions and spot checks. Where gaps are identified, corrective coaching is provided. Training materials are updated as SPC policies evolve.
139. Procurement: Regional procurement undertaken by the regional PMU will follow SPC's procurement policy. National level procurement conducted through the national PMU's will follow the government specific procurement rules. A capacity assessment of each national government's financial management services has been conducted and their systems have been deemed to be in compliance with the SPC procurement

policies. A separate ledger account for GCF resources will be established in each national public financial management system to allow traceability of GCF funds. All projects funded under this ledger account will meet ESS standards of GCF and align to exclusion criteria described in Annex 6 as well as align with GCF prohibitive practices policy. The PMU Finance and Procurement Officers will ensure compliance.

140. Based on the results of the governments' capacity assessment, the SPC regional PMU will be responsible for the procurement of high-value goods and services, while the local PMUs will be responsible for lower-value purchases.

141. Regarding the Farmer Support Programme, the following conditions will be stipulated under each Letter of Agreement (LoA) between the farmer and the related executing entity:

- for the equipment provided to participating farmers, the executing entity responsible for the procurement will also be responsible for the maintenance until the project ends. Equipment will be purchased including local taxes and will be donated to the farmers at the end of the project, on the condition that they followed operation and maintenance training during project implementation and keep engaging in CRRA practices;
- for casual labour costs, a budget will be allocated to participating farmers based on their needs, expected workload, size of the farm etc. to recruit seasonal workers, in return for proof of work (employment contract and timesheets).

G.4. Disclosure of funding proposal

No confidential information: The accredited entity confirms that the funding proposal, including its annexes, may be disclosed in full by the GCF, as no information is being provided in confidence.

With confidential information: The accredited entity declares that the funding proposal, including its annexes, may not be disclosed in full by the GCF, as certain information is being provided in confidence. Accordingly, the accredited entity is providing to the Secretariat the following two copies of the funding proposal, including all annexes:

- full copy for internal use of the GCF in which the confidential portions are marked accordingly, together with an explanatory note regarding the said portions and the corresponding reason for confidentiality under the accredited entity's disclosure policy, and
- redacted copy for disclosure on the GCF website.

The funding proposal can only be processed upon receipt of the two copies above, if containing confidential information.

H. ANNEXES

H.1. Mandatory annexes

- X Annex 1 NDA no-objection letter(s) ([template provided](#))
- X Annex 2 Feasibility study - and a market study, if applicable
- X Annex 3 Economic and/or financial analyses in spreadsheet format
- X Annex 4 Detailed budget plan ([template provided](#))
- X Annex 5 Implementation timetable including key project/programme milestones ([template provided](#))
- X Annex 6 E&S document corresponding to the E&S category (A, B or C; or I1, I2 or I3):
([ESS disclosure form provided](#))
 - Environmental and Social Impact Assessment (ESIA) or
 - Environmental and Social Management Plan (ESMP) or
 - Environmental and Social Management System (ESMS)
 - Others (please specify – e.g. Resettlement Action Plan, Resettlement Policy Framework, Indigenous People’s Plan, Land Acquisition Plan, etc.)
- X Annex 7 Summary of consultations and stakeholder engagement plan
- X Annex 8 Gender assessment and project/programme-level action plan ([template provided](#))
- X Annex 9 Legal due diligence (regulation, taxation and insurance)
- X Annex 10 Procurement plan ([template provided](#))
- X Annex 11 Monitoring and evaluation plan ([template provided](#))
- X Annex 12 AE fee request ([template provided](#))
- Annex 13 Co-financing commitment letter, if applicable ([template provided](#))
- X Annex 14 Term sheet including a detailed disbursement schedule and, if applicable, repayment schedule

H.2. Other annexes as applicable

- X Annex 15 Evidence of internal approval ([template provided](#))
- Annex 16 Map(s) indicating the location of proposed interventions
- X Annex 17 Multi-country project/programme information ([template provided](#))
- Annex 18 Appraisal, due diligence or evaluation report for proposals based on up-scaling or replicating a pilot project
- Annex 19 Procedures for controlling procurement by third parties or executing entities undertaking projects financed by the entity
- Annex 20 First level AML/CFT (KYC) assessment
- Annex 21 Operations manual (Operations and maintenance)
- Annex 22 Assessment of GHG emission reductions and their monitoring and reporting (for mitigation and cross cutting-projects)⁴⁰
- Annex X Other references

⁴⁰ Annex 22 is mandatory for mitigation and cross-cutting projects.

** Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.*

No-objection letter issued by the national designated authority(ies) or focal point(s)



MINISTRY OF METEOROLOGY,
ENERGY, INFORMATION, DISASTER
MANAGEMENT, ENVIRONMENT,
CLIMATE CHANGE AND
COMMUNICATIONS (MEIDECC)
NUKU'ALOFA, TONGA

Ref: DCC/10/25

Date: 18 November, 2025

To: The Green Climate Fund ("GCF")

**Re: No-objection letter in respect of the funding proposal titled
"Establishing Climate Resilient, Regenerative Agricultural (CRRRA)
systems in Tonga, Vanuatu and Samoa" submitted by the Pacific
Community.**

Dear Madam, Sir,

We refer to the funding proposal titled "*Establishing Climate Resilient, Regenerative Agricultural (CRRRA) systems in Tonga, Vanuatu and Samoa*," submitted by the Pacific Community (SPC) to us on 31 October 2025 (the "**Proposal**").

The undersigned is the duly authorised representative of the Ministry for Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC), the national designated authority of Tonga.

Pursuant to GCF Decisions B.08/10, B.37/22, and B.41/02, the content of which we acknowledge to have reviewed, in my capacity as representative of the national designated authority, we hereby communicate our no-objection to the Proposal.

By communicating our no-objection, it is implied that:


- (a) The government of Tonga has no objection to the Proposal; and
- (b) The Proposal is in conformity with the national priorities, strategies and plans of Tonga.

We also confirm that our national process for ascertaining no-objection to the Proposal has been duly followed.

Notwithstanding the foregoing, we expect SPC to take the necessary measures to ensure that the project as described in the Proposal is implemented in a manner consistent with applicable national laws.

We acknowledge that this letter will be made publicly available on the GCF website

Yours Sincerely,


.....
Mr. Sione 'Akauola
GCF NDA and CEO for MEIDECC
TONGA.



GOVERNMENT OF THE
REPUBLIC OF VANUATU MINISTRY
OF CLIMATE CHANGE
ADAPTATION, METEOROLOGY,
GEO-HAZARDS, ENVIRONMENT &
ENERGY & NDMO
PMB 9074, PORT VILA
VANUATU



GOUVERNEMENT DE LA
RÉPUBLIQUE DE VANUATU
MINISTÈRE DE L'ADAPTATION AU
CHANGEMENT CLIMATIQUE, LA
MÉTÉOROLOGIE, LES RISQUES
GÉOLOGIQUES, ENVIRONNEMENT &
ENERGIE & NDMO
SPR 9074, PORT-VILA, VANUATU

TEL : (678) 22068

FAX : (678) 22068

Ref: MoCC/NAB Sec/DG/GCF/011225#3

To: The Green Climate Fund ("GCF")

Port Vila, 01/12/25

Re: No-objection letter in respect of the funding proposal titled "Establishing Climate Resilient, Regenerative Agricultural (CRRA) systems in Tonga, Vanuatu and Samoa" submitted by the Pacific Community

Dear Madam, Sir,

We refer to the funding proposal titled "*Establishing Climate Resilient, Regenerative Agricultural (CRRA) systems in Tonga, Vanuatu and Samoa*" in Tonga, Vanuatu and Samoa submitted by the Pacific Community (SPC) to us on 31 October 2025 (the "**Proposal**").

The undersigned is the duly authorised representative of the Ministry of Climate Change Adaptation, Meteorology & Geo-Hazards, Environment, Energy and Disaster Management (MoCC), the national designated authority of Vanuatu.

Pursuant to GCF Decisions B.08/10, B.37/22, and B.41/02, the content of which we acknowledge to have reviewed, in my capacity as representative of the national designated authority, we hereby communicate our no-objection to the Proposal.

By communicating our no-objection, it is implied that:


- (a) The government of Vanuatu has no objection to the Proposal; and
- (b) The Proposal is in conformity with the national priorities, strategies and plans of Vanuatu.

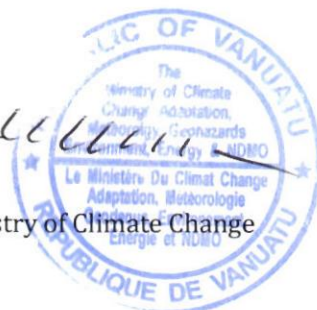
We also confirm that our national process for ascertaining no-objection to the Proposal has been duly followed.

Notwithstanding the foregoing, we expect SPC to take the necessary measures to ensure that the project as described in the Proposal is implemented in a manner consistent with applicable national laws.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,


David Gibson
GCF NDA for Vanuatu
Director General, Ministry of Climate Change



Please address all correspondence
To the Chief Executive Officer

In reply, please quote the file reference

File ref:



GOVERNMENT OF SAMOA
MINISTRY OF FINANCE

12 January 2026

Ms. Mafalda Duarte
Executive Director Green Climate Fund
Songdo International Business District
175 Art Center-daero
Yeonsu-gu, Incheon 22004

Re: No-objection letter in respect of the funding proposal titled “Establishing Climate Resilient, Regenerative Agricultural (CRRA) systems in Tonga, Vanuatu and Samoa” submitted by the Pacific Community.

With respect, we refer to the programme titled *Establishing Climate Resilient, Regenerative Agricultural (CRRA) systems in Tonga, Vanuatu and Samoa* as per the funding proposal submitted by Pacific Community (SPC) to us on 5 January 2026 (the “Proposal”).

The undersigned is the duly authorised representative of Ministry of Finance, the **national designated authority** of Samoa.

Pursuant to GCF Decisions B.08/10, B.37/22, and B.41/02, the content of which we acknowledge to have reviewed, in my capacity as the National Designated Authority for the Government of Samoa, I hereby communicate our no-objection to the Proposal.

By communicating our no-objection, it is implied that:

- a. The Government of Samoa has no objection to the Proposal; and
- b. The Proposal is in conformity with the national priorities, strategies and plans of the Government of Samoa.

We also confirm that our national process for ascertaining no-objection to the **Proposal** has been duly followed.

Notwithstanding the foregoing, we expect SPC to take the necessary measures to ensure that the **project** as described in the Proposal is implemented in a manner consistent with applicable national laws.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,


Saoleititi Maeva Betham – Vaai
CHIEF EXECUTIVE OFFICER

Secretariat’s assessment of FP295

Proposal name:	Establishing Climate Resilient, Regenerative Agricultural (CRRA) systems in Tonga, Vanuatu and Samoa
Accredited entity:	Pacific Community (SPC)
Countries:	Tonga, Vanuatu and Samoa
Programme size:	Small

I. Overall assessment of the Secretariat

1. The funding proposal is presented to the Board for consideration with the following remarks:

Strengths	Points of caution
The programme contains a package of measures to strengthen the enabling environment and knowledge base for climate-resilient and regenerative agriculture, combined with a value-chain approach to improve on-farm practices, support the high initial capital costs, encourage business planning, and foster learning for a sustained long-term transition in farming methods and livelihood.	Technical assistance support requires sustained engagement with farmers, input providers, extension workers, non-farming households and financiers (including development banks). Low uptake during early phases of the programme will reduce the impact of programme and will need to be managed.
There is strong support from the national governments and implementing entities (including ministries of finance and ministries of agriculture). The programme is anchored in the national adaptation plans and agricultural policies of each host country.	Risks include personnel challenges to staff, extensive training programmes, and potential changes in governments and support for climate-resilient, regenerative agricultural (CRRA) practices amid other priorities at ministries of agriculture.
The regional approach will enhance lessons and cross-fertilization of learning through simultaneous implementation and feedback loops between the countries and regional oversight mechanisms.	

2. The Board may wish to consider approving this funding proposal in accordance with the terms listed in the term sheet agreed between the Secretariat and the accredited entity (AE) and, if considered appropriate, subject to the conditions set out in annex II of document GCF/B.44/02.

II. Summary of the Secretariat’s assessment

2.1 Programme background

3. Tonga, Vanuatu and Samoa face growing risks from climate change, particularly through rising sea levels, decreasing rainfall, more intense storms and increasing temperatures, which are projected to reduce agricultural production. The impacts of climate change are exacerbating baseline land degradation; threatening the food security and livelihoods of rural communities in Tonga, Vanuatu and Samoa; and negatively impacting their economies. Furthermore, the majority of the populations of Tonga, Vanuatu and Samoa are engaged in small-scale agriculture, growing crops for subsistence as well as for domestic and international markets.
4. These climate impacts are projected to reduce agricultural production by increasing soil erosion and agricultural drought, increasing heat stress, reducing freshwater availability because of saltwater intrusion, and enabling the increased spread of pests and diseases.
5. To address the escalating climate risks and reduce the vulnerability of rural communities, the proposed programme comprises two interlinked activities intended to strengthen the enabling environment with hands-on technical support. This will foster the transition from conventional to CRRA practices. Through these practices, the delivery of agricultural ecosystem services will be enhanced and dependence on external inputs will be reduced.
6. The key focuses of the programme are to enhance the resilience of local food production so as to help farming systems adapt to and recover from the impacts of climate change; catalyse a shift to CRRA; and build the adaptive capacity of smallholder farmers, the land and ecosystems in Tonga, Vanuatu and Samoa.
7. The approaches include, firstly, strengthening the enabling environment via cross-sectoral capacity and partnerships for the adaptive implementation of CRRA practices in addition to introducing policy enablers and enhancing markets to promote and incentivize CRRA initiatives. Secondly, the programme will invest in practices, systems and technologies for CRRA adoption, through training, demonstration farms and farmer support programmes in addition to monitoring, evaluation and knowledge systems for continuous learning and improvement of CRRA practices.
8. The programme addresses three principal barriers: (a) farmers' lack of understanding of appropriate CRRA solutions; (b) farmers' reluctance to use new farm inputs, given the high upfront labour and capital costs, the likelihood of a short-term yield decline following adoption, and insufficient evidence of cost benefits; and (c) capacity and resource gaps at ministries of agriculture regarding promoting CRRA due to the absence of factors such as baseline data, monitoring data, indicators, and policy enablers and incentive mechanisms for CRRA adoption. The assessment finds that the barrier analysis is robust and the programme activities are well designed to offer a broad-based approach that mixes an enabling environment, capacity-building, investment and knowledge levers to bring about a systemic shift in CRRA practices that is owned and implemented by national actors as well as regional coordination mechanisms.
9. The programme targets three GCF adaptation results areas (ARAs): increased resilience of the most vulnerable people and communities (ARA 1); increased resilience of health and well-being, and food and water security (ARA 2); and ecosystems and ecosystems services (ARA 4).
10. The environmental and social safeguards (ESS) category for this programme is C (low).
11. The programme is seeking USD 42,056,443 in grants from GCF for a total programme cost of USD 43,690,708, inclusive of co-financing from the AE and executing entities (EEs) as described below. The programme intends to allocate roughly equal amounts in funding to each of the countries (Tonga, Vanuatu and Samoa) and will engage national ministries, particularly ministries of agriculture, in the delivery of extensive capacity-building activities.
12. The funding proposal has been developed with technical assistance support to the Pacific Community (SPC) from the GCF Project Preparation Facility.

2.2 Component-by-component analysis

13. The programme has two mutually reinforcing outcomes, as described below.

Outcome 1: Enabling Environment strengthened for the transition to CRRA (total cost: USD 11.1 million; GCF cost: USD 10.7 million)

14. Through this outcome, the programme will support the policies, institutions, market systems and evidence base needed to foster and sustain a widespread transition to CRRA across the agricultural systems of the three countries.

(a) Output 1.1: Cross-sectoral capacity and partnerships for the adaptive implementation of CRRA practices:

- (i) Activity 1.1.1: Establish and sustain national CRRA Muti-Stakeholder Working Groups;
- (ii) Activity 1.1.2: Working Groups co-design context-specific CRRA principles and practices; and
- (iii) Activity 1.1.3: Develop and implement training of trainers (ToT) programme on CRRA;

(b) Output 1.2: Markets enhanced to promote and incentivize CRRA initiatives:

- (i) Activity 1.2.1: Support farmers to develop viable business plans for adoption and marketing of CRRA practices;
- (ii) Activity 1.2.2: Support agri-businesses to develop viable business plans for provision of CRRA related inputs and services; and
- (iii) Activity 1.2.3: Technical assistance to the Ministries of Agriculture to design policy enablers to encourage the adoption of CRRA and reform project and subsidies which disincentivize CRRA.

Outcome 2: Practices, systems and technologies adopted for CRRA (total cost: USD 29.1 million; GCF cost: USD 28.4 million)

15. This outcome will support food-crop-producing smallholder farmers to understand, adopt, monitor and evaluate the benefits of CRRA practices. It will also establish and operate a Farmer Support Programme to provide tools, equipment and technologies and alleviate the upfront cost of adopting CRRA practices. Additionally, it will intensively target “learning farms” to field-test innovations and provide a demonstration base for wider replication across farmers through a peer-to-peer learning approach. Finally, activities will directly target knowledge dissemination (including via cellular phone applications), baseline assessments, indicators and monitoring systems to ensure the long-term spread of CRRA practices.

(a) Output 2.1: CRRA systems established through training, demonstration and farmer support:

- (i) Activity 2.1.1: Engage with local government and Chiefly structure and integrate project activities within community and provincial development plans as appropriate;
- (ii) Activity 2.1.2: Implement training programmes for farmers on CRRA practices, systems and technologies;
- (iii) Activity 2.1.3: Develop and operationalize a Farmer Support Programme (FSP) for CRRA; and
- (iv) Activity 2.1.4: Facilitate active peer-to-peer learning to promote wider adoption and replication of CRRA practices;

- (b) Output 2.2: Knowledge management, monitoring and evaluation system established for continuous learning and improvement of CRRRA practices:
- (i) Activity 2.2.1: Develop and disseminate knowledge products to promote wider adoption and replication of CRRRA practices;
 - (ii) Activity 2.2.2: Further develop and support the roll-out of farmer apps;
 - (iii) Activity 2.2.3: Develop sustainable national monitoring systems for climate resilience and regeneration of agricultural systems; and
 - (iv) Activity 2.2.4: Document and share learning from the project to wider communities of practice in the region.

Programme-level monitoring and evaluation systems (total cost: USD 1.1 million; GCF cost: USD 1.1 million)

16. This cost will cover the relevant activities required to monitor and evaluate the programme's progress towards the targets set out in the logical framework. The cost is 2.5 per cent of the total programme cost.

Project management (total cost: USD 2.2 million; GCF cost: USD 1.8 million)

17. Project management units (PMUs) will be established at the regional level and within each ministry of agriculture. The regional PMU within the SPC Land Resources Division will coordinate and oversee delivery across the three countries. The cost is 5 per cent of the total programme cost.

III. Assessment against investment criteria

3.1 Impact potential

18. The programme will directly benefit 8,874 farmers supporting 50,654 smallholder farmers, which equates to 8 per cent of the total population of Tonga, Vanuatu and Samoa. The programme will also indirectly benefit 219,639 individuals by enhancing food security through CRRRA. The programme expects to target 20,730 hectares of agricultural land (representing 13 per cent of the total agricultural land of the three countries) with improved practices over its lifetime.

19. The programme will rely on a large-scale investment in improving the enabling environment, training and outreach, and on-farm investment and peer-to-peer learning to achieve a strong impact across the population and across value chains for crops grown by smallholder farmers for domestic consumption and for sale in local markets. With an assumption that 70 per cent of farmers will adopt CRRRA practices, the programme may be conservative in its intended impacts. However, given the moderately high cost per direct beneficiary (see para. 34), the Secretariat's assessment of the impact potential of the programme is medium. The programme admittedly will deliver benefits over the longer term, particularly in later years, once CRRRA practices are accepted and mainstreamed.

20. The programme also has the potential to yield gender, livelihood, mitigation, ecosystem and other co-benefits, which may be realized in the longer term and are in addition to the direct impacts as stated.

3.2 Paradigm shift potential

21. This will be the first large-scale demonstration of the viability of CRRA in Pacific Islands and will provide a vital evidence base to influence scaling-up across the region. Such practices are not new. They mostly build on the traditional systems of these countries, including intercropping, agroforestry and letting the soil recover, which are being slowly lost in the trend towards intensive cash-crop production. However, CRRA practices have to date not been applied as a package at a large scale in the Pacific.

22. The programme will catalyse a transition to CRRA in Tonga, Vanuatu and Samoa. It will take a holistic approach to strengthening the resilience of agricultural systems in these countries by building the adaptive capacity of farmers and households as well as the land and ecosystem which they depend on. It will also incorporate accepted resilience practices (such as micro-irrigation and rainwater harvesting) and will strengthen the financial coping mechanisms of households. In this way, the programme will lead to direct resilience benefits for the farmers supported to identify and adopt relevant CRRA practices, but it will also evaluate and document the costs and benefits of CRRA in real-life settings and provide the vital evidence base to influence scaling-up across the Pacific region.

23. The programme will engage the domestic financial sector in each country to promote a paradigm shift and sustainability after the implementation period. The Tonga Development Bank, the Vanuatu Rural Development Bank and the Development Bank of Samoa will participate in some activities, such as CRRA working groups, training-of-trainers programmes and development of business plans for farmers. This will lead to an exploration of post-programme financing pathways for CRRA upscaling. Moreover, a target fund mobilization of USD 500,000 at the end of the programme has been added to ensure that the programme keeps track of the funds unlocked for farmers as a result of business planning, CRRA training, assessment of opportunities for non-grant financing, and better awareness among both financial institutions and farmers of their options for financing continued CRRA practices.

24. The programme will not just rely on a single stakeholder, such as farmers, but will rather utilize and strengthen a wide variety of communication channels with farmers, including government extension workers, farmer associations and the private sector. The programme will support the governments and the development banks under the technical assistance component to identify opportunities to further increase access to finance for CRRA adoption and, when relevant, design new financing mechanisms. Additionally, the development banks will be part of a working group to develop a strategy and involved in the development of a strategy to scale up for the longer term after the programme has ended. This will provide a clearer exit strategy and sustainability beyond the period of grant availability, and domestic actors and funding sources will be actively engaged during programme implementation.

3.3 Sustainable development potential

25. The programme will contribute to several Sustainable Development Goals (SDGs), namely SDG 1 (end poverty in all its forms everywhere), SDG 2 (end hunger, achieve food security and improved nutrition and promote sustainable agriculture), SDG 5 (achieve gender equality and empower women and girls), SDG 6 (ensure availability and sustainable management of water and sanitation for all), SDG 13 (take urgent action to combat climate change and its impacts) and SDG 15 (protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat diversification, and halt and reverse land degradation and halt biodiversity loss).

26. The programme's co-benefits will include enhancing soil health (leading to carbon capture) and increasing the number of female agricultural leaders. In addition, the programme may have an impact on access, affordability and the quality of nutrition available in the three countries through targeting smallholders' ability to produce locally grown foods and improving

livelihoods via the ability to sell excess crops on local markets. Moreover, nutrition may be improved, reducing consumption of processed, low-quality, imported food.

3.4 Needs of the recipient

27. The three program countries face high climate vulnerability and extreme climate events that affect food security and agriculture. There is a clear need for additional climate finance to tackle the impacts of climate change in Tonga, Vanuatu and Samoa. The Pacific Island countries in general face a large climate finance gap, with the average additional annual spending need estimated at 6.5–9 per cent of gross domestic product.

28. The programme is designed to put agricultural households – and their particular vulnerabilities, interests and capacities – at its heart. It will address the primary climate impacts already present in each country. Crop production in all three countries relies on seasonal rainfall, which determines crop cycles. In Tonga, during dry periods commercial farmers currently use groundwater to irrigate their crops, increasing the risk of competition for groundwater between domestic and agriculture uses. The increasingly erratic trends in rainfall are affecting productivity and raising issues with pests, disease and fungus.

29. Temperature rises are threatening the viability of crops. Scientific research has shown the limits of plants' tolerance to higher temperatures. For example, field trials show that yields of taro reduce by an average of 9.6 tonnes per acre for each temperature increase of 3 °C. Furthermore, tropical cyclones and the accompanying heavy winds, rainfall and storm surges are destroying agricultural crops, farm buildings and fences, and these incidents will worsen over time. Cyclone Harold hit the main agricultural production areas in Vanuatu in 2020, affecting 160,000 people and severely damaging 60 per cent of croplands, including causing losses of crops for exports and households' stored crops and seeds. Finally, marginal areas of farmland on the coast are expected to experience higher moisture and increased salinization due to inundation or flooding, reducing their suitability for agriculture.

30. The ministries of agriculture and finance of the three countries are facing challenges in securing additional climate finance from their own sources to tackle the adverse impacts of climate change. Furthermore, they face constraints around accessing non-grant instruments (such as loans or equity) for climate change adaptation due to their financial capacity. Additionally, farmers in the three countries are not capable of attracting non-grant instruments because the size of their economic activities is limited. The International Monetary Fund and World Bank Low-Income Country Debt Sustainability Analysis rates Tonga and Samoa at a "high risk" of debt distress, and Vanuatu at a "medium risk". Therefore, the fiscal needs of the recipients are considered to be high.

31. The selection of CRRAs practices that will be offered is based on a careful consideration of the current adaptive capacity of agricultural households in the three countries. In particular, the selection has taken note of the trend towards intensive land-management practices, which are contributing to the overuse of natural resources and the loss of ecosystem services. It also reflects the changing profile of the agriculture labour force, with young men increasingly travelling to Australia and the other Pacific countries for seasonal work. This has increased the role of women in harvesting and the overall crop production system. The specific CRRAs practices will be finalized with each learning farm only after an in-depth study of the farm's current context and needs, and the capacity support will be tailored to address each farm's particular barriers to adopting CRRAs.

3.5 Country ownership

32. Tonga, Vanuatu and Samoa all demonstrate strong country ownership of this programme through their individual national climate priorities, policies and institutional mechanisms. The programme aligns with the individual national development priorities as set out in documents relating to nationally determined contributions, country policy and strategy. Specifically, some of the key policies that support this programme include:

- (a) **Tonga:** Joint National Action Plan 2 for Climate Change Adaptation and Disaster Risk Management Tonga 2018–28, and Tonga Agriculture Sector Plan;
- (b) **Vanuatu:** Climate Change and Disaster Risk Reduction Policy 2016–30, and Vanuatu Agriculture Sector Policy 2015–30; and
- (c) **Samoa:** Samoa Food Systems Pathway 2030, and Samoa Agriculture and Fisheries Sector Plan 2022–27.

33. The programme was designed through consultations involving multiple stakeholders, such as farmers' associations, civil society groups and women's groups. Moreover, the programme will be implemented together with national EEs, and national stakeholders will be part of the CRRA working groups, national PMUs and advisory bodies. The respective national designated authorities of Tonga, Vanuatu and Samoa will be closely engaged in the programme's implementation, ensuring a feedback loop to the countries' reporting under United Nations Framework Convention on Climate Change commitments and climate financing inflows over the programme's lifetime.

3.6 Efficiency and effectiveness

34. The programme has a medium rating for efficiency and effectiveness due to the direct cost per beneficiary of USD 830 and the cost of USD 2,119 per hectare of land restored or improved via CRRA practices. These costs are a function of the moderate reach of the programme – to 8 per cent of the total population (see para. 18) – and the high cost of access and delivery of the programme activities at the farm level in the islands in Tonga, Vanuatu and Samoa that will be the focus islands or learning farms.

35. The economic and financial assessment of the programme provides a positive assessment of its positive impacts, particularly in later years, once the CRRA practices have taken hold and started to show impacts at the farm level. The estimated economic internal rate of return is 55 per cent within the lifetime of the programme. The funding proposal models the impacts of six interventions and finds positive net present values for all modelled activities. The economic efficiency of the programme will be more accurately assessed once on-farm needs and practices have been examined during implementation; this assessment will support the rationale for the adoption, scale-up and replication of CRRA practices.

36. While the expected positive returns do call into question the necessity of a fully grant-funded Farmer Support Programme, the provision of such funding takes into account the high upfront capital costs of adopting CRRA, which may discourage farmers without a clear demonstration of impact. To discourage overuse of the Farmer Support Programme, the Secretariat has capped contributions at USD 10,000, with a minimum 20 per cent contribution from farmers and clearly defined eligibility criteria for farmer selection and the types of interventions and equipment to be funded.

37. The programme will result in a range of economic and financial benefits and co-benefits, including improved livelihoods, health, well-being, food and water security, as well as ecosystem and ecosystem services benefits. The programme is conservative in its estimates and targets a 70 per cent rate of adoption of CRRA techniques among farmers, which may be exceeded in the 20-year lifetime of the programme. The programme also considers as a co-

benefit the 20,730 hectares of land that will be restored or improved, but it does not factor in the greenhouse-gas mitigation from increased soil carbon storage or reduced deforestation.

IV. Assessment of consistency with GCF safeguards and policies

4.1 Environmental and social safeguards

38. The programme is categorized as C for environmental and social risks and impacts, in accordance with the GCF revised Environmental and Social Policy, the AE accreditation level and the simplified approval process requirements. Most of the programme's activities involve capacity-building, knowledge management, and monitoring and evaluation (M&E). However, there will be some small-scale works and equipment installations (rainwater-harvesting and drip-irrigation systems, tunnel houses, etc.) and CRRA demonstration sites will be established, and these activities may entail minimal environmental and social risks and impacts. The key (low) risks include small amounts of waste generation, occupational health and safety issues, improper crop rotation or integrated pest management application, vector-borne diseases from rainwater storage, labour issues, and exclusion of women and other community members from community engagement. Such risks can be readily addressed with routine management and mitigation. Given that the specific locations of activities were not identified at the funding proposal preparation stage, an environmental and social management framework (ESMF) was prepared to describe the potential risks and impacts and corresponding mitigation measures (as outlined in the "Environmental and Social Action Plan." The ESMF also provides guidance on screening for and managing the potential minimal environmental and social risks and impacts during implementation. The screening procedure is supplemented by exclusion criteria to ensure that supported activities do not go beyond the minimal level of environmental and social risk. Land acquisition and involuntary resettlement are not anticipated to be triggered as activities will be undertaken in farmers' existing agricultural lands and site selection will be done in consultation with participating farmer beneficiaries. Works in environmentally and culturally sensitive areas will be avoided. The implementation of the ESMF will be overseen by the ESS/Gender and Social Inclusion Expert within the regional PMU. The ESS/Gender and Social Inclusion Expert will also provide environmental and social safeguards capacity-building to their national PMU counterparts. A stakeholder engagement plan has been developed that includes a summary of consultations undertaken during programme design and preparation, and a plan for further stakeholder engagement during programme implementation. The programme-level grievance redress mechanism (GRM) will be further refined at inception stage to incorporate stakeholder views at the community level. As described in the ESMF and the stand-alone stakeholder engagement annex of the funding proposal, GRMs will be disseminated to stakeholders during implementation, to include mechanisms at the community, programme and entity levels as well as the GCF Independent Redress Mechanism.

39. **Sexual exploitation, abuse and harassment (SEAH):** The GCF revised Environmental and Social Policy (adopted by decision B.BM-2021/18) requires safeguarding from SEAH in GCF-financed activities. The AE provided information on SEAH safeguarding in its submission to this funding proposal. In this programme, SEAH risks are associated with activities that involve engaging with community members – for example, training the trainers of farmers, working with smallholder farmers, including in peer-to-peer learning and community groups, offering capacity-building for farmer cooperatives and extension workers, and installing equipment. Contextual risk factors include patriarchal social norms, cultural acceptance, limited redress for survivors, potentially remote locations and limited reporting. Mitigation measures proposed for the SEAH risks are included in the programme's ESMF. They include training EEs, programme workers (e.g. consultants) and community members; implementing the AE code of conduct, which includes SEAH; and raising awareness of SEAH among community members. As

mentioned, a programme-level GRM will be established to address complaints from stakeholders during implementation. The AE institutional-level GRM will be available to complainants, and its contact details are included in the ESMF. Complaints may also be received by the GCF Independent Redress Mechanism. The AE will endeavour to ensure the provision of information regarding referral pathways and coordinate support for medical services, including psychosocial support, legal counsel, community-driven protection measures and reintegration of survivors. The AE will do this by supporting its EEs and PMUs to ensure that survivors are able to access the support they need through the most efficient and relevant local pathways. The AE will also ensure that SEAH mitigation measures are reviewed and monitored throughout implementation for their effectiveness, including accessibility of reporting mechanisms, and will ensure that remedial action is taken to address identified issues. Reports will be published for stakeholders during the implementation of the programme.

40. **GCF Indigenous Peoples Policy and ESS 7 (Indigenous Peoples):** Consistent with the programme's categorization as category C, the funding proposal activities are assessed as low risk for Indigenous Peoples as per the GCF Indigenous Peoples Policy. Stakeholder engagement and consultations have been integral to programme preparation, with broad community support confirmed during programme design. All activities will occur through voluntary participation in existing farmer plots and within existing customary systems and will not require land acquisition, involuntary resettlement or land-use conversion. The programme is designed to respect and promote the rights and cultures of Indigenous Peoples, supporting inclusive participation and culturally appropriate benefits. In line with their roles and functions, the members of the Indigenous Peoples Advisory Group are available to provide advice to the AE and EEs. In line with the GCF Indigenous Peoples Policy, the GCF Indigenous Peoples Focal Point will be available for assistance at any stage, including before a claim has been made.

4.2 Gender policy

41. The AE provided a gender assessment and gender action plan (GAP) with the funding proposal and complies with the requirements of the GCF updated Gender Policy. The assessment outlines the socioeconomic and gender baselines in the three countries participating in the programme. It examines the marginalization of women in the agricultural sector and how they are disproportionately affected by climate. Women's central role in agriculture is demonstrated by their significant involvement in subsistence farming, market gardening of fruits and vegetables, and small-scale retail trading of surplus food, which generates income for rural women. Nevertheless, their role in agriculture is undermined by limited access to productive resources such as land, finance, technology and extension services, and lack of acknowledgement of their skills. This in turn constrains their capacity to adapt to climate change effects. Furthermore, climate-induced disasters negatively impact their agricultural livelihoods and add to the burden of caregiving (both during and after such events). Women's vulnerabilities are compounded by factors such as age, disability and household headship.

42. The programme will address some of these issues by involving women in community-level consultations; offering capacity-building for farmers to develop viable business plans, including considering specific knowledge gaps of female-owned agri-businesses and developing skills that help to improve their farming livelihoods; providing packages that include technical support through learning farms as well as those led by women; and making available support with inputs for climate-resilient agriculture to address issues identified in the gender assessment relating to lack of access to productive resources. The GAP includes activities, indicators with baselines and cumulative sex-disaggregated targets, timelines, and responsibilities for implementation. The AE is advised to develop gender analyses and GAPs at the country or project level that will be implemented by the local PMUs and include additional

qualitative indicators in the GAP that reflect intended outcomes as well as targets for vulnerable groups identified in the gender assessment.

4.3 Risks

4.3.1. Overall programme assessment (medium risk)

43. The programme aims to demonstrate the viability and benefits of CRRA for smallholder farmers producing food crops for the local market through the piloting of Focus food crop systems in each country, using training, peer-to-peer learning and knowledge dissemination to provide evidence of financial and other benefits to support scaling up. GCF is requested to provide a full grant of USD 42 million. SPC and the national governments of Tonga, Vanuatu and Samoa are contributing co-financing of USD 1.63million in the form of in-kind contributions to the programme.

4.3.2. Accredited entity/executing entity capability to execute the current programme (medium risk)

44. The AE has a track record in implementing climate change adaptation projects in the countries in the Pacific region and has the dedicated expertise to execute the programme through its Land Resources Division. SPC has a dual role as the AE and EE. In addition, the programme will engage various national ministries of the Government of Tonga, the Government of Vanuatu and the Government of Samoa as EEs.

45. The procurement policies of SPC have been reviewed pursuant to the requirements of GCF for accreditation master agreements (AMAs) and it has been determined that SPC is able to manage these arrangements on terms consistent with its AMA. This is the first GCF-funded multi-country programme focusing on regenerative agriculture in the Pacific region. It is also positive to see the intensive engagement of the ministries of finance and ministries of agriculture in the design of the programme and in its implementation through membership of CRRA working groups, advisory bodies, and regional and national PMUs.

4.3.3. Programme-specific execution risks (medium risk)

46. All three target countries are politically and economically stable, but a change of government could delay disbursement and implementation. Following any change in government that could affect the programme's implementation, the AE is required to assess the extent of the impact and report to GCF.

47. It may take time to procure the qualified and high-quality experts needed to deliver the programme at the country level because national experts are commonly attracted by positions abroad. This could delay initialization of the programme, which would impact the implementation plan. The AE is responsible for making sure that the regional PMU has an extensive team, as this team will help to train and support the national PMUs and individual experts and build national expert capabilities for smooth initialization and delivery of the programme.

4.3.4. Compliance risk (medium risk)

48. The programme has a decentralized, grant-based fiduciary structure, with GCF proceeds flowing from SPC to national reserve banks and onward to ministries of agriculture acting as co-EEs. The exclusive use of grants (without loans or equity) and the reliance on national public financial management systems reduce the inherent financial integrity risks. However, the multi-country and multi-entity implementation model introduces compliance risks related to

coordination, consistency of controls and oversight across jurisdictions, particularly in relation to procurement, beneficiary support mechanisms and third-party engagement.

49. Mitigation measures are anchored in the SPC fiduciary, anti-money-laundering and countering the financing of terrorism (AML/CFT), and prohibited practices framework. SPC applies a continuous, risk-based AML/CFT approach, including know-your-customer due diligence for development partners, grantees, beneficiaries and vendors. It has confirmed that no United Nations Security Council-listed individuals or entities are involved in the programme activities. Operational capacity assessments will be conducted for all prospective grantees to inform proportionate risk mitigation measures and grant conditions. SPC applies strict vendor management procedures, including mandatory registration, due diligence, conflict-of-interest declarations, counter-terrorism financing checks and performance monitoring. Financial management will be supported by the SPC financial management information system (FMIS), segregation of GCF resources within national ledger systems, regular monitoring missions, spot checks, and internal and external audits. PMU staff and EEs will receive structured compliance-related training covering financial management, procurement, prohibited practices and safeguards.

50. Residual compliance risks remain due to the decentralized execution model and the reliance on national systems and partners to consistently apply SPC and GCF requirements throughout implementation. Nonetheless, the established AML/CFT policies, due diligence processes, vendor controls, audit regime, grievance mechanisms, and compliance training substantially mitigate the likelihood of prohibited practices occurring and their impacts if they do. Overall, the residual compliance risk is assessed as medium, which is considered acceptable given the programme’s design and controls and the oversight role of SPC as AE.

4.3.5. GCF portfolio concentration risk (within monitoring threshold)

51. In case of approval, the impact of this proposal on the GCF concentration risk remains within the monitoring thresholds of the Risk Appetite Statement in terms of results areas, single proposal and AE concentration.

Summary risk assessment	
Overall programme	Medium
Accredited entity/executing entity capability	Medium
Programme-specific execution	Medium
Compliance	Medium
GCF portfolio concentration	Within monitoring threshold

4.4 Fiduciary

52. The AE retains overall responsibility for financial management, quality assurance and oversight, supported by the regional PMU and national PMUs. GCF proceeds will be transferred to SPC and then to each national reserve bank under subsidiary arrangements, with tranche releases linked to endorsed workplans and budgets and to utilization conditions, including the 70 per cent cumulatively committed and spent threshold for subsequent tranche releases. Financial management relies on the AE FMIS and national public financial management systems, with resources tracked separately by donor and Funded Activity, semi-annual financial reporting, and audits in line with the SPC audit regime, the AMA and the funded activity agreement. Procurement responsibilities are split between the regional PMU (for higher-value

packages, under the SPC procurement policy) and national PMUs (for lower-value packages, under national rules), with SPC oversight of compliance.

4.5 Results monitoring and reporting

53. **Results framework and tracking:** The proposal presents a well-structured results framework aligned with the GCF Integrated Results Management Framework. It includes clear links between outcomes, outputs and indicators, covering core and supplementary adaptation indicators such as beneficiaries reached, food security improvements and hectares under climate-resilient management. Targets are quantified and disaggregated by country and gender, which strengthens accountability and inclusivity. However, some assumptions – such as rates of adoption of CRRRA practices – will require close monitoring to validate feasibility.

54. **Indicator robustness and data systems:** A notable strength of this multi-country programme is the integration of national data systems for farm-level resilience indicators, which supports sustainability, country ownership and alignment with country reporting obligations. The plan to establish new monitoring protocols and a farm-level data management system is forward-looking and will enhance the credibility of reported results. Risks include potential delays in operationalizing these systems and ensuring interoperability with existing national platforms, which could affect timely reporting.

55. **Monitoring and evaluation design:** The M&E plan is comprehensive, combining participatory monitoring with independent evaluations at midterm and at the end of the programme. It adopts mixed-method approaches and emphasizes adaptive management through regular reflection points and learning workshops. Dedicated M&E officers in each country and a regional Evidence, Evaluation and Learning Specialist will provide strong institutional capacity for implementation.

56. **Learning and accountability mechanisms:** The plan prioritizes learning and knowledge dissemination, including farmer-led exchanges, national workshops and regional knowledge products. This approach reinforces the programme's theory of change by promoting replication and scaling. Accountability pathways are clearly defined at both project and national level, ensuring compliance with investment criteria and integration into national climate reporting systems.

57. **Overall observations:** The results framework and M&E plan are strong and well aligned with GCF standards, offering clear pathways for tracking progress and generating evidence for scaling. Key risks relate to the timely establishment of monitoring systems and maintenance of data quality across multiple countries. Continued emphasis on adaptive management and stakeholder engagement will be critical to achieving the intended outcomes and sustaining impact beyond the programme's lifetime.

4.6 Legal assessment

58. The legal arrangements for the programme will be based on the accreditation master agreement between GCF and the Accredited Entity which has been signed and is effective (the "AMA"). Consequently, they will consist of a programme-specific funded activity agreement which incorporates the AMA.

59. The Accredited Entity has provided a legal opinion/certificate confirming that it has obtained all internal approvals and it has the capacity and authority to implement the programme.

60. The proposed programme will be implemented in the Republic of Vanuatu, the Independent State of Samoa and the Kingdom of Tonga (the “Host Countries”). The GCF has been granted privileges and immunities in each of the Host Countries.

61. GCF does not hold industrial property protection for its combined logo (sphere with the words “Green Climate Fund”) in the Host Countries. This means that, while industrial property protection is pending, (i) GCF’s combined logo could be used by other entities or individuals (including those seeking to impersonate GCF) and (ii) there could be legal claims by entities or individuals asserting their protected trademark, opposing GCF using its combined logo in the country. In both cases, this may lead to reputational risk.

62. To facilitate prompt implementation of the programme, it is recommended that any approval by the Board is made subject to the following conditions:

- (a) Signature of the funded activity agreement in a form and substance satisfactory to the GCF Secretariat within 180 days from the date of Board approval, or the date the Accredited Entity has provided a certificate or legal opinion confirming that it has obtained all final internal approvals, whichever is later; and
- (b) Completion of the legal due diligence to the satisfaction of the GCF Secretariat prior to the signature of the funded activity agreement.

Independent Technical Advisory Panel's review of FP295

Proposal name:	Establishing Climate Resilient, Regenerative Agricultural (CRRA) systems in Tonga, Vanuatu and Samoa
Accredited entity:	Pacific Community (SPC)
Countries:	Tonga, Vanuatu and Samoa
Project size:	Small

I. Assessment of the independent Technical Advisory Panel

1.1 Overview

1. The proposed multi-country programme entitled “Establishing Climate Resilient, Regenerative Agricultural (CRRA) Systems in Tonga, Vanuatu and Samoa” (CRAA project) is submitted by the Pacific Community (SPC) as the accredited entity (AE). The project seeks to enhance the climate resilience of smallholder agricultural systems in three small island developing States (SIDS) in the Pacific through the promotion of regenerative agricultural practices, ecosystem-based adaptation, and targeted support to enable a systems-wide shift toward climate-resilient rural development.
2. The proposal focuses exclusively on climate change adaptation and is structured around two core components:
 - (a) Component 1 aims to strengthen the enabling environment for the CRRA transition by supporting cross-sectoral institutional coordination, capacity development of agricultural extension services, and mainstreaming CRRA within national policy and regulatory frameworks; and
 - (b) Component 2 focuses on field-level implementation of CRRA systems through training, farmer support packages (FSPs), and the development of knowledge systems for continuous monitoring, evaluation and learning.
3. The proposal presents a reasonably conservative logical framework, with a clear set of quantitative targets as set out in table 1 below.

Table 1: Summary of key project targets under the Integrated Results Management Framework

GCF results area	Indicator	Final target	Notes/Assumptions
ARA1 – Most vulnerable people and communities	Core 2: Direct and indirect beneficiaries reached	50,654 direct 219,639 indirect	8% and 36% of total population in the three countries; gender parity assumed

ARA1	Supplementary 2.1: Beneficiaries adopting climate-resilient livelihood options	Same as above	Includes all direct beneficiaries expected to adopt CRRAs systems
ARA2 – Health, food and water security	Supplementary 2.2: Beneficiaries with improved food security	30,393 direct 58,888 indirect	Represents 60% of CRRAs system adopters and consumers benefiting from increased crop output
ARA2	Supplementary 2.5: Beneficiaries adopting resilience-strengthening innovations	50,654 direct 219,639 indirect	Assumes CRRAs systems include nature-based and technology-based innovations
ARA4 – Ecosystems and ecosystem services	Core 4: Hectares under improved climate-resilient management	20,730 ha	13% of total agricultural land; land used by direct beneficiaries
ARA4	Supplementary 4.1: Hectares under ecosystem restoration/improvement	14,798 ha	Subset of above area showing measurable ecosystem benefits
Enabling environment	Core 5: Strengthened institutional/regulatory frameworks	Institutional CRRAs mechanisms operational in all three countries	Includes functioning CRRAs working groups, updated CRRAs guidelines, and policy tools
Enabling environment	Core 7: Sectoral market transformation	1,170 business plans aligned to CRRAs systems	Supported through farmer support packages, and targeted agri- business capacity- building
Enabling environment	Core 8: Knowledge and learning systems	30 knowledge products disseminated	Includes farm-level data system, resilience indicators, and lessons learned

Abbreviations: ARA = adaptation results areas, CRRAs = climate resilient, regenerative agricultural.

4. The programme is expected to support meaningful adaptation benefits through nature-based and socially embedded solutions. It leverages the SPC regional footprint, sectoral mandate and relationships with national Ministries of Agriculture.

1.2 Impact potential

Scale: N/A

5. The proposed programme offers a credible model for enhancing climate resilience among semi-commercial farmers in Samoa, Tonga, and Vanuatu, with country-tailored approaches to support the adoption of CRRA practices. The programme constitutes a well-structured, evidence-based intervention that addresses relevant vulnerabilities in three highly climate-exposed SIDS.
6. As noted in section 1.1 above, the proposal targets approximately 50,000 direct beneficiaries (approximately 8 per cent of the total population) and over 220,000 indirect beneficiaries (approximately 36 per cent). This reach is considered appropriate given the geographical scope and programmatic focus of the proposed programme. Direct support is provided through the FSP, with indirect benefits expected to accrue through strengthened agricultural extension systems, enhanced seedling availability, and improved resilience of domestic food systems. The cost per direct beneficiary (approximately USD 830) is within the range observed for similar GCF-funded SIDS adaptation projects in the Pacific.
7. The CRRA practices promoted are context-specific and selected based on a detailed feasibility assessment per crop, country and climate risk (annex 2 to the funding proposal, table 30). These include agroforestry, intercropping, water harvesting and composting, among others, with a clear focus on soil health and system resilience. Importantly, the CRRA project is framed not as a fixed package but as a modular set of practices co-designed with farmers.
8. The proposal appropriately embeds capacity-strengthening within Ministries of Agriculture, permanent CRRA Working Groups and data systems for resilience monitoring. This institutional anchoring is critical for longer-term sustainability. The inclusion of gender-disaggregated targets, farmer-led monitoring systems, and participatory delivery models also contributes positively to the project's potential to deliver inclusive benefits. However, several concerns are worth noting:
 - (a) **Market linkages and private-sector participation are insufficiently developed.** There is no clear pathway from increased resilience to improved and sustained incomes, and limited articulation of how farmers will access downstream markets. The project does not plan to introduce certification schemes or structure private co-investment, and the reliance on informal agribusiness engagement may limit scale-up;
 - (b) **The 70 per cent adoption rate assumed appears optimistic given regional experience.** While the project builds in more hands-on farmer support than past efforts, adoption assumptions should be viewed with caution. The project assumes that short-term subsidies and training will lead to lasting behavioural change, but CRRA payoffs often materialize only after multiple years. This raises questions around post-project persistence;
 - (c) **The composite resilience indicators and baseline/attribution methodology are still under development.** While the institutional anchoring of the data systems is a strength, actual outcome attribution may remain weak;
 - (d) **While mitigation co-benefits are claimed (approximately 230,000–400,000 tonnes of carbon dioxide equivalent (t CO₂ eq)), they are not well-substantiated** and stem primarily from assumed soil carbon gains and reduced diesel use. The assumptions require clarification to avoid overstatement; and
 - (e) **Cyclone resilience, a key risk in the Pacific, is acknowledged but not fully integrated in design terms** (e.g. disaster replanting schemes, rapid response protocols).
9. In conclusion, the programme presents a solid adaptation intervention. While its long-term economic viability hinges on unresolved market access and adoption risks, the institutional embedding, policy alignment, and farmer-focused delivery model suggest that the

proposed intervention is both relevant and feasible. The project therefore meets GCF expectations for adaptation impact potential in the SIDS context, though its transformative potential remains modest. The independent Technical Advisory Panel (iTAP) assesses the impact potential of the proposed programme as medium.

1.3 Paradigm shift potential

Scale: N/A

10. The proposed programme seeks to transition smallholder farmers in Samoa, Tonga and Vanuatu away from unsustainable monocropping and chemical-intensive practices toward regenerative systems aligned with specific agroecological contexts. While many CRRRA methods – such as intercropping or composting – are not entirely novel and may already be practised informally, the project aims to embed these approaches in a more structured, evidence-driven, and system-oriented manner.

11. Notably, the programme prioritizes farmer-led experimentation, iterative business planning, and co-designed learning pathways, marking a deliberate departure from prior short-term or input-driven initiatives in the region. This reflects a more nuanced theory of change – one that recognizes that adoption of new agricultural practices requires behavioural change and risk management, not just awareness or subsidies.

12. However, while the programme design includes several mechanisms to encourage uptake – such as integration into public extension systems, national resilience monitoring platforms, and alignment with evolving policy frameworks – it remains unclear how the shift to CRRRA systems will be sustained over time, particularly once GCF support ends. The adoption of regenerative practices often fluctuates with market incentives, labour availability and competing livelihood priorities. There is limited evidence that the proposed model will foster durable behavioural change, particularly in the absence of long-term incentives or recurring extension support.

13. Institutionally, the programme is well-anchored. CRRRA Working Groups are embedded within national ministries and key stakeholders – including extension officers, development banks and research institutions – are engaged in delivery. Several public systems (e.g. resilience-monitoring tools, mobile applications, knowledge platforms) are government-owned, with the intention of enabling horizontal scaling and vertical integration into policy and finance systems. However, the operationalization of these systems post-project will depend heavily on national budget allocations, staff retention, and political follow-through.

14. The private sector plays a relatively modest role in the initial phase. While steps are taken to prepare input suppliers, agribusinesses and financial institutions to engage in business models that are aligned with CRRRA systems, critical enablers such as structured market access, scalable financing pathways, and demand-side incentives remain underdeveloped. The long-term sustainability of the approach – particularly for semi-commercial and surplus-producing farmers – will hinge on whether these actors ultimately adopt and scale CRRRA practices through commercially viable channels.

15. The multi-country modality offers some potential for regional learning and policy harmonization. However, the value-added of this structure, beyond shared technical assistance and periodic exchange, is limited. Most implementation activities remain country-specific, and the scalability of regional insights will depend on follow-through at the national level.

16. In summary, the programme presents a moderate but directionally sound paradigm shift. It builds institutional foundations and empirical knowledge to enable longer-term transition, rather than promising transformative results within the project period. The credibility of the shift lies in its process orientation and government buy-in – but the durability of CRRRA adoption, particularly as a sustained behavioural norm among farmers, remains an

open question. Future scale and systemic change will depend on political commitment, financial continuity and the emergence of functional market systems post-GCF.

1.4 Sustainable development potential

Scale: N/A

17. The proposed programme offers credible sustainable development co-benefits across economic, social and environmental dimensions. At the core of the proposal is a shift towards low-input, climate-resilient farming systems that aim to enhance food security, soil health and ecosystem-resilience across the three participating countries. The programme design aligns well with broader sustainable development objectives, particularly Sustainable Development Goals 1 (No poverty), 2 (Zero hunger), 5 (Gender equality), 13 (Climate action), and 15 (Life on land).

18. Economic co-benefits centre on improved farm productivity and household incomes through the adoption of CRRA practices. The economic and financial analysis (EFA)¹ models six CRRA practices and suggests that four offer net income gains within the project period, while the remaining two become viable within a few years. While this modelling is useful, real-world outcomes will most likely vary based on farmer uptake, weather variability and market dynamics. Importantly, the EFA shows that CRRA practices can remain financially viable without subsidy, though payback periods are longer. The programme's phased approach – combining upfront support with long-term capacity-building – is appropriate, though field-level validation will be key.

19. Job creation is expected to be modest, given the household-based nature of farming in the region. The project rightly avoids overstating employment impacts, noting that increased labour requirements may result in some short-term demand for hired labour, but not permanent jobs. Some small-scale employment gains may arise from agribusiness development and service delivery under the programme, but these are not the primary focus.

20. Social co-benefits are incorporated through targeted support to women farmers and vulnerable groups, who are prioritized in both the learning farms and the FSP. The programme goes beyond participation targets by aiming to strengthen women's access to productive assets, business skills and market networks. Sex-disaggregated indicators are tracked, and women's representation in agribusiness and regional knowledge exchange is specifically monitored. However, the programme's gender outcomes may be more incremental than transformational.

21. Environmental co-benefits are central to the CRRA model. The project promotes a suite of regenerative practices – including cover cropping, agroforestry, composting and improved organic matter management – that are designed to enhance soil health, water retention and on-farm biodiversity. These practices are also expected to reduce chemical use, mitigate erosion and improve long-term productivity. Importantly, the project avoids interventions that could lead to environmental harm: it excludes monocropping, genetically modified organisms and invasive species, and adheres to strict national biosecurity protocols for all planting material.

22. The proposal acknowledges that CRRA practices can involve trade-offs – for example, increased labour demands or resource needs for protected cropping. However, these risks are mitigated through training, technical support and safeguards built into the project's environmental and social management framework. The programme has been classified as category C, reflecting a low environmental and social risk profile. Any activity with higher risk is excluded from funding.

23. While the proposal outlines a strong conceptual framework for sustainable development, some elements – particularly the quantification of economic co-benefits, long-term viability of CRRA practices without subsidies, and concrete gender empowerment

¹ Annex 3 to the funding proposal.

outcomes – could benefit from more robust evidence. As the programme progresses, it will be important to systematically monitor and document these dimensions, both to inform adaptive management and to strengthen the evidence base for broader scale-up.

24. To summarize, the programme demonstrates significant and credible sustainable development potential. It is grounded in a nature-positive approach, takes meaningful steps to promote inclusion, and aims to deliver tangible productivity and resilience gains at the household level. The scale of benefits will ultimately depend on uptake, market access and the durability of institutional support post-GCF – areas that merit continued attention during implementation.

1.5 Needs of the recipient

Scale: N/A

25. Samoa, Tonga and Vanuatu are among the world’s most climate-vulnerable countries, consistently ranking in the top quartile of the ND-GAIN Index for exposure and sensitivity to climate change. As SIDS, they face a convergence of structural and climate-related challenges: narrow economic bases, high dependence on climate-sensitive sectors (such as agriculture and fisheries), and frequent exposure to extreme weather events (including cyclones, droughts and saltwater intrusion). Climate change is already eroding productive assets, undermining food security, and exacerbating rural poverty across these countries. Their limited land, heavy reliance on rain-fed systems, and fragile food systems render them acutely exposed to both gradual and shock-type climate impacts. Agricultural productivity remains low, particularly among smallholders and semi-commercial farmers, with soil degradation, water scarcity and increasing weather variability identified as key drivers. Government capacity for sustained extension services and farmer support is limited, particularly in remote and outer islands.

26. Despite these constraints, agriculture remains a critical livelihood source. Semi-commercial farming plays a vital role in household income and food supply, yet it is increasingly undermined by unsustainable practices – such as monocropping and chemical overuse – and by the lack of viable alternatives. While governments are committed to transitioning towards regenerative agriculture, they currently lack the empirical evidence, institutional tools and policy frameworks required to operationalize this shift at scale.

27. Against this backdrop, the programme directly responds to urgent needs by:

- (a) strengthening the adaptive capacity of vulnerable farming households;
- (b) enabling the transition to climate-resilient and regenerative practices; and
- (c) building the institutional architecture and evidence base for long-term policy and financing reform.

28. Importantly, the programme does not duplicate past or ongoing initiatives. Instead, it addresses a critical missing link between short-lived adaptation pilots and the broader goal of long-term transformation of agricultural systems. While many earlier projects in the region have introduced elements of climate-resilient agriculture, they often failed to generate the empirical evidence or farmer buy-in needed for sustained uptake. This programme aims to fill that gap by supporting structured, on-farm experimentation, hands-on business planning, and pathways to market integration. A key innovation is its emphasis on building context-specific data on the performance and viability of CRRRA practices – an acknowledged constraint in the region. Through investment in monitoring systems, farmer-led learning farms, and policy-oriented research, the programme seeks to inform both farmer decisions and public policy in a way that enables scalable and lasting adoption.

29. Access to climate finance remains limited across the three countries, particularly for locally led adaptation in the agriculture sector. While domestic budgets are constrained and fragmented donor support exists, this programme offers the scale, continuity and technical

depth necessary to generate durable change. In this regard, GCF financing is both necessary and catalytic, enabling the upfront investments, risk absorption and institutional coordination required to unlock longer-term transformation.

30. Overall, the iTAP rates the potential for the project to address the needs of the recipient as high.

1.6 Country ownership

Scale: N/A

31. The proposed programme demonstrates a strong level of country ownership, with clear alignment to national priorities and policy frameworks across Samoa, Tonga and Vanuatu. In all three countries, Ministries of Agriculture played a central role in shaping the project design and formally requested the support of SPC in transitioning toward climate-resilient, regenerative agricultural systems.

32. The programme is anchored in key national development and climate strategies. Each country's nationally determined contribution includes targets for climate-resilient agriculture and identifies the sector as a priority for adaptation action. As highlighted in the funding proposal, the programme is also aligned with broader agriculture sector plans, including the Tonga Agriculture Sector Plan, Samoa Agriculture Sector Plan, and Vanuatu's National Agriculture Sector Policy, all of which call for improved soil health, sustainable land use, and enhanced resilience of farming systems.

33. As the AE, SPC has a longstanding operational presence and trusted relationships across the participating countries. The project design process included structured consultation with national agencies, local farmer associations, agribusinesses and development banks. CRRAs Working Groups have already been established or are in formation in each country, ensuring that implementation is embedded within national systems from the outset.

34. Importantly, programme delivery will be integrated into the annual workplans of national Ministries of Agriculture, and key functions – such as farmer targeting, training, and monitoring – will be implemented by national staff and institutions. This reflects a deliberate effort to build institutional capacity, while ensuring long-term integration into public extension services and policy frameworks.

35. The programme's regional design is also consistent with the Pacific-wide Growing the Pacific 2050 Strategy for Agriculture and Forestry, which calls for evidence-based scaling of regenerative practices. While the programme will not directly reform policy or subsidies, it includes dedicated technical assistance to support governments in reviewing and adjusting incentive frameworks to enable broader adoption of CRRAs practices over time.

1.7 Efficiency and effectiveness

Scale: N/A

36. The proposed cost structure of the programme reflects a strong emphasis on technical assistance, capacity-building and behavioural change – consistent with the programme's theory of change and the challenges of climate-resilient agriculture in SIDS. However, from an efficiency perspective, the overall allocation raises concerns. Approximately 60 per cent of the programme's USD 49 million budget is dedicated to staffing, travel, workshops and consultancy support. In contrast, only USD 10 million (20 per cent) is earmarked for the FSP, which provides direct, tangible assistance to farmers.

37. While the programme rightly emphasizes the knowledge- and labour-intensive nature of regenerative agriculture, the relatively modest share of resources allocated to farm-level investments –and the absence of significant capital expenditure or infrastructure financing –is notable. Other GCF-supported agricultural adaptation programmes in similar contexts have

directed a higher proportion of funding toward productive assets and farmer-facing delivery systems. By comparison, the CRRA project appears heavily weighted toward process rather than input.

38. The FSP is positioned as a catalytic tool for de-risking early adoption of CRRA practices, but its operational modalities remain underdefined. Delivery is through in-kind procurement by the Project Management Unit, with safeguards in place to avoid duplication with other schemes. However, the scheme's efficiency, targeting precision, and procurement value for money remain difficult to assess ex ante. Moreover, the potential for distortions or disincentives after the GCF support ends is not fully explored.

39. As noted earlier (para. 18 above), the EFA models six representative CRRA practices – two per country – showing that four of them yield positive net incomes within the project period, while the remaining two break even over a longer horizon. While useful, the extrapolation of these results to a broader and more heterogeneous farmer population, adopting mixed and evolving combinations of practices, introduces uncertainty. Sensitivity analysis confirms that outcomes are highly dependent on yield assumptions and climate-impact scenarios. Some internal-rate-of-return estimates exceed 100 per cent, but appear sensitive to early year assumptions and do not fully account for risk-adjusted returns, input volatility or market constraints.

40. The programme's economic analysis adopts a 20-year evaluation horizon, which reflects the long-term nature of agricultural transformation. However, many of the projected benefits accrue only in later years and depend on the sustained adoption of CRRA practices beyond the life of the project. While the EFA does model scenarios without subsidy support, in practice, the financial viability of many practices – particularly capital-intensive ones – is materially strengthened by the FSP, which raises questions about post-GCF sustainability and farmer incentives in the absence of ongoing support.

41. The programme's delivery structure – via SPC as the AE and regional coordinator, with embedded national teams and CRRA Working Groups — is well adapted to the multi-country context. However, the parallel structures and high coordination costs associated with tri-country implementation may further reduce cost-efficiency relative to single-country comparators.

42. Mitigation co-benefits are estimated in the range of 230,000 to 400,000 t CO₂ eq, at a cost of USD 25–44 per t CO₂ eq. While these are consistent with agroecological adaptation approaches, they remain secondary to the project's core adaptation rationale.

43. To summarize, while the programme is conceptually well-designed and structurally appropriate for a complex adaptation challenge, the cost profile is heavily skewed toward support functions rather than tangible investments. This may be justified by the long-term nature of the transformation sought, but it limits near-term cost-efficiency and constrains direct delivery of adaptation benefits per dollar. Ongoing monitoring of cost-effectiveness and adaptive reallocation during implementation will be essential to ensure value for money.

II. Overall remarks from the independent Technical Advisory Panel

44. The iTAP recommends that the Board approve this funding proposal. It presents a regionally grounded and contextually relevant intervention to strengthen climate resilience in the highly vulnerable agricultural systems of Samoa, Tonga and Vanuatu. The programme is well-aligned with national adaptation priorities and the strategic objectives of GCF, and responds to long-standing challenges around soil degradation, declining productivity, and climate-related livelihood risks in SIDS.

45. If implemented effectively, the project has the potential to generate meaningful adaptation and development co-benefits, including improved farm-level resilience, increased food security, and more sustainable resource management. Its emphasis on farmer-led learning, national systems integration, and policy-oriented evidence generation reflects a measured but credible attempt to catalyse a longer-term transition toward regenerative, climate-resilient agriculture.
46. At the same time, the iTAP notes several design limitations – particularly the modest private-sector engagement, the limited attention to post-harvest infrastructure and structured market access, and the high proportion of resources allocated to coordination and technical assistance. While these elements are broadly consistent with the programme’s behavioural change agenda, they constrain cost-efficiency and raise questions about the programme’s capacity to scale beyond initial beneficiaries.
47. The financial and economic analysis is directionally sound but dependent on early assumptions, and the sustainability of results post-GCF hinges on national uptake of CRRAs models and policy reforms that remain to be defined. The programme’s long-run impact will therefore depend less on direct outputs and more on the extent to which it successfully shifts institutional norms, service delivery models, and farmer decision-making over time.
48. Overall, the iTAP considers the proposal to be well-conceived and structurally appropriate, albeit modest in scope and ambition. It provides a timely and relevant opportunity to support adaptation in fragile agricultural systems, build institutional capacity for climate-resilient agriculture, and test a participatory pathway for scaling regenerative practices in the Pacific. With appropriate implementation oversight and close attention to lessons during execution, the programme can make a valuable contribution to climate resilience and sustainable development in the region.
49. Based on the analysis presented above, **the iTAP recommends that the Board approve the funding proposal with the following condition:**
- (a) Prior to the first disbursement, the AE shall submit to the Secretariat, as part of the draft Operations manual and in form and substance satisfactory to the Secretariat, a high-level market access and value chain framework applicable to all Host Countries, which:
- (i) sets out the strategic approach and indicative timeline for strengthening market access and value chain linkages;
 - (ii) defines institutional responsibilities of the AE and/or executing entities, including coordination arrangements at national level;
 - (iii) explains how value-chain mapping and private-sector engagement will be operationalized (including approach, sequencing and minimum parameters); and
- (b) Prior to the second disbursement, the AE shall submit to the Secretariat, as part of the final Operations Manual and in form and substance satisfactory to the Secretariat, a detailed, country-specific market access and value chain implementation plan for each Host Country, which builds on the findings of the feasibility study and includes, at a minimum:
- (i) priority value-chain mapping identifying key opportunities and constraints for products aligned with CRRAs systems;
 - (ii) a structured private-sector engagement plan (including, as relevant, buyers, aggregators and processors) and proposed partnership modalities;
 - (iii) concrete measures to support post-harvest handling, aggregation and access to local and/or export markets beyond production-focused support.

Response from the accredited entity to the independent Technical Advisory Panel's assessment (FP295)

Proposal name:	Establishing Climate Resilient, Regenerative Agricultural (CRRA) systems in Tonga, Vanuatu and Samoa
Accredited entity:	Pacific Community (SPC)
Countries:	Tonga, Vanuatu and Samoa
Project size:	Small

Impact potential
<p>SPC notes the iTAP's assessment of the impact potential as "medium" and welcomes the overall recognition of the programme as a credible, well-structured adaptation intervention. SPC acknowledges the concerns raised regarding market linkages, adoption rate assumptions, attribution methodology, mitigation co-benefits, and cyclone resilience integration. SPC remains confident that the programme's farmer-focused approach, strong institutional anchoring across three highly climate-exposed SIDS and reach of approximately 50,000 direct and 220,000 indirect beneficiaries position it to deliver meaningful and lasting climate resilience outcomes for Pacific farming communities.</p>
Paradigm shift potential
<p>SPC notes the iTAP's assessment of the paradigm shift potential as "medium" and welcomes the recognition of the programme's process-oriented, institutionally anchored approach, prioritizing farmer-led experimentation, iterative business planning, and co-designed learning pathways, marking a deliberate departure from prior short-term or input-driven initiatives in the region. SPC acknowledges the concerns raised regarding long-term behavioural change, private sector engagement, and post-project sustainability. SPC is confident that the programme's government-owned monitoring platforms, CRRA Working Groups, and farmer-led co-design model provide a credible foundation for durable, scalable transition toward climate-resilient agriculture across Samoa, Tonga, and Vanuatu.</p>
Sustainable development potential
<p>SPC is pleased to note the iTAP's recognition of the programme's credible and wide-ranging sustainable development co-benefits across economic, social and environmental dimensions. SPC acknowledges the recommendations to strengthen quantification of economic co-benefits, particularly to strengthen the evidence base for scale-ups, as well as to deepen gender empowerment results beyond incremental gains. The programme aims to respond to this through robust field-level monitoring and adaptive management, as well as strengthened gender-responsive programming during implementation.</p>
Needs of the recipient

SPC is pleased to note that the iTAP rates the programme's potential to address the needs of the recipient as "high." The funding proposal clearly demonstrates the acute climate vulnerability of Samoa, Tonga and Vanuatu, and highlights critical gaps in institutional capacity, extension services, and evidence-based frameworks for regenerative agriculture. SPC acknowledges the urgency of addressing these interconnected challenges and remains committed to delivering targeted interventions that strengthen farming household resilience, enable transition to climate-resilient practices, and build the institutional architecture and empirical evidence base necessary for lasting agricultural transformation across these highly climate-exposed SIDS.

Country ownership

SPC is pleased to note that the iTAP concurs that the country ownership of the programme is "high." As with all projects developed by SPC, this programme is predicated on direct requests from the Governments of Samoa, Tonga and Vanuatu, and has been government-owned and government-led from the start. The programme is firmly anchored in each country's national agriculture sector plans, and the Pacific-wide Growing the Pacific 2050 Strategy Pacific Agriculture and Forestry: Healthy, Regenerative, Secure. SPC remains committed to ensuring that implementation is fully embedded within national systems, strengthening institutional capacity and supporting long-term integration into public extension services and policy frameworks.

Efficiency and effectiveness

SPC reiterates that the knowledge- and labour-intensive nature of climate-resilient regenerative agriculture in SIDS necessitates significant investment in technical assistance, capacity-building and behavioural change. The Farmer Support Programme (FSP) is designed as a catalytic de-risking mechanism, not a subsidy programme. SPC is committed to addressing identified gaps during implementation, including refining FSP operational modalities, strengthening economic analysis, and ensuring adaptive reallocation of resources where needed to maximise cost-effectiveness and deliver tangible adaptation benefits across Samoa, Tonga and Vanuatu.

Overall remarks from the independent Technical Advisory Panel:

SPC is pleased to note that the iTAP has endorsed the funding proposal for the programme "Establishing Climate Resilient, Regenerative Agricultural (CRRA) systems in Tonga, Vanuatu and Samoa" and recommends its approval by the GCF Board.

SPC welcomes the iTAP's recognition of the programme as a regionally grounded, contextually relevant and well-structured intervention that addresses long-standing climate resilience challenges in three of the Pacific's most vulnerable agricultural systems.

SPC notes the iTAP's observations regarding private-sector engagement, market access, post-harvest infrastructure, and the proportion of resources allocated to coordination and technical assistance. SPC is committed to addressing any concerns proactively during implementation, including through strengthened farmer-to-market linkages, enhanced private-sector partnerships, and rigorous adaptive management to ensure cost-effectiveness and sustained impact beyond the project period.

With respect to the conditions for approval, SPC acknowledges and accepts all conditions. SPC understands that the market access and value chain framework applicable to all three host countries delivered prior to the first disbursement constitutes a strategic and methodological approach, outlining the intended direction, institutional responsibilities, and sequencing for



value-chain mapping and private-sector engagement, given that programme activities will not yet have commenced at this stage. Detailed, country-specific market access and value chain implementation plans will be developed and submitted prior to second disbursement as required.

SPC is fully committed to meeting all conditions in a timely and substantive manner and looks forward to working closely with the GCF Secretariat to ensure the programme delivers meaningful, lasting adaptation and development co-benefits for farming communities across Samoa, Tonga and Vanuatu.

ANNEX 8: GENDER ASSESSMENT AND GENDER ACTION PLAN (GAAP)

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Abbreviations

ARD	Agriculture and Rural Development
CCDRM	Climate Change and Disaster Risk Management
CDD	Community Development Division of Ministry of Internal Affairs
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CRRA	Climate-Resilient Regenerative Agriculture
CSO	Civil Society Organization
DCC	Department of Climate Change of the Ministry of Energy, Information, Disaster Management, Environment, Communication and Climate Change
ESMF	Environmental and social management framework
ESMS	Environmental and social management system
FGD	Focus Group Discussion
GAAP	Gender Assessment and Action Plan
GCF	Green Climate Fund
GDI	Gender Development Index
GDP	Gross Domestic Product
GGI	Gender Gap Index
GII	Gender Inequality Index
HDI	Human Development Index
JNAP	Joint National Action Plan on Climate Change Adaptation and Disaster Risk Management
M&E	Monitoring and Evaluation
MAFF	Ministry of Agriculture, Food and Forests
MEF	Monitoring and Evaluation Framework
MEIDECC	Ministry of Energy, Information, Disaster Management, Environment, Communication and Climate Change
MIA	Ministry of Internal Affairs
MOF	Ministry of Fisheries
NACGAD	National Advisory Committee on Gender and Development
PPA	Pacific Platform for Action on Gender Equality and Women's Human Rights
PPP	Public Private Partnership
PRRP	Pacific Risk Resilience Programme

RNPGAD	Revised National Policy on Gender and Development
RWE	Rural Women Empowerment
SDG	Sustainable Development Goals
SMA	Special Management Area
SPBD	South Pacific Business Development
TASP	Tonga Agricultural Sector Plan
TFSP	Tonga Fisheries Sector Plan
TOP	Tongan pa'anga
ToT	Training of Trainers
TSDF	Tonga Strategic Development Framework
UNDP	United Nations Development Programme
WAD	Women's Affairs Division (formerly Division of Women's Affairs, DWA)

A. INTRODUCTION/CONTEXT

1. Objectives of the Study

The Gender Assessment and Action Plan (GAAP) is a supporting document and annex for the Funding Proposal to the GCF for the project: *Establishing resilient, regenerative agricultural (CRRA) systems in Tonga, Vanuatu and Samoa*.

The overall objective of the GAAP is to provide a tool to ensure gender mainstreaming across both the project outputs and expected results. The Pacific Community (SPC) together with each national government, as Co-Executing Entities (EE) to the project, aim to improve the adaptive capacities of agricultural households and rural communities in Vanuatu, Tonga and Samoa by recognising that structural gender issues need to be addressed, as a precondition to adaptation. The study assesses the ways in which gender intersects with climate change and disasters in these three countries, with a focus on rural agriculture communities. The study includes assessment of gender roles in rural livelihoods vis-à-vis environmental and socioeconomic trends; control over assets and resources; the shift from sustenance to commercial agriculture; the challenges to addressing gender issues; and the entry points to empower rural women and address gender issues through CRRA initiatives.

The GAAP highlights actions that can be included in the project wide logical framework. The core approach is to embed gender equality and social inclusion across the project activities and operations.

2. A summary of gender barriers

Across the three countries there are a wide array of interlapping cultural, socio-economic and political drivers that influence existing gender norms and power relations. In general, climate change is impacting women and girls in unique and disproportionate ways. The traditionally male-dominated and largely patriarchal society also affects women's access to decision-making and adaptive capacity. While there are similarities between the countries, there are also important differences, highlighted below:

Tonga

- Traditional gender roles are deeply entrenched in Tongan society, with men¹ generally seen as the primary breadwinners and decision-makers, while women are expected to focus on domestic work and caregiving.
- Education is highly valued in Tongan society, and both boys and girls have equal access to education. However, enrolment and completion rates for primary, lower and upper secondary education is higher for girls than boys.
- Women's participation in the labour force is lower than men, and they are more likely to work in low-paid, low-skilled jobs in the informal sector. However, women have made significant progress in recent years and are increasingly represented in leadership positions and traditionally male-dominated sectors.

¹ Tonga Statistical Department 2019 Tonga Multiple Indicator Cluster Survey Findings Report.

- Tonga has a constitutional monarchy, and women have the right to vote and stand for election. However, women are underrepresented in political decision-making positions, with only a few women holding political office at the national level.
- Owing to prevalent patriarchy and patrilineality women face barriers in land ownership and inheritance and face the risk of homelessness if they are single or divorced².
- There is a high rate of prevalence of gender-based violence, including domestic violence (DV) and intimate partner violence (IPV)
- Tonga is yet to ratify the Convention for the Elimination of All Forms of Discrimination Against Women (CEDAW) which serve as an impediment to the work on women's empowerment. To tackle the issues of DV and IPV, Tonga established the Family Protection Act in 2013. Over the years there has been significant development in the implementation of the act, including the institution of several sub-committees, budget, referral and police services^{3,4}.
- Overall, while Tonga has made progress in advancing gender equality, there are still significant gender disparities in various areas. There is a need for continued efforts to address gender-based discrimination and promote women's empowerment and leadership in Tongan society.
- Although the government of Tonga is pro-gender mainstreaming, there are constraints identified in implementing institutions. Key overarching challenges include the lack of adequate staffing and resources, lack of skills and capacity among staff to undertake gender analysis and strategic gender programming across sectors, limited collection of sex-disaggregated data and non-existence of gender focal points.

Vanuatu

- Men overall have control over land, marine and forest resources, while women have access or use rights to natural resources in line with existing divisions of labour. There is no gender disaggregated data available on land ownership.
- Fewer than one in five women have a bank account, though village loans and savings and other micro-credit schemes are widespread and an important way for women to increase access to finance. The typical requirement at financial institutions for land or vehicles as collateral or a 100% cash deposit restricts women's access to capital in Vanuatu.
- Women are expected to care for all family members, manage food gardens, fishing and water collections for family consumption, host guests, weave mats and handicrafts, sell produce at markets and also provide support to local community and church. Overall, women and girls work significantly more hours than men, with less time for leisure or rest. Women's work in agriculture is not adequately recognised.
- Women and girl's roles and workloads restrict access to training and extension initiatives that could assist with adaptation strategies such as livelihood diversification. Agricultural extension services and enterprise development training at local level tends to be targeted to male heads of household.

² UN Women. 2022. Gender Equality Brief for Tonga.

³ SPC. 2021. Tonga's Experience of Implementation of Domestic Violence Legislation.

⁴ UN Women. 2022. Gender Equality Brief for Tonga.

- Decision making at the household, community and government level is typically male dominated. In the FAO Tanna case study⁵, women reported many decisions are made by women and men together, but that men are the final decision makers. Women have very low representation in legislative and local governance.
- There is a high prevalence of violence against women, including Intimate Partner Violence and domestic violence. Violence is seen as means to make women conform and has wide cultural and social acceptance. Redressal mechanisms are inadequate.
- Women have low levels of representation in the formal private sector but are active in small and medium enterprises based on agriculture, handicrafts, and food production.
- Climate disasters in Vanuatu augment a variety of existing gender inequalities.
- The economic impact of the COVID-19 pandemic has been considerable in Vanuatu due to the impact that global travel restrictions and lockdowns have had on Vanuatu's tourism sector. Women tend to be more engaged in sectors such as tourism and hospitality, market vendors that have been significantly impacted by the pandemic and associated restrictions.
- Within available institutional mechanisms for agriculture and allied divisions, no gender disaggregated data is collected to understand and monitor the participation of women. There are no set accountability mechanisms. Overall, there is poor or limited awareness on how to integrate and mainstream gender.

Samoa

- Socially constructed gender roles and patriarchal norms within the family and community settings are the main impediments to gender equality and women's full participation in political and public life. In Samoa, traditional indigenous beliefs and customs define men's and women's access to and control over resources, including land and labour.
- Increases in family incomes and assets have not significantly improved women's decision-making abilities or their positioning within their homes and communities. Violence against women also presents major health issues for Samoan women.
- There is poor recognition of women as agriculturists and farmers. They are often 'unemployed' when they engage in unpaid agricultural work; They are less likely to be reported as farmers in statistics and institutional reports and are not represented in agricultural decision-making, in general⁶.
- Violence against women is one of the major health issues of Samoan women. Although Samoa has ratified the Convention for the Elimination of Discrimination Against Women (CEDAW) and the policy implications for this remain. Violence against women is normalised within the Samoan way of life and family structure and the mechanisms for redress are limited.
- Humanitarian and climate disasters in Samoa can augment a variety of existing gender inequalities. For women and girls, this means: an increase in workload, decrease in food security for the family, unequal access to education for disaster response and management, damage to their agricultural fields and plots, and increased exposure to sexual and gender-based violence.

⁵ [FAO and SPC. 2019. Country gender assessment of agriculture and the rural sector in Vanuatu.](#)

⁶ https://asiapacific.unwomen.org/sites/default/files/2022-11/UN_WOMEN_SAMOA.pdf

- Although there are policy directives for the collection of sex disaggregated data for different sectors, this data is not publicly available.

3. Methodology of this GAAP

This GAAP has been prepared using primary data collected through national and community consultations between January – May 2023, together with secondary data collected through literature and document review.

Primary data sources: A combination of in-person and virtual semi-structured interviews was used to collect information and perceptions on the particular needs and interests of women and girls within the project design. The Stakeholder Engagement Plan details the full list of stakeholders consulted, but those with relevance for the GAAP are summarized in the table below.

Table 1: Summary of GAAP related consultations

Stakeholder Group	Tonga	Vanuatu	Samoa
Primary Stakeholders: Ministries of Agriculture and NDA	Ministry of Agriculture, Food, Forests and Fisheries (MAFFF) Corporate Services Division Department of Climate Change, Ministry of Environment, Energy, Climate Change, Disaster Management, Meteorology, Information and Communications (MEIDECC) (NDA). Women’s Affairs Division (Ministry of Internal Affairs) and other women led NGOs and councils.	Livestock, Forestry, Fisheries, and Biosecurity (MALFFB), Department for Agricultural Resources Division (DARD) Ministry of Climate Change Adaptation, Meteorology and Geo-Hazards, Energy, Environment and National Disaster Management (MoCC) (NDA), Department of Women’s Affairs and other women led NGOs and councils for example Vanuatu Women International Group.	Ministry of Agriculture and Fisheries (MAF), Crops Division Climate Resilience Investment Coordination Division (CRICD) of the Ministry of Finance (MoF) (NDA). Ministry of Women, Community, and Social Development and women led NGOs and councils.
Secondary Stakeholders: NGOs, other projects, local government/traditional leaders, private sector	MORDI Tonga Trust, PHARMA Plus Project, UN Coordinator, FAO, other Farmers organisations in the country.	Vanuatu Agricultural Research and Training Centre (VARTC), Vanuatu Agriculture College, Vanuatu Organic Certification Committee, EU, Save the Children. Key farmers organisations in the country	METI, WIBDI, Harvest Hand Farmers, SAFPROM, KVA Consult and other key farmers organisations in the country.
Beneficiaries: Farmer Associations, Women Farmer Groups, Female farmers	The largest female owned squash farm and export company, the largest horticulture export company (Nishi Trading Company), female farmer associations/farmers, and individual semi-commercial horticulture farmers, in each of the three focus provinces	Kava women farmers in Santo and Pentecost, and a women exporter (Maison de Sanma) in Santo	A sample of female and male semi-commercial and commercial farmers producing taro in both Upolu and Savaii, agri-business farmer associations and women farmer associations.

Secondary data: A comprehensive desk review was carried out of relevant national, regional and global literature relevant to gender equality and advancement of rural women across natural resource management sectors. Reports, policies, programme documents and other information from the government, development partners and civil society organizations (CSOs) were also reviewed.

Secondary data and information were also collected from lessons learned and recommendations from past assessments and studies on gender equality undertaken by each government, UN agencies, development partners, CSOs, academic organizations, and information available from programs and projects currently being implemented. In addition, existing GAAP from ongoing GCF projects in each country were reviewed to understand the current scope of GCF supported gender-climate resilient investments.

Concurrent triangulation: The study employed a concurrent triangulation methodology, whereby the secondary and primary data was collected at the same time. Therefore, the secondary evidence was used to provide context and wider understanding to the insights provided by particular women beneficiaries and stakeholders.

1. Legal, Institutional and Policy Framework

This section takes stock of the policy and legal environment for gender-responsible adaptation planning and action in each of the three countries. This includes national actions to adopt international conventions, particularly the CEDAW, and nationally driven policy priorities. These legal and policy tools provide the project with a foundation for integrating gender equity across all its activities. The project will follow all formal procedures required at the national level and ensure strong government ownership of the gender mainstreaming process.

Vanuatu⁷

The Constitution of Vanuatu (1980) states that people have the right to live freely and without discrimination on the grounds of sex, race, place of origin, religious or traditional beliefs, political opinions or language. The Constitution also acknowledges special measures to benefit females, children, young persons and members of underprivileged groups and inhabitants of less developed areas. Vanuatu is a signatory to key international human rights treaties:

- the CEDAW (ratified 1995);
- the Convention on the Rights of the Child (ratified 1993);
- the Convention on the Rights of People with Disability (ratified 2008);
- Endorsed Sustainable Development Goals (2015);
- and the United Nations joint statement on ending acts of violence and related human rights violations based on sexual orientation and gender identity (signed 2011).

Vanuatu is also signatory to regional commitments in the Pacific Leaders Gender Equality Declaration and the Pacific Platform for Action on Gender Equality and Women's Human Rights (2018- 2030).

There are also several national policy commitments to advance gender equality some of which are aligned to the international goals and treaties. The 2016–2030 National Sustainable Development Plan (NSDP) outlines Vanuatu's national development goals and policy objectives in order to translate the National Vision into priorities to be actioned. This provides a sound framework to monitor progress, including alignment of the NSDP with the 17 SDGs and the 2030 Agenda for Sustainable Development⁸. The NSDP sets out specific policy objectives for gender equality and social inclusion in education, health, government planning and budgeting, protection from violence and discrimination, and empowering people with disabilities and improving accessibility.

The country is preparing to launch the second National Gender Equality Policy (NGEP 2020–2030). Implementation of the first National Gender Equality Policy (2015–2019) delivered gains against strategic objectives of enhancing women's economic status; mainstreaming gender equality into national sectoral policies (and planning to some extent); and advancing efforts to reduce gender-based violence and increase women's participation in leadership and decision making.

⁷ This section draws from: Save the Children (Australia). 2022. Gender Assessment: Vanuatu community-based climate resilience project (VCCRP).

⁸ Republic of Vanuatu. 2019. Voluntary National Review on the Implementation of the Sustainable Development Agenda 2030.

The new NGEF includes an additional strategic area: Fostering gender-responsive and community-driven solutions to climate and disaster resilience. Priority actions in the NGEF relevant to building climate and disaster resilience cover:

- Job creation and skills development for women in agriculture, fisheries, handicrafts and tourism, including women with disabilities,
- Enhancing rural women's access to markets, land, credit and financial literacy training,
- Increasing women's participation in decision making processes and leadership including in emergencies,
- Engaging women with disabilities in leadership and decision-making roles,
- Increasing capacity of climate change and disaster governance bodies (CDCCCs, area and provincial councils) to plan for and respond to needs of vulnerable groups,
- Allocation of budgets for gender analysis and specific gender activities,
- Funding and supporting women led initiatives that contribute to adaptation,
- Embedding gender and social inclusion outcomes in tourism and productive sector recovery.

Provincial gender action plans have been developed with specific priorities drawn from the NGEF. Vanuatu's National Disability Inclusive Development policy (2018–2025) commits to mainstreaming the Rights of Persons with Disabilities providing support specifically to women and girls with disabilities.

The Ministry's Department for Women's Affairs (DWA), Child Desk and Disability Desk are responsible for policy and program development and supporting mainstreaming into other parts Department of Women's Affairs, National Gender Equality Policy 2020-2030 (draft).

In 2020, the Government moved to abolish the Ministry of Justice and Community Services and absorb functions into other Ministries, although this change is currently being contested.

However, the government is under-resourced which limits effective implementation and enforcement of these requirements. Annual budgets only cover staff costs and not programming, and technical expertise to support mainstreaming across agencies is limited.

DWA has 14 staff including one in each province. DWA plays a convening role across the desks including leading the Gender and Protection Cluster at national level, with subgroups on children, disability, and leadership. The Cluster is active in both peacetime and response and with the establishment of DWA in provinces, efforts to build provincial gender and protection capabilities are a priority.

Sectoral policies for climate change and disaster risk reduction (CCDRR), agriculture, fisheries, livestock, and forestry all include language on gender equality and inclusion. The CCDRR policy specifies participation of women, youth, and people with disability in Community Disaster and Climate Change Committees (CDCCCs). The other policies address extension and training services, representation in decision making, as well as employment opportunities in departments.

In 2017 the Council of Ministers identified five priority ministries for gender-based budgeting: agriculture/fisheries, climate change, lands, education and local authorities.

The legal and policy framework provides a solid basis and direction for mainstreaming gender equality and social inclusion in climate and disaster resilience action. Yet climate change-related agriculture, fisheries, forestry and livestock policies do not specify how

departments should go about gender and social inclusion work, and do not set indicators or targets to generate action and accountability.

A recent FAO assessment of the enabling environment for gender equality in the Ministry of Agriculture, Livestock, Fisheries, Forests and Biosecurity (MALFFB) found that there is substantial staff interest in understanding more about gender equality and social inclusion and how to translate this into their work. MALFFB also reported during consultations that a draft action plan for gender mainstreaming in agriculture projects is under development.

However, there is a reported gap in financial and human resources to implement gender mainstreaming. MALFFB has extension officers in all six provinces and is supported by the Vanuatu Agricultural and Research and Technical Centre and the Vanuatu Agricultural College, neither of which have specific programmes targeting women/girls or people with disabilities.

Support is required for departments to translate policy into practice and accelerate gender-based planning and budgeting as per the Council of Ministers decision in 2017. Technical resources are needed to support departments to undertake gender and social inclusion analysis and integrate findings into annual planning, budgeting, and reporting, at national and subnational level.

Samoa⁹

The Samoan Constitution, under Article 15, states that all persons are equal and are entitled to equal protection under the law, and that no law or executive or administrative action shall discriminate either directly or indirectly on the basis of descent, sex, language, religion, political or other opinion, social origin, place of birth, or family status. The Article also explicitly states that provisions for the protection of advancement of women and other vulnerable groups are not prohibited under it.

Samoa ratified the CEDAW in 1992 without reservations. In addition to CEDAW, Government of Samoa has made several other international and regional commitments to gender equality, which include:

- The Convention on the Rights of the Child (CRC), acceded to in 1990;
- The Beijing Platform for Action and the Revised Pacific Regional Platform for Action (1995);
- The Pacific Leaders Gender Equality Declaration (PLGED) (2012);
- The Sustainable Development Goals (2016).

The ratification of CEDAW has led to a number of significant legislative reforms, like Constitutional Amendment Act 2013, providing a quota to increase the representation of women in Parliament; legislation to tackle domestic violence and violence against women and girls, such as the 2013 Crimes Act, the 2013 Family Safety Act, and the 2017 Sex Offender Registration Act; legislation to improve access to justice, such as the Community Law Centre Act of 2015 and the Family Court Act of 2014; legislation to prevent discrimination against women and girls, such as the Labour and Employment Relations Act of 2013, and the Personal Property Securities Act of 2013.

Additional progress has been achieved through the development of targeted policies and plans, such as the District Development Plan of the Ministry of Women, Community and Social Development (MWCSO) which promotes the participation of women in village

⁹ [FAO and SPC. 2019. Country gender assessment of agriculture and the rural sector in Samoa.](#)

decision-making bodies and village development committees; and the National Safe Schools' Policy, which tackles discrimination against pregnant girls and protects them from being expelled from school. The CEDAW Committee raised several concerns, including the lack of awareness amongst women living in rural and remote areas of their rights under the Convention and their lack of access to information to be able to claim their rights.

Being signatory to the Beijing Declaration and Platform for Action (+25-year review published in 2019) has led to some positive reform for women and girls, including introduction of a 10% quota in the national Legislative Assembly, and the record numbers of female candidates that contested the 2016 General Elections. Challenges faced since the previous review included a lack of emphasis on gender mainstreaming, prevailing misconceptions regarding the rights that women and children have, data collection and availability, and continued bans in some villages which prevent women from holding *matai* ('chief') titles.

In addition to the above and informed by them, there are several national level policies and frameworks to achieve gender equality in Samoa. At the sectorial level, MWCSO finalized the development of a Village Governance Strategy (2012–2016), Community Integrated Management and Development Plans (2002–2003 and 2004–2007) and the Community Development Sector Plan Monitoring and Evaluation Framework (2016–2021). Each of these had informed and influenced the Gender Equality Policy that was launched in December 2016.

The 2021–2031 National Policy on Gender Equality and the Rights of Women and Girls builds upon the previous National Policy for Gender Equality 2016–2020. The 2021–2031 Policy identifies seven key strategic policy priorities:

- Increased economic empowerment of all women and girls, especially women and girls facing multiple and intersecting barriers and forms of discrimination;
- Improved health outcomes for all women and girls, especially women and girls facing multiple and intersecting barriers and discrimination;
- Enhanced access, opportunities for life-long learning and educational outcomes for women and girls, especially those facing multiple and intersecting barriers and forms of discrimination;
- Improved gender balance in leadership, governance, and public life;
- Increased and improved safety and access to law and justice for women and girls, especially those facing multiple and intersecting barriers and forms of discrimination;
- Increased gender sensitivity and social inclusion in all infrastructure developments and governance including transport, energy, WASH, and communications;
- Increased visibility, contribution and engagement of women and girls in agriculture, climate change, natural resources management and disaster preparedness and response, especially those facing intersecting barriers and forms or discrimination.

The Policy includes an implementation plan, which discusses governance and implementation arrangements, monitoring and evaluation frameworks, and implementing agencies and their roles.

The Samoa Agriculture Sector Plan (ASP) (2022–2027) provides a 5-year plan for the Samoa's agricultural sector and a framework for directing programmes to increase food, nutrition and income security. It also aims at strengthening partnerships among the

government, private sector, NGOs and development partners and emphasizes capacity building of staff to manage partnerships and support ownership of commitments to gender mainstreaming and women's empowerment within relevant ministries.

The ASP also makes specific references to increasing women's engagement in agriculture and rural livelihoods through improving food security, nutrition and income-generating opportunities in rural areas and supports increased agricultural incomes and employment-generating opportunities for women and youth.

ASP's specific desired results included: Increased capacity of rural women to run successful chicken farming enterprises; improved skills and knowledge among rural women and youth in fruit growing, processing, preservation and business enterprise and marketing; and increased capacity among rural women and youth to develop viable small-scale fisheries value-added and marketing enterprises.

The Samoa National Action Plan for Disaster Risk Management 2017–2021 acknowledges women as key stakeholders in the community and the crucial need for their role in decision making positions in disaster planning and post-disaster management. The Plan also acknowledges women as a vulnerable group and highlights combating violence against women as a priority area in the Plan within disaster risk management and post-disaster planning. Agriculture is also highlighted as one of the 14 priority sectors for disaster risk management.

The National Disaster Management Plan 2017–2020 highlights gender-sensitive policymaking, monitoring and evaluation, as well as integrating gender into vulnerability, risk and capacity assessments. The Plan also highlights furthering women's participation and leadership in disaster management and promotes the systematic collection and use of sex- and age disaggregated data and gender analysis.

The Community Development Sector Plan (CDSP) 2016–2021, led by MWCSO, provides a framework for guiding the development of communities in Samoa. The aim of the CDSP is to empower communities to become their own drivers of development and one of its main intended outcomes is to improve governance and inclusivity at the community level.

CDSP's gender-sensitive components include ending violence against women and gender-sensitive curriculum development. CDSP is a critical area of engagement for Ministry of Agriculture and Fisheries (MAF) since the community level work of MAF relies heavily on governance structures and inclusivity at the village level. The plan also contributes to other sector plans across Government of Samoa.

Samoa Climate Change Policy 2020 recognizes that a key strategy for achieving an effective governance framework for climate change action is the inclusion of vulnerable groups, such as women, children, the elderly, and people with disabilities, in climate change planning. The current proportion of women involved in climate change policy and disaster preparedness and response is not known.

Tonga¹⁰

The Constitution of Tonga provides a general guarantee of equality and states that the laws of Tonga shall apply to all people regardless of class, although is not explicit about

¹⁰ This section largely drawn from: FAO and SPC. 2019. Country gender assessment of agriculture and the rural sector in Tonga. Nuku'alofa.

prohibiting discrimination based on sex, sexual orientation, gender identity and expression, and sex characteristics¹¹. Tonga is signatory to key international human rights treaties:

- Convention on the Rights of the Child, 1995
- Member of International Labor Organization since 2016
- Endorsed Small Island Developing States Accelerated Modalities of Action (SAMOA) Pathway (2014)
- Endorsed Sustainable Development Goals (2015)

The ratification of the SAMOA Pathway is an important step as it comprehensively covers all aspects of women social and economic empowerment, including gender equality, full realization of human rights of women and girls, elimination all forms of discrimination and violence against women and girls, strengthening women's economic empowerment, equal and effective participation at all levels of decision making, and the promotion and protection of the human rights of women and their sexual and reproductive health and reproductive rights.

Even having ratified the SAMOA Pathway, Tonga has faced challenges in women's political participation and in the ratification of CEDAW¹². The non-ratification of CEDAW obstructs the women empowerment work of the Government.

Tonga has signed up to several gender-related regional commitments. These regional agreements identify priorities for the region and provide guidance to countries in developing their own national gender policies, strategies, plans and programmes. The Pacific Platform for Action for the Advancement of Women and Gender Equality or PPA (1994, 2004, 2017) serves as the main guiding forum for government's policy formulation and directives for gender equality. It was the first regional charter on gender equality where the priority areas are clustered into four strategic themes¹³: mechanisms to promote the advancement of women; women's legal and human rights; women's access to services; and women's economic empowerment. The PPA was reviewed and reformulated in 2015 to accelerate progress towards gender equality, as committed by the Pacific governments through the Pacific Leaders Gender Equality Declaration and the SDGs. PPA was also the Pacific Platform for Action on Gender Equality and Women's Human Rights 2018–2030 to highlight importance of promoting human rights. The revised PPA emphasizes means of implementation, particularly through knowledge generation and information sharing, gender mainstreaming, partnerships, investments, and accountability.

The Pacific Leaders Gender Equality Declaration (2012) was endorsed by the Forum Leaders¹⁴ in 2012 and renewed the involved countries' commitments to gender equality while identifying five priorities¹⁵: gender-responsive policies and programmes; leadership and decision making; women's economic empowerment; ending violence against women; and health and education.

Every three years, SPC also convenes the Pacific Women and Ministers of Women meetings that bring together senior government officials, development partners, NGOs, academics and others to review the situation and identify priority areas of work to advance gender equality in the respective countries in the region.

¹¹ https://asiapacific.unwomen.org/sites/default/files/2022-12/UN_WOMEN_TONGA.pdf

¹² UN Women – Asia Pacific. <https://asiapacific.unwomen.org/en/countries/fiji/co/tonga>

¹³ FAO and SPC. 2019. Country gender assessment of agriculture and the rural sector in Tonga. Nuku'alofa.

¹⁴ Pacific Islands Forum (PIF) - <https://www.forumsec.org/who-we-arepacific-islands-forum/>

¹⁵ FAO and SPC. 2019. Country gender assessment of agriculture and the rural sector in Tonga. Nuku'alofa.

Gender equality and advancement for women and girls are also recognized in many of Tonga's key national frameworks and policies. The Tonga Strategic Development Framework 2015–2025 (TSDF II) has seven national outcomes, the third of which is “a more inclusive, sustainable and empowering human development with gender equality”¹⁶. UNDP supported Tonga to align TSDF II with the SDGs for the country.

Tonga also has a National Policy on Gender and Development (NPGAD) 2000, and the Revised National Policy on Gender and Development (RNPGAD) 2014–2018. The RNPGAD had six outcome areas¹⁷: an enabling familial and social environment for gender equality; equitable access to economic assets and employment; increased women's leadership and equitable political representation; creation of equal conditions to respond to natural disasters and climate change; increased focus on addressing the additional vulnerability experienced by female-headed households, women with disabilities and women in rural areas, especially in the outer islands; and an enabling environment for mainstreaming gender across government policies, programs and services.

Tonga has created the policy space for advancing gender equality and women's empowerment covering all critical areas for women and girls to realize their full development potential. The actual translations of these policy frameworks to programs have been limited and the exact implementation status is unclear. The existing provisions however could be leveraged for CRRRA, particularly in areas of women's institutional participation and economic empowerment by enabling better access to resources, technology, information, and markets.

The institutional space for creating an enabling environment for integrating gender into the proposed CRRRA exists, albeit with limitations.

The Women's Affairs and Gender Development Division (WAGED) in the Ministry of Internal Affairs (MIA) is the national agency responsible for coordinating, monitoring, and evaluating implementation of national policies on gender and development. WAD also plays its role as secretariat to the National Advisory Committee for the RNPGAD. While the existence of WAD demonstrates the government's commitment to gender equality, the positioning of the division in a social welfare-focused line ministry instead of Prime Minister's Office, limits the authority, reach and effectiveness of WAD and restricts broader gender mainstreaming. Low staff numbers, limited budget and competing priorities create challenges for effective management of WAD's mandate. Three WAD staff members have roles linked to implementation of the National Gender Policy, but progress is inhibited by lack of gender focal points.

Staff lack skills for gender analysis of issues across sectors and lack the experience required to influence transformational change or facilitate 'whole of government' mainstreaming.

The Community Development Division (CDD) within MIA works with village women's committees, who are often given responsibility for implementation of projects (commercial agriculture, with a focus on handicrafts, vanilla production, and sandalwood planting). Women's committees are meant to be the driving force behind development. Nonetheless, general village committees and town/island councils are acknowledged to still be dominated by men and, as the community consultations found, neither women nor youth are represented in Village Development Committees.

The Ministry of Agriculture, Food and Forests (MAFF) has significant opportunities but also considerable barriers in advancing gender equality in agriculture, including extension

¹⁶ Ibid.

¹⁷ FAO and SPC. 2019. Country gender assessment of agriculture and the rural sector in Tonga. Nuku'alofa.

services. The draft Tonga Framework for Action on Food Security 2015–2020 has gender equity as a guiding principle. Women were consulted for the Tonga Agriculture Sector Plan 2016–2020 in the design phase and the Plan acknowledges the insufficient recognition of the indirect roles of women in Tonga’s agriculture sector. Extension Services has a Women’s Section that works with village women’s committees. There are no apparent barriers to employing and promoting women. Senior staff are open to gender training for all staff. This notwithstanding there is a general lack of acknowledgement by the leadership of the importance of gender equality, rural women’s empowerment and women’s and men’s different roles in agriculture, including livestock, food security and forestry. Support for women farmers focuses on subsistence farming and handicrafts only. Gender champions and gender focal points are non-existent.

The Department of Climate Change (DCC) in the Ministry of Meteorology, Energy, and Information regularly engages with WAD on gender activities in the Joint National Action Plan on climate change (JNAP)¹⁸. DCC is now the implementing agency for the climate change-related outcomes under RNPAGAD for the Gender Action Plan (GAP). DCC intends to eventually mainstream gender both horizontally and vertically in the Division. Although JNAP II mandates the inclusion of gender components in all climate projects and includes a GAP, support from technical agencies is required to improve the gender and social inclusion capacity of staff in all climate change-related divisions.

The National Emergency Management Office had mainstreamed gender into the district emergency management plans, yet it seems like the women’s committees and their roles as service deliverers in Community Emergency Management Committees were merely mentioned, alongside youth committees, community development committees and community disaster committees. All committees had a role in preparedness, relief, recovery, prevention and mitigation, but no document had any analysis of the different impacts of emergencies on women and men, especially the vulnerable. All planning documents are gender-blind, including the Disaster Assessment Manual.

2. Socioeconomic and gender baseline

i. Methodology for the baseline

The socio-economic and gender baseline for Vanuatu, Samoa and Tonga has been drafted based on secondary data collected through a combination of literature review, analysis of public policies and development programs, data dashboards of SPC, World Bank, UN Organizations and SDG reports. In addition, primary data from stakeholder consultations at the national level and in a sample of communities were used to add qualitative inputs.

ii. National aggregate statistics with SDG Indicators

Tonga

Population and Demographics: The country has a population of 100,209 of which 48.7% are males and 51.3% are females¹⁹. Tonga’s demographic profile is characterized by a population growth rate of 0.7, high net migration (-948 in 2021), high fertility (3.3 per women in 2020), and a gradual increase in life expectancy (68 and 74 for male and female

¹⁸ The JNAP on climate change is a 10-year plan which aims to propose a realistic time frame for gender activities.

¹⁹ Tonga Statistic Department 2021.Preliminary Results. Tonga Population Census.

respectively)²⁰. The total sex ratio in Tonga has remained steady over the decades with 100 males per 100 females²¹. Within the working age population aged 25–59 years and the older population aged 60 and above, there are more rural women compared to rural men. In 2021, 22.1% households were headed by women²².

Education²³: There is no gender disparity in the literacy rates in Tonga. The literacy rate as of 2013 was 99.2% for males and 99.3% for females. The primary gross enrolment rate as of 2020 for girls (112.1%) was slightly lower than boys (117.4%). There are no significant disparities in primary education with net enrolment rate for girls (94.1%) being only slightly lower than for boys (97.4%). Secondary gross enrolment rates were higher for girls (95.6%) than for boys (81.3%). This is primarily because boys tend to out-migrate and begin work earlier than girls. There are high dropout rates in tertiary education with the gross enrolment for girls (26.7%) being higher than for boys (10.8%), partly linked to limited tertiary and TVET education opportunities for young women compared with young men. As a result, the Education Act 2013 has increased the compulsory education age to 18.

Health: In Tonga, basic health needs and access to state health services are free of charge and available for all. According to the latest World Bank gender data of Tonga, there has been a significant improvement in the maternal mortality rate from 77 in 2000 to 52 in 2024. Maternal mortality in Tonga is lower than its regional average²⁵. The percentage of women who receive at least 4 antenatal care visits is as high as 70%²⁶. The total fertility rate has declined from 3.91 in 2010 to 3.48 in 2020. There has also been a significant decline in the adolescent rate from pregnancy 17.6 in 2010 to 13.7 in 2020²⁷.

However, in the Multiple Indicator Cluster Survey (MICS) 2019²⁸ the total fertility rate was an average of 2.9 children per woman. The adolescent fertility rate was 30 births per 1,000 women aged 15–19 and was higher in rural (32 per 1,000) than urban (25 per 1,000) areas. The life expectancy at birth in Tonga was 72.9 years for women and 69.0 years for men in 2019²⁹. There is a high prevalence of non-communicable diseases (NCDs) - especially diabetes and cardiovascular disease - which poses significant challenges to the nation and its health system. According to data published by SPC, 20.2% of female mortality and 29.5% of male mortality was attributed to cardiovascular disease, cancer, diabetes, and chronic respiratory disease in 2019. About 24.2% of married women (15–49 years) have unmet contraceptive needs³⁰.

Reproductive health rights of women in Tonga require a signature from the husband if a woman requires sterilization. Health related data in Tonga largely lack gender disaggregated information across different socioeconomic groups and, thus, it is not possible to differentiate whether there is inequity in health outcomes amongst different population groups. Tonga is experiencing various climate change-induced impacts in the health sector, which inevitably are increasing the burdens on the public health system. Prolonged rainfall and cyclones have increased the incidence of waterborne and vector-borne diseases. It is important to

²⁰ <https://data.worldbank.org/indicator/>

²¹ Ibid.

²² Tonga Statistic Department 2021. Tonga Household Listing, Tonga Census Pre-counts.

²³ UN Women 2021. Gender Equality Brief for Tonga.

²⁴ <https://genderdata.worldbank.org/countries/tonga/>

²⁵ Ibid

²⁶ Ibid

²⁷ Ibid.

²⁸ Multiple Indicator Cluster Survey 2019.

²⁹ World Bank data 2020 <https://databank.worldbank.org/source/world-development-indicators>

³⁰ UN Women 2022. Gender Equality Brief: Tonga.

note that these issues are likely to be borne disproportionately by vulnerable segments of the population, including women.

Political participation and Decision making³¹: Women's political participation is extremely low both at the national and local level. In the November 2021 elections to Tonga's national legislature, 12 of the 75 candidates (16%) were women and not one of them were elected. Currently there is only one female member of the 27-seat legislature, which is a 3.7% representation of women in legislature. The one woman is a non-elected member and has been appointed to the Cabinet as the Minister of Foreign Affairs and Tourism. There are 9 seats for the aristocracy that is nominated by the Monarch. Only men from Tongan aristocracy have the right to inherit a noble title, and there are 33 nobles in Tonga. There is only 1.1% representation of women in the local governments in Tonga.

The poor political participation of women in Tonga is on account of the prevailing gender norms and culture where women are discouraged from being part of public proceedings and spaces. Communal-level decisions are largely taken by men due to male-dominated decision-making norms within the community. Despite having women in leadership positions in the Ministries and serving as acting ministers, women in Tonga are still facing challenges with regards to political participation and decision-making. Tonga has recently revised its Gender policy and has included an outcome on increased participation of women in decision-making, and extended support for women who want to be a candidate for national or local elections as well as women who wish to play a leadership role in their profession or in the civil society.

Economy and women's work force participation: The Gross Domestic Product (GDP) of Tonga in 2021 was estimated at USD 470 million and GDP per capita is USD 4,426³¹. The mainstay of the rural economy in Tonga is mainly agriculture with the sector contributing nearly 16.2% of the GDP in 2020/21³². Agriculture sector in 2015/16 represented over 65% of exports³³. The main products exported are kava, squash, pumpkins, root crops, coconuts, and fish. The economy of Tonga is highly dependent on remittances, with remittances accounting for 37.7% of the GDP³⁴. Handicrafts also constitute an important source of income with 25% of all households being engaged in the sector³⁵. Manufacturing and service sectors contribute about 5.2% and 49.2% (Business, Government and Community service industries) respectively³⁶. The unemployment for 15+ population was 3.6% for women and 2.6% for men, and among youth (aged 15–24) 8.9% of the labour force was in unemployment, compared with 2.1% for adults (aged 25+)³⁷.

As of 2018, the labour force participation rate was 38.4% for women and 56.2% for men³⁸. Employment in Tonga is largely in the informal sectors primarily in fisheries, agriculture, and forestry. 75.6% of female employment and 79.7% of male employment was informal.³⁹ Employment in Tonga seems gendered. As of 2018 women were most employed in the manufacturing sector (40.9% of female employment (handicrafts, bakeries, etc.) and 4.4% of male employment), the administrative and support services sector (11.1% of female employment and 7.3% of male employment) and the education sector (10.9% of female employment and 4.5% of male employment). Men were most employed in the agriculture,

³¹ Ibid.

³² National Accounts | Tonga Statistics Department (tongastats.gov.to).

³³ FAO and SPC 2019 Country gender assessment of agriculture and the rural sector in Tonga.

³⁴ UN Women 2022 Gender Equality Brief for Tonga.

³⁵ Ibid.

³⁶ National Accounts | Tonga Statistics Department (tongastats.gov.to).

³⁷ Tonga Statistic Division. 2018. Labour Force Survey (TLFS).

³⁸ Ibid.

³⁹ Ibid.

forestry and fishing sector (33.8% of male employment and 1.9% of female employment) and the construction sector (15.0% of male employment and 0.3% of female employment). 70% of the health workforce are women⁴⁰.

The type of occupations women engage in are predominantly administrative or secretariat work and subordinate positions, leaving women with less exposure to decision-making and high managerial occupations. There is, however, significant shift occurring. In a leadership benchmarking study in 2021 of the public and private sectors, 39% of the senior management roles were held by women.

Although women's employment rate is low in agriculture, women are heavily dependent on the informal sector for their income generating activities, such as small-scale production in agriculture and fishing, or handcraft production. In the craft industry alone, there are 9,181 female workers in comparison to 2,463 males.

Women in Agriculture and forestry in Tonga: Agriculture, including forestry and fisheries, is the main sector of employment for Tongan women and men aged 15 years and above. In 2015, agriculture represented approximately 19% of Tonga's GDP and constituted over 65% of the country's exports, valued at TOP 26 million⁴¹. The 2015 Agriculture Census reported that over 80% or 13,944 households and organizations engaged in one or more agriculture activities, namely cropping, livestock, fisheries, handicrafts and forestry⁴². Agriculture in Tonga generally shows a gendered division of labour shaped by culture, land tenure, markets, and evolving climate risks. Men predominantly lead cultivation of staple root crops for food security and export, while women are more likely to be involved in subsistence and market gardening (especially vegetables and fruit) as well as increasingly in organic value chains. Female-headed households had lower participation rates in agriculture (50%) compared to men (68%). The rate of subsistence food production in Tonga is among the highest in the Pacific Island countries⁴³. On average, about 40% of subsistence workers are rural women, with women comprising 35% of subsistence workers in rural Tongatapu, 47% in Vava'u, 45% in Ha'apai, 42% in 'Eua and 24% in Ongo Niua⁴⁴. Women are not involved in large-scale fisheries, but they are very active in gleaning activities along the coast for the purposes of auto-consumption and sale of surplus to the market.

Gender-based violence (GBV) and Sexual Exploitation, Abuse and Harassment

(SEAH): A national study on Domestic Violence Against Women in Tonga, conducted in 2009 by Tongan NGO Ma'a Fafine mo e Famili, found that Tongan women reported high levels of violence: 40% of Tongan women reported physical and/or sexual violence from a current or former partner at least once in her life, and 19% of women reported experiencing physical and/or sexual violence in the 12 months prior to interview (current violence). In addition, 77% of women reported that they had experienced physical and/or violence by someone other than a partner since they were 15 years old; this violence was most often physical and most often perpetrated by fathers and teachers. In both this study, and the more recent domestic violence module used in the 2019 MICS, younger women aged 20-24 years, followed by those 25-29 years, reported the highest levels of violence of any age cohort. During COVID-19 lockdown, WCCC recorded 54% increase in the number of cases in the period between February and April 2022.⁴⁵ The Family Protection Act 2013 (FPA) was enacted to tackle domestic violence in Tonga. It provides protection for all members of a

⁴⁰ Ibid

⁴¹ Ibid.

⁴² Ibid.

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ UN Women 2022 Gender Equality Brief for Tonga.

family. In 2021, the Tonga National Service Delivery Protocol for Multisectoral Response to Cases of Gender-Based Violence was launched with the objective to guide the coordination of multi-sectoral service delivery for survivors of gender-based violence. The Protocol is led by the Ministry of Internal Affairs, Women’s Affairs and Gender Equality Division and was developed to coordinate and guide the national response of services to survivors of gender-based violence. The Protocol provides an agreed set of procedures and minimum standards to ensure a survivor-centred approach, continuity of care across the preparedness-emergency-recovery continuum and more positive outcomes for survivors, their families, and the communities of Tonga. The implementation however suffers from lack of inadequate resources and political will.

SDG Performance by indicator: As of December 2020, only 18.9% of indicators needed to monitor the SDGs from a gender perspective were available, with gaps in key areas, in particular: unpaid care and domestic work. In addition, many areas – such as gender and poverty, physical and sexual harassment, women’s access to assets (including land), and gender and the environment – lack comparable methodologies for regular monitoring. Closing these gender data gaps is essential for achieving gender-related SDG commitments in Tonga⁴⁶.

Table 2: Summary of SDG Performance by indicator in Tonga

Category	Indicator No.	Indicator	Value in Tonga (Female)	Value in Tonga (Male)
Economic	8.5.2.	Unemployment rate. Age 15+	3.6%	2.6%
	Labour force survey report (2018)	Youth unemployment rate. Age 15-24	8.9% (overall)	8.9% (overall)
Social protection	1.3.1	Proportion of mothers with newborns receiving maternity cash benefit.	26.3%	NA
	3.1.1	Maternal mortality ratio (Per 100,000 live births).	52	NA
	3.7.2	Adolescent birth rate (per 1,000 women aged 15-19 years).	30	NA
		Literacy rate, age 15+	99.4%	99.5%
		Rate of out of school children. Primary and Lower Secondary education.	1.8%	3.7%
	5.2.1	Proportion of ever-partnered women and girls subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months. Age 15-49.	16.9%	NA
	5.3.1	Proportion of women aged 20-24 years who were married or in a union before age 18 (%)	10.1%	NA
Political participation	5.5.1	Proportion of seats held by women in national parliaments (% of total number of seats)	7.4%	NA
		Proportion of elected seats held by women in deliberative bodies of local government	0	NA
	5.5.2	Proportion of women in managerial positions	41.6%	NA
		Proportion of women in senior and middle management positions	40.3%	

⁴⁶ [Country Fact Sheet | UN Women Data Hub.](#)

Environment	3.9.1	Age-standardized mortality rate attributed to household air pollution (deaths per 100,000 population).	52	
	6.1.1	Proportion of population using safely managed drinking water services, by urban/rural.	30%	
	7.1.2	Proportion of population with primary reliance on clean fuels and technology.	76%	

Vanuatu

Vanuatu is an archipelagic nation of 83 islands, 65 of which are inhabited, extending over 1,000 km in a north-south direction between the equator and the Tropic of Capricorn⁴⁷. The total land area of Vanuatu is 12,190 km² of which 28 km² is urban and 12,338 km² is rural.⁴⁸ The people of Vanuatu are described as Melanesian. Port Vila, on the island of Efate, is the capital. Vanuatu is one of the most linguistically diverse countries in the world with over 100 languages spoken, of which approximately 80 are actively spoken. Bislama, English and French are the three official languages of Vanuatu⁴⁹.

Population and demographics: The total population of Vanuatu is 300,019⁵⁰ of which 151,597 is male and 148,422 is female. The majority of the population (233,266) is rural, and the small urban population (66,753) is mainly located in Port Vila and Luganville. The annual population growth rate as of 2023 was +2.2%⁵¹. Data collected in the 2020 Census on the proportion of houses that are headed by women has not yet been released; previous data from the 2016 Mini Census found that women headed 17.5% of households in Vanuatu⁵². The life expectancy in Vanuatu in 2021 was 72 for women and 69 for men.

Education: The total literacy rate in English for population above the age of 15 years is 77.8% for men and 76% for women⁵³. The school enrolment is high both for boys and girls at the primary level. The net enrolment rate in primary school was 94.9% for girls and 95.8% for boys in 2020⁵⁴ and access to primary education is universal and free. The net enrolment rate for secondary schools was higher for girls (49.9%) than boys (42.8%), noting that there are limitations on the number of places available for secondary education⁵⁵. In terms of completed education it is highest at the primary level (59% for both males and females) but drops significantly at the secondary and tertiary levels with a high dropout rate amongst girls at the secondary level of education (around 50%)⁵⁶.

Health: The total fertility rate in Vanuatu in 2020 was 3.7 births per woman, decreasing from 4.1 in 2009 and 4.5 in 1999⁵⁷. The number of maternal deaths during childbirth and child deaths under the age of 5 in Vanuatu remains high; the infant mortality rate was 22 infant deaths per 1,000 live births in 2018, while the under-5 mortality rate was 25.9 in 2019⁵⁸. The maternal mortality ratio was estimated to be 72 in 2017⁵⁹. Among married women (aged 15-49,) the unmet needs for contraception were 24.2% (2013)⁶⁰.

⁴⁷ FAO and SPC 2019. Country gender assessment of agriculture and the rural sector in Vanuatu.

⁴⁸ <https://data.worldbank.org/indicator/AG.LND.TOTL.K2?locations=VU>

⁴⁹ FAO and SPC 2019. Country gender assessment of agriculture and the rural sector in Vanuatu.

⁵⁰ 2020 National Census and Housing Survey, VSNO. As per the Statistics for Development Division, SPC the population in 2023 stands at 307,941 with an annual growth rate of +2.21%. <https://sdd.spc.int/vu>

⁵¹ <https://sdd.spc.int/vu>

⁵² VSNO 2016. Mini-Census Report Vanuatu.

⁵³ VSNO 2020. National Census.

⁵⁴ UNESCO Institute for Statistics (UIS). 2020. <https://uis.unesco.org/en/country/vu>

⁵⁵ Ibid.

⁵⁶ UN Women 2022. Gender Equality Brief for Vanuatu.

⁵⁷ <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=VU>

⁵⁸ UN Women 2022 Gender equality brief for Vanuatu.

⁵⁹ Vanuatu Gender Landscape: <https://genderdata.worldbank.org/>

⁶⁰ Ibid.

Political Participation and decision-making: As of March 2022, there are no female members of Parliament. There have only been five women in Parliament in the country's history, and there have been no women in Parliament since 2012. In the 2020 elections, there were 18 female candidates, an increase from eight in 2016. According to senior female political actors, reasons for this gender gap include women's lack of money and necessary resources to contest incumbent seats⁶¹. There is a 25% representation of women as municipal councillors primarily owing to the reservation of seats that was introduced via amendments to the 2011 Municipalities Act (advocated by Vanuatu's Department of Women's Affairs). Approximately 7% women were also elected to the provincial council in 2018–2021⁶². Women in boards are underrepresented in Vanuatu's organisations. The highest representation is in the industry sector. The representation of women in leadership position is higher in the private sector than in the state-owned enterprises. Women tend to dominate a few sectors like tourism, where 33% of the Directors are women.

Owing to prevalent gender and social norms, men tend to dominate decision making at the community level, including decisions related to natural resource management and productive resources. Women are not included in the meetings and socialization of men in the public platforms (formal and informal)⁶³. Where women are most active in decision making roles are the Cooperatives in Vanuatu of which there are over 300; 44% of these are managed by women. The Cooperatives function in various areas, including savings and loans, housing, handcrafts, fisheries and agriculture.

Economy and women's work force participation: The Vanuatu economy is based on agriculture (mostly subsistence farming), fishing, tourism, and offshore financial services, as well as the activities of government. Exports are dominated by a narrow range of agricultural commodities that are vulnerable to fluctuations in world commodity prices. Economic growth is constrained by access to markets, relatively remote and isolated island communities with associated high transport costs, and natural disasters. As a result, Vanuatu is dependent on aid for development projects⁶⁴. The GDP in Vanuatu was USD 96 billion in 2021, according to the World Bank⁶⁵. In 2019, GDP growth reached 3.9% but collapsed to -6.8% in 2020 due to the outbreak of COVID-19. According to the updated IMF forecasts from October 2021, GDP growth stood at 1.2% in 2021 and is expected to pick up to 3% in 2022 and 4.1% in 2023, subject to the post-pandemic global economic recovery⁶⁶. In Vanuatu 15.9% of the population lives below the national poverty line with an unemployment rate of 5.4%.⁶⁷

The labour force participation rate among females is 41.7 and males is 51.2 (2020) with the national average at 46.7.⁶⁸ Women were mostly occupied (38.7%) as skilled agricultural, forestry, and fishery workers. 18% of women were occupied as service and sale workers, 15.4% of women had elementary occupations, and 11.1% were professionals⁶⁹. In 2020, 36.5% of managers were women, with the occupation manager accounting for 2.1% of female occupations and 3.0% of male occupations⁷⁰.

⁶¹ UN Women 2022 Gender equality brief for Vanuatu.

⁶² Ibid.

⁶³ FAO and SPC 2019 Country gender assessment of agriculture and rural sectors in Vanuatu.

⁶⁴ Ibid.

⁶⁵ <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=VU>

⁶⁶ <https://www.imf.org/en/Countries/VUT>

⁶⁷ <https://www.adb.org/countries/vanuatu/poverty>

⁶⁸ VSNO 2020. National Census.

⁶⁹ UN Women 2022: Gender equality brief for Vanuatu.

⁷⁰ Ibid.

Adverse Impact of COVID-19 on Women’s Economic Empowerment: The economic impact of the COVID-19 pandemic has been considerable in Vanuatu due to the impact that global travel restrictions and lockdowns have had on Vanuatu’s tourism sector. Women tend to be more engaged in sectors such as tourism and hospitality or as market vendors that have been significantly impacted by the pandemic and associated restrictions. Further research is required to fully comprehend the impact of the pandemic on the economic participation and empowerment of women in Vanuatu.

Women in agriculture⁷¹: Agriculture continues to be one of the key activities amongst the population of Vanuatu with 97% of households engaged in vegetable crop production⁷² for subsistence and commercial purposes. Women constitute 49.5% of the work force in agriculture. Men and women play quite different roles. Women are engaged in agricultural production, processing and marketing and spend more time than rural men on agricultural production, income generation and household work. Specific types of farming activities that women are more likely to be involved in include subsistence farming and market gardening of vegetables and for household provisioning as well as small-scale market vendors in larger urban centres where they dominate selling of fresh produce and prepared food⁷³. This demonstrates women’s central role in local food economies.

Rural women generate income through marketing of agricultural goods and handicrafts, and they participate in savings and loan groups. The role of women in agriculture continues to be undermined with their work considered to be ‘lighter’ than that of men as they are involved in agricultural roles of cleaning the ground, planting and maintaining crops, and selling produce in the market. Women also play a significant role in the Vanuatu Cooperatives, though extension services and access to technology for women in agriculture remains limited. It is also noted that one of the restricting factors for access is the inadequate availability of women extension officers. The four main commercial crops include cocoa, coconut, kava and coffee. There are now several measures to enhance the role of women in the value chain for commercial crops and there is concerted effort to adopt a gender equality and social inclusion approach to value chain development^{74,75}. The Vanuatu National Coconut Strategy is a national policy with a sectoral approach, with a timeframe of 10 years between 2016 and 2025. The overall aim of this Strategy is to develop Vanuatu coconut sector to turn coconut into the top income earner in Vanuatu’s agriculture sector by 2026⁷⁶. This also provides an opportunity to apply gender sensitive development.

GBV, Child Marriage and SEAH: In Vanuatu, social norms give men control over women’s behaviour and privilege male decision making in traditional, formal, and community settings. According to the Vanuatu Women’s Centre research in 2011, gender-based violence is widespread, where 60% of women with an intimate partner had experienced physical violence, 68% experienced emotional violence and 69% coercive behavioural control by men. It is higher in rural (63%) than in urban (50%) areas. The Family Protection Act of 2008 was passed to help tackle the high level of violence against women and children by criminalising domestic violence in recognition that many perpetrators were family members. However, the legal framework fails to protect unmarried women or domestic workers and has been challenging to fully implement in remote rural and maritime communities. In a

⁷¹ FAO and SPC 2019 Country gender assessment of agriculture and rural sector in Vanuatu.

⁷² Vanuatu National Statistics Office. (VNSO) 2016. 2016 Post TC Pam mini-census report. Port Vila.

⁷³ FAO and SPC 2019 Country gender assessment of agriculture and rural sector in Vanuatu.

⁷⁴ AECOM 2018 Kava Value Chain, Gender Equality and Social Inclusion Analysis TR#130.

⁷⁵ FAO 2016 Developing gender sensitive value chain: A guiding framework.

⁷⁶ SPC 2015 Vanuatu National Coconut Strategy 2016-2025.

study examining access to justice in rural Vanuatu published in 2016, 74% of the interviewed women stated that they had not heard of Family Protection Orders.

SDG Performance by indicator: As of December 2020, only 24.6% of indicators needed to monitor the SDGs from a gender perspective were available, with gaps in key areas, in particular: unpaid care and domestic work, key labour market indicators, such as the gender pay gap and information and communications technology skills. In addition, many areas – such as gender and poverty, physical and sexual harassment, women’s access to assets (including land), and gender and the environment – lack comparable methodologies for regular monitoring. Closing these gender data gaps is essential for achieving gender-related SDG commitments in Vanuatu⁷⁷.

Table 3: Summary of SDG Performance by indicator

Category	Indicator No.	Indicator	Value in Vanuatu (Female)	Value in Vanuatu (Male)
Economic	8.5.2.	Unemployment rate. Age 15+	1.6%	2.1%
Social protection	1.3.1	Proportion of mothers with newborns receiving maternity cash benefit.	NA	NA
	3.1.1	Maternal mortality ratio (Per 100,000 live births).	72	NA
	3.7.2	Adolescent birth rate (per 1,000 women aged 15-19 years).	51.2	NA
		Literacy rate, age 15+	87.5%	86.7%
		Rate of out of school children. Primary and Lower Secondary education.	6.4%	6.2%
	5.2.1	Proportion of ever-partnered women and girls subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months. Age 15-49.	29.4%	NA
	5.3.1	Proportion of women aged 20-24 years who were married or in a union before age 18 (%)	2.5% before 15 yrs 21.4% - before 18 yrs	NA
Political participation	5.5.1	Proportion of seats held by women in national parliaments (% of total number of seats)	0%	NA
		Proportion of elected seats held by women in deliberative bodies of local government	10.1%	NA
	5.5.2	Proportion of women in managerial positions	22.1%	-
		Proportion of women in senior and middle management positions	28.5%	-
Environment	3.9.1	Age-standardized mortality rate attributed to household air pollution (deaths per 100,000 population).	111	
	6.1.1	Proportion of population using safely managed drinking water services, by urban/rural.	57%	
	7.1.2	Proportion of population with primary reliance on clean fuels and technology.	8%	

Samoa

The Republic of Samoa is an independent Polynesian Pacific Island country consisting of ten islands, five of which are inhabited. The capital, Apia, is located on the largest island, Upolu. Samoa has a total land area of 2,830 km². The population was estimated to be 218,764 in

⁷⁷ [Country Fact Sheet | UN Women Data Hub.](#)

2022. The country's official languages are English and Samoan. Samoa's society centres around the extended family, which is headed by an elected chief who directs the family's social, economic and political affairs, and the church, which is a focus of recreational and social life⁷⁸.

Population and Demographics: The population of Samoa is 218,764⁷⁹ with 111,550 males⁸⁰ and 107,213 females⁸¹ (2021). About 18% of the population lives in urban area and the remainder lives in rural areas⁸² (2022). The annual population growth rate is 1.8% (2021)⁸³.

Education: Adult literacy rate in Samoa is very high, about 99%.⁸⁴

Health: The total fertility rate in Samoa is 4⁸⁵. Maternal mortality ratio of Samoa is 43 deaths per 100,000 live births (2017)⁸⁶. The adolescent birth rate is 44 births per 1,000 women of ages 15-19 (2020).⁸⁷ The infant mortality is 14 per 1,000 live births with female infant mortality rate being 13 per 1,000 live births and 16 per 1,000 live births for male infants (2021)⁸⁸. An estimated 7.3% of children under the age of 5 years face stunting⁸⁹. This includes 6.9% of female and 7.6% of male infants (2019)⁹⁰ Life expectancy at birth for Samoans is 73 years; 75 years for women and 70 years for men (2020)⁹¹.

Political representation and decision-making⁹²: In 2021, 7.8% of seats in the Samoan parliament were occupied by women⁹³. Despite the introduction of temporary special measures like 10% reservation for women in legislative assembly and the participation of women in the highest levels of political leadership, customary social norms and socially constructed gender roles pose persistent barriers/challenges to women's full participation in political and public life as well as their decision-making power in the community. Samoan villages tend to be hierarchically organized into tight-knit communities with clear gender roles reflective of patriarchy. Within the traditional village setting, a woman's status is largely determined by birth order and marital status in the family. High status and respect are given to the eldest female of the family, with the status of the male family member's wife much lower than that of his sister or their daughter. Nofotane women (married into husband's family) do not have the same access to pathways to leadership as other women and men in the village because of their status. Traditional village norms that do not recognize women matai, or do not allow or encourage them to participate in village councils by putting formal barriers such as bans of women matai, and informal barriers such as the use of offensive or sexual jokes in village council meetings. Religious norms and church practices are also resistant to women's leadership. These barriers continue to exist unchallenged as they are claimed to be part of village rules and traditions. As a result, the voices of women matai continue to be excluded from village decision-making processes.

⁷⁸ <https://aric.adb.org/samoa>

⁸¹ <https://data.worldbank.org/indicator/SP.POP.TOTL.FE.IN?locations=WS>

⁸¹ <https://data.worldbank.org/indicator/SP.POP.TOTL.FE.IN?locations=WS>

⁸¹ <https://data.worldbank.org/indicator/SP.POP.TOTL.FE.IN?locations=WS>

⁸² <https://data.worldbank.org/indicator/SP.RUR.TOTL.ZS?locations=WS>

⁸³ <https://data.worldbank.org/indicator/SP.POP.GROW?locations=WS>

⁸⁴ <https://data.worldbank.org/indicator/SE.ADT.LITR.ZS?locations=WS>

⁸⁵ <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=WS>

⁸⁶ <https://data.worldbank.org/indicator/SH.STA.MMRT?locations=WS>

⁸⁷ <https://data.worldbank.org/indicator/SP.ADO.TFRT?locations=WS>

⁸⁸ <https://data.worldbank.org/indicator/SP.DYN.IMRT.MA.IN?locations=WS>

⁸⁹ <https://data.worldbank.org/indicator/SH.STA.STNT.ZS?locations=WS>

⁹⁰ <https://data.worldbank.org/indicator/SH.STA.STNT.MA.ZS?locations=WS>

⁹¹ <https://data.worldbank.org/indicator/SP.DYN.LE00.MA.IN?locations=WS>

⁹² https://asiapacific.unwomen.org/sites/default/files/2022-11/UN-Women-Women-in-Leadership-Samoa-Report_0.pdf

⁹³ UNDP. 2022. Human Development Report: Samoa.

Economy and women's work force participation⁹⁴: Samoa is majorly dependent on its informal economy with majority of the population relying on subsistence agriculture and coastal fishing. However, women and men make different contributions to rural livelihoods. Women perform a variety of jobs, including supporting their families and communities and generating income through small enterprises. Women are frequently simultaneously involved in subsistence farming and roadside sales as well as more structured local marketplaces. They also play a key role in the production of value-added goods especially in terms of quality control and compliance in export businesses⁹⁵. However, only men are traditionally recognised as farmers, while women are considered playing only supportive roles within communities. Therefore, it is difficult to measure the true size of the economy and women's participation in it⁹⁶.

Samoa's GDP growth rate is -7.1% (2021)⁹⁷. Nearly two-thirds of Samoans are farmers or agricultural workers. About one-fifth of the population works in government, tourist, or other service sectors, and the central government is Samoa's single largest employer. The labour force participation rate among females is 41.1% (2017)⁹⁸ and among males is 61% (2021)⁹⁹. 18.8% of Samoan population lives under Basic Needs Poverty Line (BNPL) (2014). 40% of women working in subsistence agriculture are below the BNPL (2019). 20% of the household in Samoa are female headed (2016). 2.9% of female headed households and 2.8% of male-headed households are below the food poverty line (2019). More female headed households, 12.8%, are below the BNPL compared to 10.1% of male headed households, reflecting increased vulnerability for female headed households (2019).

Women in agriculture: Samoan women are primarily involved in subsistence and market gardening of vegetables and fruits close to their homes. These crops are important to households for nutrition as well as market incomes. They also make up the majority of market vendors of farm produce and value-added products such as prepared foods and handicrafts¹⁰⁰. Women lead in niche organic value chains such as certified organic production of coconut and fetau oil, dried bananas and honey. This contributes to village enterprises and provides a source of income for rural families.

Despite this considerable contribution of women to agriculture in Samoa, only 4.6% of rural and 0.5% of urban women report being employed in agriculture. The low reporting of rural women's occupation in agriculture may indicate underreporting of their employment as contributing family members on family farms or as subsistence farmers. This may also be why women's employment in agriculture is lower than it is for men. Most women employed in agriculture are not paid (88.1%) and/or are self-employed (88.3%). Rural women have a significant role in several agricultural value chain points. Since there is such a high demand from exporters, more and more women and entire families are switching from traditional to commercial agriculture and turning to cash crops like turmeric, cocoa, taro, bananas and noni. Women labour harder than males in the cocoa value chain when it comes to small-scale manufacturing operations like making lumps of cocoa paste sold in cup moulds. Many women own cocoa plantations, and many of those women are also cocoa farmers who have taken over the management of a plantation on their own family land from their husbands or sometimes from brothers. Some women manage the plantation because their husbands

⁹⁴ FAO and SPC 2019. Country gender assessment of agriculture and rural sector in Samoa.

⁹⁵ <https://www.fao.org/3/ca6156en/ca6156en.pdf>

⁹⁶ *ibid.*

⁹⁷ <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=WS>

⁹⁸ <https://data.worldbank.org/indicator/SL.TLF.CACT.FE.NE.ZS?locations=WS>

⁹⁹ <https://data.worldbank.org/indicator/SL.TLF.CACT.MA.ZS?locations=WS>

¹⁰⁰ FAO and SPC. 2019. Country Gender Assessment of Agriculture and the Rural Sector in Samoa.

have full-time paid jobs. In most cases, female producers schedule the job of cultivating with young males from their family or with hired male employees during busy seasons.¹⁰¹

Taro chip manufacture also involves rural women, especially in quality control and maintaining compliance for export requirements. Women work on the taro washing line and in factory production lines to provide quality control, even though Samoan males are usually recognised for growing taro rather than women. While women are not directly involved in the planting and harvesting of taro, they are involved in marketing, in managing family businesses and in various other points of the taro value chain. Similarly, women are involved in quality control and compliance in the non-growth banana industry. In the organic industry, consisting of export of extra virgin organic coconut oil, fetau oil and noni juice, women are involved in all three areas in various stages of the value chain process. Many women are employed by locally owned, family-run businesses like Natural Foods Limited, which exports local Samoan products like taro, copra, and breadfruit as well as goods with added value like taro and banana chips and papaya leaf tea. These women are also primarily involved in quality control to ensure that the products are in compliance with necessary standards.¹⁰²

GBV and SEAH: There is high level of prevalence of GBV in Samoa. The latest data on gender-based violence and SEAH is available from the MICS Survey 2019-2020. As per the survey, 37.5% of ever-partnered women aged 15-49 years experienced intimate partner physical and/or sexual violence at least once in their lifetime¹⁰³; 9.7% of women aged 15–49 years experienced sexual violence perpetrated by someone other than an intimate partner since age 15¹⁰⁴; and 7.4% of women aged 20–24 years were first married or in union before age 18¹⁰⁵. There is wide cultural acceptance and normalisation of GBV and thus there is under-reporting of these cases and survivors tend to be hesitant in seeking safety and support. In 2019–2020, 40.2% of women who had ever experienced physical or sexual violence stated that they had sought help to stop the violence; 6.3% stated that they had never sought help but had told someone about the violence; and 51.5% stated that they had never told anyone about the violence. Among women who sought help for physical or sexual violence, 75.2% went to their own family, while 8.6% sought help from the police. Domestic violence and other forms of violence against women and girls are prosecuted under the Crimes Act of 2013. The Family Safety Act of 2013 further defines family violence; provides protections for children under age 18 to apply for a protection order without the consent of a parent or legal guardian; and institutes a “No Drop Policy” for all cases¹⁰⁶.

SDG Performance by indicator: As of December 2020, only 24.6% of indicators needed to monitor the SDGs from a gender perspective were available, with gaps in key areas, in particular: unpaid care and domestic work, and information and communications technology skills. In addition, many areas – such as gender and poverty, physical and sexual harassment, women’s access to assets (including land), and gender and the environment – lack comparable methodologies for regular monitoring. Closing these gender data gaps is essential for achieving gender-related SDG commitments in Samoa¹⁰⁷.

Table 4: SDG Performance by indicator in Samoa

¹⁰¹ <https://www.fao.org/3/ca6156en/ca6156en.pdf>.

¹⁰² *ibid.*

¹⁰³ <https://evaw-global-database.unwomen.org/en/countries/oceania/samoa>

¹⁰⁴ *ibid.*

¹⁰⁵ *ibid.*

¹⁰⁶ UN Women 2022 Gender Equality Report 2022.

¹⁰⁷ [Country Fact Sheet | UN Women Data Hub](#)

Category	Indicator No.	Indicator	Value in Samoa (Female)	Value in Samoa (Male)
Economic	8.5.2.	Unemployment rate. Age 15+.	21.3%	10.6%
Social protection	1.3.1	Proportion of mothers with newborns receiving maternity cash benefit.	28.5%	NA
	3.1.1	Maternal mortality ratio (Per 100,000 live births).	43	NA
	3.7.2	Adolescent birth rate (per 1,000 women aged 15-19 years).	39.2	NA
		Literacy rate, age 15+.	99.1%	99.2%
		Rate of out of school children. Primary and Lower Secondary education.	NA	NA
	5.2.1	Proportion of ever-partnered women and girls subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months. Age 15-49.	17.8%	NA
	5.3.1	Proportion of women aged 20-24 years who were married or in a union before age 18 (%).	0.9% before 15yrs 7.4% - before 18yrs	NA
Political participation	5.5.1	Proportion of seats held by women in national parliaments (% of total number of seats).	10%	-
		Proportion of elected seats held by women in deliberative bodies of local government.	NA	-
	5.5.2	Proportion of women in managerial positions.	43.1%	-
		Proportion of women in senior and middle management positions.	43%	-
Environment	3.9.1	Age-standardized mortality rate attributed to household air pollution (deaths per 100,000 population).	66	
	6.1.1	Proportion of population using safely managed drinking water services, by urban/rural.	46%	
	7.1.2	Proportion of population with primary reliance on clean fuels and technology.	36%	

iii. Composite indices (HDI, GDI, GII, GGI)

The collation of scores and rankings from composite indices helps to situate the project with a comprehensive context-driven baseline. Such indices help to reflect each country's overall performance on different indicators. These indices have different methodologies and should be viewed as indicative rather than conclusive measures of current levels of development.

Tonga

Tonga is placed in the high human development category, ranking 91 out of 191 countries and UN-recognized territories. Between 1990 and 2021, Tonga's Human Development Index (HDI) value increased by 15.5% – life expectancy at birth changed by 3.7 years, mean years of schooling changed by 2.3 years and expected years of schooling changed by 4.0 years. The 2021 female HDI value for Tonga is 0.728, which is lower than it was for men, at 0.754 for males, resulting in a Gender Development Index (GDI) value 108 of 0.965, placing it into Group 2 of GDI.

¹⁰⁸ GDI measures gender gaps in achievements in 3 basic dimensions of human development: health (measured by female and male life expectancy at birth), knowledge (measured by female and male expected years of schooling for children and mean years of schooling for adults aged 25 years and older) and living standards (measured by female and male estimated GNI per capita). It is a ratio of the female to the male HDI.

Table 5: Summary of Tonga's HDI

		Female	Male
	HDI	0.728	0.754
	Life expectancy at birth	73.7 years	68.4 years
	Expected years of schooling	16.3 years	15.7 years
	Mean years of schooling	11.5 years	11.2 years
	Gross National Income per capita (\$)	4,842	8,845

Tonga's Gender Inequality Index (GII) ranking is 160 out of 170 countries in 2021.

Table 6: Summary of Tonga's GII

Gender Inequality Index (GII)	0.631	
Maternal Mortality Ratio	52 deaths/100,000 births	
Adolescent birth rate	19 births/1000 women (age 15-19)	
	Female	Male
Share of seats in parliament	0%	100%
Population with at least some secondary education (age 25 and older)	93.5%	93.1%
Labour force participation rate (age 15 and older)	37.3%	55.3%

Tonga's losses due to inequality is 10.6%, which lowers the IHDI¹⁰⁹ to 0.666 in 2021.

Table 7: Summary of Tonga's losses due to inequality

Inequality adjusted HDI (IHDI)	0.666
Overall loss (from HDI to IHDI)	10.6%
Inequality in life expectancy	8.7%
Inequality in education	4.3%
Inequality in income	18.2%

Note: The Gender Gap Index (GGI) is not available for Tonga.

Vanuatu

Vanuatu's HDI value for 2021 is 0.607, which puts the country in the Medium human development category and positions it at 140 out of 191 countries and territories.

Table 8: Summary of Vanuatu's Human Development Index

	Overall	Female	Male
HDI (2021)	0.607 (Rank 140)	0.715	0.747
Life expectancy at birth	70.4	74.0	68.9
Expected years of schooling	11.5	12.9	12.7
Mean years of schooling	7.1	8.4	8.9
Gross National Income per capita (\$)	3,085	12,241	21,210
GDI	0.957	-	-

¹⁰⁹ IHDI considers inequalities in all 3 dimensions of the HDI by 'discounting' each dimension's average value according to its level of inequality in the distribution. The 'loss' in human development due to inequality is given by the difference between the HDI and the IHDI. As the inequality in a country increases, the loss in human development also increases.

Between 2005 and 2021, Vanuatu's HDI value changed from 0.578 to 0.607, a change of 5%. Between 2005 and 2021, Vanuatu's life expectancy at birth changed by 1.1 years, mean years of schooling changed by 0.6 years and expected years of schooling changed by 0.9 years. Vanuatu's GNI per capita changed by about 16.5% between 2005 and 2021.

Table 9: Summary of Vanuatu's Gender Inequality indicators

Gender Inequality Index (GII) (2021)	0.465	
Maternal Mortality Ratio	225.4 deaths /100,000 births	
Adolescent birth rate	42.5 births/1000 women (age 15-19)	
	Female	Male
Share of seats in parliament	25.9%	74.1%
Population with at least some secondary education (age 25 and older)	64.2%	70.3%
Labour force participation rate (age 15 and older)	46.2%	71.7%

The IHDI considers inequalities in all three dimensions of the HDI by 'discounting' each dimension's average value according to its level of inequality in the distribution. The 'loss' in human development due to inequality is given by the difference between the HDI and the IHDI. As the inequality in a country increase, the loss in human development also increases. Vanuatu's loss due to inequality is 17.8%, which lowers the HDI to 0.489 in 2014.

Table 10: Summary of Vanuatu's losses due to inequality

Inequality adjusted HDI (IHDI)	0.666
Overall loss (from HDI to IHDI)	10.6%
Inequality in life expectancy	8.7%
Inequality in education	4.3%
Inequality in income	18.2%

In 2022, **Global Gender Gap index for Vanuatu was 0.67 index**. Global gender gap index of Vanuatu increased from 0.64 index in 2019 to 0.67 index in 2022 growing at an average annual rate of 2.39%.

Samoa

Samoa's HDI value for 2021 was 0.707— which put the country in the High human development category—positioning it at 111 out of 191 countries and territories. Between 1995 and 2021, Samoa's HDI value changed from 0.659 to 0.707, a change of 7.3%.

In 2021, Samoa's female HDI value was 0.685 which was a little lower in comparison to male HDI of 0.716, resulting in a GDI value of 0.957. This placed Samoa in Group 2 countries, which have medium-high equality in HDI achievements between women and men. Between 1995 and 2021, Samoa's life expectancy at birth changed by 3.5 years, mean years of schooling changed by 0.9 years and expected years of schooling changed by 0.4 years. Samoa's GNI per capita changed by about 35.2%.

Table 11: Summary of Samoa's Human Development Index

	Overall	Female	Male
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HDI (2021)	0.707 (Rank 111)	0.685	0.716
Life expectancy at birth	72.8	75.5	70.3
Expected years of schooling	12.4	13.0	11.9
Mean years of schooling	11.4	11.8	11.0
Gross National Income per capita (\$)	5308	3223	7312
GDI	0.957	-	-

With a GII value of 0.418, Samoa ranked 99 out of 170 countries in 2021. Samoa fares well in terms of education, where 79.1% of adult women have reached secondary level of education in comparison to 71.6% of their male counterparts. However, only 7.8% of parliamentary seats were held by women which indicates a low political representation.

Table 12: Summary of Samoa's GII

Gender Inequality Index (GII) (2021)	0.418	
Maternal Mortality Ratio	43 deaths /100,000 births	
Adolescent birth rate	43.6 births/1000 women (age 15-19)	
	Female	Male
Share of seats in parliament	7.8%	92.2%
Population with at least some secondary education (age 25 and older)	79.1%	71.6%
Labour force participation rate (age 15 and older)	30.7%	54.2%

3. Gender and the Pacific Community

For over 30 years SPC has worked towards the promotion of gender equality, women's human rights and the advancement of women, by documenting good practices for promoting gender equality, women's human rights and the empowerment of women, and building the capacity of Pacific Island countries and territories (PICTs) to advance gender equality. SPC convenes the Triennial Conference of Pacific Women and the Pacific Ministers for Women Meeting every three years to monitor progress in the implementation of the Pacific Platform of Action for the Advancement of Women and Gender Equality – the blueprint for gender equality in the Pacific¹¹⁰.

SPC works with countries in strengthening the capacity of institutions to strategically progress gender equality, focusing on strengthening the capacity of governments and partner agencies to consider gender perspectives and to effectively address gender inequality issues across sectors.

In that context, SPC implemented the Progressing Gender Equality in the Pacific (PGE) programme in two phases. In Phase 1 (2013-2018) the program aimed to: a) take stock of the enabling environment for the promotion of gender equality and women's rights in 12 Pacific Island countries, and provide technical assistance to at least 18 countries for the purpose of strengthening the capacity of governments to mainstream gender across all sectors, including through improved national policies and strategies; and b) develop and disseminate information about gender inequalities through improved data on the situation of men and women (gender statistics) in at least 18 countries¹¹¹. Continuing from Phase I, PGE Phase II (2019–2022) addresses Pacific Leaders' Gender Equality Declaration (PLGED) priorities and use of the Pacific Platform for Action to guide its interventions of

¹¹⁰ SPC 2016 Progressing gender equality in the Pacific (2013 – 2018): Programme report. 1 July 2014 – 30 June 2015.

¹¹¹ Ibid.

supporting PICs to adopt policies and legislation for the promotion of gender equality and women's human rights¹¹².

The adoption, implementation and monitoring of these policies and legislation, in turn, will be a key contributor to improved gender equality outcomes identified in the Sustainable Development Goals, PLGED and national gender policies relevant to women in decision-making, ending violence against women, and women's economic empowerment. PGEP I and II is funded by the Australian Government.

The SPC adopted a set of general policies towards social and environmental responsibility in August 2020¹¹³. The key objectives of this policy are to promote and drive continuous improvement of SPC's social and environmental performance, to embed a people-centred approach across its programmes, projects and activities, as well as to align with internationally recognised best practices for development. The policy provisions for considerations of gender equality and social inclusion in SPC's mandate by coordination between key divisions within SPC that are responsible for mainstreaming human rights, gender, cultural heritage and socio-environmental issues. Through the adoption of this policy, SPC will minimize social, cultural and environmental impact; contribute towards the economic empowerment of women, youth, persons with disabilities, and marginalised groups in all their diversities; promote local participation and ownership of development; and contribute to the elimination of all forms of gender-based violence. SPC developed a robust gender assessment and gender action plan to inform the disbursement of sub-grants to local authorities in the Federated States of Micronesia.

Much of this has been initiated under SPC's Human Rights and Social Development (HRSD) division. HRSD was created in 2020 and is a newly merged division within SPC, bringing together the previous Social Development Programme and Regional Rights Resource Team. HRSD provides culturally and contextually grounded technical assistance to advance human rights, gender equality, social inclusion, youth development and cultural development – together termed human rights and social development¹¹⁴.

SPC has also established a Grievance Redressal Mechanism (GRM)¹¹⁵. In all situations involving complaints related to GBV, SEAH, violence against children and human trafficking, SPC's GRM ensures that such issues are taken into consideration during project implementation of projects. The objectives of setting up the GRM are to:

- provide stakeholders with a clear process for providing comment and raising grievances and concerns in an anonymous manner.
- structure and manage the handling of comments, responses, and grievances in a timely manner; and,
- ensure that comments, responses, and grievances are handled in a fair and transparent manner and in line with local and national policies.

The GRM is meant to serve as an effective tool for early identification, assessment and resolution of grievances and therefore for strengthening accountability to beneficiaries. All grievances will be closely monitored by the Accredited Entity to assess the number and type

¹¹² <https://hrsd.spc.int/node/848>

¹¹³ This has been taken from Gender Assessment and Gender Action Plan have been prepared for The Pacific Community (SPC), to inform the project design of the Green Climate Fund (GCF) Funding Proposal titled: Enhancing Adaptation and Community Resilience by Improving Water Security in Vanuatu. 2022.

¹¹⁴ <https://hrsd.spc.int/what-we-do>

¹¹⁵ This has been taken from Gender Assessment and Gender Action Plan have been prepared for The Pacific Community (SPC), to inform the project design of the Green Climate Fund (GCF) Funding Proposal titled: Enhancing Adaptation and Community Resilience by Improving Water Security in Vanuatu. 2022.

of grievances and evaluate any trends over time. This will be conducted by the relevant responsible parties as highlighted under SPC's policies for accountability.

4. Gender mainstreaming for the project

This section sets out the rationale and approach to gender mainstreaming for the project, drawing on documented literature as well as insights gained during the design consultations.

i. Problem Statement

The majority of the populations of Tonga, Vanuatu and Samoa are engaged in agriculture, including growing crops for subsistence as well as for domestic and limited international markets. However, with decreasing and erratic rainfall, more intense storms and increasing temperatures, agricultural productivity is projected to reduce significantly. Unless urgent adaptation action is taken, the impacts of climate change will contribute to inconsistent food production, loss of farmer livelihoods, food insecurity and related environmental, social and economic instabilities in light of each country's baseline vulnerability to natural disasters and economic shocks.

Women and marginalized groups are disproportionately affected by the effects of climate change due to the existing discriminatory norms and practices that impede equal access to productive assets for livelihoods, information, and decision-making, combined with their responsibilities for food production and security for their families.

Tonga

Women are more likely to be involved in home-based subsistence farming and market gardening of vegetables and fruit for daily diets and small-scale trading¹¹⁶. They are also more active in organic learning farm networks and have some participation in value chains such as purchasing from smallholders and linking subsistence farmers to semi-commercial markets. Climate change impacts on women (especially during and after disasters) include a burden of care, reduced income and mental health stresses. This is exacerbated by limited access to various forms of resources including land tenure security and extension services, constraining their adaptive capacity at a time when they have a greater responsibility for food provisioning for their families¹¹⁷.

Vanuatu

Women in Vanuatu primarily undertake subsistence garden close to their homes for household provisioning. They are also central to the sales of fresh and prepared food in local markets¹¹⁸. Frequent climate hazards – especially recurring tropical cyclones such as twin cyclones Judy and Kevin in March 2023 – impact on women's subsistence farming, affecting both household food security as well as small-scale economic activities¹¹⁹. These disproportionate impacts on women are magnified by increased care burdens during and after disasters, reduced safety and security challenges in markets¹²⁰, their lower access to

¹¹⁶ Pacific Farmer Organisations. 2025. Climate Adaptation in the Pacific Islands through a Gender Lens.

¹¹⁷ Amato-Ali et al. 2025. Impacts of climate change on taro food loss and farmers' food security in Tonga and Samoa. *Frontiers in Sustainable Food Systems* 9.

¹¹⁸ FAO and SPC 2019 Country gender assessment of agriculture and rural sector in Vanuatu.

¹¹⁹ Governments of Australia and Vanuatu. 2023. A triple disaster event series in Vanuatu: Cascading and compounding impacts of climate change.

¹²⁰ UN Women. 2022. Creating Safe Workspaces for Women Market Vendors in Vanuatu

credit and reduced involvement in decision-making about land. During times of disaster, ni-Vanuatu women highlight concerns such as stress over food and water availability leading to mental health impacts¹²¹.

Samoa

Samoa women are likely to be involved of household production of vegetables and fruits for food security and income from small-scale retail. They are also involved in the production of niche organic products that generate cash and promote climate-resilient agro-ecological systems. However, climate change impacts such as severe tropical cyclones, extreme precipitation and warming temperatures¹²² affect such small-scale agricultural production. This affects women farmers as well as women retailers, who face income shocks, infrastructure constraints at markets, and lower access to land and credit, all of which are further compounded by seasonal fluctuations in prices of agricultural food products in local markets¹²³. Climate-induced disasters in Samoa cause severe damage to livelihoods, with women being more likely to experience such impacts across almost all of their livelihood options, further unpaid care and domestic work burdens during such times¹²⁴.

ii. Rationale

Climate change affects women and men differently, due to existing social norms and gender roles. The risk of climate change often magnifies women's relative poverty, and discrimination increases. Women are also underrepresented in decision making for resource management and other adaptation strategies, notably in the primary sector. In addition, resource scarcity reduces work opportunities for men; the associated financial hardship increases the risk of gender-based violence against women in stressful and crises situations. Further as widely recognised in all three countries of interest that are highly dependent on remittance economy, climate change tends to impact livelihood and availability of land and can lead to increased migration of men and thus more women-headed households¹²⁵. This not only affects the social and cultural aspects of the communities but also places a larger burden of workload and labour on women who are left behind. Women must be recognized as critical actors in climate change adaptation processes, with their knowledge, needs and priorities informing the design, implementation and monitoring of the proposed project. In each of the countries, rural to urban migration as well as migration of men for seasonal work has resulted in increased workloads for women and households headed by women.

While gender mainstreaming is acknowledged as a need by the three governments, it has been problematic due to limited skills in gender analytics and lack of gender disaggregated data in the different departments concerned and weak political will to prioritise it. The proposed CRRRA project intends to identify and acknowledge barriers for women to actively participate in the growth of the economy and decision making in the agricultural sector. The objective is to safeguard them from the disproportionate impacts of climate change, by ensuring that the proposed activities are gender responsive.

¹²¹ Alston et al. 2023. Women and climate change in Vanuatu, Pacific Islands Region. Gender, Place and Culture.

¹²² Australian BOM and CSIRO. 2011. Climate Change in the Pacific: Scientific Assessment and New Research. Volume 2: Country Reports. Chapter 12: Samoa.

¹²³ Samoa Ministry of Agriculture and Fisheries. 2025. Local Market Report Q4, 2025.

¹²⁴ Samoa Bureau of Statistics and UN Women. 2023. Gender and Environment Survey 2023 Report: Samoa.

¹²⁵ Campbell, J. and O. Warrick 2014. Climate Change and Migration Issues in the Pacific. UNESCAP, Fiji.

iii. Barrier analysis

Tonga

Gender inequality plays out along political, social and cultural dimensions. Social norms and expectations about the roles and responsibilities of women and men have a considerable influence on the work that men and women perform in agriculture in Tonga. Gender equality in agriculture needs transformation in order to meet the related challenges of food security and climate change. Women farmers need to be more active in decision-making for the agricultural sector to adjust, adapt and continue to be profitable in the face of climate risks. Some of the identified gender barriers in Tonga are:

Gender roles in rural livelihoods: Although women and girls comprise 51% of the agricultural workforce¹²⁶ in the country, the Tonga Agriculture Sector Plan (TASP) acknowledges that the role of women in the agriculture sector is not recognized at its true value. Rural women are producers of both food and high-value handicrafts for additional income generation¹²⁷. Farming and fishing are considered men's responsibilities, and there is very little recognition of women farmers and fishers. This view is reflected in the governance systems related to natural resources and land use management as well as in the services provided to farmers and fishers. District-wise agricultural committees in Tonga conduct monthly meetings. These committees are composed mostly of men, although women are allowed to become members. Women face time constraints due to their domestic and caregiving responsibilities and have difficulty in prioritizing farming activities.

It was reported in the consultations that women are involved in all stages of agricultural production, although their exact role has changed. Traditionally men would be involved in harvesting and women would do processing. This is starting to be reversed – women being the lead farmers and men doing processing in many cases.

Since 2018 the Ministry of Agriculture in Tonga has been encouraging and highlighting the skills of women farmers skills through competitions for the best home garden. This highlights the important contribution of home gardens to household food security but also for income generation.

In general, the Ministry has found that women are quicker to engage with and adopt new practices they are proposing, and more committed to piloting and experimenting. In fact, if they do not engage women during the design and implementation of their programmes, they typically fail.

Access to and control over land and other productive resources: Most lands in Tonga belong to the nobles. Every Tongan male is entitled to access a town allotment and a bush allotment for farming when they reach the age of 16. Men can “rent” land from a noble, and only a man can inherit land use rights. Tongan women do not have any rights over land, are not entitled to own land and can only have temporary access to land. Women can legally lease land, although it is difficult for them to do so. As per the 2016 Land Act of Tonga, while widowed women are entitled to continue to stay in the town allotment (residential) of her deceased husband, divorced or separated women are not. With limited access to land and property inheritance, single, divorced and separated women tend to face high risks of homelessness. As a consequence, women for the fear of becoming homeless continue to survive in violent households or relationships¹²⁸. Challenges for women identified by

¹²⁶ FAO and SPC. 2019. Country gender assessment of agriculture and the rural sector in Tonga. Nuku'alofa.

¹²⁷ Ibid.

¹²⁸ UN Women 2022 Gender Equality Brief for Tonga.

extension staff include lack of funds to buy seeds or pay for help with the harvest, or lack of land and sea transportation to reach markets.

Inadequate access to agriculture extension services: MAFF's extension services are planned with inputs from male farmers only. Extension services focus on growing crops for both subsistence and income, either from selling surpluses in local markets or selling to exporters. Extension Services offered by MAFF, also have a Women's Section that works with village women's committees. This section works with them on subsistence crops for food security and nutrition, as well as providing support for value-added products such as taro chips. Unlike the extension services targeting men on cash crops for exportation, extension services for women focus on sale at local markets and supermarkets.

A gender assessment of Tongatapu conducted in 2015 found that the Women's Section focuses on the same crops each year and that some women attend trainings to get free seeds but often do not return for the whole programme because they have had the same training in past years¹²⁹.

Lack of acknowledgement of women's entrepreneurial skill: Tongan women have considerable entrepreneurship experience that is seldom recognized because most are involved in the informal economy. Rural women commonly sell surplus agriculture products, fish and handicrafts. A growing number of women are also involved in the services sector, including in running restaurants and hotels in Nuku'alofa and the touristic areas of Vava'u. Although numerous gender barriers are prevalent in Tonga, there have been attempts to remove these barriers.

In fact, it was reported in consultations that women in some locations are earning large amounts of money by harvesting and selling large banana leaves given their use in wedding ceremonies and other cultural occasions as well as other important traditional cultural items (e.g., taivala and tapa). These are mostly being exported to relatives or the diaspora living in other countries through an informal export trade. They get cash or some form of exchange. The government is aware of this informal trade, and the fact that this is not counting in national accounts, but not pursuing it.

Co-operatives: Although there is little available information on agricultural and women's cooperatives, there is some information on past efforts on organizing women into cooperatives, such as women's involvement in the Friendly Island Marketing Cooperative that used to market squash, vanilla, root crops and handicrafts products. Other past efforts include two important cooperatives run by women¹³⁰, the Paki moe To'i cooperative registered in 1977 and the Women Multipurpose Cooperative Ltd established in 1991.

Financial services: The Tonga Development Bank (TDB) has introduced loan products and financial support services for women's groups and individual women with interest rates from 4–8% aimed at supporting women's microenterprises. There are also numerous moneylenders operating with interest rates ranging from 10–25%. For example, the South Pacific Business Development (SPBD) offers women's groups microfinance with 25% interest rates. SPBD's current membership is 6,168 women ranging from 18–65 years of age. One commercial bank, ANZ, conducts 'business mind-set' training for women's groups throughout Tonga to encourage women-led profitable undertakings.

¹²⁹ FAO and SPC. 2019. Country gender assessment of agriculture and the rural sector in Tonga. Nuku'alofa.

¹³⁰ Hakautapu Emberson-Bain. 1998. Country Briefing Paper: Women in Tonga. ADB

It was reported in the consultations that there are good examples of women-owned micro-credit initiatives in each country, but these have to be kept very small and local. They have not been able to absorb large amounts of donor funding, and there is a real risk of additional donor funds overwhelming them.

Decision making and Leadership¹³¹: Women in Tonga remain underrepresented in leadership and decision-making roles. Post the 2021 election, with only one female member in the 27-seat legislature, women have only 3.7% representation. Of the 75 candidates who stood for election, only 12 were women (16%). Representation of women in local governance comprising of district and town officers was as low as 1.1% as of the 2016 election. Women's representation in village councils, established to advise district and town officers, is unknown. Women tend to be more influential in the women committees and sub-committees. Women representation on boards and CEOs in private sector enterprises tends to be higher than state-owned enterprises.

Decision-making platforms within communities and village are dominated by men¹³². At the household decision making varies¹³³. Women tend to have decision making over household expenses, food etc. For most of the other issues either there is joint decision making or men taking the decision. Age and education among women tend to influence their decision-making role with more educated and younger women having greater independence in decision making. The *fahu* system accords the eldest a high-ranking position in the family and extended family but the eldest brother in the extended family supersedes that position.

Violence Against Women: As mentioned above, both the 2009 study and the 2019 MICS revealed that a significant number of women in Tonga have experienced controlling behaviour from their partners, including restrictions on their contact with others, controlling their movements, and becoming angry if they interact with other men. The high prevalence of these behaviours suggests that they are normalized in intimate relationships in Tonga. Additionally, the 2019 MICS found that over 38% of Tongan women believe that husbands are justified in beating their wives in certain circumstances. However, formal services to support women and girls experiencing violence are limited in Tonga, with the Women and Children's Crisis Centre (WCCC) providing survivor-centred response activities and the only refuge in Tonga. Efforts have been made to strengthen the referral system between WCCC and government ministries, but there is still room for improvement in the relationship between WCCC and the Ministry of Health. GBV is a core concern as this affects women's ability to participate effectively in Tonga's political and economic development leaving women with huge physical, emotional and psychological burden.

The National Centre for Women and Children and Ma'a Fafine Moe Famili also provide services to women experiencing violence. The data indicates that preventing and responding to gender-based violence is an urgent priority for Tonga, reflected in current policy and legislation¹²¹. Given that there exist limited mechanisms for redress, it is imperative that any interventions use "do no harm" approaches and recognise that many women and girls, as well as men and boys are survivors of gender-based violence.

Vulnerability to Disasters: Tonga ranks 3rd in the World Risk Index and is highly vulnerable to multiple forms of natural disasters like hurricane, cyclones, volcanic eruptions, tsunamis and erosion of land owing to the proximity to the coastline¹³⁴. Studies and evidence find that

¹³¹ UN Women. 2022. Gender Equality Brief for Tonga.

¹³² Government of Tonga and SPC 2019. Gender equality: where do we stand?

¹³³ FAO and SPC. 2019. Country gender assessment of agriculture and the rural sector in Tonga.

¹³⁴ UN Women. 2022. Gender Equality Brief for Tonga.

disaster and climate change affect women and vulnerable communities including female headed households, single women and women with disability disproportionately. Among the key adverse impacts are loss of livelihoods, increase in workload, loss of food security, increase in GBV and increase in poverty and deprivation¹³⁵¹³⁶. This notwithstanding women tend to be excluded from the decision making, planning and information related to disaster risk reduction, preparedness and management. Yet, where included, women have tended to be at the forefront of risk management and response. While there are multiple policy provisions for the Department of Climate Change and National Emergency Management Office to advance gender equality, the implementation remains limited with limited political will, human resources and financial resources¹³⁷.

Vanuatu

Gender role in rural livelihoods: Rural families operate as a family unit to undertake productive work. Women are expected to care for all family members, manage food gardens, fishing and water collections for family consumption, host guests, weave mats and handicrafts, sell produce at markets and also provide support to local community and church. Men have greater mobility and are engaged in outside employment and politics, as well as community and church activity.

Both women and men are engaged in agriculture in almost equal numbers though they may grow different crops and use different levels of technology. Generally, women tend to have “lighter” agricultural roles of weeding, planting and maintaining crops closer to home, while men take on “heavier” roles of clearing and ploughing land including use of machinery.

It was reported in the consultations that the role of women in kava production has changed considerably over the last decade. Traditionally, women were not ‘allowed’ to engage in kava consumption and production. Since it has been a cash crop, women are involved in all stages. Within each household, each individual will have a crop of harvest they are cultivating. In many cases, male members of the household are working abroad, and then the farm work rests with the women. It is also often women who are running stores and bars selling kava.

Overall, women and girls work significantly more hours than men, with less time for leisure or rest. FAO rural case studies of time use in Tanna showed women worked twice as many hours as men. When faced with this data, men in the community were surprised and many indicated a willingness to take on more work so there is better balance in families. Climate changes including drought, heavy rains, rough seas and sea level rise increase women’s workloads in a number of ways: reducing productivity of household gardens; reducing productivity of materials for handicraft production; increasing time and distance for water collection and reducing opportunity for gleaning and fishing.

Communities in North Ambrym, Epi and West Santo all experience three or more months of water shortages, requiring greater travel to collect drinking water and increasing incidence of water borne diseases. After disasters (and during the pandemic) women’s care burden increases substantially with closure of kindergartens and schools, loss of homes and gardens and water sources. Migration also creates pressure on families with increased work burdens on women left to care for children, elderly and family members with disability.

¹³⁵ UN Women (Year Unknown). Climate Change Disasters and Gender-Based Violence in the Pacific Community.

¹³⁶ UNCDF. 2020. Economic Impacts of Natural Hazards on Vulnerable Populations in Tonga.

¹³⁷ FAO and SPC. 2019. Country gender assessment of agriculture and the rural sector in Tonga.

Limited access to and control over land productive resources: Within Ni-Vanuatu ethnic groups, customary laws form the basis of the relationship between people and land¹³⁸.

According to the 2020 Census, 73% of private households reported having customary land tenure agreements. Vanuatu Land Registry does not collect sex-disaggregated data on land leases. However, the National Sustainable Development Plan Baseline Survey found that male-headed households had greater access to customary land than female-headed households¹³⁹. Kastom law, however, may in some instances prevent or discourage the participation of women in decision-making processes pertaining to land management and tenure. For example, in many communities, women are not allowed into the village meeting house where the discussions happen. Men overall have control over land, marine and forest resources, while women have access or use rights to natural resources in line with existing divisions of labour¹⁴⁰. Women with disability are less likely to marry and so face double exclusion to resources. Widows and female headed households also face exclusion or marginal access to natural resources.

Limited Access to Technology and Extension Services: Women and girl's roles and workloads restrict access to training and extension initiatives that could assist with adaptation strategies such as livelihood diversification. Agricultural extension services and enterprise development training at local level tends to be targeted to male heads of household, with men's work valued over women's work. Service providers need to shift approach to recognise that rural livelihoods are family enterprises, with women making up half of rural producers. Engaging families rather than just male heads of household is an effective way of reaching women and men, recognising and building on the work of all family members. The family farm teams approach combines technical extension/training with modules to identify family goals, roles, how work burdens can be shared, and improving decision making and communication and has been successful in other countries of the region, such as Papua New Guinea.

Access to and control of agricultural and marine machinery is gendered in many countries, including Vanuatu with women having less access than men to tools, machinery such as grass cutters, food processing (dryers and grinders) motorbikes, trucks or generators. Very few women know how to drive or operate agricultural machinery. Technology such as solar energy systems, fridges, lighting, drying and processing machines, improved cookstoves contribute to adaptive capacity. It will be important to ensure these technologies are available to women as well as men, and that women and people with disability have opportunities to train in maintenance and management of new technologies.

Limited sources of income and access to finance: The majority of the population in Vanuatu live in rural areas. Women in rural areas earn income through marketing crops and fish, processing copra, cooking food and handicrafts. Fewer than one in five women have a bank account, though village loans and savings cooperatives and other micro-credit schemes are widespread and an important way for women to increase access to finance. In the 2016 Mini-Census, 25.1% of women and 37.4% of men had an account at a commercial bank; the rate was higher among urban populations (46.6% female, 59.8% male) than rural (18.0% female, 29.3% male)¹⁴¹.

The typical requirement at financial institutions for land or vehicles as collateral restricts women's access to capital in Vanuatu (or pushes them to black market money lenders with

¹³⁸ FAO and SPC 2019. Country gender assessment of agriculture and rural sector in Vanuatu.

¹³⁹ UN Women 2022. Gender equality brief for Vanuatu.

¹⁴⁰ Ibid.

¹⁴¹ VSNO 2016. Mini-Census Report Vanuatu.

very high rates of interest). In 2020, 80% of the members of savings and loans cooperatives in Vanuatu were women. Savings and loans cooperatives disbursed approximately US\$475,000 of loans to members in 2020. Small and medium enterprise development provides an opportunity to diversify livelihoods and also integrate climate and disaster resilience into existing enterprises such as handicrafts. It is important that enterprise development is linked to markets with sound value chain analysis. This requires climate change and DRR delivery partners to work with market development programs.

It was reported in the consultations that there are good examples of women-owned micro credit initiatives in each country, but these have to be kept very small and local. They have not been able to absorb large amounts of donor funding, and there is a real risk of additional donor funds overwhelming them.

South Pacific Business Development (SPBD) Microfinance (Vanuatu) Ltd. has commenced its operation in April 2017. It is the fifth entity in the SPBD network of microfinance institutions in the South Pacific region following the success of SPBD Samoa (2000), SPBD Tonga (2009) and SPBD Fiji (2010) and SPBD Solomon Islands (2012). Since 2017, SPBD Vanuatu has disbursed more than 11,000 loans, worth over US \$6 million. In the coming years, it aims to grow its reach in Vanuatu to provide more women with economic opportunities. While this may seem positive, SPBD has very high real rates of interests and many women tend to default and lose assets to SPBD.

Decision making, leadership and participation in rural areas is shifting for the better:

Decision making is male dominated in Vanuatu. In the FAO Tanna case study, women reported many decisions are made by women and men together, but that men are the final decision makers. As enumerated, political participation in formal bodies is limited and has enhanced owing to reservation. In the public, sector women are better represented in leadership. Two of seven director generals are women (notably in in the MCC and MJCS) and 8/43 directors were women in 2019.

At the international level, women have led Vanuatu delegations to the UNFCCC COP (2017 and 2019) and women's representation in delegations has been 30-50% since 2017. Social norms about masculinity and leadership are slowly changing. At community level while male chiefs head the kastom governance structure, community committees for climate and disasters, water and village development provide a framework for women, people with disability and youth to participate and take on leadership roles particularly when supported by NGOs. Activities to build confidence and skills of women, people with disability and youth have increased community acceptance of their leadership capabilities. Women have low levels of representation in the formal private sector but are active in small and medium enterprises based on agriculture, handicrafts, small stores and vendors, and food production.

Market associations and loans and savings cooperatives have large numbers of women members including in leadership roles. These provide an important entry point for business skills development (eg UN Women Markets for Change, VANWODs financial literacy and savings and loans groups) but have not yet been targeted for climate adaptation and resilience building. While women in most communities are excluded from kastom leadership roles, they do play an active part in church communities including leadership of women's groups and youth groups.

Lack of disaggregated data, monitoring framework and strategies to mainstream gender in DARD: The Vanuatu Agriculture Sector Policy 2015–2030 has a specific objective of “equal opportunity in agricultural development” under its thematic area 13 on ‘Gender and

Vulnerable Groups.’ There is however no gender policy, which reduces commitment to implementing the general statements about inclusion of women in the Ministry’s corporate plan and the Department’s policy. Further according to the 2019 FAO report,¹⁴² women within the Department seem to have less space to exercise their voice and often not being included in the design of programs. No gender disaggregated data is collected to understand and monitor the participation of women, and there are no accountability mechanisms. Overall, awareness on how to integrate and mainstream gender is poor or limited.

GBV and SEAH: Vanuatu has one of the highest prevalence rates of violence against women and girls globally. According to Vanuatu National Survey (VNS) on Women’s Lives and Family Relationships (2011) 60% of women in a relationship experienced physical and/or sexual violence by their husband/partner in their lifetime, 68% experienced emotional violence, and 69% coercive behavioural control by men¹⁴³. The prevalence of sexual violence against girls under the age of 15 is one of the very highest in the world. Almost 1 in 3 women (30%) were sexually abused before the age of 15 years. In a more recent survey by gender of (2012–2015) 380 people who had experienced sexual violence, 49% were girls and 39% were women¹⁴⁴. According to the 2011 VNS, 30% of women reported that they were sexually abused under the age of 15. Most perpetrators were either male family members (55%) or boyfriends (33%). A third (33%) of women reported that they had been sexually abused since the age of 15 by someone other than an intimate partner, while 28% of women stated that their first sexual experience was forced. Experiences of physical and/or sexual abuse by someone other than an intimate partner were more common among rural women (50%) than urban women (39%)¹⁴⁵. 98% of women and children experiencing violence in Vanuatu do not access the formal justice system¹⁴⁶. Vanuatu’s Women Centre plays a key role in enabling women and children to access formal justice. There are limited redress systems, mechanisms, and resources available for police service. The Family Protection Act of Vanuatu was established in 2008 to maintain harmonious family relationships and prevent domestic violence in all levels of Vanuatu society. The implementation of the Act has been slow, with the government being slow in allocating resources till almost 2016. The awareness on the Act continues to be poor and implementation limited¹⁴⁷.

Vulnerability to Disasters and Climate Change: Vanuatu ranked number one in the World Risk Index in 2021¹⁴⁸. Vanuatu is prone to extreme natural events such as cyclones, earthquakes, tsunamis, landslides, and coastal flooding. Owing to much of the population staying close to the coastline, Vanuatu is most susceptible to disasters¹⁴⁹. With 14 volcanoes, it also faces high risk from volcanic activities¹⁵⁰. The climate change impacts have already experienced through the high shortage of water. Climate change and natural disasters impact women disproportionately as evidenced in the aftermath of tropical cyclone, Harrold¹⁵¹. Natural disasters impact women’s livelihood, ability to provide security to their families, and escalation of experience of GBV. Vanuatu is also known to have inadequate capacity to cope with disaster driven adverse impacts.

¹⁴² FAO and SPC. 2019. Country gender assessment of agriculture and rural sector in Vanuatu.

¹⁴³ Vanuatu Women’s Center and VSNO. 2011. Vanuatu National Survey on Women’s Lives and Family Relationship.

¹⁴⁴ UN Women 2016 Women and Children’s Access to Formal Justice System in Vanuatu.

¹⁴⁵ UN Women 2022 Gender Equality Brief for Vanuatu.

¹⁴⁶ UN Women 2016 Women and Children’s Access to Formal Justice System in Vanuatu.

¹⁴⁷ Ibid.

¹⁴⁸ World Risk Report 2021.

¹⁴⁹ FAO and SPC 2019 Country gender assessment of agriculture and rural sectors in Vanuatu.

¹⁵⁰ UN Women 2022 Gender Equality Brief Vanuatu.

¹⁵¹ CARE 2020 Rapid Gender Analysis Covid 19 Vanuatu.

Samoa

Gender roles in rural livelihoods: Samoa is majorly dependent on its informal economy with majority of the population relying on subsistence agriculture and coastal fishing. Men are traditionally recognised as farmers despite women’s involvement. Therefore, it is difficult to measure the true size of the economy and women’s participation in it. Samoa is primarily dependent on its informal economy with majority of the population relying on subsistence agriculture and coastal fishing. However, women and men make different contributions to rural livelihoods. Women perform a variety of jobs, including supporting their families and communities and generating income through small enterprises. Women are frequently simultaneously involved in subsistence farming and roadside sales as well as more structured local marketplaces. They also play a key role in the production of value-added goods especially in terms of quality control and compliance in export businesses¹⁵². However, only men are traditionally recognised as farmers women are considered playing only supportive roles within communities. Therefore, it is difficult to measure the true size of the economy and women’s participation in it¹⁵³.

Lack of political representation and decision-making powers: The electoral laws in Samoa restrict women from participating in parliamentary elections, since only citizens holding *matai* titles can do so (of which very few are women). Additionally, *matai* also need signed validation from their village council before their electoral candidature can be registered. In 2015, women in 21 villages and sub villages were prohibited from holding *matai* titles and in 2020, only 22% of the registered *matais* were women. Samoa got its first women Prime Minister in 2021 after a protracted constitutional crisis¹⁵⁴.

Samoa had implemented some temporary special measures (TSMs) to increase political representation of women by introducing the Constitution Amendment Act of 2013 which reserved 10% seats in the national legislative assembly for female representation. Despite the TSMs and women participating in highest levels of political leadership, social norms continue to influence women’s active participation and decision-making powers which eventually poses a barrier to women’s political representation and inclusion. For example, in a 2015 survey it was found that in 35.4% of the surveyed villages and sub-villages, women *matai* chose to not participate in the council meetings. There is also a lack of transparency on the number of women who are currently sitting on village and church councils, which have a crucial role to play in decision making in local communities¹⁵⁵.

Lack of control over land for women: In Samoa, land and inheritance rights are guided by indigenous views on ancestral and local heritage. People who get married into a family, ‘*affines*’, are not always entitled to inheritances of their spouses and are seen as outsiders. Female *affines* are called ‘*nofotane*’ and male *affines* are called ‘*faiava*’. Even though women who reside in their birth village, ‘*aua luma*’, have the same rights as their brothers, titleholders (chief or *matai*) in a family are mostly men. They decide and control how the land is going to be inherited within the family, and often discriminate against women in the process. This makes *nofotane* even more vulnerable of all in the family, in the absence of any inheritance rights for spouses, since women are likely to move to their partners’ village after marriage. Especially after the death of their husbands, *nofotane* are sometimes

¹⁵² <https://www.fao.org/3/ca6156en/ca6156en.pdf>

¹⁵³ *ibid.*

¹⁵⁴ <https://www.eastasiaforum.org/2021/06/01/resolving-samoas-democratic-crisis/>

¹⁵⁵ UN Women 2022: Gender Equality Brief for Samoa.

mistreated, kept out of decision-making processes, evicted from home or village by the *matai*, and exposed to domestic violence¹⁵⁶.

Control and access to finance: The Samoa Business Enterprise Centre (SBEC) identified that lack of control over income is also an occasional problem in rural areas and that access to funds does not automatically translate to control of those funds. SBEC observed that sometimes women who access small loans are unable to use it for the intended project because their husbands would use the money for some other things. This poses a challenge/barrier for women who intend to start or build up their small agricultural business¹⁵⁷.

It was reported in the consultations that there are good examples of women-owned micro credit initiatives in each country, but these have to be kept very small and local. They have not been able to absorb large amounts of donor funding, and there is a real risk of additional donor funds overwhelming them.

Access to technology and extension services: Extension services have been inadequate in Samoa with the emphasis on Samoa adopting private extension services¹⁵⁸. Despite the recognition and mandate to have more women extension officers, their low numbers serve as an impediment to women farmers accessing extension services. In all areas, households led by men had a substantially larger percentage of private homes having mobile phone connectivity. This might mean that men are more likely than women to have access to information, communication, and technology (ICT) and its advantages, such as utilising a cell phone. Access to information, literacy, and education, as well as economic prospects, agency and autonomy, social and political involvement, may all be improved if women had more access to and control over their mobile phone use.¹⁵⁹

Food insecurity and rise in non-communicable diseases: As Samoa is transitioning from traditional and sustenance agriculture to a more market-oriented and commercialised agriculture system, this has led to more and more women and families turning to cash crops like turmeric, cocoa, taro, banana, and noni because of huge or increased demand from exporters. With this increased focus on growing cash crops, families are not spending enough time for growing vegetables for personal consumption and for sale in the local markets. This has a negative impact on food security and increases dependence on imported food items. Climate change and natural disasters, including extreme weather conditions, rising sea level, high temperature and loss of biodiversity, augment food insecurity. Some foods that were traditionally grown and eaten are now no longer farmed in Samoa.

This heavy reliance on imported and processed food (high calorie, high sodium and low in nutrients) along with low rates of adequate fruit and vegetable consumption is changing dietary patterns in Samoa and causing a rise in non-communicable diseases like cardiovascular diseases, diabetes, cancer and chronic respiratory diseases. High rates of NCDs are observed, especially in Samoan women, with 83% of them aged 15-49 being classified as obese¹⁶⁰.

¹⁵⁶ Ibid.

¹⁵⁷ Ibid

¹⁵⁸ Tuilaepa. 2019. Towards an Appropriate System of Agricultural Extension for Samoa. Proceedings: Innovation in Extension and Advisory Services. International Conference.

¹⁵⁹ https://pacific.unfpa.org/sites/default/files/pub-pdf/sgm_brief_4_gender_web_19aug.pdf

¹⁶⁰ FAO and SPC 2019 Country gender assessment of agriculture and rural sector in Samoa.

Domestic Violence against Women: The Samoan society is built on the core values and principles of fa'asamoa i.e., the Samoan culture or way of life which defines the man's role as the decision maker and the woman's role as the advisor, which until today remains an integral part of the sociocultural fabric of the country and influences people's lives, traditions, and politics. This automatically confers women a secondary position to men.

Violence against women is one of the major health issues of Samoan women. According to the most recent data collected on the prevalence of violence against women and girls in Samoa, the 2019-20 MICS survey, 37.5% of women have experienced physical or sexual violence from an intimate partner during their lifetime¹⁶¹.

Vulnerability to natural disasters: Humanitarian and climate disasters in Samoa can augment a variety of existing gender inequalities. For women and girls, this means: an increase in workload, decrease in food security for the family, unequal access to education for disaster response and management, damage to their agricultural fields and plots, and increased exposure to sexual and gender-based violence. Women and girls displaced by disasters are at a higher risk of gender-based violence than those who stay in the community. For example, in the aftermath of the 2009 tsunami and 2012 Cyclone Evan that struck Samoa, relocation of rural Samoans was identified as a key driver of gender-based violence in Samoa. The country's National Disaster Management Plan 2017-2020 notes that women are largely excluded from formal planning and decision-making in the context of disasters response and management¹⁶², which further marginalises women and girls and makes them more vulnerable to disasters.

5. Gender related co-benefits of the project

The project aims to deliver the following gender co-benefit as part of its logical framework for the project (see Section E of the Funding Proposal): *Increasing the number and visibility of female agriculture leaders in the communities*. The table below summarizes the indicators that will be used to monitor and measure progress in achieving this co-benefit.

Table 13: Indicators for measuring gender related co-benefit of the project

Indicator	Means of Verification	Baseline	Mid-Term Target	Final Target	Notes
% of the project's Learning Farms that are female-led	Project reports	0	35%	50%	<i>This assumes there is sufficient interest from female farmers</i>
% of the project's target CRRR agri-businesses start-ups that are led by females	Project reports	0	35%	35%	<i>This assumes there is sufficient interest from female farmers</i>
% of farmers supported by the project to showcase their results and experiences at the national and regional level that are female.	Project reports	0	35%	50%	<i>This assumes there is sufficient interest from female farmers</i>

¹⁶¹ https://asiapacific.unwomen.org/sites/default/files/2022-11/UN_WOMEN_SAMOA.pdf

¹⁶² *ibid.*

The project is targeting this co-benefit as a result of the finding that women are typically not considered the lead farmer, but rather are assumed to be supporting their husbands. This does not reflect the reality of their experience and their leadership tends to be 'invisible' within the community.

6. Key recommendations

To achieve this objective, the consultations and the literature highlighted some of the important ways the project can ensure women can participate and share the benefits of CRRRA practices. The following are therefore recommendations for mainstreaming gender within the project activities.

Building knowledge, awareness and technical capacity within government: One of the major challenges that has emerged at the policy and institutional level is the lack of capacity and awareness on gender and gender mainstreaming strategies in each Ministry of Agriculture. Each government is attempting to strengthen internal capacity in this regard, for example, MALFFB in Vanuatu is in the process of recruiting a dedicated gender and agriculture specialist. This project should support and build on these efforts by, for example, involving gender focal points within the CRRRA Working Groups. Collaboration with Departments of Women Affairs in these countries will also be useful.

Developing monitoring and accountability mechanisms: The other key challenge that has emerged is the lack of accountability and monitoring mechanism to assess the extent to which women farmers are being targeted and benefiting from programs and policies. This is primarily coming from the lack of collection of sex disaggregated data across the agricultural sub-sectors. This project should therefore embed and integrate sex-disaggregated data collection mechanisms within its monitoring and evaluation plan and logframe indicators.

Enhance the visibility and leadership of female farmers: A key component of the climate resilience of the agricultural sector and the rural economy should be the recognition of women as agricultural producers and a greater valuing of their role in agricultural production, processing and selling. Women play a significant role in agriculture but are not necessarily recognized as farmers. Prevailing gendered norms and practices reflect the tendency to assume that men are farmers and women are their helpers. This project should therefore target women as decision-makers in the agricultural household and showcase their leadership of their farms and businesses within the wider community.

Engage women community members to define and implement activities: Women farmers and women agribusiness owners will be actively consulted in discussions about project activities and plans during inception, to further understand their concerns and ideas on improving women's involvement in receiving CRRRA skills training, availing the correct kind of inputs suited to women's responsibilities on-farm and post-production, and effectively practicing the skills learned. Women's inputs on indigenous practices that were or are being deployed which are aligned to CRRRA principles, will be sought so as to develop the CRRRA practices toolkit and plan inputs procurement.

Train and sensitize ToT to encourage women's participation in trainings and assist in collecting gender-disaggregated data for monitoring: The ToT who will be trained under Output 1.1 will also be trained on useful methods to encourage women farmers in the community to attend CRRRA awareness sessions and trainings, and to practice the knowledge on their farms. It should be ensured that at least 35% of the ToTs should be women. Observed issues hampering women's participation should be noted by project staff and raised with senior staff, so that relevant course corrections can be planned. Towards

gathering gender data on result indicators, officers would guide the monitoring and evaluation team in identifying target households, conducting interviews and recording data. Besides training, opportunities should be created for women lead farmers to have coaching and mentoring support.

Gender-responsive training materials and technical support: Recognizing the different role and barriers faced by women in performing production and post-harvest tasks, training materials will distinguish the activities feasible and acceptable for women to take up. Technical handholding to roll out CRRA on farms would factor in differential responsibilities and timing of women's involvement at respective stages of CRRA lifecycle. The information products to encourage the scaling-up of CRRA should be designed to consider accessibility of women, for example using public communication channels such as the radio.

Building and strengthening markets and value chains for women: For enhancing women entrepreneurship, the business plan development activities should be tailored to meet women's needs and level of business knowledge, so that training is effective, and practical business plans for marketing CRRA products can be drawn up. In all three countries there is some level of involvement of women in running small agribusiness or working in the value chain of commercial crops. Gender sensitive development of value chains in countries like Vanuatu (for Kava and Coconut) and Tonga (for watermelon and coconut) should be considered.

Promote women farmer associations and other such groups: Cooperative and membership groups of female farmers offer a powerful peer-support mechanism, and a safe space for female farmers to share experiences and challenges and collectively offer possible solutions. Such groups also increase their bargaining power to access resources, technology and markets. The project will work through such groups, offering the associations training on business planning and how the group could increase market access to its members.

During implementation, qualitative assessments will be conducted to document the gender-specific benefits directly associated with the project employing gender sensitive approaches. The information will be incorporated in the annual progress reports, mid-term report, and final evaluation report. In addition to the indicators for the co-benefit results explained above, the log-frame includes indicators to quantify the achievement of project results with respect to gender equality. It will include gender disaggregated data on access to CRRA training, adoption of CRRA on their farms etc.

B. GENDER ACTION PLAN

Gender Outcome	Indicators (Baseline, Mid, End Project Targets)				Responsible Party(ies)	
Increased resilience of the most vulnerable people and communities	Direct beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options (0 male, 0 female; 8,476 male, 8,409 female; 25,429 male, 25,226 female)				SPC LRD, Ministries of Agriculture, Ministries of Women, farmers organisations and associations, agricultural research and training centres, individual farmers, local government, traditional leaders, community-based organisations	
	Indirect beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options (0 male, 0 female; 36,753 male, 36,460 female; 110,259 male, 109,380 female)					
Improved health, well-being, food and water security for the most vulnerable people and communities	Direct beneficiaries (female/male) with improved food security (0 male, 0 female; 5,086 male, 5,045 female; 9,854 male, 9,775 female; 15,257 male, 15,136 female)				SPC LRD, Ministries of Agriculture, Ministries of Women, farmers organisations and associations, agricultural research and training centres, individual farmers, local government, traditional leaders, community-based organisations	
	Indirect beneficiaries (female/male) with improved food security (0 male, 0 female; 9,854 male, 9,775 female; 29,562 male, 29,326 female)					
	Direct beneficiaries (female/male) adopting innovations that strengthen climate change resilience (0 male, 0 female; 8,476 male, 8,409 female; 25,429 male, 25,226 female)					
	Indirect beneficiaries (female/male) adopting innovations that strengthen climate change resilience (0 male, 0 female; 36,753 male, 36,460 female; 110,259 male, 109,380 female)					
Project Activities	Gender Activities or Action	Indicators (Baseline, Mid, End Project Targets)	Barrier(s) addressed	Timeline	Cost of Gender Activities and financing source	Responsible Party(ies)
Activity 1.1.1. Establish and sustain national CRRA Muti-Stakeholder Working Groups	Ensure gender balance in the working groups. If required, provide capacity building through mentoring (soft skills and technical knowledge) to ensure the women members	The ratio of women in comparison to men in CRRA working groups (0% / 35% / 35%)	Decision making and leadership [Tonga] Decision making, leadership and participation [Vanuatu] Lack of political representation	Establish: Year 1 (Q2-Q3) Sustain: Year 2-5 (biannually)	No additional cost. Mentoring provided as core responsibility of national project team (with oversight of regional Gender and Social Inclusion officer)	SPC LRD, Ministries of Agriculture, Ministries of Women, Farmers organisations, agricultural research and training centres

	are able to contribute effectively.		and decision-making powers [Samoa]			
Activity 1.1.2. Working Groups co-design context specific CRRA principles and practices	Ensure female farmers are able to input into the design gender responsive context specific principles and practices for CRRA, and that the final CRRA Guidelines specifically address any gender related dimensions. Ensure at least one member of the CRRA International Advisory Group is an expert in the gender dimensions of CRRA.	<ul style="list-style-type: none"> Proportion of CRRA guidelines that explicitly address gender related dimensions to the uptake of such practices (0% / 100% / 100%) Number of CRRA International Advisory Group members who are specialists in gender dimension of CRRA (0 / 1 / 1) 	<p>Inadequate access to agriculture extension services [Tonga]</p> <p>Limited access to technology and extension services [Vanuatu]</p> <p>Access to technology and extension services [Samoa]</p>	Year 1 (Q2-Q3)	No additional cost required. The target for 50% of Learning Farms to be female-led will be the primary route to ensuring the experiences of female farmers is made visible. The budget for CRRA International Advisory Group already includes this role.	SPC LRD, Ministries of Agriculture, Ministries of Women, Farmers organisations, agricultural research and training centres, individual farmers
Activity 1.1.3. Develop and implement training of trainers (ToT) programme on CRRA	Develop and implement gender-sensitive Training of trainers (ToT) programme on CRRA, with an inclusive curriculum informed by gender analyses to reflect gender	<ul style="list-style-type: none"> Proportion of ToT training curriculum developed on CRRA that is gender-sensitive (0% / 100% / 100%) Proportion of women 		Develop: Year 1 (Q2-3) Implement: Year 1 Q4-Year 5 Q3	No additional cost required. The service provider that will support the design of training material will be required to have sufficient expertise in gender mainstreaming.	SPC LRD, Ministries of Agriculture, agricultural research and training centres

	roles in agriculture and barriers to participation with content on gender equity in access to resources, knowledge, finance, etc. as well as showcasing examples of women-led CRRAs, and ensuring a good representation of female trainers.	trained as trainers through ToT (0% / 35% / 35%)				
Activity 1.2.1: Support farmers to develop viable business plans for adoption and marketing of CRRAs practices	Develop and implement gender-sensitive farmer business planning training and support on CRRAs, including considering the specific access and knowledge gaps of female farmers, and ensure a good representation of female farmers	<ul style="list-style-type: none"> Proportion of farmer focused CRRAs business planning training curriculum developed that is gender-sensitive (0% / 100% / 100%) Proportion of women trained on CRRAs business planning skills (0% / 35% / 35%) 	<p>Inadequate access to agriculture extension services [Tonga]</p> <p>Lack of acknowledgement of women's entrepreneurial skill [Tonga]</p> <p>Limited access to technology and extension services [Vanuatu]</p> <p>Limited sources of income and access to finance [Vanuatu]</p>	Year 1 (Q2)–Year 5 (Q1)	No additional cost required. The service provider that will support the design of training material will be required to have sufficient expertise in gender mainstreaming.	SPC LRD, Ministries of Agriculture, farmer associations

<p>Activity 1.2.2: Support agri-businesses and farmer associations to develop viable business plans for provision of CRRA related inputs and services</p>	<p>Develop and implement gender-sensitive agri-business and farmer association planning training and support on CRRA, including considering the specific access and knowledge gaps of female owned companies, and ensure a good representation of female owned agri-businesses</p>	<ul style="list-style-type: none"> • Proportion of agri-businesses/ farmer associations focused CRRA business planning training curriculum developed that is gender-sensitive (0% / 100% / 100%) • Proportion of women-focussed agri-businesses¹⁶³ trained on inclusive CRRA business planning skills (0% / 35% / 35%) 	<p>Control and access to finance [Samoa]</p> <p>Access to technology and extension services [Samoa]</p>	<p>Year 1 (Q2)–Year 5 (Q1)</p>	<p>No additional cost required. The service provider that will support the design of training material will be required to have sufficient expertise in gender mainstreaming.</p>	<p>SPC LRD, Ministries of Agriculture, farmer associations</p>
<p>Activity 1.2.3: Technical assistance to the Ministries of Agriculture to</p>	<p>Scrutiny of existing agricultural subsidies, policies and projects to</p>	<ul style="list-style-type: none"> • Number of gender focused reviews carried out to 	<p>Gender roles in rural livelihoods [Tonga]</p>	<p>Year 2 (Q4)–Year 5 (Q1)</p>	<p>No additional cost required. The service provider that will support the policy analysis</p>	<p>SPC LRD, Ministries of Agriculture</p>

¹⁶³ “Women-focussed agri-businesses” will be selected based on their ability to demonstrate: a strong baseline business capacity; commitment to CRRA principles; a track record of gender-inclusivity; provision of products or services that meet the needs of women farmers; capacity building for women (e.g. training, mentorship and networking opportunities for women in technical, financial or leadership skills); active support to women for accessing markets, finance, and technology; promotion of women’s participation in the agricultural value chain (e.g., processing, export); and facilitation of access to credit, savings, and insurance tailored for women farmers or entrepreneurs.

design policy enablers to encourage the adoption of CRRA and reform projects and subsidies which disincentivize CRRA.	identify gender biases. Develop plans to rectify the identified biases in consultation with female farmers, and design new policy enablers to incentivize CRRA that are appropriate and accessible to women.	<p>assess gender biases in existing/ new subsidies and policies (0 / 1 / 3)</p> <ul style="list-style-type: none"> • Number of new/ reformed draft policies or subsidies developed which support CRRA and explicitly address the needs and priorities of female farmers. (0 / 1 / 3) • Proportion of female participants in consultations related to the design/ reform of CRRA policies and subsidies (0% / 35% / 35%) 	<p>Access to and control over land and other productive resources [Tonga]</p> <p>Gender role in rural livelihoods [Vanuatu]</p> <p>Limited access to and control over land productive resources [Vanuatu]</p> <p>Gender roles in rural livelihoods [Samoa]</p> <p>Lack of control over land for women [Samoa]</p>		will be required to have sufficient expertise in gender mainstreaming.	
Project Activities	Gender Activities or Action	Indicators (Baseline, Mid,	Barrier(s) addressed	Timeline	Cost of Gender Activities and financing source	Responsible Party(ies)

		End Project Targets)				
Activity 2.1.1. Engage with local government and traditional leaders and integrate project activities within community/ provincial plans as appropriate	Community dialogue and consultation with female farmers to identify gender specific needs in the sector, and a clear commitment from local government and traditional leaders to ensure equal access to the training and support being offered by the project to female farmers within the community.	<ul style="list-style-type: none"> Proportion of female participants at community consultations on the project (0% / 35% / 35%) 	<p>Gender roles in rural livelihoods [Tonga]</p> <p>Decision making and leadership [Tonga]</p> <p>Gender role in rural livelihoods [Vanuatu]</p> <p>Decision making, leadership and participation [Vanuatu]</p> <p>Gender roles in rural livelihoods [Samoa]</p> <p>Lack of political representation and decision-making powers [Samoa]</p>	Bi-annually throughout the project	No additional cost required. The purpose of the activity is to ensure active community leadership commitment to equal representation	SPC LRD, Ministries of Agriculture, local government, traditional leaders, community-based organisations
Activity 2.1.2: Implement training programmes for farmers on CRRA practices, systems and technologies	Develop and implement gender-sensitive package of support for adopting CRRA for each leading farmer, including considering the specific access and knowledge	<ul style="list-style-type: none"> Proportion of packages of support for each leading farmer which is gender-sensitive (0% / 100% / 100%) 	<p>Inadequate access to agriculture extension services [Tonga]</p> <p>Limited access to technology and extension services [Vanuatu]</p>	Year 1 (Q4)-Year 5 (Q3)	No additional cost required. The service provider that will support the policy analysis will be required to have sufficient expertise in gender mainstreaming.	SPC LRD, Ministries of Agriculture, agricultural research and training centres

	<p>gaps of female farmers, and ensure a good representation of females within the leading farmers group. Ensure context-specific, culturally-sensitive training on PSEAH principles, standards, and protocols for contractors, trainers, service providers, and workers, inclusive of GRMs; and deliver GRM awareness-raising sessions and community-facing knowledge products in local languages, inclusive of all available mechanisms, PSEAH procedures, and referral pathways for survivor support. Operationalise the Project-level GRM to receive and address concerns inclusive of SEAH-related issues in a timely,</p>	<ul style="list-style-type: none"> • Proportion of female-led Learning Farms (0% / 35% / 50%) 	<p>Access to technology and extension services [Samoa]</p>			
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	confidential, and accessible manner for all stakeholders.					
Activity 2.1.3: Develop and operationalise a Farmer Support Programme for CRRA	Female farmers have equal access to the Farmer Support Programme, meaning the process is accessible to them and eligibility requirements are not biased against them. They should receive information about the programme and be encouraged to apply. The programme will strive for diversity and inclusion in the allocation of the funds while respecting the transparent and fair selection criteria.	<ul style="list-style-type: none"> % female farmers supported with inputs from the Farmer Support Programme (0% / 35% / 50%) 	Limited sources of income and access to finance [Vanuatu] Control and access to finance [Samoa]	Year 1 (Q4)-Year 3 (Q4)	No additional cost required, inbuilt assumption is that dissemination of information on the FSP will involve groups and associations with networks of female farmers.	SPC LRD, Ministries of Agriculture, agricultural research and training centres
Activity 2.1.4: Facilitate active peer-to-peer learning to promote wider adoption and replication of CRRA practices	Other female farmers within the community and networks of the leading farmers are targeted for support, training and engagement	<ul style="list-style-type: none"> Proportion of farmer focused CRRA training curriculum developed that is 	Inadequate access to agriculture extension services [Tonga] Limited access to technology and	Year 3 (Q3)-Year 5 (Q2)	No additional cost required. The project activity design assumes that training, workshops and support will happen locally,	SPC LRD, Ministries of Agriculture, agricultural research and training centres

	on replicating CRRA.	<p>gender-sensitive (0% / 100% / 100%)</p> <ul style="list-style-type: none"> • Proportion of female farmers trained on CRRA (0% / 35% / 35%) • Proportion of female participants to Farmer Workshops (0% / 35% / 35%) 	<p>extension services [Vanuatu]</p> <p>Access to technology and extension services [Samoa]</p>		making it accessible and safe for females.	
Activity 2.2.1: Develop and disseminate knowledge products to promote wider adoption and replication of CRRA practices`	The information and evidence from the project are packaged in a form and manner which is accessible to female farmers, and is disseminated via channels that specifically target women, such as women farmer associations, radio and television talkback shows, local newspapers, and other media.	<ul style="list-style-type: none"> • Proportion of female participants to National and Regional Workshops (0% / 35% / 35%) • Proportion of female farmers speaking on panels about their experience and knowledge (0% / 35% / 50%) 	<p>Inadequate access to agriculture extension services [Tonga]</p> <p>Limited access to technology and extension services [Vanuatu]</p> <p>Access to technology and extension services [Samoa]</p>	Year 1 (Q2)-Year 5 (Q3)	No additional cost required. Participation costs remain same, just selection criteria will ensure equal representation.	SPC LRD, Ministries of Agriculture, agricultural research and training centres

Activity 2.2.2: Further develop and support the roll-out of farmer mobile phone apps in Vanuatu and Samoa	The farmer apps that are further developed and rolled-out is accessible and targeted at female farmers and provides information and user interface that specifically addresses female farmer needs and interests.	<ul style="list-style-type: none"> • Proportion of downloads of apps by women (0% / 35% / 35%) • Proportion of female users sampled provide positive feedback on the relevance and ease of use of the app (0% / 100% / 100%) 		Year 2 (Q4)-Year 5 (Q3)	No additional cost required. The service provider that will support the app development will be required to have sufficient expertise in gender mainstreaming.	SPC LRD, Ministries of Agriculture, agricultural research and training centres
Activity 2.2.3: Develop sustainable national monitoring systems for resilience of agricultural systems	New monitoring system to include gender responsive indicators and disaggregated data on resilience at the farm level. The system itself should be appropriate and accessible to female farmers and users of the data.	<ul style="list-style-type: none"> • Proportion of women consulted as part of the design and piloting of the system (0% / 50% / 50%) • Proportion of resilience indicators covered in the new system which are disaggregated by gender (0% / 100% / 100%). 	Lack of disaggregated data, monitoring framework and strategies to mainstream gender [Vanuatu]	Year 2 (Q1)-Year 5 (Q4)	No additional cost required. If 50% of Learning Farms are female-led then the perspective and needs of females for the monitoring system will be visible.	SPC LRD, Ministries of Agriculture, agricultural research and training centres
Activity: 2.2.4: Document and share learning from the project to	Ensure that gender and social inclusion considerations are	<ul style="list-style-type: none"> • Proportion of female participants to National and 	Gender roles in rural livelihoods [Tonga]	Year 2 (Q3)-Year 5 (Q4)	No additional cost required. Participation costs remain same, just	SPC LRD, Ministries of Agriculture, agricultural

wider communities of practice in the region	included in the publication and showcasing of lessons learned, and that female leading farmers are highlighted on national and regional platforms.	<p>Regional Workshops (0% / 35% / 35%)</p> <ul style="list-style-type: none"> • Proportion of female farmers speaking on panels about their experience and knowledge (0% / 35% / 50%) 	<p>Inadequate access to agriculture extension services [Tonga]</p> <p>Gender role in rural livelihoods [Vanuatu]</p> <p>Limited access to technology and extension services [Vanuatu]</p> <p>Gender roles in rural livelihoods [Samoa]</p> <p>Access to technology and extension services [Samoa]</p>		selection criteria will ensure equal representation.	research and training centres
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C. GENDER RISK ASSESSMENT AND MANAGEMENT

KEY Risk factors and mitigations measures		
Selected Risk Factor 1: Insufficient interest and engagement from female smallholder farmers to ensure 50% of Learning Farms and recipients of the FSP are female-led		
Category	Probability	Impact
Technical and Operational	High	High
Description		
<p><i>There is a high likelihood that female-led smallholder farms do not put themselves forward to participate in the project as a Learning Farm nor apply to the FSP. The known farmers to the government, who are typically engaged for piloting new techniques, will be majority men. Female-led smallholder farms are more under-the-radar but still very influential within the community and networks of other female farmers. Due to cultural norms, there is a reluctance from some female farmers to put themselves forward for a leadership/ visible role.</i></p>		
Mitigation Measure(s)		
<p><i>To meet this ambitious target, the project will need to identify and engage female smallholder farmers using different methods. In particular, using local NGOs and women groups to identify female farmers who meet the criteria for Learning Farms and for the FSP (see FS, Annex I). This includes in Activity 2.1.1 engaging with community-level traditional leaders to ensure they understand the need for equal gender representation and ask them to help identify suitable female farmers.</i></p>		
Selected Risk Factor 2: Female smallholder farmers are restricted in fully participating and benefiting from project activities due to traditional gender roles and other constraints		
Category	Probability	Impact
Technical and Operational	Medium	High
Description		
<p><i>There is a high likelihood that female farmers who are invited/ nominated or volunteer to participate in the project face constraints in actually engaging proactively and maximising the full benefits of the project. This could be due to them having to shoulder the majority of the household farming, childcare and domestic duties meaning it is difficult for them to commit sufficient time to the project. In addition, there may be reluctance from the women, or within the community, for them to travel to attend project activities, particularly if requires overnight/ night travel that has associated safety risks. Females may also lack the confidence to step up and be visible, for example, showcasing their work to others.</i></p>		
Mitigation Measure(s)		
<p><i>We will use gender-sensitive approaches to delivering the project activities. This includes designing activities that are accessible (e.g. workshops within the community) and do not put female activities at risk. Crucially, support and training will be provided by experts that females trust and are comfortable with, for example, through collaboration with women associations and NGOs that are known to them. This will be done together with the (mostly male) government extension services so there is a bridging of trust and understanding that can be sustained after the project end.</i></p>		
Selected Risk Factor 3: The outputs developed by the project are not sufficiently addressing female farmers specific needs.		
Category	Category	Category

Technical and operational	Technical and operational	Technical and operational
Description		
<i>The policies, training material, guidelines and other outputs that are produced by the project, to support CRRA adoption, need to be addressing the specific needs of female farmers. However, typically, the government's policies, plans and services are assuming that both genders have equal needs. There is a risk that this project continues this cycle of under representing female farmers specific needs.</i>		
Mitigation Measure(s)		
<i>A consideration of female farmers specific needs has been incorporated as a specific step in every key activity of the project, starting from collecting data, knowledge and learning from female-led Learning Farms and specifically considering whether their experiences has differed from male counterparts, and why. This will then inform the CRRA guidelines, training materials and other outputs. In addition, a dedicated gender inclusion lead will be responsible for reviewing these outputs specifically from a gender mainstreaming perspective.</i>		
Selected Risk Factor 4: SEAH-related issues arise from project staff actions during implementation.		
Category	Probability	Impact
Technical and operational	Low	Low
Description		
<i>SEAH may occur among project workers, trainers, contractors, or facilitators during recruitment, supervision, or interactions within the project team or delivery partners.</i>		
Mitigation Measure(s)		
<i>Deliver context-specific, culturally-sensitive training on PSEAH principles, standards, and protocols for contractors, trainers, service providers, and workers, inclusive of GRMs.</i>		
Selected Risk Factor 5: SEAH incidents occur towards community members during implementation.		
Probability	Probability	Probability
Low	Low	Low
Description		
<i>SEAH may occur towards community members during trainings, equipment delivery, or installations if project personnel or contractors misuse their positions in interactions with community members.</i>		
Mitigation Measure(s)		
<i>Deliver GRM awareness-raising sessions and community-facing knowledge products in local languages, inclusive of all available mechanisms, PSEAH procedures, and referral pathways for survivor support.</i>		
Selected Risk Factor 6: Concerns, complaints, or SEAH-related issues go unreported..		
Probability	Probability	Probability
Low	Low	Low
Description		
<i>Concerns, complaints, or SEAH-related issues may go unreported or escalate if stakeholders lack a safe, confidential, and culturally appropriate channel to raise matters during implementation.</i>		
Mitigation Measure(s)		
<i>Operationalise the project-level GRM to receive and address concerns in a timely, confidential, and accessible manner for all stakeholders.</i>		

Annex A: Implementing roles and responsibilities for gender mainstreaming

ESS and Gender Officer: An ESS and Gender Officer will be hired full-time in the Regional Project Management Unit to provide technical assistance to deliver the planned activities of the Gender Action Plan (GAP). They will develop tools and systems for ensuring gender and social inclusion is integrated across all project activities in line with the GAP, ensure the ESMF and Gender Action Plan is delivered, and identify additional opportunities for targeted investments in strengthening equality at each stage of implementation. They will support the development of gender and CRRRA training modules and protocols and support national PMU Technical Officers in training extension officers on gender integration into training programmes. They will also support the regional PMU's Evidence, Evaluation and Learning Expert, and national PMU's M&E and Reporting officer in conducting monitoring and evaluation of project implementation against the ESMF and GAP. The Gender Officer will assess project activity implementation against the GAP and report findings in relevant reports as mandated. If any issues are identified, they will develop recommendations to address these issues. These will be reviewed by the national and regional Team Leaders and technical specialists. If technical modifications are needed to address certain gender related issues during implementation, these will be added to annual workplans and budgets and presented to Project Steering Committees and SPC for approval.

Ministries of Agriculture: The Ministries of Agriculture in the three countries are the co-executing entities. They will ensure that adequate representation of women in the various trainings is met as per the logframe indicators, and that gender co-benefits are identified.

Department of Women's Affairs or equivalent Departments: They will play a facilitating role as required, in raising awareness and trainings where suitable, to ensure that women in communities participate, towards ensuring community well-being and acceptance of the planned activities.

SPC: SPC is the Accredited Entity and a co-Executing Entity in implementation. It will have overall responsibility of ensuring the gender co-benefit (Increasing the number and visibility of female agricultural leaders in the communities) is delivered during the project lifespan.

Annex B: Gender questionnaire for consultations

1. How does the role of women and men differ in the production of the crop?
2. How does the role of women and men differ in the decision-making of farm activities?
3. How are women being impacted by the impact of disasters and climate change on agriculture? Is this different than for men? Why?
4. Other than the FAO reports are there any assessments or reports on women in agriculture?
5. What Impacts have the reduced productivity has had on women, both in terms of income that is dependent on peripheral agricultural activities as well as in terms of taking on additional non-agricultural economic activities?
6. What support do women have to manage the impacts on agriculture? Is this different than for men?
7. What role do women play in the meeting of water needs of the field and at home and how does the current risk related to water availability affect women in terms of their time, labour and work burden?
8. For farmers practicing water conservation practices, such as micro-irrigation and water storage systems, is there any differences in role played by men and women?
9. For farmers applying organic/non-organic fertilizer, is there any differences in role played by men and women?
10. For farmers who have added value to their products through processing, marketing etc, are there any differences in the role played by men and women, and the impacts on both?
11. Are there opportunities for women to get more value from their crops? What are the barriers for them in doing this?
12. Are there any special or additional subsidies or schemes for women farmers? What are they and what is the process for accessing them?
13. Are there any policies or institutions specifically targeting gender mainstreaming in agriculture? Are there any policy gaps?
14. In your experience, what is the most effective way of getting advice and information to female farmers?
15. What challenges do women face in piloting new practices and in setting up 'demonstration farms' (*explain concept*)? Do women face any challenge in learning from their peers in other locations?
16. Are there particular constraints that female farmers face in using a mobile phone app to access information on farming practices? What gender considerations need to be factored in improving this app - what could be done to make this more accessible and user friendly for women farmers?
17. In your experience, what is the most effective way of targeting female beneficiaries or female farmers in an agriculture programme, and ensuring they benefit from it?
18. Is finance a potential barrier to female farmers adopting CRRA practices?
19. Do female farmers face any challenges in accessing credit? In what way and why?