

# Funding Proposal

Project/Programme title:	Climate change adaptation solutions for Local Authorities in the Federated States of Micronesia
Country:	Federated States of Micronesia
Accredited Entity:	Pacific Community (SPC)
Date of first submission:	<u>2021/03/25</u>
Date of current submission	<u>2021/08/09</u>
Version number	<u>V.6</u>



GREEN  
CLIMATE  
FUND

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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](mailto: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 Programme or	Programme	A.2. Public or private sector	Public <b>A</b>
A.3. Request for Proposals (RFP)	Enhancing Direct Access (EDA) Enhancing Direct Access (EDA)		
A.4. Result area(s)	<p>Check the applicable <a href="#">GCF result area(s)</a> that the <u>overall</u> proposed project/Programme targets. For each checked result area(s), indicate the estimated percentage of <u>GCF budget</u> devoted to it. The total of the percentages when summed should be 100%.</p>		
	<p><b>Mitigation:</b> Reduced emissions from:</p> <input type="checkbox"/> Energy access and power generation: <input type="checkbox"/> Low-emission transport: <input type="checkbox"/> Buildings, cities, industries and appliances: <input type="checkbox"/> Forestry and land use: <p><b>Adaptation:</b> Increased resilience of:</p> <input checked="" type="checkbox"/> Most vulnerable people, communities and regions: <input checked="" type="checkbox"/> Health and well-being, and food and water security: <input checked="" type="checkbox"/> Infrastructure and built environment: <input checked="" type="checkbox"/> Ecosystem and ecosystem services:	<p><b>GCF contribution:</b></p> <p><u>Enter number</u>%  <u>Enter number</u>%  <u>Enter number</u>%  <u>Enter number</u>%</p> <p><u>25</u>%  <u>25</u>%  <u>25</u>%  <u>25</u>%</p>	
A.5. Expected mitigation impact	Indicate t CO <sub>2</sub> eq over lifespan	A.6. Expected adaptation impact	Direct = 54,301 (47.2% of FSM's population) Indirect = 92,016 (80% of FSM's population)
A.7. Total financing (GCF + co-finance)	19,710,637 USD	A.9. Project size	Small (Upto USD 50 million)
A.8. Total GCF funding requested	16,591,556 USD		
A.10. Financial instrument(s) requested for the GCF funding	<p>Mark all that apply and provide total amounts. The sum of all total amounts should be consistent with A.8.</p> <input checked="" type="checkbox"/> Grant <u>16,591,556</u> <input type="checkbox"/> Equity <u>Enter number</u> <input type="checkbox"/> Loan <u>Enter number</u> <input type="checkbox"/> Results-based payment <u>Enter number</u> <input type="checkbox"/> Guarantee <u>Enter number</u>		
A.11. Implementation period	7 years	A.12. Total lifespan	20 years
A.13. Expected date of AE internal approval	11/10/2019	A.14. ESS category	I-2
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 type="checkbox"/> No <input checked="" 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	SPC will be the Accredited Entity and the sole Executing Entity for this Programme.		
<b>A.21. Executive summary (max. 750 words, approximately 1.5 pages)</b>			
<p>The aim of the proposed Enhanced Direct Access (EDA) Programme “<b>Climate change adaptation solutions for Local Authorities in the Federated States of Micronesia</b>” is to shift the status quo from a pathway of climate vulnerability, elevated health risks and limited socioeconomic development for vulnerable communities in the Federated States of Micronesia (FSM) to one of improved food and water security, enhanced disaster risk reduction (DRR) and recovery, and improved socioeconomic development by building the adaptive capacity of Local Authorities (LAs) to respond to climate change.</p> <p>Climate change is expected to severely threaten FSM across all sectors of its economy, particularly through increased: sea level rise; variability of rainfall; severe weather events and king tides; and temperature. Past inundation, surge and storm events have caused significant losses and damages to communities’ assets and livelihoods, including lasting impacts to community infrastructure, coastal resources, and agriculture and water</p>			

systems. Further, the frequency and magnitude of these extreme climate events could potentially increase due to El Niño conditions coupled with increased sea surface and atmospheric temperatures. Currently, approximately 60% of households in FSM live within 180 m of the shoreline with millions of dollars' worth of agriculture, buildings, etc. exposed to climate threats. Further, the vast majority of FSM is reliant on underdeveloped agriculture, livestock, and fisheries value streams both for subsistence consumption as well as for primary income streams, and climate change is expected to limit these systems further constraining livelihoods and threatening community food security. Water security is likewise constrained due to insufficient technology like catchment systems and mismanaged watershed resources both of which are made more difficult due to future climate change.

As of 2020, FSM's estimated population is 115,021, with a GDP of USD 408 million and a GDP per capita of almost USD 3,550. The majority of the country's population live in the coastal regions of the high islands, with more than half the population living in rural areas. According to the Household Income and Expenditure Survey (HIES), one requires an average of USD 1.84 per adult per day to meet basic caloric needs in FSM and USD 4.34 per adult per day to meet all basic needs. Across FSM, approximately 10% of the population falls below the food poverty line and approximately 41% of the population falls below the nationally determined 'total basic needs poverty line'.

According to the Notre Dame Global Adaptation Initiative (ND-GAIN), FSM is the 4<sup>th</sup> most vulnerable country to climate change and the 78<sup>th</sup> in terms of climate change readiness in the world (FSM scored 0.640 on the vulnerability scale and 0.360 on the readiness scale). The FSM GCF Country Programme concluded that at present, none of the FSM States have a 'high' level of adaptive capacity required to ensure adaptation to the effects of climate change.

This EDA Programme will overcome critical barriers to strengthen the resilience of vulnerable communities to the impacts of extreme climatic events as well as long term water and food insecurity as a result of predicted climate change. GCF resources will be critical in strengthening the adaptive capacity of local authorities and communities to improve DRR and coastal management as well as food and water security for FSM's most vulnerable populations located in the main islands and outer atolls.

The EDA Programme will establish a dedicated Grant Facility to strengthen the capacity of local authorities (LAs) in FSM to adapt to climate change and to address urgent, top priority vulnerability issues. The facility will empower participating LAs by providing them with organizational and individual capacity-building in resilience and priority adaptation project development. The Programme has two components:

- **Component 1: Local authorities empowered to deliver climate change adaptation services to their populations**
- **Component 2: Priority project implementation-EDA Facility for strengthening local community resilience**

The Programme, through the implementation of sub-projects, will directly contribute to increasing the adaptive capacity of local communities and will deliver on a number of economic, social, environmental and gender co-benefits. The EDA Grant Facility is anticipated to directly benefit 54,301 people, accounting for 47.2% of the total FSM population. Indirect beneficiaries of the proposed Programme will represent 80% of the population.<sup>1</sup>

GCF funding is required because of the limited availability of public and private funding to support transformation in FSM's DRR capacity and agricultural and water sectors. GCF funds will be used specifically to address critical information and capacity gaps of LAs as well as cover the additional cost of climate change adaptation. Indeed, the current costs estimates for climate change adaptation solutions far exceed allocated budgets for national, State and municipal governments. This highlights the necessity of the proposed GCF grant structure and concessionally to directly support local communities.

The total Programme cost is USD 19,710,637 comprising USD 16,591,556 of GCF funding in the form of grants and USD 3,199,081 co-finance from the Government of FSM and SPC. As the Accredited Entity, SPC's Climate Finance Unit (CFU) within its Climate Change and Environmental Sustainability (CCES) Division (also SPC's GCF focal point) will be responsible for overall project management. A dedicated EDA Programme Coordination Unit (ECU) will be hosted within SPC's Regional Office for Micronesia, located in FSM. The EDA Programme Board (EPB) will be a national body chaired by FSM's National Designated Authority (NDA) and responsible for taking corrective action as needed to ensure the EDA Programme achieves the desired results.

<sup>1</sup> The numbers provided represent conservative estimates, to be understood as the minimum number of the sum of the potential number of direct beneficiaries across all three thematic areas. This methodological choice was made to prevent the possibility of double counting as beneficiaries of projects in each state will likely overlap. See Annex 2, Section 14.

## B. PROJECT/PROGRAMME INFORMATION

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

#### **Adaptive context of the Programme area**

1. The Federated States of Micronesia (hereafter “FSM”) is a widely dispersed archipelago located in the North Pacific Ocean. FSM is formed by four states (Chuuk, Yap, Pohnpei, and Kosrae) and comprised of 607 islands, of which 74 are inhabited. The distance between the eastern-most State (Kosrae) and the western-most State (Yap) is 2,700 km. Under the 1979 Constitution, FSM has three levels of government: national, state, and municipal. The four State governments of Chuuk, Kosrae Pohnpei, and Yap are relatively autonomous. Each State has its own governor, judiciary and legislative bodies, along with relevant government departments.
2. As of 2019, FSM’s estimated population is 115,021<sup>2</sup>, with a GDP of USD 408 million and a GDP per capita of almost USD 3,550. The majority of the country’s population live in the coastal regions of the high islands, with more than half the population living in rural areas. According to the HIES, one requires an average of USD 1.84 per adult per day to meet basic caloric needs in FSM and USD 4.34 per adult per day to meet all basic needs<sup>3</sup>. Across FSM, approximately 10% of the population falls below the food poverty line and approximately 41% of the population falls below the total basic needs poverty line.
3. The ongoing COVID-19 pandemic is projected to further impact the FSM economy in coming years<sup>4</sup>. Construction, transportation and communications and the tourism sectors are estimated to shrink for at least the next fiscal year. Overall GDP is expected to have declined by approximately 5% over fiscal year 2020 and to decline 2% over fiscal year 2021. The private sector is expected to be the hardest hit, with an estimated private sector GDP reduction of 18.7% between 2019 and 2021.
4. There is a strong correlation between the extreme climate vulnerability of FSM and the livelihoods of communities, as a large share of the population heavily relies on natural resources. Rising oceans, changing precipitation patterns, increase in the intensity of extreme climate events and extended drought periods are expected to have a dramatic impact on the food and water security of local populations, while posing a serious disaster risk to assets and people.

#### **Climate analysis**

5. The climate of FSM displays considerable year-on-year **variability** due to the El Niño-Southern Oscillation (ENSO)<sup>5</sup>. The country has two seasons – a dry season from November to April and a wet season from May to October. Rainfall in throughout the country and region is affected by the movement of the Intertropical Convergence Zone<sup>6</sup>.
6. **Due to the diversity of environmental conditions between States and their respective islands and atolls, climate trends tend to differ from one island state to another, and between island states and atolls.**
  - Climatically, **Yap** lies in an area that generally experiences a monsoon climatic pattern, with more frequent periods of drought than in other States.
  - The climate of **Chuuk** is hot and humid with an average temperature of 27°C, and little variation throughout the year. Average annual precipitation is 3,100 mm, with the months of January to March being drier.
  - **Pohnpei** is generally hot and humid, also with a mean temperature of 27°C. Temperatures vary little from month to month. The mean annual rainfall is 4,826 mm, with January and February being slightly drier than average.
  - **Kosrae**’s climate is characterized by high temperatures, heavy rainfall and high humidity. The average annual rainfall measured at the weather station in coastal Lelu is 5,000 mm. In the mountainous interior

<sup>2</sup> World Bank Data, World Development Indicators 2020.

<sup>3</sup> FSM Statistics – Poverty Profile of the Federated States of Micronesia. Last Accessed 22 August 2020; Available [here](#)

<sup>4</sup> Assessing the Impact of COVID-19 on the Federated States of Micronesia Economy; Available [here](#).

<sup>5</sup> McGree et al. 2016. Trends and variability in droughts in the Pacific islands and Northeast Australia. *Journal of Climate* 29: 8377-8397.

<sup>6</sup> FSM. Second National Communication to the United Nations Framework Convention on Climate Change; Available [here](#).

rainfall is estimated to be as high as 7,500 mm annually with average temperature 27°C at sea level. Average monthly temperatures vary from the annual average by no more than 1°C and the difference between the average minimum and maximum temperatures is less than 8°C.

**Historical trends**

7. **Temperature:** With less than 1.5°C between its hottest and coldest months, FSM experiences very little seasonal variation in mean air temperatures. Mean annual temperature (1901–2016) is 27.1°C. Annual maximum and minimum temperatures in FSM have increased since records began in 1952, with annual maximum temperatures having increased at a rate of 0.18°C per decade in Pohnpei (eastern FSM) and 0.23°C per decade in Yap (western FSM)<sup>7</sup>. Extreme temperatures such as warm days and warm nights have been increasing in Pohnpei consistent with global warming trends. Temperatures are expected to continue to increase throughout FSM under all emissions scenarios<sup>8</sup>.
- Annual maximum air temperatures at three sites across FSM (Pohnpei, Yap and Chuuk) have risen between 0.10–0.14°C per decade since the 1950s<sup>9</sup>.
  - There is variation in air temperature trends within FSM. For the state of Pohnpei, the greatest trends involve minimum air temperature, whereas for Yap, the greater trends are observed in maximum air temperature<sup>10</sup>.
8. **Precipitation:** There is variability between States in changing precipitation patterns. Mean annual precipitation (1901–2016) stands at 3,810.4mm. The wet season takes place between May and September, with the West Pacific Monsoon affecting rainfall in the western islands by contributing additional rain<sup>11</sup>.
- Generally, there has been a decreasing trend for rainfall in Pohnpei (an eastern State) since records began in 1950. There has also been a decreasing trend in Very Wet Day rainfall in Pohnpei. However, Consecutive Dry Days in Yap (a western State) have decreased since 1952<sup>12</sup>.

<sup>7</sup> Pacific-Australia Climate Change Science and Adaptation Planning Program. 2014. Current and future climate of the Federated States of Micronesia. Available [here](#).

<sup>8</sup> Pacific-Australia Climate Change Science and Adaptation Planning Program; Available [here](#).

<sup>9</sup> Pacific-Australia Climate Change Science and Adaptation Planning Program; Available [here](#).

<sup>10</sup> Pacific-Australia Climate Change Science and Adaptation Planning Program; Available [here](#).

<sup>11</sup> World Bank Climate Change Knowledge Portal. Federated States of Micronesia profile; Available [here](#).

<sup>12</sup> Pacific-Australia Climate Change Science and Adaptation Planning Program; Available [here](#).

- Although the frequency of droughts is projected to decrease in FSM, drier conditions and droughts are linked to ENSO events, with an increased intensity of events occurring under El Niño conditions. The driest year on record for Micronesia was 1998 and was a direct consequence of an El Niño phenomenon the same year. Figure 2 below illustrates the variability of precipitation patterns and the intensity of drought periods in Pohnpei and Yap<sup>13</sup>.

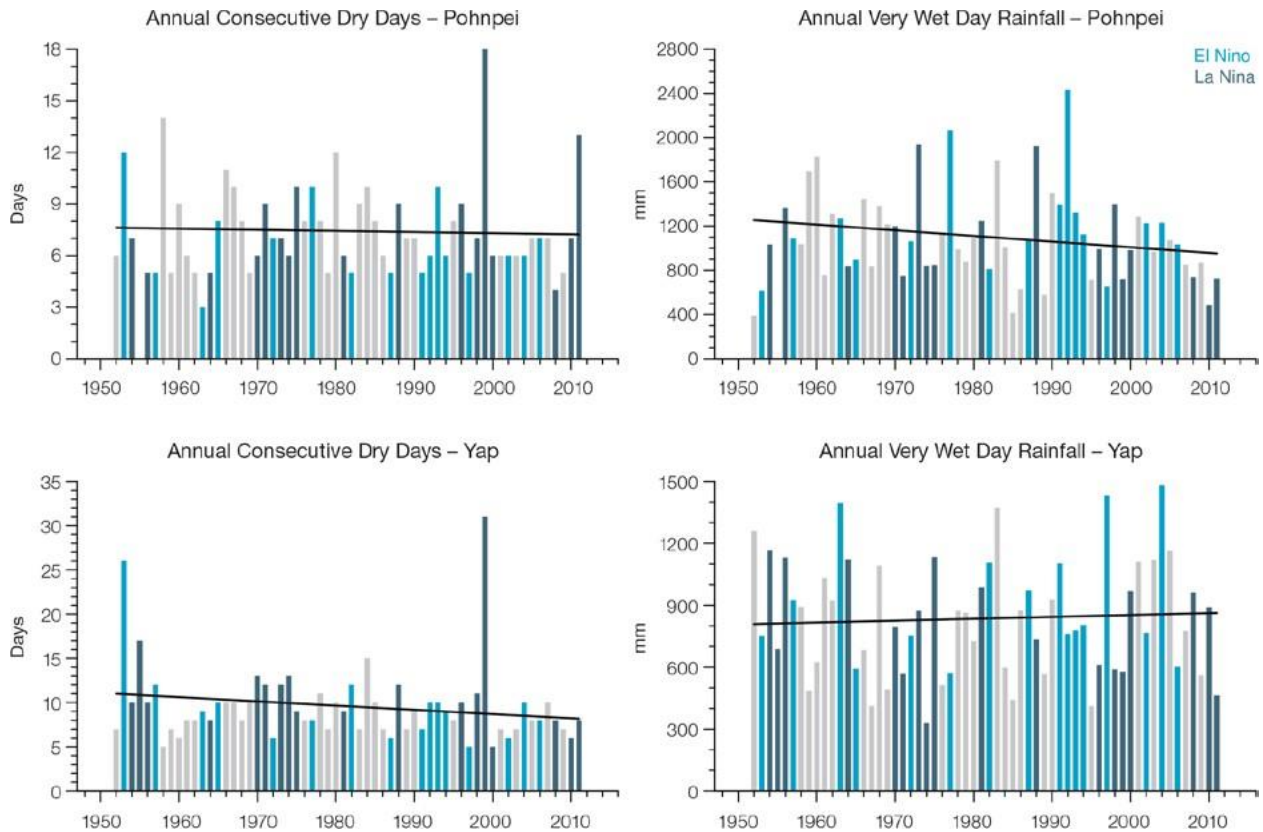


Figure 1. Observed Time Series of Annual Consecutive Dry Days and Annual Very Wet Day Rainfall in Pohnpei and Yap

9. **Sea level rise:** Between 1993 and 2010, FSM has experienced a disproportionate amount of sea level rise, ranging from 8 to 12 mm per year, compared to other areas in the Western Pacific (see Figure 2 below)<sup>14</sup>. Since 2000, FSM has been occasionally experiencing a periodic rise of sea level in the low-lying coastal areas of both high and low islands. Additionally, **ENSO variations** amplify<sup>15</sup> the mean sea level across FSM which exacerbates the impacts of tidal surges, rainfall, and extreme events like typhoons. Climate variability due to seasonal changes and large-scale climate features such as ENSO can lead to overall changes in trade wind patterns and temperature, which in turn may affect sea level at timescales of months to years. For instance, ENSO can cause sea-level changes up to 30 cm in the western tropical Pacific, depending on time of year and location. Naturally occurring sea-level changes due to tides, weather and climate variability can be quite large at any one time compared to sea-level rise through climate change alone. **A small amount of overall, long-term sea-level rise due to climate change will compound the effects of natural variability and cause an increase in extreme sea levels to happen more often**<sup>16</sup>.

<sup>13</sup> Pacific-Australia Climate Change Science and Adaptation Planning Program; Available [here](#).

<sup>14</sup> Pacific-Australia Climate Change Science and Adaptation Planning Program; Available [here](#).

<sup>15</sup> Fletcher et al. 2010. Climate Change in the Federated States of Micronesia, Food and Water Security, Climate Risk Management, and Adaptive Strategies. University of Hawaii Sea Grant College Programme.

<sup>16</sup> Pacific-Australia Climate Change Science and Adaptation Planning Program. 2014. Sea-level rise in the western tropical Pacific. Available [here](#).



10. Overall, the effect that climate change will have on ENSO incidence and severity remains uncertain, but it is clear that ENSO events result in a direct increase of large-scale sea level anomalies (SLAs) in the Western Tropical Pacific region<sup>17</sup>. Furthermore, the anomalous ocean-atmosphere conditions during ENSO can induce changes in the intensity, frequency, and tracks of storms, thereby affecting the generation of extremes such as tides and storm surges<sup>18</sup>. These events cause marine inundation that damages groundwater resources, taro beds, soil, and agro-forestry resources in coastal settings, especially on low atoll islets. On high islands, coastal communities that experience both intensifying storm runoff and rising ocean waters are experiencing increased flooding and other drainage problems<sup>19</sup>.

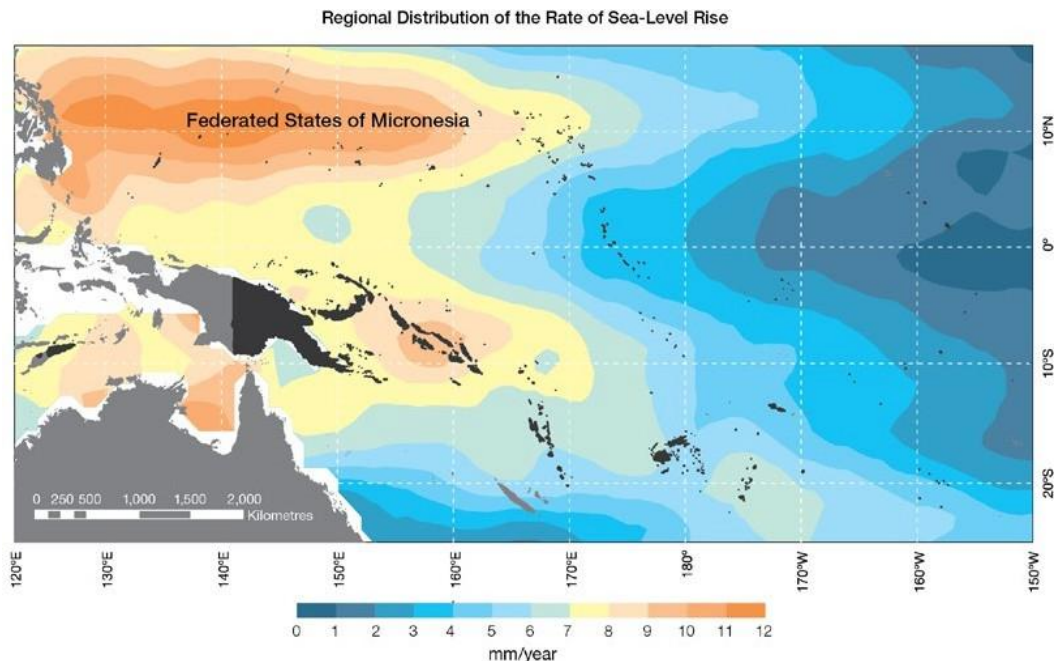


Figure 2. Regional distribution of the rate of sea level rise (1993-2010) in the Western Pacific

11. **Extreme climate events:** FSM is highly susceptible to extreme weather events such as tropical storms and typhoons<sup>20</sup>. For example:

- In 2002 Typhoon Mitag caused a storm surge that inundated up to 500 m inland and destroyed nearly all the food crops in low-lying areas in the north, northeast, and southern parts of the main island of Yap (please see Annex 2 of the Feasibility Study for a list of past climate damaging events).
- In March 2015, Typhoon Maysak devastated the country, killing four people, wiping out 90% of key agricultural crops (banana, breadfruit and taro) in two of its states (Chuuk and Yap), affecting 29,000 people and causing USD 8.5 million in damages (more information on climate change impacts on agriculture below).
- Sea salt deposition caused from tropical cyclones can devastate agriculture and cause significant corrosion

<sup>17</sup> Ren et al. 2020. Asymmetry of interannual sea level variability in the western tropical Pacific: Responses to El Niño and La Niña. *Journal of Geophysical Research: Oceans*, 125, e2020JC016616. Available [here](#).

<sup>18</sup> Muis et al. 2018. Influence of El Niño-Southern Oscillation on global coastal flooding. *Earth's Future*, 6, 1311– 1322. Available [here](#).

<sup>19</sup> Ibid.

<sup>20</sup> Pacific-Australia Climate Change Science and Adaptation Planning Program; Available [here](#).

affecting electricity infrastructure.

12. The **ENSO phenomenon** has a profound effect on the distribution of tropical cyclones in the FSM. During La Nina events, above average numbers of tropical storms occur in the FSM region. The formation region of cyclones is also impacted. During El Nino, typhoon formation extends eastward resulting in an increased risk of a typhoon for Pohnpei during El Nino years, and a decreased risk during the year following El Nino and during La Nina years. On Pohnpei, the risk of having typhoon force winds of 65 kt (33.4ms<sup>-1</sup>) or greater is one year in 10 for El Nino years, and approximately one year in 50 for non-El Nino years.

**Climate change projections<sup>21</sup>**

13. **Temperature:** Climate projections under all emissions scenarios suggest that the frequency and occurrence of higher maximum daily temperatures will dramatically increase for Pohnpei and FSM more broadly<sup>22</sup>. By 2030, under a very high emissions scenario, this increase in air temperature is projected to be in the range of 0.6–1.1°C<sup>23</sup>. Table 1 below shows the projected changes in annual average surface air temperature in FSM<sup>24</sup>.

*Table 1. Projected changes in average surface air temperature in FSM*

Geography	2030	2050	2070	2090
<b>FSM East</b>	<b>Projected °C increase</b>			
<b>Very low (RCP 2.6)</b>	0.4–0.9	0.6–1.2	0.5–1.2	0.5–1.2
<b>Low (RCP 4.5)</b>	0.5–1.0	0.7–1.4	1.0–1.9	1.0–2.1
<b>Medium (RCP 6)</b>	0.4–0.9	0.7–1.4	1.0–2.0	1.3–2.6
<b>High (RCP 8.5)</b>	0.6–1.1	1.0–1.9	1.6–3.1	2.1–4.1
<b>FSM West</b>	<b>Projected °C increase</b>			
<b>Very low (RCP 2.6)</b>	0.5–0.9	0.6–1.1	0.5–1.2	0.4–1.2
<b>Low (RCP 4.5)</b>	0.5–1.0	0.8–1.4	1.0–1.8	1.0–2.1
<b>Medium (RCP 6)</b>	0.4–0.9	0.7–1.4	1.1–1.9	1.4–2.6
<b>High (RCP 8.5)</b>	0.6–1.1	1.1–1.9	1.6–3.1	2.1–4.0

14. **Precipitation:** In general, FSM is expected to experience an increase in precipitation over the next century, with a decrease in the frequency of drought events but an increase in their intensity.
- FSM's Second National Communication explain how CMIP3 models predict little change in rainfall by 2030 but with a majority of simulations estimating an increase of rainfall of greater than 5% by 2090 under a high emissions scenario.
  - Under a high emissions scenario, an increase in mean annual precipitation of up to 8% ± 11% in eastern FSM and up to 12% ± 15% in western FSM is expected by 2090.
  - Interannual rainfall variability is also projected to increase.
15. **Sea level rise:** By 2030, under a very high emissions scenario, the rise in sea level is projected to be in the range of 8–18 cm. The frequency of extreme high sea level (tidal surges) for FSM are projected to increase dramatically as a result of climate change<sup>25</sup>. Sea level rise is projected to continue to increase under all climate scenarios (see Table 2 below). **The sea level rise combined with natural year-to-year changes and phenomena such as ENSO will amplify the impact of storm surges and coastal flooding.** For example, ENSO variations already significantly impact mean sea level across FSM, with knock-on effects during tidal

<sup>21</sup> Climate projections for FSM have been derived from up to 26 new GCMs in the CMIP5 database (the exact number is different for each scenario), compared with up to 18 models in the CMIP3 database reported in the previous report from the Australian Bureau of Meteorology and CSIRO (2011) (Source [here](#) p. 76).

<sup>22</sup> FSM. Second National Communication to the United Nations Framework Convention on Climate Change. Available [here](#).

<sup>23</sup> Australian Bureau of Meteorology and CSIRO. 2014. Climate Variability, Extremes and Change in the Western Tropical Pacific: New Science and Updated Country Reports. Pacific-Australia Climate Change Science and Adaptation Planning Programme Technical Report, Australian Bureau of Meteorology and Commonwealth Scientific and Industrial Research Organization, Melbourne, Australia

<sup>24</sup> Pacific-Australia Climate Change Science and Adaptation Planning Programme – Current and future climate of the Federated States of Micronesia; Available [here](#).

<sup>25</sup> FSM. Second National Communication to the United Nations Framework Convention on Climate Change. Available [here](#).

surges, heavy rainfall and storm events. Consequently, during La Niña periods, the above-average number of tropical storms that will occur combined with higher sea levels because of climate change would result in coastal inundation during such storms being higher than in the absence of climate change-induced sea level rise.

Table 2. Sea Level Rise Under Various Emissions Scenarios

Emissions Scenario	2030	2050	2070	2090
Very low (RCP 2.6)	8–18 cm	14–30 cm	20–45 cm	24–60 cm
Low (RCP 4.5)	8–17 cm	14–31 cm	22–49 cm	30–68 cm
Medium (RCP 6)	7–17 cm	14–30 cm	22–48 cm	31–69 cm
High (RCP 8.5)	8–18 cm	17–35 cm	28–59 cm	41–90 cm

16. Lower-lying atolls are especially vulnerable to inundation events and even losing arable land from projected sea level rise and extreme tide events. With projections of increased sea level rise under all climate scenarios and an increase in extreme high tide events due to climate change, FSM's vulnerability will further increase in the future. Figure 3 illustrates the extent of the flooding hazard caused by sea level rise for the islands of Pohnpei and Yap.

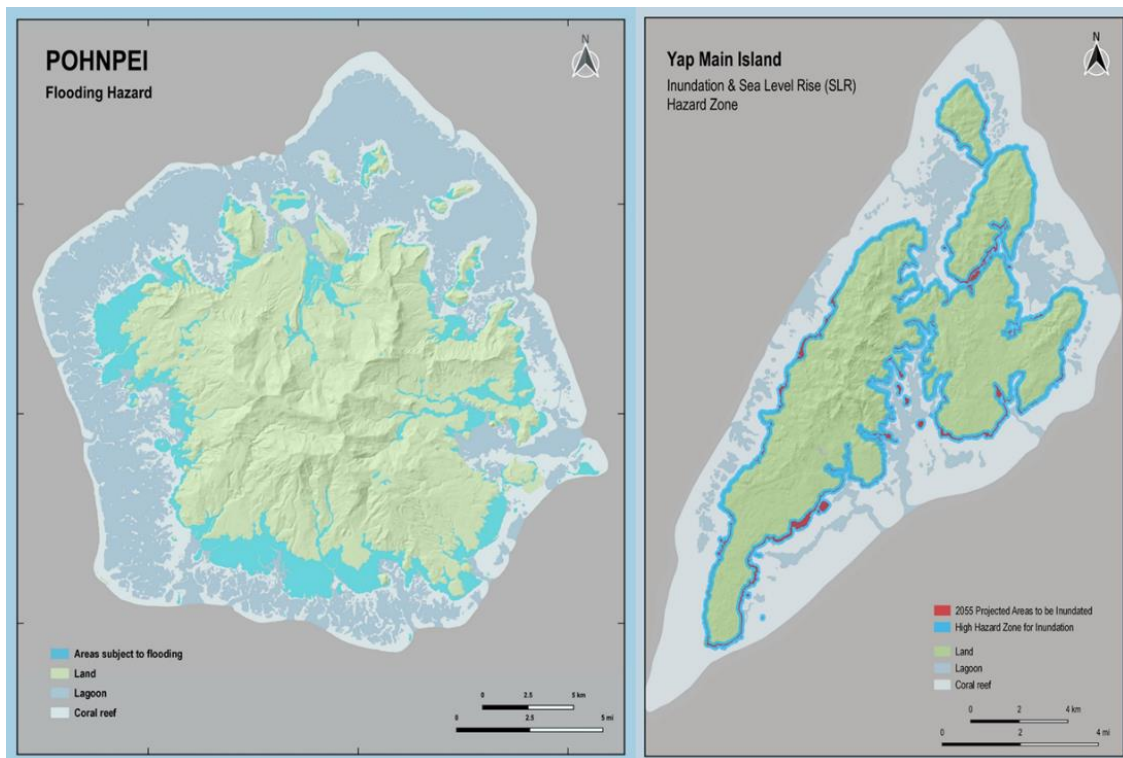


Figure 3. Sea Level Rise and Flood Hazard Maps for Pohnpei and Yap

17. **Extreme climate events:** It is projected that there will be a decrease in the number of typhoons globally by the end of the 21st century. However, these projections also indicate that typhoon intensity will increase, with an increase in average maximum wind speed of typhoons between 2% and 11% as well as an increase in rainfall intensity of 20% within 100 km of a typhoon's centre<sup>26</sup>. For FSM, the projection for a decrease in frequency of formation of tropical cyclones in the northern basin has only a low confidence level<sup>27</sup>. Extreme hourly and daily rainfall events, such as Tropical Storm Chataan which resulted in massive landslides and damage across Chuuk State are also projected to increase in frequency, particularly in Pohnpei and Kosrae<sup>28</sup>. The frequency and

<sup>26</sup> Pacific-Australia Climate Change Science and Adaptation Planning Programme – Current and future climate of the Federated States of Micronesia; Available [here](#).

<sup>27</sup> Pacific-Australia Climate Change Science and Adaptation Planning Program; Available [here](#).

<sup>28</sup> FSM. Second National Communication to the United Nations Framework Convention on Climate Change. Available [here](#).

intensity of extreme rainfall events are projected to increase. This conclusion is based on analysis of daily rainfall data from a subset of CMIP5 models using a similar method to that in Australian Bureau of Meteorology and CSIRO (2011) with some improvements (Chapter 1), so the results are slightly different to those in Australian Bureau of Meteorology and CSIRO (2011). Projections also show that temperatures on “extremely hot days” in FSM will increase in line with increases in average temperatures; the frequency of such days is also expected to increase<sup>29</sup>.

18. **Drought:** El Niño years in FSM tend to cause droughts which have resulted in water and food shortages (including staples such as taro, coconut, breadfruit, banana, yam, sweet potato, citrus and cash crops), and had impacts on terrestrial habitats, wildfires, and invasive species<sup>30</sup>. ENSO influences the minimum air temperatures in both Yap and Pohnpei in the wet season, but in the dry season there is a weak but significant impact on air minimum temperatures in Pohnpei and maximum air temperatures in Yap (all being warmer in El Niño years and colder in La Niña years). The incidence of drought is expected to decrease over the 21st century (except during ENSO conditions as outlined above), consistent with a projected overall increase in rainfall for FSM. Recent projections suggest that:
- Mild drought will occur approximately seven to eight times every 20 years by 2090 under the B1 (low) emissions scenario and six to seven times under the A1B (medium) and A2 (high) scenarios approximately eight to nine times every 20 years in 2030.
  - Moderate drought will occur approximately once to twice every 20 years in 2030 once to twice every 20 years in 2090 for all emissions scenarios moderate drought will occur.
  - Severe drought will occur approximately once every 20 years across all time periods and scenarios<sup>31</sup>.
19. **Ocean acidification and sea surface warming:** Ocean acidification, as measured by the decrease in aragonite saturation, has risen in the region of Micronesia since measurements began in the late 18th century<sup>32</sup>. Studies<sup>33</sup> have indicated that a level above 4 is optimal for coral growth in the Pacific. Projections indicate that levels will fall below 3.5 by approximately 2030, indicating an increase in ocean acidification which would severely negatively affect coral reefs in FSM. Under all emissions scenarios<sup>34</sup> for FSM, sea surface temperatures are expected to increase in the coming decades. Rising sea surface temperatures as well as a projected increase in ocean acidification in the coming decades due to climate change will cause increased occurrences of coral bleaching, a reduction in migratory fish stocks, and overall decrease the health of the marine environment<sup>35,36,37,38</sup>. A decrease in the health of these habitats could result in less catch for households that utilize fisheries and marine resources and result in a rise in food insecurity throughout FSM.

#### **Vulnerability of the Programme area**

20. As explained above, all FSM States are susceptible to acute climate change risks such as extreme rainfall events, drought, high sea levels, strong winds and extreme high air temperatures. FSM is particularly vulnerable to climate change and likely to suffer serious, adverse environmental, social and economic consequences. Limited infrastructure, geographic remoteness and the fact that FSM remains heavily reliant on the economic assistance under the Compact of Free Association (COFA), the economic outlook beyond 2023 is uncertain and fragile which exacerbate the country’s vulnerability.
21. Approximately 60% of households in FSM live within 180 meters<sup>39</sup> of the shoreline, with the State of Kosrae having the greatest proportion of coastal-dwelling households (80%) and Chuuk having the least (38%). 94% of

<sup>29</sup> Pacific-Australia Climate Change Science and Adaptation Planning Programme – Current and future climate of the Federated States of Micronesia; Available [here](#).

<sup>30</sup> FSM. Second National Communication to the United Nations Framework Convention on Climate Change; Available [here](#).

<sup>31</sup> Pacific-Australia Climate Change Science and Adaptation Planning Program; Available [here](#).

<sup>32</sup> FSM. Second National Communication to the United Nations Framework Convention on Climate Change; Available [here](#).

<sup>33</sup> Johnson et al. 2015. Pacific Islands Ocean Acidification Vulnerability Assessment; Available [here](#).

<sup>34</sup> Ibid.

<sup>35</sup> FSM Chuuk Joint State Action Plan for Disaster Risk Management and Climate Change; Available [here](#).

<sup>36</sup> FSM Pohnpei Joint State Action Plan for Disaster Risk Management and Climate Change; Available [here](#).

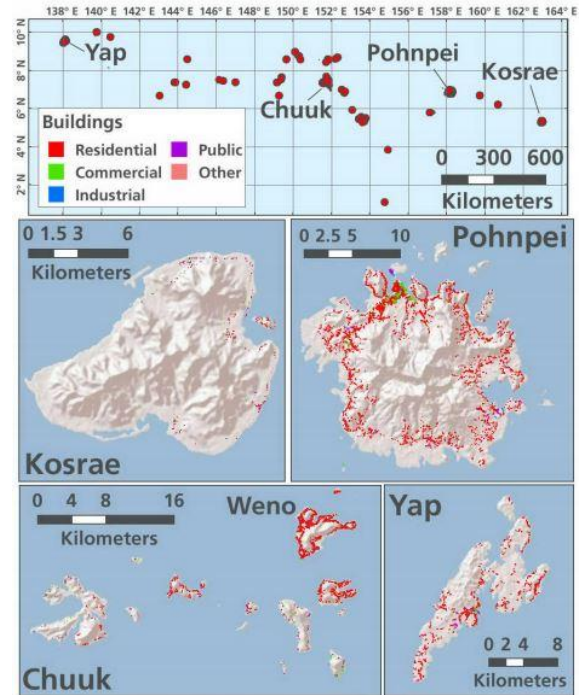
<sup>37</sup> FSM Yap Joint State Action Plan for Disaster Risk Management and Climate Change; Available [here](#).

<sup>38</sup> FSM Kosrae Joint State Action Plan for Disaster Risk Management and Climate Change; Available [here](#).

<sup>39</sup> 200 yards.

the FSM population lives within at least 1km of the coastal strip and 100% within 5km.<sup>40</sup> Additionally, the majority of structures in FSM are located near or along the coast (see Figure 4). Almost all outer island islets lie within the 2-meter zone of potential sea level rise, and all lie within a 5-meter zone of storm surge. This poses a significant disaster risk to the majority of households in the project area.

22. In terms of terrestrial agriculture, the majority of agricultural production within FSM occurs in the low-lying areas of the high, volcanic islands. 92% of agricultural workers surveyed in the Integrated Agriculture Census<sup>41</sup> (IAC) were unpaid, demonstrating the subsistence nature of agricultural production in FSM. The livelihoods of these communities are increasingly subject to lowland flooding as well as seawater inundation from sea level rise<sup>42</sup>. For most staple food crops, extreme weather events including storm surges and king tides (and the resulting salinization) will have the greatest impact in the short- to medium-term timescale (2030–2050), compared to changes in mean temperature where significant impacts are not expected before 2050. The projected increase in the frequency and intensity of extreme weather events due to climate change poses the greatest risk to agricultural production over the next few decades.



23. With regards to fisheries, the small-scale fisheries underpinning food and livelihoods across the region have a moderate to high vulnerability to climate change because: (i) increases in SST will progressively drive many target species to higher latitudes; (ii) degradation of coral reefs is expected to reduce the productivity of those fish species able to remain on reefs; and (iii) the majority of the small-scale catch is derived from coral reefs whose habitats are expected to be severely impacted by ocean acidification.

24. There are no comprehensive studies on freshwater resources and climate change in FSM, and large data gaps remain especially for hydraulic modelling of atoll aquifer systems<sup>43</sup>. However, with the continued projections for sea level rise, the increased occurrence of storm surges and inundation events coupled with unpredictable seasonal variations in rainfall and ENSO, freshwater availability in FSM will continue to be negatively impacted by climate change in the coming decades. Additionally, 20% of all households surveyed in the IAC in 2016 reported drought as being the main barrier to agricultural production<sup>44</sup>. Therefore, there is the need for improved water storage and distribution systems as an adaptation measure to address climate change issues on the water stressed islands.

25. The combination of the factors and climate vulnerabilities described above requires the implementation of locally led adaptation measures and demonstrates the relevance of the proposed EDA Programme. More detail on the sectoral vulnerabilities and potential impacts (including impacts on crops and freshwater resources) of climate change in FSM can be found in Section 4 of the Feasibility Study.

<sup>40</sup> For an interactive map of population concentration along the coastline, see: [here](#).

<sup>41</sup> FAO, SPC and GoFSM. 2016. Federated States of Micronesia Integrated Agriculture Census 2016; Available [here](#).

<sup>42</sup> GCF Country Programme – Federated States of Micronesia; Available [here](#).

<sup>43</sup> SPC. Federated States of Micronesia – IWRM Outlook Summary and NWF Report; Available [here](#).

<sup>44</sup> Calculated using average for all four FSM states: Share of households reporting drought as the main barrier to agricultural production: Yap (45%), Chuuk (21%), Pohnpei (9%), Kosrae (3%).

26. The following table provides a summary overview of climatic and non-climatic drivers and their associated impacts for the FSM islands, and the potential adaptation interventions proposed by the EDA Programme.

Type of drivers	Drivers	Impacts	EDA Programme potential sub-grant interventions
Climate change drivers	Sea level rise and storm surges <sup>45</sup>	<p>Approximately 60% of households in FSM live within 180 m of the shoreline, with Kosrae having the greatest proportion of coastal-dwelling households (80%) and Chuuk having the least (38%).<sup>46</sup> Additionally, the majority of structures located in FSM are located near or along the coast. Almost all outer island islets lie within the 2-metre zone of potential sea level rise, and all lie within a 5-metre zone of storm surge.</p> <p>The projected impacts of the increased magnitude of climate change events and effects – including increased sea level rise<sup>47</sup> and more intense typhoons<sup>48</sup> – represents the greatest risk to agricultural production in the FSM over the next decades, with impacts on:</p> <ul style="list-style-type: none"> <li>• Crop productivity: increased soil salinity after coastal inundation and saltwater intrusion into ground water leading to total loss of key crops (cassava, yam, pawpaw)</li> <li>• Reduced arable land caused by coastal erosion</li> <li>• Reduced agricultural production: food insecurity and reduced income for subsistence farming households</li> <li>• Food insecurity: crop shortages results in malnutrition and health issues for the impacted communities.</li> </ul> <p>Sea level rise and saltwater inundation also negatively impact water security:</p> <ul style="list-style-type: none"> <li>• Low-lying atolls are more susceptible to sea level rise and saltwater inundate from tidal events and storm surge. With enough saltwater inundation, the fragile freshwater lens within an atoll's aquifer can become contaminated and unusable.</li> </ul> <p>Additional negative impacts include:</p> <ul style="list-style-type: none"> <li>• Demographic shift: immigration from low-lying islands to high islands</li> <li>• Biodiversity: watershed health</li> <li>• Freshwater supply and availability</li> </ul>	<ul style="list-style-type: none"> <li>• Small-scale coastal infrastructure constructed that will reduce the risk of losses and damages caused by climate-induced disaster events (as appropriate, use of endemic species planting, wave breakers, man-made channels)</li> <li>• Restoration, rehabilitation or substitution of ecosystems relevant for adaptation (e.g. mangrove restoration, re-vegetation, sea-grass beds)</li> <li>• Development and use of climate-resilient crop species and varieties (resilient to drought, waterlogging, saltwater, pests), including techniques for their consistent supply (germplasm collections, nurseries)</li> <li>• Farming and land use techniques facilitating soil and water conservation (e.g. mulching, organic farming, mixed cropping, drainage)</li> <li>• Establishment of agroforestry demonstration sites integrated with livestock</li> <li>• Building value chains for crops, fisheries, and livestock<sup>49</sup></li> </ul>
	Precipitation	Increased occurrence of intensifying rainfall exacerbates the impacts of storm surges, resulting in:	<ul style="list-style-type: none"> <li>• Watershed reforestation for landslide protection and flooding control</li> <li>• Small-scale coastal infrastructure constructed that will reduce the risk of</li> </ul>

<sup>45</sup> Sea level rise analysis was conducted for the main islands for the States of Yap, Chuuk, Pohnpei and Kosrae. This analysis utilized projections of 0.3 meters of sea level rise by 2055 and 0.62 meters of sea level rise by 2090. The projected sea level rise for Yap indicates that there will be inundation of large parts of existing coastline and low-lying areas of the main island. The main island of Pohnpei will experience coastal changes due to sea level rise by 2055 as well as saltwater inundation of low-lying areas, including the Pohnpei airport. The main island of Chuuk and the other islands located in the main atoll are also projected to experience coastal changes due to sea level rise by 2055 along with saltwater inundation. The main island of Kosrae is projected to experience sea level inundation of low-lying areas up through 2090.

<sup>46</sup> [GCF – Federated State of Micronesia Country Programme.](#)

<sup>47</sup> FSM. Second National Communication to the United Nations Framework Convention on Climate Change; Available [here](#).

<sup>48</sup> Pacific-Australia Climate Change Science and Adaptation Planning Programme – Current and future climate of the Federated States of Micronesia; Available [here](#).

<sup>49</sup> E.g. post-harvest and post-catch processing for small-scale and semi-subsistence livelihood practices

		<ul style="list-style-type: none"> <li>• Landslides: erosion, loss of arable land</li> <li>• Flooding: surface run-off, loss of arable land, damages to the built environment</li> <li>• On the higher islands, increased extreme weather events and precipitation events could result in damage to watersheds from soil erosion and landslide events and result in a reduction in water security to communities that depend on these watersheds.</li> </ul>	<ul style="list-style-type: none"> <li>• losses and damages caused by climate-induced disaster events (as appropriate, use of endemic species planting, wave breakers, man-made channels)</li> <li>• Restoration, rehabilitation or substitution of ecosystems relevant for adaptation (e.g. mangrove restoration, re-vegetation, sea-grass beds)</li> </ul>
	Air temperature	<p>Increased air temperatures are projected to have a moderate impact on agricultural production in FSM (across different emissions scenarios). Projected impacts relate to:</p> <ul style="list-style-type: none"> <li>• Specific impacts of temperature increase on crops are difficult to predict based on current knowledge, but temperatures approaching 2°C and beyond will create significant physiological stress for many of the staple crops.<sup>50</sup></li> <li>• Negative impacts are projected for rice, swamp taro and yams (high negative impact), and sweet potato and taro (moderate impact) – physiological stress</li> <li>• Projections for changing climate in the Pacific generally improves conditions for pest growth and spreading staple crops specifically, fruit flies, mealybugs, scale insects, and whiteflies.</li> </ul>	<ul style="list-style-type: none"> <li>• Development and use of climate-resilient crop species and varieties (resilient to drought, waterlogging, saltwater, pests), including techniques for their consistent supply (germplasm collections, nurseries)</li> <li>• Farming and land use techniques facilitating soil and water conservation (e.g. mulching, organic farming, mixed cropping, drainage)</li> <li>• Water infrastructure (e.g. water tanks, solar water pumps)</li> <li>• Procurement and distribution of rainwater collection tanks</li> <li>• Capturing and storage of rain and groundwater resources (individual household and community storage capacities)</li> </ul>
	Ocean acidification (aragonite saturation) and sea surface warming	<ul style="list-style-type: none"> <li>• Rising sea surface temperatures as well as a projected increase in ocean acidification in the coming decades due to climate change will cause increased occurrences of coral bleaching, damage to migratory fish stocks, and overall decrease the health of the marine environment.<sup>51,52,53,54</sup> This will be especially impactful to near-shore coral reefs and the fish and other marine species that depend on these coral reefs for habitat.</li> <li>• A decrease in the health of these habitats could result in less catch for households that utilize these resources and result in an overall reduction in food security throughout FSM. The tuna license revenue in 2016 in FSM was approximately USD 63.2 million. Under high emission scenarios it is estimated that up to USD 16.4 million in revenue could be lost by 2050, which is a loss of 14.6% relative to 2016.<sup>55</sup></li> <li>• An FAO review in 2013 projected declines in catches of tuna in FSM of about 15% also expected to cause reductions of about 0.8–1% in GDP, and about 1–2% in government revenue.</li> </ul>	<ul style="list-style-type: none"> <li>• Small scale aquaculture</li> <li>• Fisheries and coastal resources management<sup>56</sup></li> <li>• Building value chains for crops, fisheries, and livestock<sup>57</sup></li> </ul>
<b>Natural climatic drivers</b>	El Niño/La Niña phenomenon -	Although the incidence of drought is expected to decrease over the 21 <sup>st</sup> century in FSM, ENSO conditions are expected to result in drought episodes in the following year, with severe impacts on:	

<sup>50</sup> SPC. 2016. Vulnerability of Pacific Island agriculture and forestry to climate change.

<sup>51</sup> FSM. Chuuk Joint State Action Plan for Disaster Risk Management and Climate Change.

<sup>52</sup> FSM. Pohnpei Joint State Action Plan for Disaster Risk Management and Climate Change.

<sup>53</sup> FSM. Yap Joint State Action Plan for Disaster Risk Management and Climate Change.

<sup>54</sup> FSM. Kosrae Joint State Action Plan for Disaster Risk Management and Climate Change.

<sup>55</sup> SPC Policy Brief #32 2019 Implications of climate-driven redistribution of tuna for Pacific Island economies.

<sup>56</sup> E.g. local marine protected areas and habitat conservation, sustainable fishing programmes, improved post-harvest practices.

<sup>57</sup> E.g. post-harvest and post-catch processing for small-scale and semi-subsistence livelihood practices

	drought	<ul style="list-style-type: none"> <li>• Ground water resources: water shortages and drop in agricultural production due to unavailability of water</li> <li>• Agroecosystems: significant drop in yields for key crops such as coconut, taro and breadfruit</li> <li>• Biodiversity: localized loss of species and occurrence of wildfires</li> <li>• Economy: during drought periods, agricultural losses resulted in the need to import vital food supplies and bottled water</li> <li>• Water security: Groundwater on low-lying atolls is subject to perceptible reductions due to climate driven droughts. Results of an analysis<sup>58</sup> indicated that of the 105 atoll islands that were studied, only six would retain enough groundwater to sustain an island's community during a drought with similar conditions to the drought experienced in 1998.</li> </ul>	
	El Niño/La Niña phenomenon - Sea level rise	<p>Sea-level rise caused by climate change will combine with natural year-to-year variability resulting from climatic phenomena to accentuate the impact of storm surges and coastal flooding. Extreme high-sea level (tidal surges) for FSM are naturally recurring events but are expected to increase dramatically in frequency as a result of projected climate change.</p> <ul style="list-style-type: none"> <li>• To date there are no comprehensive studies on freshwater resources and climate change in FSM and there remain large data gaps especially for hydraulic modelling of atoll aquifer systems.<sup>59</sup></li> <li>• However, it is clear that with the continued projections for sea level rise, storm surge and inundation events and unpredictable seasonal variations in rainfall and ENSO events outlined above, freshwater availability in FSM will continue to be negatively impacted due to climate change events in the coming decades.</li> <li>• Estimated costs of flooding from extreme rainfall events for a representative village are 15.59 million in 2050 and 23.01 million in 2100 (3% discount rate).</li> <li>• On average, in any one year, FSM is expected to incur USD 8 million in losses due to tropical cyclones and earthquakes. The relative contribution from earthquakes is small as most islands of FSM are situated in a relatively quiet seismic area. In the coming 50 years FSM has a 50% chance of experiencing natural disaster losses exceeding USD 105 million. Additionally, there is at least a 10% chance that FSM will experience a loss greater than USD 450 million and fatalities of more than 600 individuals.<sup>60</sup></li> </ul>	
<b>Non-climatic drivers</b>	Deforestation	<p>Deforestation exacerbates and is in turn exacerbated by the negative impacts of floods and landslides that are caused by climate change effects such as more intense typhoons<sup>61</sup>, resulting in:</p> <ul style="list-style-type: none"> <li>• Loss of arable land</li> <li>• Surface run-off, sedimentation, downstream pollution of waterways</li> </ul>	<ul style="list-style-type: none"> <li>• Watershed reforestation for landslide protection and flooding control</li> <li>• Restoration, rehabilitation or substitution of ecosystems relevant for adaptation (e.g. mangrove restoration, re-vegetation, sea-grass beds)</li> </ul>
	High pressure on inshore fisheries	<p>High fishing pressure may result in depletion of fish stocks as well as damage to inshore and coastal ecosystems, further exacerbating the impacts of climate change on inshore fisheries such as reduced production<sup>62</sup></p>	<ul style="list-style-type: none"> <li>• Rehabilitation of ecosystems relevant for adaptation (e.g. mangrove restoration, sea-grass beds) can provide nurseries for fish species</li> </ul>
	Environmental pollution	<p>Waste management is listed as a priority adaptation area for municipalities largely because of its impact on water and soil quality when mismanaged. While this can be an important adaptation strategy for Local Authorities, waste management projects will not be funded by this EDA project. Even still it is important to capture the stated priorities of the Local Authorities</p>	

**Related projects and interventions**

27. There has been a number of past and on-going projects and initiatives in FSM that have sought to overcome some of the key climate change challenges previously mentioned. Specifically, the 'Practical Solutions for Reducing Community Vulnerability to Climate Change in the Federated States of Micronesia' Adaptation Fund

<sup>58</sup> Bailey et al. Groundwater Resources Analysis of Atoll Islands in the Federated States of Micronesia Using an Algebraic Model.

<sup>59</sup> SPC. [Federated States of Micronesia – IWRM Outlook Summary and NWTF Report.](#)

<sup>60</sup> Pacific Catastrophe and Risk Financing Initiative, 2011.

<sup>61</sup> Pacific-Australia Climate Change Science and Adaptation Planning Programme – Current and future climate of the Federated States of Micronesia; Available [here](#).

<sup>62</sup> Bell et al. 2011. Vulnerability of tropical Pacific fisheries and aquaculture to climate change.



project<sup>63</sup>, the Pacific-American Climate Fund (PACAM)<sup>64</sup> projects administered through USAID, the recently approved 'Climate Resilient Food Security for Farming Households across FSM' GCF project and the Small Grants Programme (SGP) projects administered by the Global Environment Facility (GEF) have all aimed to increase adaptation capacity and implement sub-grants in FSM through NGOs.

Project / Programme title	Description	Additionality / complementarity with EDA Programme
<p><b>'Practical Solutions for Reducing Community Vulnerability to Climate Change in the Federated States of Micronesia' – Adaptation Fund</b></p>	<p>This is a nationwide Adaptation Fund project that has an overall project goal to build/increase the ecological, social and economic resilience of communities by reducing vulnerability to stressors from climate change.<sup>65</sup> The project focuses on protecting marine ecosystems in FSM and increasing their resilience to climate change. Expected outcomes of this project include:</p> <ul style="list-style-type: none"> <li>• Natural assets or ecosystems under protected area management are adequately protected/rehabilitated through effective legislative, institutional and financial arrangements and support.</li> <li>• Natural assets or ecosystems under protected area management are adequately protected/rehabilitated through effective State-level enforcement of MPA and nearshore fisheries legislation regulations.</li> <li>• Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level.</li> <li>• Improved Knowledge Management for Protected Areas and Ecosystem based adaptation Solutions</li> </ul> <p>The project also leveraged an EDA Facility to provide support for 10 communities to implement priority actions identified in their Local Early Action Plans for climate adaptation - demonstrating that the small grants mode of delivery works well in FSM.</p>	<p>The present programme proposal will work to leverage the past experience with small grants, particularly utilizing them to support specific local priorities for adaptation as well as the increased capacity of communities that have participated in this project in regard to water conservation and coastal protection.</p> <p>Opportunities to be leveraged for the proposed EDA Programme:</p> <ul style="list-style-type: none"> <li>• Increased understanding of climate change risks/adaptation at the local level.</li> <li>• Improved protection of fishing grounds (food security).</li> </ul>
<p><b>Pacific-American Climate Fund – USAID</b></p>	<p>The PACAM regional programme provides grant support to NGOs operating in Pacific island communities in adapting to climate change.<sup>66</sup> The programme includes focus on capacity building through various means (technical training, workshops, purchasing equipment through grants, etc.) and projects are both regional and country/community specific. Relevant recent projects that have been implemented in FSM include 'Climate Change Adaptation through Family Gardens, Food, and Health' and 'Improving Community Climate Resilience in Micronesia'. The family gardens project aims at strengthening the capacity of households and school communities to grow food in FSM. The climate resilience project is a regional project that targets remote outer islands and strengthening community resilience to climate change risks and hazards.</p>	<p>The present programme proposal will work to leverage the community knowledge of implementing home gardens and other household level food security projects through the family gardens project and increased capacity for climate change adaptation planning on outer islands through the climate resilience project. The proposed EDA is synergistic with the USAID initiative as it will seek to increase community capacity to implement coastal management projects.</p>
<p><b>'Climate Resilient Food Security for Farming Households across FSM' – Micronesia Conservation Trust (MCT) Green Climate Fund (GCF)</b></p>	<p>This additional GCF project is focused on providing a system-wide solution to increasing the resilience of FSM's most vulnerable communities to food insecurity in the face of climate change. Goals of the project include strengthening the enabling environment with the agriculture sector at both the national and State-levels, providing an evidence-base for specific interventions, developing new opportunities for market access and development and targeting climate smart agricultural techniques and opportunities to be used at the household level.</p>	<p>Potential areas for leverage with the present programme include utilizing updated data, mapping, and climate information from the food security project to provide better targeted interventions across all three climate impact areas. The vulnerability assessments conducted as part of Component 1 of the MCT project will inform and guide the elaboration of sub-projects by LAs by supporting the prioritization and decision-making processes.</p> <p>Additionally, as the MCT project does not target outer atoll communities, the proposed EDA Programme will aim to provide sub-grants for climate-resilient agriculture and water security interventions to enhance the resilience of households in more remote communities, in</p>

<sup>63</sup> Adaptation Fund – Practical Solutions for Reducing Community Vulnerability to Climate Change in FSM; Available [here](#).

<sup>64</sup> USAID – Pacific-American Climate Fund; Available [here](#).

<sup>65</sup> [Adaptation Fund – Practical Solutions for Reducing Community Vulnerability to Climate Change in FSM](#).

<sup>66</sup> [USAID – Pacific-American Climate Fund](#).

		<p>addition to fostering activities undertaken under the MCT project.</p> <p>To ensure there is no duplication of efforts between the MCT project and the proposed Programme, the ECU will assess, using the sub-project screening form, the potential synergies and opportunities to be leveraged.</p>
<p><b>Small Grants Programme – Global Environment Facility (GEF)</b></p>	<p>The GEF SGP provides financial and technical support to communities in developing countries for small projects that conserve and restore the environment and enhance community well-being and livelihoods. The programme provides grants up to USD 50,000 to beneficiaries for project implementation.<sup>67</sup> Various SGP projects have been implemented in FSM and the region, including a climate food security project in the community of Enimwahn and a coastal and land ecosystem rehabilitation project in the community of Satawan.</p>	<p>The present programme proposal will work to leverage the increased capacity to implement various types of adaptation projects throughout FSM that has been increased through the SGP.</p>
<p><b>ADB/GCF Pacific Islands Renewable Energy Investment Program</b></p>	<p>The Pacific Islands Renewable Energy Investment Program (the program) will support a paradigm shift from diesel power generation to renewable energy in seven Pacific SIDS and place the SIDS on a sustainable, climate resilient development pathway. Participating SIDS include Cook Islands, Tonga, Republic of Marshall Islands, Federated States of Micronesia, Papua New Guinea, Nauru and Samoa.</p> <p>In terms of adaptation, the project will focus in particular in floating solar panels on water reservoir to minimize evaporation and secure water supply (in Yap State), but also incorporate climate proofing into technical design of infrastructure.</p>	<p>The project is in the early stages of implementation, but it can inform the present programme on implementation of a GCF project in FSM and highlight specific challenges for project development in the individual FSM States. Further, to the extent that the States and Local Authorities have developed prior capacity with distributed renewable systems, particularly solar, the programme can leverage that capacity to support the design, operations, and maintenance of the PV systems envisioned to support adaptation solutions in the EDA sub-projects.</p>
<p><b>FAO El Niño drought: Food insecurity monitoring, preparedness and support in Micronesia and Melanesia</b></p>	<p>The project worked to mitigate risks to the food security and nutrition of vulnerable households created by El Niño-induced effects, particularly droughts. Specifically, the project:</p> <ul style="list-style-type: none"> <li>• Developed and designed a food availability monitoring system for data collection and analysis.</li> <li>• Trained government officials in Solomon Islands, Palau, the Marshall Islands and Micronesia (Federated States of) on the use of tablets populated with the Kobo Toolbox software for data collection, analysis and reporting.</li> <li>• Guided and assisted government departments to prepare implementation plans for data collection and monitoring capability for household food security and nutrition.</li> <li>• Liaised with ministries of agriculture and village leaders/local representatives to ensure regular collection and triangulation of data</li> </ul>	<p>The project also trained government officials and guided and assisted government departments to prepare implementation plans for data collection and monitoring capability for household food security and nutrition. This capacity will be helpful in guiding the development and implementation of food security sub-projects.</p>

**B.2. Theory of change (max. 1000 words, approximately 2 pages plus diagram)**

**Barrier analysis**

28. A number of barriers continue to hamper the design, planning and implementation of food security, water security and infrastructure adaptation projects as well as the overall adaptive capacity of LAs. These barriers are listed below along with a short description, while the table further below demonstrates how the Programme will address them.

**1) Information barriers:**

- **Limited scientific and technical knowledge and understanding of climate change and adaptation programming:** There is currently limited availability of data and information on the impacts of climate change in FSM because the mechanisms and processes for producing such data are nascent. Information is this limited at

<sup>67</sup> [GEF SGP](#).

this stage, but mechanisms are now in place (e.g. SPREP environmental portal for FSM<sup>68</sup>, Pacific Data Hub) to improve climate information dissemination. Staff members from the Department of Environment, Climate Change & Emergency Management (DECCEM) have now been dedicated to maintenance of these portals. States have also been trained to be able to disseminate climate information easily. Specifically, FSM's Second National Communication to the UNFCCC highlighted<sup>69</sup> the limited information related to climate baseline data, vulnerability and adaptation assessments, and changing environmental, demographic, economic patterns and trends as a key knowledge barrier to adaptation. Further, there remains an insufficient scientific and technical knowledge in-country to effectively utilize climate change information and data.

- **Lack of central mechanism to collect climate change information and disseminate as needed at the state and local level:** There is currently no specific or dedicated mechanism in FSM to collect and disseminate climate change information; instead, the country relies on regional platforms<sup>70</sup>. Climate change information is also shared in the schools by the Department of Environment, Climate Change and Emergency Management (DECCEM) and the International Organization for Migration (IOM) through projects (PREPARE and CADRE).
- **Limited local awareness of climate change from households and community members which leads to limited buy-in for climate adaptation priorities:** Outcomes of the stakeholder engagement process revealed limited awareness of the linkages between climate change and impacts on DRR and coastal protection, food security and water security.

## 2) Technical barriers

- **Limited experience in designing, implementing and managing climate change adaptation projects and limited operational capacities:** The Capacity Assessment conducted as part of the development of the Feasibility Study highlighted that although municipality capacity varies within and between States, in general, municipalities were found to have limited scientific and technical knowledge and understanding of climate change and adaptation programming, limited operational capacity and limited experience in designing, implementing, managing and undertaking monitoring, evaluation and learning for climate change adaptation projects. This includes limitations in human resources, equipment, tools, finance and procurement systems, amongst others.
- **Private sector has limited engagement in adaptation planning:** The NDA office has involved the private sector in its consultations for the preparation of the Country Program. The Chamber of Commerce is a member of the FSM Climate Change and Sustainable Development Council to ensure inclusion of the private sector. However, successful engagement of the private sector in climate change investments requires transformative economies of scale. As a small and fragile island economy, FSM doesn't have the capacity, resources and knowledge to fully engage its private sector with regards to mobilisation of capital from the private sector or active collaboration towards achieving the nation's climate change adaptation and mitigation targets.
- **Local climate change adaptation capacity is not sustained effectively:** Past attempts at projects have largely been one-off pilot projects that failed to build system-wide capacities for increasing the resilience of FSM's most vulnerable communities in the face of climate change. While some level of capacity is built during the implementation of such projects, they often lack sustainability. These capacities are thus soon lost. Other limitations or challenges include the brain drain, general level of educational attainment in the various states, the standard of education and available domestic educational opportunities or resources.

## 3) Financial barrier

- **Insufficient available financing from alternative sources to develop and implement locally relevant adaptation projects:** Climate finance funding has already been leveraged, but the funding amount is still inadequate to meet adaptation needs, considering the magnitude of potential climate change impacts. Further, more than 60% of the funds go "uncoordinated" among national institutions<sup>71</sup> which creates a void for effective and coordinated financing for climate adaptation in FSM communities.

## 4) Institutional barriers

- **Uncoordinated government adaptation planning and integration into national policy frameworks:** While decision-makers' awareness of climate change is reasonably high; a concrete institutional response is at a very

<sup>68</sup> <https://fsm-data.sprep.org/>

<sup>69</sup> FSM. Second National Communication to the United Nations Framework Convention on Climate Change; Available [here](#).

<sup>70</sup> The [Pacific Climate Change Portal](#) is used to access climate resources, news and events in the Pacific island's region. It is also linked with the [Pacific Environment Portal](#) which provides access to environmental datasets to support environmental planning, forecasting and reporting. Another tool that has recently been created to make datasets available (including climate change information) is the [Pacific Data Hub](#).

<sup>71</sup> FSM Climate Change and Disaster Risk Finance; Available [here](#).

early stage in FSM. States have low adaptive capacity that is further constrained by weak linkages among government institutions nationally and between different levels of government and with communities.

#### 4) Social barriers

- **Traditional social structures and conceptions can create complexities for the implementation of certain adaptation projects:** Micronesian societies (with the exception of Yap and a few atolls in Pohnpei), emphasize matrilineal descent where identities, titles, rights and acquisition to property are traced through female hereditary lines. Through colonization, women’s rights to land ownership and their access to resources have changed from traditional matrilineal descent to a system with most decision-making related to land ownership and land use being retained by male members of the family. Key aspects of land ownership in the four FSM states are as follows:
  - **Pohnpei** – Private landowners have final authority on private land. However, any conflict goes through the Department of Land and the Land Commission (land court). The State has the final authority for all state-owned terrestrial land and marine resources. States make final decisions on the use and/or conservation of marine resources or the designated protected areas.
  - **Kosrae** – Kosrae has similar laws to Pohnpei regarding land ownership. Kosrae Land Court has procedures to resolve conflict of interests regarding the use of private lands. For public lands, the use of these lands is regulated by state law in the public interest. Any use of the waters, lands, and other natural resources within the marine space of the municipality by the state government is subject to prior consultations between the state and the municipality where the marine space is situated.
  - **Yap** - For Yap, land ownership resides at the community level first (village/municipality) involving the resource owners, titled estates of the place, and traditional leader of the place. On land ownership/resource conflict, if brought to State Court and the issue has not been discussed at the Municipal Court (overseen by the chief of each municipality with appointed judges from the place), the State Court would defer it back to the Municipal Court. Decisions made at municipal court can be appealed to state level.
  - **Chuuk** – Land ownership and near shore marine resources are privately owned. However, Chuuk only issues title of certificate to terrestrial land ownership but not marine ones. As with any other state, any conflict goes through the court system but authority on conservation and natural resource use on privately owned lands lies with the private landowners. The state works with families and communities who owned near shore marine resources for conservation and natural resource use.
  
- **Socio-cultural and educational barriers coupled with limited representation leads to gender-blind design of climate adaptation policies and projects:** Although women’s groups interviewed as part of the stakeholder engagement process reported that times were rapidly changing and that FSM society was heading toward a modern conception of women’s roles and responsibilities, there remains gender inequality in some of the most remote LAs. Mainstreaming gender considerations and acknowledging the unique contribution to and knowledge of food security, water security and DRR has been lacking in both climate change adaptation policies and projects. The stakeholder engagement process revealed that women’s groups felt they had limited capacity in adaptation project design, proposal development and project implementation and monitoring.

Table 3 below provides an overview of identified barriers and the proposed interventions to address them.

*Table 3. Interventions to address the identified barriers to adaptation*

	Barriers to adaptation	How the project will address specific barriers
Information barrier	Limited scientific and technical knowledge and understanding of climate change and adaptation programming	The Programme is working directly with LAs to build technical capacity for climate change, particularly climate change adaptation planning through particularly the climate adaptation decision support framework and training (Activity 1.1.1, 1.1.2) and the project preparation trainings (1.2.1, 1.2.2). SPC will develop a framework for LAs to identify and screen for climate change adaptation risks in their

		<p>Lack of central mechanism to collect climate change information and disseminate as needed at the State and local level</p>	<p>communities. The framework will include intensive community engagement to allow for inclusive identification and prioritization of adaptation solutions, as well as develop tools and frameworks which will allow LAs to match needs with potential sources of funding both national and international. Examples of resources which could be used to train the LAs include the Pacific Adaptation Tool<sup>72</sup>, the UNDP Toolkit for Practitioners- Designing Climate Change Adaptation Initiatives, the Community Based Risk Screening tool – Adaptation and Livelihoods (CRISTAL) and the USAID’s Pacific Islands Development Program Small Grants Guide<sup>73</sup>.</p> <p>At least two (2) representatives per municipality will be trained (approximately 140 persons). At least two (2) representatives from relevant State agencies will also be trained (approximately 80). Areas for training will include but not be limited to (i) Problem Analysis- Defining and identifying the specific climate change related issues, (ii) Identifying key possible adaptation responses or preferred solutions, (iii) Barrier Analysis and Potential Solutions, (iv) Cost-Benefit Analysis (CBA), and (v) Stakeholder Consultation Techniques.</p> <p>There is no single and central mechanism to collect and disseminate climate change information, but there are some platforms regularly used in FSM to disseminate climate change information. Under the EU GCCA project, a climate change portal was created<sup>74</sup> that has been used by the Government of FSM and others. It has also been linked with the INFORM portal<sup>75</sup>, overseen by DECEM. Further strengthening of the climate change portal will be undertaken under the EU GCCA SUPA project. The Government of FSM – and in particular DECEM – is thus in the process of strengthening information dissemination on climate change. This EDA project will contribute to the dissemination of information through these initiatives.</p>	
	<p><b>Technical barriers</b></p>	<p>Limited local awareness of climate change from households and community members which leads to limited buy-in for climate adaptation priorities</p>	<p>LAs and community stakeholders have been engaged throughout the initial project design to build awareness of climate change and identify key adaptation priorities. The Stakeholder Engagement Plan (Annex 7) details the ongoing stakeholder engagement and risk mitigation strategies, particularly awareness of climate change and integration of all community concerns into sub-grant design.</p>	
		<p>Limited operational capacities (e.g., human resources, equipment, tools, finance and procurement systems, etc.)</p>	<p>To address the limited operational capacities, all of the LAs are receiving direct technical training and capacity building for project development and operations, as well as continued technical assistance through trainings on service delivery and project management/financial management support from SPC.</p>	
		<p>Constrained project monitoring at the State and national level, which results in discordant climate financing</p>	<p>The direct training for the LAs specifically includes capacity building for designing, implementing, managing, and monitoring climate adaptation projects. The Programme will also be deploying specific support capacity to continue to guide the LAs throughout the sub-grant implementation. Strengthening of capacities and systems for monitoring and evaluation of adaptation measures will support informed decision-making, prioritisation and resource allocation on climate change at the national and sub-national levels. While this will mostly be at the municipal government and state level, this will be a strong foundation for building national level experience.</p>	
		<p>Limited experience in designing, implementing and managing climate change adaptation projects</p>		
		<p>Private sector has limited engagement in adaptation planning</p>	<p>The private sector is fully engaged in terms of consultations on climate change in</p>	

<sup>72</sup> <https://apt.pacificclimatechange.net/>

<sup>73</sup> USAID Pacific Islands Development Program “Small Grants Guide”; Available [here](#).

<sup>74</sup> <https://fsm-data.sprep.org/dataset/fsm-national-climate-change-data-portal>

<sup>75</sup> <https://www.sprep.org/inform/data-portals>

	<p>Local climate change adaptation capacity is not sustained effectively</p>	<p>FSM. For example, the private sector was extensively consulted for the development of the States Joint State Action Plans (JSAPs) for disaster risk management and climate change. The private sector is generally supportive of government decisions and initiatives on climate change.</p> <p>However, the limited capacity and scale/fragmentation of local private sectors in Pacific countries present challenges. LAs will be able to include the private sector and academia as part of their sub-grant applications as stipulated in the RCGF application process and relevant forms. The private sector can be included within the sub-grants from the RCGF as participants in an application. Similarly, academia can be included where there is a requirement for technical expertise within bids. The RCGF application and evaluation process has been modified to allow for the provision of more explicit information on the extent to which private sector and other actors are included in applications for sub-grants under the RCGF. The EOI form and Grant Application Form (Appendices I and II to the Operations Manual) have been modified to explicitly request information on private sector and other actors' involvement in sub-grants. Moreover, the Sub-Grant Review Checklist (Appendix VII of the Operations Manual) includes a specific evaluation question on the inclusion of private sector and other actors in the sub-grant applications.</p> <p>Likewise, academia will be encouraged to contribute to and support the development of the various capacity building materials. There is also potential for academia to serve as facilitating agents, where the expertise within FSM's academia matches the requirements for the facilitating agents. Finally, lessons learned and other information from the project will be shared with COM.</p>
<p><b>Financial barriers</b></p>	<p>Cost estimations for implementing adaptation measures/projects at the State level outstrips current department budgets</p> <p>Insufficient available financing from alternative sources to develop and implement locally relevant adaptation projects</p>	<p>The Programme provides an influx of critical financing opportunities for state agencies and municipal governments to accelerate the addressing adaptation priorities that currently cannot be financed by existing budgets or alternative sources of financing. The direct access mechanism also ensures that the new financing is directly supporting adaptation priorities rather than more general development outcomes.</p>
<p><b>Social barriers</b></p>	<p>Land ownership and other social structures can create complexities for the implementation of certain adaptation projects</p> <p>Socio-cultural and educational barriers coupled with limited representation leads to gender-blind design of climate adaptation policies and projects</p>	<p>As explained in the barrier analysis above, individual communities will have differing structures and systems, but since private land ownership is varied, but mostly limited in much of FSM, the Programme will be focused on conducting extensive community engagement and co-development of sub-grant proposals to ensure that any potential barriers that can arise for activities like siting/distribution of resources and interventions are managed proactively with communities. The Programme will comply with FSM government legislation with regard to land ownership/land tenure for sub-grants implemented in public locations.</p> <p>The Programme is deliberately working to address issues of gender equity and gender mainstreaming by providing for balanced representation and empowered decision making/training for women in project design and implementation and ensuring effective screening and technical expertise is in place to effectively support positive gender outcomes both in project design and throughout its implementation.</p>
<p><b>Institutional barriers</b></p>	<p>A deficit in government coordination regarding integrating adaptation in FSM's national policy framework</p> <p>Climate finance and adaptation priorities are not coordinated at the State and national levels</p>	<p>The Programme's bottom-up approach to mainstreaming climate adaptation priorities as well as the direct LA financing through the EDA mechanism create a strong foundation for state and local level coordination of climate finance and adaptation priorities and addresses the current deficit in the national policy framework.</p> <p>GCF Focal points at the State level and the central government are currently working on improving coordination between entities through the Readiness II project. The proposed programme will support this coordination effort by leveraging the GCF State Focal Points to support the ECU and the NDA in the dissemination of information on the results of the programme. Specifically, under Component 1, the training activities (Output 1.1) along with the adaptation decision support framework and tools will help streamlining adaptation priorities.</p>

**Theory of change**

29. The proposed EDA Programme's Theory of Change (ToC) builds on the principle that reducing the vulnerability of local communities FSM depends on their empowerment and increased capacity to identify and understand climate change impacts on their livelihoods, and subsequently to design and implement climate adaptation solutions relating to food security, water security and DRR. Figure 5 presents the ToC of this Programme and

demonstrates how the current barriers will be addressed through the Programme activities to achieve transformational change.

30. Component 1 supports a variety of capacity assessment and capacity building activities to ensure that LAs are able to access EDA resources and implement identified priority sub-projects<sup>76</sup>. This will enable LAs to develop and implement effective projects tailored to their communities' local adaptation priorities. The key adaptation results delivered will include number of people trained in resilience planning and development of priority adaptation projects. Component 2 leverages this foundation to support the implementation of priority adaptation projects by the LAs. These projects will be tailored to local needs to build adaptive, anticipatory, and absorptive capacity in these communities in three critical sectors based on the prioritization process (more details on the prioritization process can be found in Section 5 of the Feasibility Study). Adaptation outcomes will vary from project to project, but are likely to include uptake of diversified, climate resilient livelihood options, improved food security and water security for vulnerable households, enhanced local coordination mechanisms, reduced economic and human costs from disasters/climate change, and overall increased resilience of target communities.

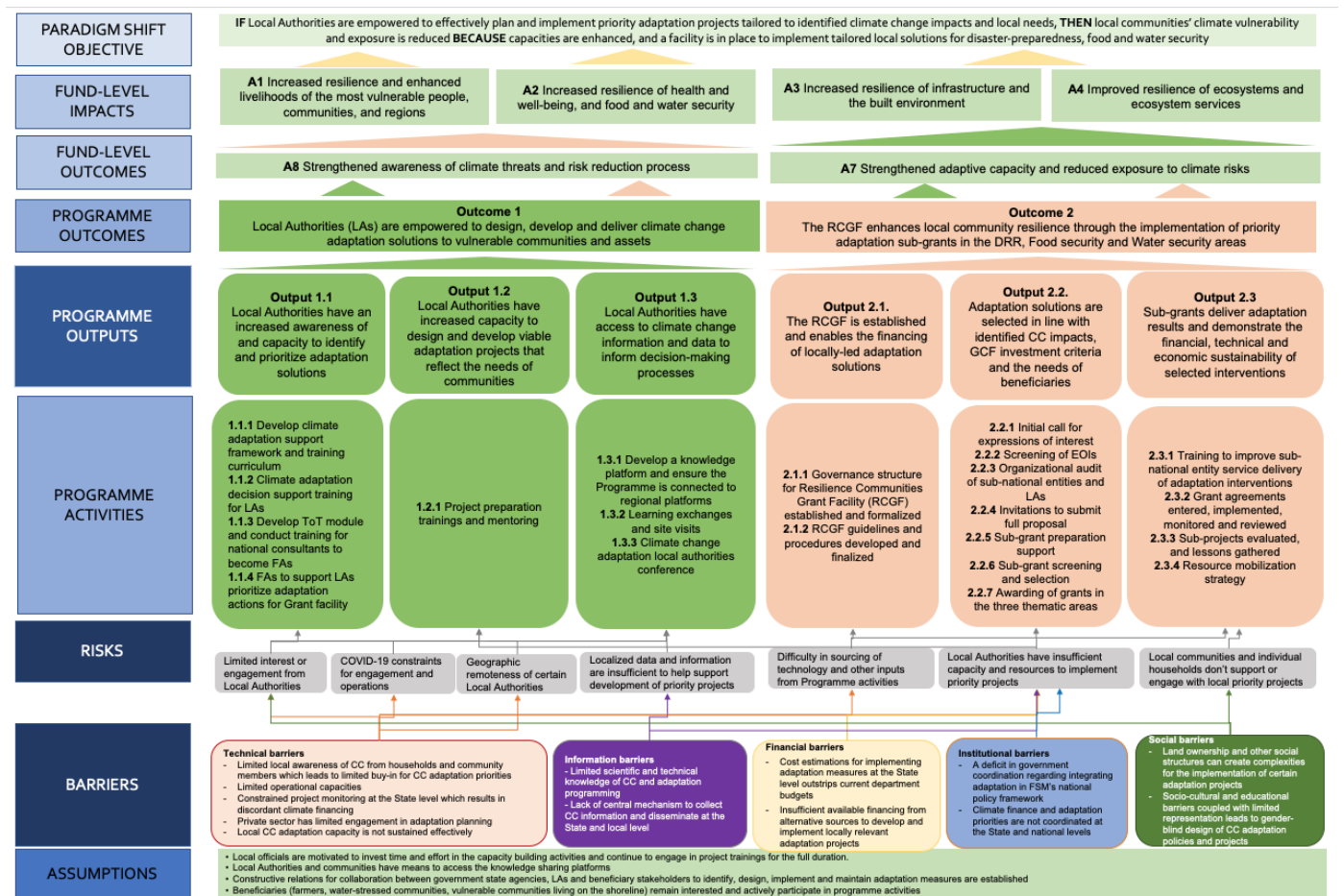


Figure 5. EDA Programme Theory of Change

31. Table 3 below summarizes the identified climate risks and impacts, and how the Programme's Theory of Change addresses these climate change impacts through adaptation interventions in the three thematic areas.

<sup>76</sup> During the programme design phase, a survey was conducted with LAs to assess their absorption capacity in light of the current and programmed funding received. Generally, municipalities have budgets ranging from USD 10,000 up to USD 500,000, while State agencies have handled grant amounts up to USD 1m. For more information on the survey conducted, please see Annex 4 of the Feasibility Study.

Table 4. Contribution of the EDA Programme Theory of Change to identified climate change impacts

Climate Risk	GCF Result Area	Thematic area	Evidence of Impact	Adaptation Intervention	Adaptation Benefit
Increased temperature	<i>Health and well-being, and food and water security</i>	<b>Food security</b>	Temperature increases of 2°C and beyond create significant physiological stress for most staple crops  Reduced agricultural production results in food insecurity and reduced income for subsistence farming households	Promotion and dissemination of climate-resilient crop species and varieties <sup>77</sup> (resilient to drought and pest) including techniques for their consistent supply and conservation (germplasm collections, nurseries)	Increased agricultural productivity and increased number of food-secure households in areas/periods at risk of climate change impacts e.g. droughts
Sea level rise		<b>Food security</b>	Saltwater intrusion contaminates the soil which results in decreased crop productivity and/or crop loss	Promotion and dissemination of saltwater resistant crop varieties <sup>78</sup> , including techniques for their consistent supply and conservation (germplasm collections, nurseries)	
		<b>Water security</b>	Saltwater intrusion in freshwater sources and watersheds reduces the availability and quality of freshwater supply	Establishment of small-scale water storage infrastructure for capturing and storing rainwater	Increased freshwater availability and reduced frequency of water-borne diseases  Increased number of water-secure households in periods at risk of climate change impacts e.g. sea surges
		<b>Disaster Risk Reduction</b>	Damage or destruction of coastal buildings and infrastructure, undermining community livelihoods	Small-scale coastal infrastructure	Decreased expected loss of economic assets due to the impact of sea level rise in the geographic area of intervention
Rainfall variability		<b>Water security</b>	Results in soil erosion, landslides and down-stream water pollution around watersheds, lowering water quality	Establishment of small-scale run-off catchments and/or rainwater harvesting	Increased number of people with year-round and off-season access to reliable and safe <sup>79</sup> water supply despite climate shocks and stresses
Increased magnitude and frequency of extreme climate	<i>Most vulnerable people, communities, and regions</i>	<b>Disaster Risk Reduction</b>	Results in casualties and loss of lives	Early warning systems, emergency plans and shelters	Decreased expected loss of lives and economic assets due to the impact of

<sup>77</sup> Varieties likely to include: salt- and drought-tolerant banana (Miri et al. 2009; Vanhove et al. 2012); salt-tolerant breadfruit (Ragone 1997); salt-tolerant swamp taro (Webb 2007; Rao 2010); and salt-tolerant sweet potato (van Kien et al. 2013; Carretero et al. 2007).

<sup>78</sup> Ibid.

<sup>79</sup> According to the Joint Monitoring Programme (JMP), “access to safe drinking water” is defined as the “availability of at least 20 l per person per day from an improved source within 1 km of the user’s dwelling”. “Improved source” includes household connections, public standpipes, boreholes, protected dug wells, protected springs and rainwater collections.



events such as storms and typhoons					extreme climate-related disasters in the geographic area of intervention
	<i>Infrastructure and built environment</i>	<b>Disaster Risk Reduction</b>	Results in loss of lives and economic assets such as buildings and community infrastructure	Rock revetment, sea walls, retrofitting of buildings	Physical assets made more resilient to climate variability and change, considering human benefits (reported where applicable)
	<i>Ecosystem and ecosystem services</i>	<b>Disaster Risk Reduction</b>	Reduced capacity of ecosystems to act as a natural protective barrier against extreme climate change events	Ecosystem restoration, rehabilitation (mangrove restoration, re-vegetation, sea-grass beds), planting of endemic species, wave breakers etc.	Increased coverage/scale of ecosystems protected and strengthened in response to climate variability and change

**B.3. Project/Programme description (max. 2000 words, approximately 4 pages)**

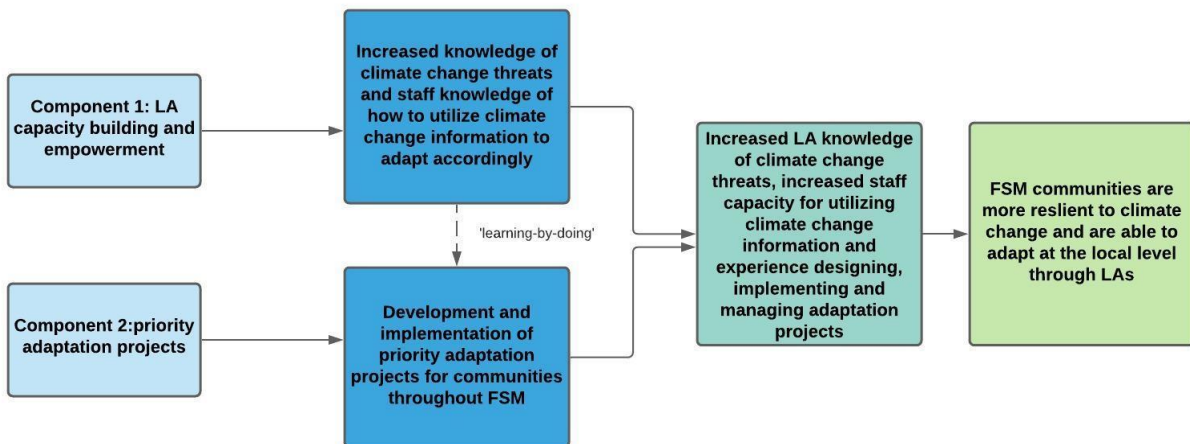


Figure 6 Process for delivery of climate resilient communities in FSM

**Component 1. Local authorities empowered to deliver climate change adaptation services to their populations**

GCF: USD 1,724,637

GoFSM: USD 70,000

**Outcome 1: Local authorities are empowered to deliver climate change adaptation services to their populations**

32. Across FSM, LAs (municipalities and the State-level governments) are well-situated to coordinate and develop local responses to climate change, to enable participatory decision-making, and to ensure financial and technical assistance resources reach beneficiary communities. The beneficiary assessment (See Annex 2, section 5) identified that capacity of LAs to respond to climate change in FSM is limited along a number of dimensions, which can be categorized by the availability of different forms of human, financial, and environmental capital<sup>80</sup>. Component 1 is structured to address barriers to increased human capital to respond to projected climate impacts outlined in B.1, while the financial flows and access supported under Component 2 support the protection and resilience of the environmental capital of vulnerable communities.

33. Component 1 delivers three outputs to strengthen the capacities of LAs across FSM:

<sup>80</sup> A Method for Enhancing Capacity of Local Governance for Climate Change Adaptation (May 2020); Available [here](#).

- Output 1.1 will directly address barriers such as the limited scientific and technical knowledge and understanding of climate change vulnerability and insufficient knowledge to effectively utilize climate change and adaptation information for adaptation programming;
- Output 1.2 will provide direct technical support on how to prepare climate change adaptation projects targeting the project's Resilient Communities Grant Facility (RCGF) to improve access to climate financing;
- Finally, Output 1.3 will create a knowledge management network for cooperation and sharing among different LAs (municipalities and State-government agencies) to share experience and develop solutions to local adaptation problems.

34. Component 1 activities will be implemented by a dedicated ECU that will be established under component 2 and hosted within SPC regional office in FSM. The ECU will have the dual responsibility to run the day-to-day operations of the EDA Programme and manage the RCGF under component 2 under the responsibility of SPC as the Executing Entity.

**Output 1.1 Build technical expertise to identify and prioritize adaptation solutions**

35. Activities under  
output 1.1 will deliver climate adaptation decision support tools and training to LAs empowering them with the scientific and technical knowledge and understanding of climate change vulnerability and adaptation options to identify and prioritize adaptation actions.

*Activity 1.1.1 Develop climate adaptation decision support framework and training curriculum including interactive case studies targeting government officials*

**Implementing party(ies):** ECU

36. To ensure a  
transformation in the way LA's and state agencies identify and prioritize appropriate local adaptation measures, SPC will develop an adaptation measure prioritization framework, climate risk screening tools and a training curriculum informed by scientific data and analysis that will support LAs to identify and screen for climate change adaptation risks and identify appropriate adaptation measures. Intensive LA and community engagement will present approaches from existing and successful toolkits that be adapted into a national "FSM Adaptation Measure Prioritization Framework" which will then be presented to the Climate Change and Sustainable Development Council for potential endorsement. Existing toolkits that will be adapted include the Pacific Adaptation Tool<sup>81</sup>, the UNDP Toolkit for Practitioners- Designing Climate Change Adaptation Initiatives<sup>82</sup>, the CRiSTAL tool<sup>83</sup> and the USAID's Pacific Islands Development Program Small Grants Guide<sup>84</sup>. This will incorporate the following gender-responsive sub-activity from the Gender Action Plan<sup>85</sup>:

- Activity 1.1.1.  
Gender Responsive design incorporated into sub-grant development training; localized strategies for gender mainstreaming, gender criteria, and implementation are developed

*Activity 1.1.2 Climate adaptation decision support training for local authorities (2 trainings per State)*

**Implementing party(ies):** ECU

37. SPC will train LAs on the framework and resources identified and provide an introduction to the EDA Facility to familiarize local government officials with the objectives of the facility, the process, eligibility criteria, and details of the three thematic areas for adaptation sub-grants. At least two (2) representatives per municipality will be trained (approximately 140 persons). At least two (2) representatives from relevant State agencies will also be trained (approximately 80). Each State will have two trainings, one for municipalities and one for State agencies. The NDA will make recommendations on the invitation of representatives from municipality and state agencies. Based on these invitations, the municipality and state agencies would nominate their preferred representative.

<sup>81</sup> See: <https://apt.pacificclimatechange.net/>

<sup>82</sup> See: <https://www.adaptation-undp.org/resources/training-tools/designing-climate-change-adaptation-initiatives-toolkit-practitioners>

<sup>83</sup> See: <https://www.iisd.org/cristaltool/>

<sup>84</sup> USAID Pacific Islands Development Program "Small Grants Guide"; Available [here](#).

<sup>85</sup> See Table 7 in Annex 4: GCF Gender Assessment and Action Plan GAAP

38. Areas for training will include but not be limited to (i) Problem Analysis- Defining and identifying the specific climate change related issues, (ii) Identifying key possible adaptation responses or preferred solutions, (iii) Barrier Analysis and Potential Solutions, (iv) CBA, and (v) Stakeholder Consultation Techniques. This will incorporate the following gender-responsive sub-activity from the Gender Action Plan<sup>86</sup>:

- Activity 1.1.2. Resilience training, includes training on gender-mainstreaming for climate resilience, for local authorities' staff and elected and appointed officials

*Activity 1.1.3 Develop train-the-trainer's module and conduct training for national consultants and/or local NGOs in each State to become Facilitating Agents*

**Implementing party(ies):** ECU

39. NGOs and national consultants from all four states will be selected and procured by SPC through a competitive process to serve as technical support Facilitating Agents (FAs) and will provide capacity and project implementation support. The selection criteria for the national consultants and/or local NGOs will be based on individual fields of expertise, job titles or track record delivering on projects or initiatives in food security, water security, DRR and coastal protection in relation to climate change adaptation. SPC will develop and deliver a train-the-trainer's module to ensure FAs can support LAs in the prioritization and development of climate change projects, particularly for the EDA Facility. FAs will be added to a roster of experts and paired with LAs by SPC based on FAs' expertise and experience.

*Activity 1.1.4 Facilitating Agents to support LAs prioritize adaptation actions for Grant Facility*

**Implementing party(ies):** ECU, FAs, State GCF Focal Points

40. Based on the beneficiary assessment, municipalities and State government agencies will need tailored support to catalyse relevant project ideas that will be channelled through the EDA Facility in component 2. FA's will conduct site-visits to State agencies and individual municipalities (approximately 70–80 site visits will be conducted) to provide support to LAs for consultations with communities and to prioritize adaptation actions under the FSM Adaptation Measure Prioritization Framework. All LAs will be eligible for technical assistance under this activity, although priority will be given to municipalities or state agencies showing the highest level of vulnerability as well as the lowest level of adaptive capacity to implement resilience-building activities. This will incorporate the following gender-responsive sub-activity from the Gender Action Plan<sup>87</sup>:

- Activity 1.1.4 Integration of gender considerations into the development of sharing mechanisms and a community of learning and practice

**Output 1.2. Technical support on project preparation**

41. Once project priorities have been identified under output 1.1, training will be provided by FAs (locally) and international experts (remotely) to LAs on how to develop adaptation sub-grants targeting the EDA Facility. This will be done through deploying FAs directly to municipalities and State governments to conduct targeted training.

*Activity 1.2.1 Project Preparation Trainings and Mentoring*

**Implementing party(ies):** ECU, FAs, State GCF Focal Points

42. Two to three (2-3) workshops per State will be held on eligible sub-grant activities (under the food security, water security and DRR/coastal protection themes), project preparation and development, targeting around five (5) FAs per State for a total of twenty (20).<sup>88</sup> Training will support municipalities and State-government agencies to submit an expression of interest (EOI) through activity 2.2.2 and a full sub-grant proposal through activity 2.2.6. A guideline

<sup>86</sup> See Table 7 in Annex 4: GCF Gender Assessment and Action Plan GAAP

<sup>87</sup> See Table 7 in Annex 4: GCF Gender Assessment and Action Plan GAAP

<sup>88</sup> The number will vary depending on the breakdown of individual consultants versus non-governmental organizations that are selected. For example, an NGO may be able to support a greater number of LAs than an individual and the number of individual consultants would therefore be less).

will be developed to explain how GCF investment criteria and results management framework, gender and environmental and social safeguards is to be incorporated into the sub-grant design. The guide will also incorporate USAID's Guide to Climate Change Adaptation Project Preparation.<sup>89</sup> Areas of training will include: (i) Elements of project design and formats; (ii) Community Engagement Processes (ii) Budgeting and Economic and Financial Aspects, (iii) Implementation and management arrangements and (iv) Monitoring, Evaluation and Reporting. This will incorporate the following gender-responsive sub-activities from the Gender Action Plan<sup>90</sup>:

- Activity 1.2.1a  
Capacity support to local authorities to strengthen ability of staff to integrate gender considerations into project design and gender-responsive project design in local authorities based on audits
- Activity 1.2.1b  
Ensure inclusive stakeholder consultations for identifying adaptation priorities

**Output 1.3. Knowledge sharing mechanisms to develop and foster a network of local government authorities**

*Activity 1.3.1 Develop a knowledge platform and ensure the Programme is connected to regional platforms across the Pacific*

**Implementing party(ies):** ECU

43. A web portal will be developed to host all materials developed as part of the project including the guide (activity 1.2.1) and FSM Adaptation Measure Prioritization Framework (activity 1.1.1) all training materials, webinars, and communication tools and information on FSM adaptation approaches, methods and tools that facilitate the planning and implementation of adaptation actions, as well as the municipal-level and sub-project level data collected (activities 2.2.3 and 2.3.2). The platform will also host the knowledge portal including monitoring and reporting results (activity 2.3.2) and lessons learned collated (activity 2.3.3). Additionally, to encourage remote working where possible, the platform will connect users via relevant and appropriate social media accounts and cross-platform messaging and teleconference services. Learning exchanges and a national FSM conference on adaptation action (activity 1.3.3) will support integration of the knowledge platform. The web portal will also connect to the data portals and knowledge communities that already exist in the Pacific such as SPC's [Pacific Data Hub](#), the [Pacific Climate Change Portal](#), and SPREP's [Pacific Environment Portal](#). This will include the following sub-activity from the Gender Action Plan:

- Activity 1.3.1  
The programme web portal and database include sex-disaggregated data at the municipal and sub-project level on the three thematic areas and on key socioeconomic indicators to inform the design of future adaptation interventions.

*Activity 1.3.2 Learning exchanges and site visits*

**Implementing party(ies):** ECU, NDA office, State GCF Focal Points

44. To promote cross-learning and create a network of climate change advocates and practitioners among local government officials across FSM, this activity will support learning exchanges between LAs as well as site visits to ongoing projects funded through the EDA Facility. SPC hosted learning exchanges (in years 3 and 5 of the project) allow for regional dissemination and lessons sharing between Pacific island officials regarding similar issues through site visits by local government officials to other countries and relevant workshops and conferences. To foster the engagement of the private sector in future sub-projects and the overall grant facility, private sector actors will be identified and invited to participate in the learning exchanges and workshops. Initial criteria to be used for the selection of private sector participants will include:

- Businesses that can be directly (hardware stores that supplies water catchment tanks) or indirectly (restaurants or food retailers through the food security sub-projects) impacted by the sub-projects
- Businesses that are capable or can contribute to the provision of resilience-oriented goods, finance or services.

45. Additionally, the criteria will include the following gender-responsive target from the Gender Action Plan:

- Activity 1.3.2 Learning exchanges and site visits promote gender-sensitive cross-learning between climate

<sup>89</sup> [https://www.weadapt.org/sites/weadapt.org/files/2017/august/guide\\_to\\_climate\\_change\\_low\\_re.pdf](https://www.weadapt.org/sites/weadapt.org/files/2017/august/guide_to_climate_change_low_re.pdf)

<sup>90</sup> See Table 7 in Annex 4: GCF Gender Assessment and Action Plan GAAP

change practitioners, local officials and private sector actors: At least 25% of private sector actors invited will be women and/or women owned businesses

*Activity 1.3.3 Climate change adaptation local authorities conference*

**Implementing party(ies):** ECU, NDA office, State GCF Focal Points

46. One conference  
will be organized toward the end of the overall EDA Programme implementation to allow LA officials to showcase implemented projects and reflect on challenges, successes and lessons learned and to revisit the Programme's exit and sustainability strategy as well as progress on the recapitalization of the EDA Facility. As above, private sector actors will be invited to join in the conference to learn on the successes and opportunities generated by the EDA Programme. This will include the following sub-activity from the Gender Action Plan:

- Activity 1.3.3  
Climate change adaptation local authorities conference promotes the inclusion of women and women-owned businesses as key agents for adaptation planning: a minimum of 25% of private sector actors invited will be comprised of women and/or women-owned businesses.

**Component 2. Priority project implementation-Grant Facility for Enhancing local community resilience**

**GCF: USD 13,943,717**

**SPC: USD 91,750**

**GoFSM: USD 2,807,571**

***Outcome 2: Grant Facility for Enhancing local community resilience through priority adaptation projects implementation***

47. Under  
Component 2, SPC (via the ECU) will establish a Resilient Communities Grants Facility (RCGF) (output 2.1) to address the long-term vulnerabilities identified in the feasibility study (annex 2). The RCGF will provide sub-grants for sub-grants prioritized under Component 1. The RCGF will award grants and provide targeted technical assistance to LAs and State governments across all four FSM States including outer atolls (output 2.2). It will support 30–40 sub-grants in the range of USD 75,000–1,000,000. An estimated breakdown of size of projects is provided in Table 3 below:

*Table 4. Indicative Breakdown of Sub-grants by grant size*

Number of Projects	Sub-grant Range (USD per project)	Total Average Amount*	Municipal/State Implemented
15-20	75,000-250,000	2,550,000	Municipal
10-15	250,000-500,000	4,500,000	Municipal and State
5	500,000-1,000,000	3,750,000	State
<b>Totals: 30-40</b>	<b>75,000-1,000,000</b>	<b>12,000,000</b>	

\*Taking average of the range x the average of the number of projects within the sub-grant range

48. The stakeholder  
consultation process, climate change vulnerability analysis and other studies conducted and presented in the project feasibility study (see: Annex 2, section 12) identified three priority thematic areas and a list of indicative intervention prototypes across DRR and coastal protection, food security and water security (see: Annex 2, appendix 7).

49. In addition to  
building climate resiliency, the EDA Facility, through the awarded grants, will assist in strengthening the local managerial and financial as well as monitoring, evaluation and learning (MEL) capacities so that the recipient LAs develop sufficient capability to implement adaptation sub-grants and sustain the country's climate-resilient development in the long term.

50. Sub-projects will  
be informed and selected based on past viability of similar projects and interventions in FSM and other Pacific communities. Modelling, feasibility analysis and design of sub-grants will ultimately be driven by the context and needs of the LAs requesting sub-grants as **prescriptive preselection of sub-projects ex-ante weakens the EDA approach of building the capacity of LAs to identify, prioritize and develop projects themselves**. As such, the EDA Programme provides FAs and specialized consultants support to technical assessment and design of sub-grant activities (e.g., engineering design for solar water pumping, planting environmental management plans for mangrove restoration). Alignment with GCF funding requirements will be ensured through stringent approval criteria of sub-grant proposals and screening processes conducted by the ECU (activities

2.2.2, 2.2.7). The three thematic areas, which can be cross cutting, and their sub-grant interventions are outlined below (for detailed description including examples refer to Annex 2, section 11).<sup>91</sup>

*Table 5. Thematic areas and adaptation interventions for the EDA Programme*

Thematic area description	Adaptation interventions
<b>Climate-induced DRR and Coastal Protection:</b>	
<p><b>Climate impacts:</b> Including interrelated coastal erosion, sea level rise, storm surges associated with typhoons and tropical storms as well as flooding and landslides due to extreme rainfall and storm events.</p> <p><b>DRR sub-projects:</b> Community-led, that can safeguard lives, livelihoods and infrastructure. Depending on the climate change projections for the area, such projects could prepare for extremes ranging from flash floods to typhoons.</p> <p><b>Coastal protection sub-projects:</b> Ecological infrastructure can in some cases play a role in buffering extremes, and as such be incorporated as part of climate-proof small infrastructure projects. Such interventions will need to be linked to projected climate change related impacts on communities being reduced or prevented as a result of healthy and functioning ecosystems.</p>	<ul style="list-style-type: none"> <li>•etrofitting existing buildings to climate-proof against increased storm incidents (e.g., cyclone proofing, solar panels, rainwater tanks)</li> <li>•atershed reforestation for landslide protection and flooding control</li> <li>•mall-scale coastal infrastructure constructed that will reduce the risk of losses and damages caused by climate-induced disaster events (as appropriate, use of endemic species planting, wave breakers, man-made channels)</li> <li>•estoration, rehabilitation or substitution of ecosystems relevant for adaptation (e.g., mangrove restoration, re-vegetation, sea-grass beds)</li> <li>•quipping municipalities with necessary tools to respond to climate-induced disaster, including emergency plans, building shelter, medical and other supplies</li> </ul>
<b>Food Security<sup>92</sup></b>	
<p><b>Climate impacts:</b> Climate change-induced extreme weather events and sea-level as well as the projected impacts of warmer atmospheric and open water temperatures, erratic rainfall intensity and distribution, more frequent and more intense tropical cyclones etc and their effect on land, soil and water resources, agricultural production systems (including those of livestock and fisheries), infrastructure, and social (community) systems.</p> <p><b>Food security sub-projects:</b> Address the management of cropland, livestock, forests and fisheries. Sub-projects that aim to support food security under the new realities of climate change through sustainable and equitable transitions for agricultural systems and livelihoods as well as access to markets and value chains. Specifically, to target increased productivity (i.e., produce more food and boost local incomes) and enhanced ability of communities to adapt to climate change and weather extremes. In FSM, it is important to also support benefits to coastal ecosystem (e.g., by reducing sediment into the coastal zone through taro swamps, reducing pressure on wild-caught fisheries, reducing pollutants from fertilizers).</p>	<ul style="list-style-type: none"> <li>•evelopment and use of climate-resilient crop species and varieties (resilient to drought, waterlogging, saltwater, pests), including techniques for their consistent supply (germplasm collections, nurseries)</li> <li>•arming and land use techniques facilitating soil and water conservation (e.g., mulching, organic farming, mixed cropping, drainage)</li> <li>•mall scale aquaculture</li> <li>•isheries and coastal resources management</li> <li>•ivestock management</li> <li>•atershed management</li> <li>•tablishment of agroforestry demonstration sites integrated with livestock</li> <li>•uilding value chains for crops, fisheries, and livestock</li> </ul>
<b>Water Security</b>	

<sup>91</sup> The indicative list of interventions for each thematic area will be refined by the governing bodies at the outset of the Programme.

<sup>92</sup> This EDA programme proposal has been developed in constant communication with the proponents of the GCF project "Climate resilient food security for farming households across the Federated States of Micronesia". It will be implemented in a complementary manner to ensure that any food security action taken does not result in duplication of efforts.

**Climate impacts:** Climate-induced disturbances in water supply and security including reduced aquifer recharge from hydrological disturbances, salinization and contamination of aquifers from sea-level rise and flooding

**Water security sub-projects:** interventions that address increased impacts of droughts in Yap and Chuuk; shortages in freshwater supplies, especially in the outer islands; increased incidence of lowland flooding and seawater inundation, especially in the steep topographies of Chuuk, Pohnpei and Kosrae.

- ater distribution infrastructure (e.g., solar water pumps)
- rocurement and distribution of rainwater collection tanks
- educing leakage of reticulated systems and water storage facilities
- ater saving (e.g., introducing compost toilets, demand management through awareness raising)
- ater quality enhancement and assurance
- olar water purifiers

### Output 2.1 Establishment of Resilient Communities Grant Facility (RCGF)

Under this output, SPC will establish the EDA Facility that will openly and competitively fund applications for adaptation measures. The output will put in place the relevant requirements, rules, and regulations for the RCGF. It will be established and function as a grants funding mechanism to be governed as set out in this funding proposal and in accordance with the Operations Manual, operating in the legal name of SPC as the sole executing entity for this project.

#### Activity 2.1.1. Governance structure for RCGF established and formalized

**Implementing party(ies):** ECU, NDA office, State GCF Focal Points

51. SPC Micronesia Regional Office (MRO), in partnership with FSM Department of Finance and Administration (the GCF NDA) will establish all committees, review panels (including expertise for E&S and gender assessment reviews) during the first six months of Programme implementation. SPC and the NDA will identify and recruit personnel for committees from relevant organizations and plan steering committee meetings (see B.4 for detailed structure). As the Executing Entity, SPC will bear responsibility for the overall governance of the RCGF as well as provide quality assurance, oversight and monitoring functions for the EPB and ECU. This includes mediation and final decision-making by the SPC Representative in cases where consensus cannot be reached within the Board, in accordance with SPC's role as the Executing Entity for the project (please see Section B.4 and Annex 21: Operations Manual). This function for final investment decision-making will ensure compliance of the on-granting mechanism of the EDA Programme with GCF and SPC's relevant policies, but all decisions made will be based on and with the full involvement of the government and non-governmental members of the EPB.

52. The stakeholder engagement during the project preparation phase indicated willingness on the part of various stakeholders – including the government of FSM – to participate in the governance structure for the EDA programme, but formalization of this structure was not possible without an active project under which such formalization could take place. Consequently, this will take place during the inception phase of the project implementation. This will incorporate the following gender-responsive sub-activity from the Gender Action Plan<sup>93</sup>:

- Activity 2.1.1 Establishment of inclusive and representative EDA Programme Board and Grants Technical Evaluation sub-committee

#### Activity 2.1.2 RCGF guidelines and procedures endorsed and adopted by EDA Programme Board

**Implementing party(ies):** ECU

53. Based on Annex 21: Operations Manual, the guidelines and procedures of the RCGF will be updated (if necessary) by the ECU. This will include any necessary further detailing of the overall procedures of the RCGF and refinement of guidance documents and forms for LAs to access the RCGF (based on Appendices I, II, III, IV and VII of Annex 21: Operations Manual). These will then be presented for endorsement and adoption as the procedures by which the RCGF will function by the EPB, as the governance mechanism responsible for overall guidance and direction to the EDA Programme. Figure 7 below and output 2.2 provide an overview of the RCGF, sub-grant review criteria, and details eligibility criteria. This will incorporate the following gender-responsive sub-

<sup>93</sup> See Table 7 in Annex 4: GCF Gender Assessment and Action Plan GAAP

activities from the Gender Action Plan<sup>94</sup>:

- Activity 2.1.2.a  
Development of tender documents for the technical support to ensure adequate gender expertise for EDA programme and EDA Facility
- Activity 2.1.2.b  
Refinement of gender review criteria for sub-grant selection

**Output 2.2 Grant award selection**

54. Under this output, the ECU (a unit to be established within SPC as the Executing Entity for the project) will operate the RCGF. Calls for expressions of interest (activity 2.2.1) and full proposals will be launched (activity 2.2.5). Grants for adaptation investments will be screened (activities 2.2.2 and 2.2.7) and awarded (activity 2.2.8) to LAs (either State or municipal-level entities) for priority adaptation sub-projects worth USD 75,000–1,000,000 across DRR and coastal protection, food security, and water security thematic areas. The EDA facility will also support LAs through technical assistance activities. An organizational audit (2.2.3) will determine whether the applicant has the necessary capacity to implement the proposed sub-grant. Based on the audit and sub grant screening selection, targeted technical assistance will then be provided to a) improve LA's service delivery of adaptation interventions (activity 2.2.4), and b) prepare subgrants, to ensure sufficient capacity to identify, prioritize and design a range of adaptation investments. To ensure no LA is left behind, additional targeted technical assistance will be provided by FAs appointed by ECU to support LAs who fail to meet RCGF funding criteria.

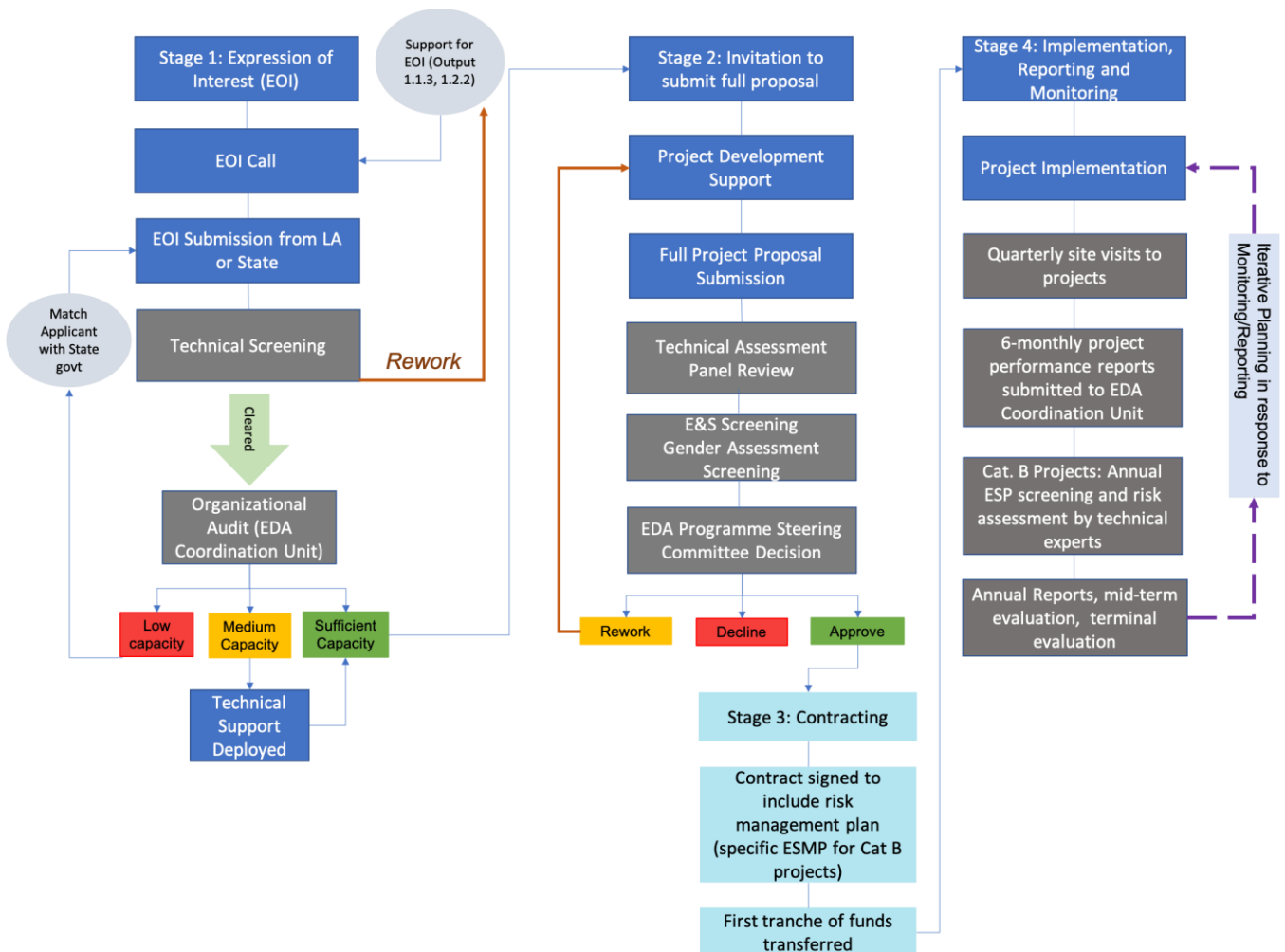


Figure 7 EDA Facility grant award procedure overview

<sup>94</sup> See Table 7 in Annex 4: GCF Gender Assessment and Action Plan GAAP



55. The Programme also prioritizes funding for LAs that are considered the most vulnerable to climate change based on an assessment of 1. potential climate impacts and 2. adaptive capacity assessment. As such, the ECU will ensure that at least 40–50% of the grants will go to LAs with a capacity rating of less than 3.6 (for prioritization see: Annex 2, section 5). Details on the types of eligible projects under these three thematic windows is detailed in Annex 2, section 11. The Sub-Grant Review, EOI, and Intake Form are in Appendix 4 of Annex 2.

*Activity 2.2.1 Initial call for expressions of interest*

**Implementing party(ies):** ECU, FAs,

Based on priority adaptation solutions identified under Activity 1.1.2 and Activity 1.1.3, ECU will release an initial call for EOI for all LAs in Q3 year 2. Four (4) further calls for EOI will occur, with one call per annum in year 3, 4 5 and 6. If any EOIs are issued in Q3 Y7, they would be expected to proceed under the auspices of the RCGF itself upon its recapitalisation after successful resource mobilisation (see Activity 2.3.4) rather than under the project, i.e. using non-GCF finances. Additional technical assistance to improve EOI applications will be provided by FAs to encourage LAs that did not submit an EOI to submit in the next round. This will incorporate the following gender-responsive sub-activity from the Gender Action Plan<sup>95</sup>:

- Inclusive sub-grant design process Activity 2.2.1

*Activity 2.2.2 Screening of Expressions of Interest*

**Implementing party(ies):** ECU

56. The EOI process will allow the ECU to pre-screen sub-grants against the GCF investment criteria, eligibility under the EDA Facility's three thematic areas, E&S risk level, climate reasoning and rationale and level of community input/engagement (the sub-grant review checklist can be found in Annex 4 of the Feasibility Study). Additionally, the ECU will ensure that the financing needs of the applicant cover the total cost of the chosen adaptation measure. If an applicant fails to submit an application that meets the eligibility criteria, ECU will allocate targeted technical assistance support to LAs to align their EOIs application with pre-screening criteria. Sub-grant alignment with GCF investment criteria is outlined in the table below. This activity will incorporate the following gender-responsive sub-activity from the Gender Action Plan<sup>96</sup>:

- Sub-grants reviewed and directed technical assistance provided for sub-grants, to ensure appropriate gender mainstreaming as needed Activity 2.2.2

*Table 6. Sub-grant Alignment Matrix for GCF Investment Criteria*

GCF Investment Criteria	Description	Intake Form
Impact Potential	Overall adaptation potential; Results based on GCF Impact Indicators	"Potential for Impact" section addresses overall climate adaptation potential and impact across selected GCF adaptation metrics
Paradigm Shift	Potential for transformative change from the status quo including the specific innovations leveraged, learning potential, sustainability and replicability of results	"Innovation, Change, and Sustainability" section addresses shift from status quo, innovation, learning potential, and project sustainability
Sustainable Development	Environmental, Social, Economic, and Gender-Sensitive development co-benefits	"Other Benefits" section includes expected benefits for environment, social systems, and economic systems. The "Gender" section assesses gender-sensitive development impact.
Needs of Recipients	Alignment with the specific community/beneficiary needs and priorities	"Community Needs and Priorities" section assesses community needs/priorities and the specific community engagement processes that have been utilized
Country Ownership	Alignment with relevant FSM, State, and local policies and plans	"Community Needs and Priorities" section includes question on alignment with specific plans/policies
Efficiency and Effectiveness	Financial and operational efficiency and effectiveness of grant resources	"Efficiency" section assesses the sub-grant's approach to using grant resources effectively and utilizing best available technologies.

57. Additional considerations to be taken by the ECU in the conduct of the screening of sub-grants will include the complementarity or additionality of the proposed sub-project with existing and ongoing initiatives, particularly with

<sup>95</sup> See Table 7 in Annex 4: GCF Gender Assessment and Action Plan GAAP

<sup>96</sup> See Table 7 in Annex 4: GCF Gender Assessment and Action Plan GAAP

that of the MCT project “Climate resilient food security for farming households across the Federated States of Micronesia”, approved by GCF as SAP020. The ECU will prioritise interventions relating to food security in outer atoll communities, and will seek to address gaps to ensure potential beneficiaries in the most vulnerable and remote locations can access the RCGF.

*Activity 2.2.3 Organizational audit of sub-national entities/LAs undertaken*

**Implementing party(ies):** ECU

58. Once the EOI is cleared by ECU, the ECU will initiate an organizational audit under activity 2.2.3 to determine the capability of the LA to manage and implement the proposed sub-grant and initial E&S risk level. If the LA is evaluated as “medium-capacity”, it will mean that technical training (2.3.1) and support from FAs will be considered sufficient to develop and implement the sub-project. In addition to training under 2.3.1, municipalities who are evaluated as “low capacity” will be able to choose to receive additional support either from a State agency or from SPC as outlined below:

- Option 1 - The lower capacity LA (in this case, usually a municipality) would be matched with a higher capacity LA (usually a State agency) to collaborate on the sub-grant and resubmit the EOI in the next call with the higher capacity LA as the lead agency.
- Option 2 - The ECU would serve as the financial and procurement provider and directly support project implementation in collaboration with the LA (in this case, usually a municipality).

59. As detailed in the Sub-Grant Review Checklist (Appendix VII to Annex 21 Operations Manual), applicants will be assessed according to their abilities to comply with GCF requirements including management of E&S risks, alignment with GCF investment criteria, mainstreaming of gender considerations and other relevant aspects.

60. Specific conditions will apply to the LAs that are State agencies to make sure local communities, through municipalities, will remain the target beneficiaries of sub-grants and further capacity building/skills transfer will be provided to municipalities during project implementation.

61. A summarized audit report will inform a training manual to improve sub-national entity service delivery of climate adaptation interventions under activity 2.3.1. The report will also inform the training manual and training conducted for project management, reporting, finance and procurement where appropriate for applicant entities under activity 2.3.1.

62. In parallel to the organizational audits, a data collection exercise will be carried out in order to address the lack of municipal-level data available for the design of gender-responsive adaptation measures at the local-level. This exercise will include the collection and compilation of gender-disaggregated data pertaining to governance, civil society, food security, water security and disaster risk reduction. Types of data collected will include number of women and men involved in governance processes, number of food (in)secure households, number of water (un)safe households, number of assets at high risk of climate impacts, number of women-owned businesses, cooperatives and land, and women’s groups.

*Activity 2.2.4 Invitations to submit full proposal*

**Implementing party(ies):** ECU

63. The ECU will issue invitations to the LAs to submit project proposals if an EOI passes screening and there is no duplication with other ongoing support in FSM. The ECU will prepare and share invitation documents for LAs including full proposal document templates and guidelines (based on those presented in the feasibility study (Annex 2).

*Activity 2.2.5 Sub-grant preparation support provided*

**Implementing party(ies):** ECU

64. Applicants invited to submit a full proposal may request support for full project preparation. SPC and the ECU will deploy Consultants and NGOs trained under activity 1.2.1 as FAs to support applicants in their preparation of full proposals. Support can be provided, among others, to develop the proposal further, sub-grant climate rationale,

logical framework, conduct further stakeholder engagement processes with target communities, undertaking a gender analysis, conduct an E&S screening. If the sub-grant is deemed to be a medium risk project (Category B) SPC will deploy an independent contractor to conduct an Environmental Impact Assessment (EIA) and associated E&S Management Plan (ESMP) for the project based on the proposal received. This will incorporate the following gender-responsive sub-activity from the Gender Action Plan<sup>97</sup>:

- Activity 2.2.5.  
Technical assistance support to local authorities to strengthen gender in sub-grant design

*Activity 2.2.6 Sub-grant screening and selection*

**Implementing party(ies):** ECU, EPB

65. Following  
training, LAs will be invited by the ECU to submit their full proposal and will have 3-4 weeks to prepare it, with potential support from FAs (activity 2.2.5). Under this activity, full proposals will undergo a three-stage review process:

- I. *Proposals pre-*  
*screened by the ECU against a set of review criteria* (see EDA Facility section below) and an E&S screening will be done by the SER (social and environmental responsibility) support from SPC. If necessary, applicants will be invited to improve their proposal with further support from FAs. Potential areas for support may include E&S safeguard screening and strengthening, gender mainstreaming, and monitoring and evaluation frameworks.
- II. *Proposals*  
*reviewed by the SPC procurement committee.* A Grants Technical Evaluation sub-committee will firstly provide an advisory report on both technical and financial sides of the proposals. Then, this report and the organizational audit (Activity 2.2.3) will be used by the procurement committee to assess if the proposal needs to be reworked or can be sent to the Board. FAs will be made available for additional project development support at various stages where necessary.
- III. *Proposals*  
*reviewed by the EPB* who will make the final decision of the approval process<sup>98</sup>. As the Executing Entity, SPC will hold a position on the EPB and be legally responsible for the EPB's actions and decisions. To this end, SPC will have the right to veto the approval of applications that are in non-compliance with policies of SPC and of GCF on the basis of due diligence evaluations.

This will incorporate the following gender-responsive sub-activity from the Gender Action Plan<sup>99</sup>:

- Activity 2.2.6  
Screening of sub-grant proposals for effective gender considerations and design

*Activity 2.2.7 Awarding of grants in the three thematic areas, of food security, climate-induced disaster risk reduction and coastal protection, and water security*

**Implementing party(ies):** ECU, NDA office, State GCF Focal Points, EPB

66. The final step  
will be to award grants to applicants. All awarded grants will be announced publicly, and successful proposals will be posted on the Programme web portal (1.3.1). An initial catalogue of tailored and gender-sensitive adaptation measures in the three thematic areas will be developed and uploaded to the web portal. This will incorporate the following gender-responsive sub-activity from the Gender Action Plan<sup>100</sup>:

- Activity 2.2.7  
Portfolio of gender-responsive sub-grants funded by granting mechanism. It is anticipated that 25% of sub-grants will be awarded to women-run businesses, cooperatives, or women's groups (totalling 10 sub-grants)

<sup>97</sup> See Table 7 in Annex 4: GCF Gender Assessment and Action Plan GAAP

<sup>98</sup> Further information on the composition of bodies is provided in the Implementation Arrangements section (Section 12).

<sup>99</sup> See Table 7 in Annex 4: GCF Gender Assessment and Action Plan GAAP

<sup>100</sup> See Table 7 in Annex 4: GCF Gender Assessment and Action Plan GAAP

by the end of programme implementation.

**Output 2.3 Sub-project/grant award implementation**

67. Under this output, awarded grants will be implemented, monitored and evaluated. To ensure LAs have the required project management skills necessary for the implementation of sub-grants, targeted project management training (2.3.1) will be provided. A sub-grant agreement will be entered into between LA applicants and SPC for the sub-projects to be implemented (2.3.2). During the implementation of sub-projects will be monitored and reviewed, evaluated and lessons learned gathered (2.3.3). During execution, SPC will engage with development partners to identify resources for re-capitalization of the EDA fund, preparing a resource mobilization strategy and preparing and securing application funding requests.

*Activity 2.3.1 Training to improve sub-national entity service delivery of adaptation interventions*

**Implementing party(ies):** ECU, FAs

68. Based on the organizational audit (activity 2.2.3), if it is determined that the applicant requires additional training in order to enhance their capacity to implement the proposed sub-grant, training tailored to specific gaps will be provided to strengthen governance structures including areas such as improving the effectiveness of risk management, control, and governance processes. “Fit for purpose” coaching and potential reorganization recommendations will be provided to LAs to address the allocation of tasks and responsibilities, coordination and control mechanisms, rules and procedures, and financial management. This would require specialized expertise that would be outside of the scope of FAs and would be procured separately. Once training on these issues is complete, a grant agreement can be entered (2.3.2). Based on the capacity assessment, it is estimated that 10-15 municipalities may be eligible for training under this activity with an additional 2-3 State agencies per State (total targeted training estimate 18-27).

*Activity 2.3.2 Grant agreements entered, implemented, monitored and reviewed*

**Implementing party(ies):** ECU, FAs, EPB

69. Under this activity, SPC will sign a grant agreement with the applicants for the implementation of selected projects. The Programme will target issuing 30–40 grants across FSM. Sub-grants will be implemented and actively monitored by the ECU through the support of FAs. For Category B projects, an E&S specialist will be assigned by SPC to undertake E&S risk monitoring. A FA will be assigned to each project to undertake quarterly site-visits, support reporting processes, and flag any risks or implementation issues to the ECU. During the monitoring process, gender-disaggregated data will be collected to complete the data previously collected at the municipal-level. The database created will help inform the design of future adaptation projects and measures by providing up to date data and information on the three thematic areas (food security, water security and disaster risk reduction) in addition to key socioeconomic indicators. Monitoring will include: i) overall project progress towards the project objective; ii) detailed progress of project activities; iii) benefits realised and delivered to intended beneficiaries<sup>101</sup>; iv) realised impact achieved in terms of supporting adaptation and improving resilience to climate change<sup>102</sup>; v) achievements in terms of innovation, change, sustainability and other co-benefits; vi) management of environmental and social risks; vii) how the sub-grant has integrated gender issues; viii) what challenges have arisen and how they have been addressed; ix) how support from FAs has been accessed; and x) budget.

*Activity 2.3.3 Sub-projects evaluated, and lessons gathered*

**Implementing party(ies):** ECU and EPB

70. At the conclusion of implementation, all grant awards will be evaluated, and lessons gathered and codified into a catalogue format with tailored and gender-sensitive adaptation measures, completed lessons learned reports and design documents of projects located uploaded to project knowledge portal (1.3.1) and other regional portals/websites. As detailed in Section 6 – Financial and progress reporting of the Operations Manual, the evaluation of sub-projects may be carried out either by the ECU or through as a service from a Facilitating Agent.

<sup>101</sup> Including information on locations, gender, young people, older persons, persons living with disability, socioeconomic conditions, etc.

<sup>102</sup> E.g. number of people with improved resilience to climate change (direct and indirect beneficiaries, gender disaggregated), savings from avoided disasters, households with improved food or water security, areas of land under improved management, number of people trained (gender disaggregated), etc.

71. Lessons learned will be gathered through the reporting on the sub-grants by LAs and FAs. This will be supported and systematized by the ECU. Information will be disseminated through a range of climate change and other information platforms available including the FSM climate change portal<sup>103</sup>, the INFORM portal, the FSM DECEM Geoportal, the Pacific Data Hub<sup>104</sup>, etc. This will be undertaken by the ECU in partnership and coordination with DECEM and FSM's NDA office.

72. This will incorporate the following gender-responsive sub-activity from the Gender Action Plan<sup>105</sup>:

- Activity 2.3.3  
Implementation, monitoring, and evaluation of priority adaptation sub-grants to track gender elements

*Activity 2.3.4 Continued resource mobilization*

**Implementing party(ies):** ECU, NDA office, State GCF Focal Points, EPB

73. As expressed in letters of support, SPC will continue to engage with development partners throughout the project cycle to re-capitalize the RCGF fund. Engagement will include site visits, meetings with bi-lateral and multilateral donors. The mid-term review evaluation report will include a clear and costed action plan for the resource mobilization strategy (including GCF exit strategy), and the identification and confirmation of funding commitments. The plan will build on the initial results and lessons learned from the Programme facility. In the last two years of the project, SPC will prepare funding application requests with the aim for acceptance before or during the final year of implementation to ensure the smooth transition to new sources of climate finance.

74. The Micronesia Conservation Trust (MCT) and various sources of bilateral and other development assistance already provide funds for on-granting in FSM, including for climate change adaptation and resilience-building measures at the local level. As part of the resource mobilization activities, discussions will be held with such partners to solicit the re-direction of a proportion of such funds into the RCGF – they might be able to commit to the facility. Once the RCGF has demonstrated its value in terms of delivering efficient and effective climate action, it is expected that crowding in of such sources of funds would be possible.

75. In addition, the resource mobilization activities will include assessing the extent to which regular government expenditure for resilience building activities might be re-directed into the RCGF. For example, this would allow for funds from the Department of Environment, Climate Change and Emergency Management to be funnelled through the RCGF to achieve the objectives of the Department's annual workplans. Similar engagement with State-level governments will be undertaken. Other activities for resource mobilisation will include undertaking analyses to determine the minimum amount of capitalization needed for the viability of phase 2 of the RCGF based on projects under implementation as well as scenario planning based on future needs and a capacity assessment to determine the optimal extent of funding to scale up the RCGF.

**B.4. Implementation arrangements (max. 1500 words, approximately 3 pages plus diagrams)**

**Overall EDA Programme**

**Accredited Entity**

76. **SPC's Climate Change and Environmental Sustainability Division:** As the Accredited Entity, SPC's CFU within the CCES Division (also GCF focal point) will oversee and supervise the project implementation, providing technical guidance as necessary, with a GCF Programme Manager, GCF Programme Officer and GCF Finance and Administrative Assistant supported by additional SPC staff from the Operations and Management Directorate (such as procurement, finance, human resources, legal, MEL, SPL and other staff) as well as technical staff from SPC's technical divisions (including the Geoscience, Energy and Maritime, Fisheries, Aquaculture & Marine Ecosystems, Land Resources, and Public Health Divisions as well as the Climate Change and Environmental Sustainability programme). In this capacity as Accredited Entity, SPC will be in charge of overall reporting to the GCF, ensuring alignment with SPC's procurement processes and requirements, oversight of financial management and ensuring monitoring, evaluation and learning (MEL) activities are undertaken. MEL will be supported by a specialist local consultant. A full-time position at the NDA office will be financed by GCF resources. Office equipment, telecommunication, transportation etc. will be provided as co-financing from the NDA office.

**Executing Entity and Other Implementing Partners**

77. **SPC will be the sole Executing Entity for the proposed programme.** A number of units, government departments and other stakeholders will contribute the operational management of the EDA Programme as well as the RCGF facility as additional implementing partners under the overall management by SPC as the executing

<sup>103</sup> <https://fsm-data.sprep.org/dataset/fsm-national-climate-change-data-portal>

<sup>104</sup> <https://pacificdata.org/data/organization/fsm-data>

<sup>105</sup> See Table 7 in Annex 4: GCF Gender Assessment and Action Plan GAAP

entity. These additional implementing partners have been selected in collaboration with the Government of FSM through stakeholder consultation processes (see Annex 7 for detailed consultation processes) and include:

- **EDA Programme Coordination Unit:** A dedicated ECU will be hosted within the SPC regional office in FSM, including a Programme Coordinator, Programme Administrative Assistant, Finance and Procurement Officer and supported by other part time staff including a Grants Officer, MEL expert, gender expert and a communication expert. SPC as the Executing Entity will be legally responsible for the acts and decisions of the ECU. The ECU will have the dual responsibility to run the day-to-day operations of the EDA Programme and manage the RCGF. The ECU will coordinate and implement the programme activities, budget, and provide the necessary technical and financial reports. The ECU will thus function as the Executing Entity, separately and with differentiated responsibilities from but under the oversight of SPC's CCES programme as the Accredited Entity.
- **FSM Department of Finance and Administration:** Recruitment of one support staff (using GCF resources) at the NDA office to support the States GCF focal points and to serve as liaison between LAs, the NDA and SPC. The NDA works alongside SPC's CCES and ECU to establish the EDA Programme's governing bodies and will also assist in the supervision of sub-grant design and implementation. In-kind co-financing from the Government of FSM will support the functions carried out by this staff.
- **State GCF Focal Points:** Each State's GCF Focal Points will support the ECU and NDA to disseminate information about the Programme to local government officials and to support organizing of meetings, trainings and workshops.
- **EDA Programme Board:** The EPB will be a national body chaired by the NDA and responsible for taking corrective action as needed to ensure the EDA Programme achieves the desired results. The Board members will include representatives from the NDA (Chair), each State GCF Focal Point, the Department of Environment, Climate Change and Emergency Management and NGO representatives. The FSM National Women's Council has agreed to be part of the EPB as a representative of FSM's civil society organisations. SPC will serve in a quality assurance and advisory role and will support the EPB and ECU by carrying out objective and independent Programme oversight and monitoring functions. This role ensures appropriate project management milestones are monitored and completed. The Programme assurance role is entirely independent of the Programme coordination function. SPC as the Executing Entity will be responsible for the acts and decisions of the EPB.

78. The EPB will meet once a year with the possibility to hold virtual meetings for final sub-grant approvals every 6 months or as needed. Specific responsibilities of the EPB include:

- Overall guidance and direction to the Programme, ensuring it remains within any specified constraints and advise on or address project amendments, issues raised and grievances
- Provide guidance on new project risks, and agree on possible mitigation and management actions
- Ensure coordination between various donor, government-funded projects and government agencies
- Track and review the Programme progress, assess performance, co-finance, ensure that the agreed deliverables are produced satisfactorily according to plans, and appraise the Annual Work Plan
- Approve the project Inception Report, Mid-term Review and Terminal Evaluation reports and corresponding management responses and discuss lesson learned and opportunities for scaling up
- Receipt and oversight of addressing of grievances raised through the grievance redress mechanism.

79. In case consensus cannot be reached within the Board, the SPC Representative (or their designate) will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed. This is in accordance with the role of SPC as the sole executing entity for the project.

80. SPC-CCES will serve in the quality assurance role and will support the EPB and ECU by carrying out objective and independent Programme oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Programme assurance role is totally independent of the Programme coordination function. Figure 8 below presents an overview of the Programme implementation arrangements described.

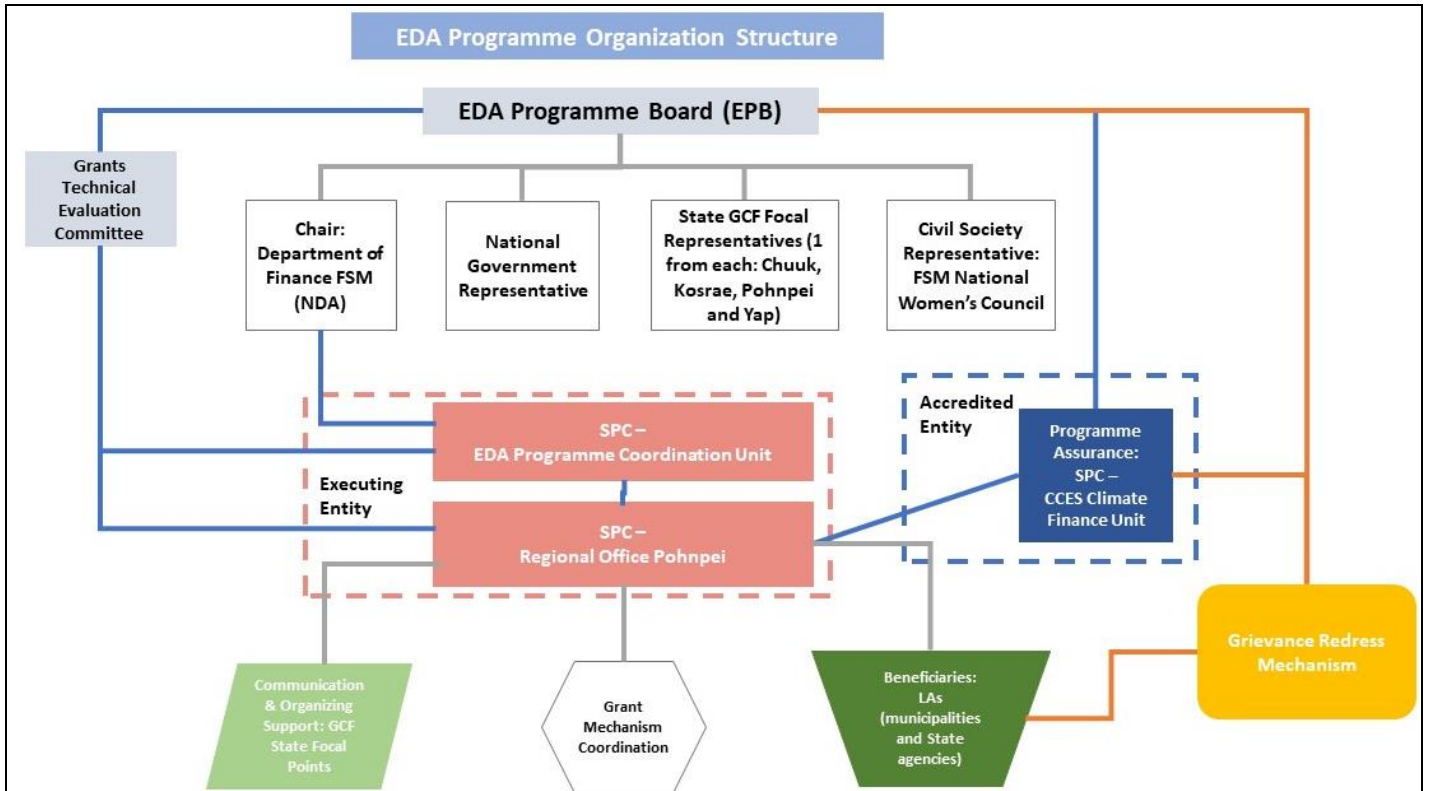


Figure 8 Overall EDA Programme Organization Structure

### EDA Programme Flow of Funds

81. The funding flows for the EDA Programme are illustrated in Figure 9. As the Accredited Entity, SPC's CCES Division – through its CFU – will receive funds from the GCF. These funds, along with the in-kind co-financing from GoFSM and SPC will in turn flow to the ECU, in which capacity SPC as the Executing Entity for the EDA Programme has the responsibility for managing the RCGF. Based on the grants applications received and the capacities of the applicants to administer those grants, the ECU will either enter into grants agreements with the LAs submitting the applications or else contract support organizations to deliver the goods and services outlined in the proposal. Funds will be thus be transferred by the ECU to the grantees on the basis of the grant applications following the procedures on disbursement.
82. The disbursement of funds to successful grantees will proceed according to SPC's Finance Regulations (2018), Finance Policy: Procurement (2020), Finance Policy: Grants and Sub-delegations (2020) and Finance Policy: Anti-Money Laundering and Counter-Terrorism Financing (2020). These policies ensure considerable internal controls and due diligence so that funds provided grantees are properly disbursed and managed.

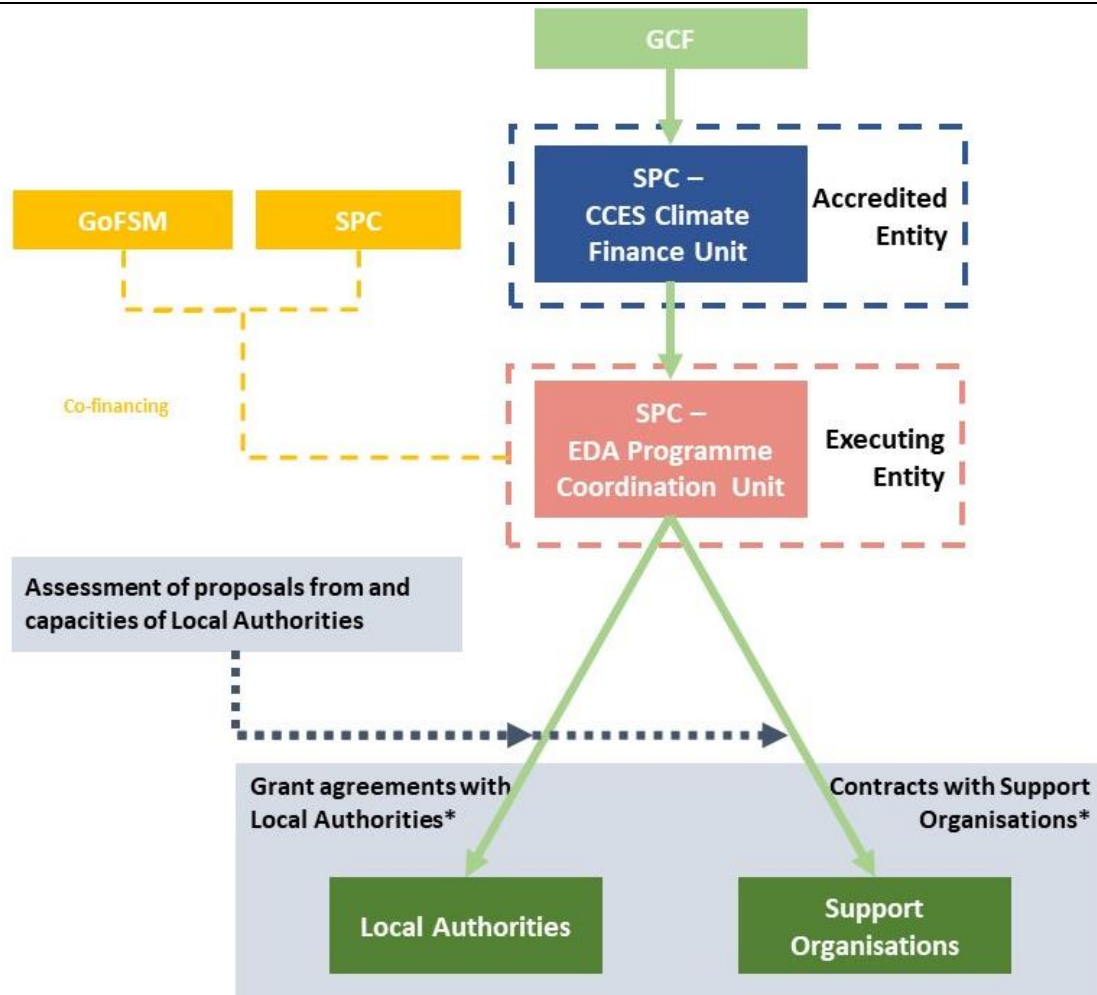


Figure 9: Flow of Funds diagram [\* agreements directly with LAs that have capacity to implement sub-grants or with FAs if the LA doesn't have the requisite capacities]

### EDA Facility Mechanism

83. In addition to the overall Programme structure, the grant facility (Component 2) will have a separate implementation structure to review, screen and approve sub-grant proposals. The proposed structure will include the SPC ECU, EPB, the SPC Procurement Committee (which includes a Grants Technical Evaluation sub-committee) and FAs.

84. **EDA Programme Coordination Unit:** The ECU will be responsible for putting out the annual call for EOIs to initiate proposal submissions to the RCGF. EOI's will be screened by the ECU to determine project eligibility. The ECU (and potentially external consultants) will be responsible for undertaking organizational audits of LAs. See Figure 10. below for the ECU's role in the EOI process.



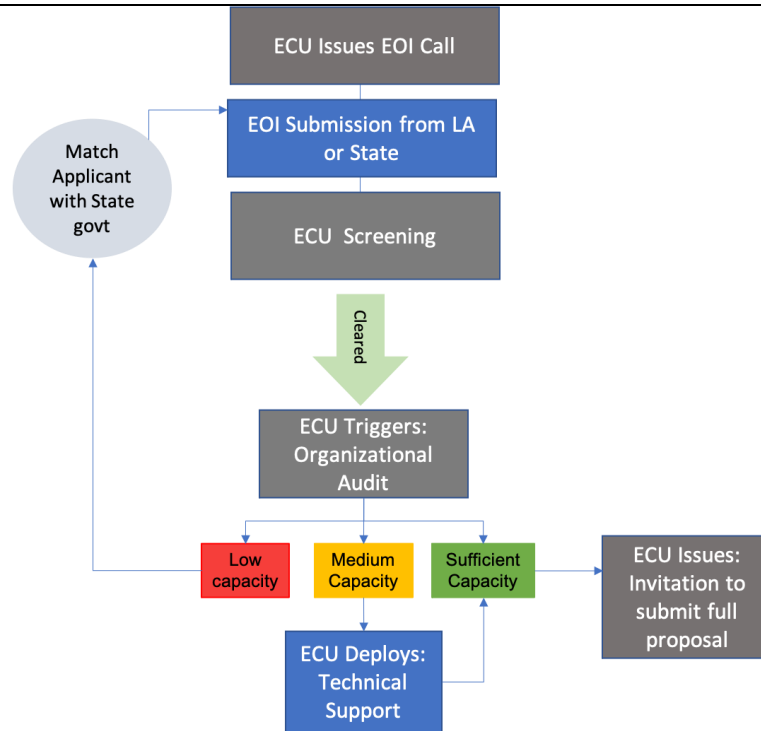


Figure 10. ECU Role EOI Process

85. **EDA Programme Board:** The EPB will be chaired by the NDA and will include State-level representation as well as national departments that reflect the different themes the RCGF will fund (disaster risk and coastal protection, food security and water security). Based on stakeholder consultations, the dedicated body would be composed of a climate expert from DECEM, the NDA, State GCF focal points, and a representative from FSM's Women's Council.
86. **Grants Technical Evaluation sub-committee** (under SPC Procurement Committee): An independent technical sub-committee of at least five individual experts will be appointed through a competitive bidding process launched by SPC to be carried out under activity 2.1.1 Governance structure for RCGF established and formalized. One external expert from each of the thematic areas, an E&S and gender expert and a national community engagement expert will be selected to join the technical sub-committee along with a representative from the ECU and a representative from the SPC Procurement team. The Committee will undertake a full technical and financial review of full proposals and provide recommendations to the SPC Procurement Committee to approve, reject or modify. The final decision will be made by the EPB. The eligibility criteria to be applied for the selection of the Grants Technical Evaluation sub-committee members have been detailed in Annex 21: Operations Manual and include appropriate qualifications and experience as well as no conflict of interest with any parties to the EDA Programme or sub-grant applicants.
87. **SPC Procurement Committee (PC):** The SPC Procurement Committee is composed of an SPC Division Director (Chair), a Procurement Team representative who will provide secretariat support to the PC, a representative from the ECU who will act as the Submitting Officer and provide any clarification or information relevant to the procurement action, and two other representatives from other SPC divisions. The PC members are responsible for carrying out evaluations of proposals, ensuring that SPC's procurement policy is duly followed and making recommendations if necessary.
88. **Facilitating Agents:** A cohort of FAs will be selected through a call for tenders. FAs will be national organizations (NGOs/CSOs) or individual national consultants. FAs will be trained through Component 1 to provide sub-grant development and implementation support. FAs will be assigned to each sub-grant and will conduct a site visit once each quarter to support the reporting and monitoring processes. Figure below outlines the ECU, EPB, Grants Technical Evaluation sub-committee and FAs decision roles in the full proposal process.

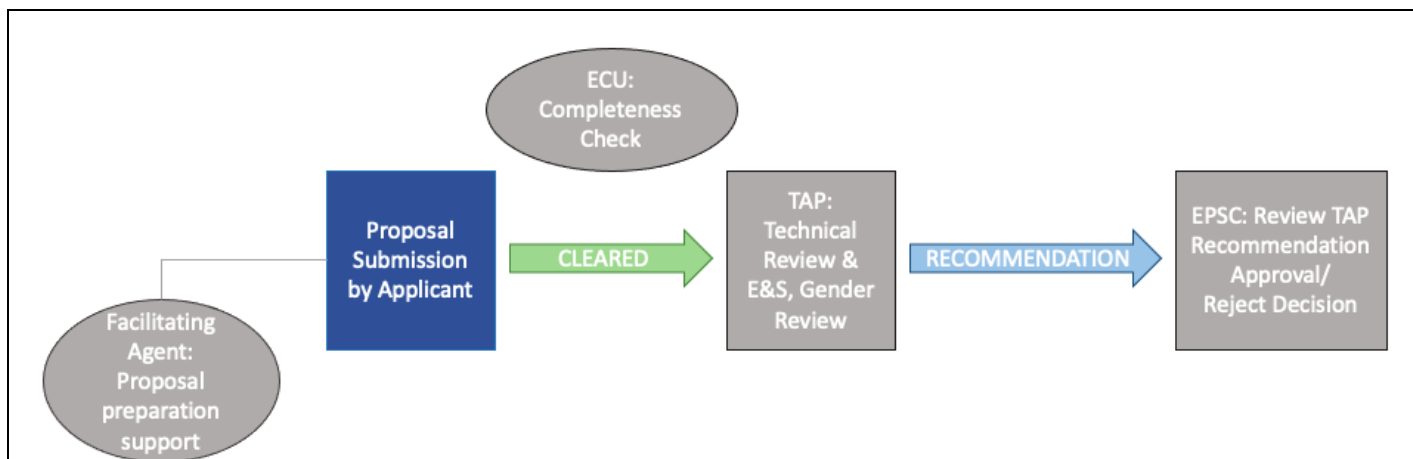


Figure 11. RCGF Governing Bodies Roles

89. The entire EDA Facility will have a grievance mechanism that is aligned with SPC’s policies and frameworks<sup>106</sup>. Further details of the specific grievance mechanism process for E&S issues are outlined in Annex 6. Additional detail for processes is included in the Operations Manual for the EDA Programme.

90. Table 6 below provides an overview of responsible executing entity and implementing partners for each activity under the proposed Programme.

Table 7. Summary of executing entity and other implementing partners responsible for the delivery of Programme activities

Activities	Executing Entity	Other implementing partners
1.1.1 Develop climate adaptation decision support framework and training curriculum including interactive case studies targeting government officials	SPC–ECU	
1.1.2 Climate adaptation decision support training for local authorities	SPC–ECU	
1.1.3 Develop train-the-trainer’s module and conduct training for national consultants and/or local NGOs in each State to become Facilitating Agents	SPC–ECU	
1.1.4 Facilitating Agents to support LAs prioritize adaptation actions for Grant Facility	SPC–ECU	FAs, State GCF Focal Points
1.2.1 Project Preparation Trainings and Mentoring	SPC–ECU	FAs, State GCF Focal Points
1.3.1 Develop a knowledge platform and ensure the Programme is connected to regional platforms across the Pacific	SPC–ECU	
1.3.2 Learning exchanges and site visits	SPC–ECU	NDA office, State GCF Focal Points
1.3.3 Climate change adaptation local authorities conference	SPC–ECU	NDA office, State GCF Focal Points
2.1.1 RCGF established and formalized	SPC–ECU	NDA office, State GCF Focal Points
2.1.2 RCGF guidelines and procedures developed and finalized	SPC–ECU	
2.2.1 Initial call for expressions of interest	SPC–ECU	FAs
2.2.2 Screening of Expressions of Interest	SPC–ECU	
2.2.3 Organizational audit of sub-national entities/LAs undertaken	SPC–ECU	
2.2.4 Invitations to submit full proposal	SPC–ECU	
2.2.5 Sub-grant preparation support provided	SPC–ECU	
2.2.6 Sub-grant screening and selection	SPC–ECU	EPB

<sup>106</sup> SPC Policy on Accountability; Available [here](#).

2.2.7 Awarding of grants in the three thematic areas, of food security, climate-induced disaster risk reduction and coastal protection, and water security	SPC–ECU	NDA office, State GCF Focal Points, EPB
2.3.1 Training to improve sub-national entity service delivery of adaptation interventions	SPC–ECU	FAs
2.3.2 Grant agreements entered, implemented, monitored and reviewed	SPC–ECU	FAs, EPB
2.3.3 Sub-projects evaluated, and lessons gathered	SPC–ECU	EPB
2.3.4 Resource mobilization strategy	SPC–ECU	NDA office, State GCF Focal Points, EPB

### Track record of the AE and EEs

91. **The Pacific Community** has been supporting development and environmental protection in the Pacific region since 1947. Headquartered in Noumea, New Caledonia, and comprising 26 governing territory member states, SPC as an international organization works for the effective and innovative application of science and knowledge to the fulfilment of Development Goals promoting sustainable economic development, the empowerment and resilience of local communities and ecosystems. SPC’s track record in the elaboration, implementation and management of climate change, food security, water security and DRR projects and Programmes is extensive, and the pipeline and strategic direction of projects is identified in the Pacific Community Strategic Plan 2016-2020<sup>107</sup>.
92. **SPC’s Micronesia Regional Office**, situated in Kolonia, Pohnpei, FSM, is the main hub for SPC’s projects and partnerships in the Micronesian countries of the FSM, the Republic of the Marshall Islands (RMI) and the Republic of Palau and territories of the Northern Mariana Islands (CNMI) and Guam. The regional office has supported a number of climate change adaptation projects in FSM including: The Global Climate Change Alliance Plus - Scaling up Pacific Adaptation (GCCA+ SUPA), EU - Ready for El Nino (RENI) and Global Climate Change Alliance Pacific Small Island States (GCCA: PSIS) Project.
93. **FSM Department of Finance and Administration (GCF NDA)** has been the recipient of two rounds of GCF readiness funding including the development of the Country Programme and the development of two gap assessments for DAEs. It is experienced in the development of GCF proposals, including FP036 and more recently an SAP Food security proposal, and an SAP concept note on increasing the resilience to the health risks of climate change.

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

94. The project will overcome critical barriers to strengthen the resilience of the most vulnerable population to the impacts of extreme climatic events as well as long term water and food insecurity as a result of predicted climate change. GCF resources will be critical in strengthening climate resilience to improve DRR and coastal management, food and water security for FSM’s most vulnerable populations.
95. LAs are able to respond to climate change impacts that are specific to their geography, natural environment and socio-political context. Further, LAs are also in a position that enables them the responsibility to manage and regulate land use planning, infrastructure and construction regulation and the management of natural resources. These authorities are ideally positioned to efficiently coordinate between on-the-ground stakeholders and key sectors in the area. Sustainable Development Goal 13 on climate action indicates that local governments are critical to strengthening resilience and adaptive capacity to climate-related hazards and natural disasters in all countries. The recent IPCC special report also emphasizes the important role that subnational governments play in developing and reinforcing measures for reducing weather- and climate-related risks<sup>108</sup>.
96. GCF funding is required because of the limited availability of public and private funding to support transformation in FSM’s DRR capacity and agricultural and water sectors. GCF funds will be used specifically to address critical information and capacity gaps of LAs as well as cover the additional cost of climate change adaption. Indeed, the current costs estimates for climate change adaptation solutions far exceed allocated budgets for both LAs and States. This highlights the necessity of the proposed GCF grant structure and concessionally to directly support local communities.
97. GCF grant support is required to address a number of key market failures in FSM. Firstly, the majority of outputs and outcomes under this project meet the classical definition of non-rivalrous and non-excludable public goods

<sup>107</sup> SPC. 2016. Pacific Community Strategic Plan 2016-2020; Available [here](#).

<sup>108</sup> IPCC. 2019: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.

for which benefits accrue to many beneficiaries and are often un-monetized or it is difficult to distinguish intrinsic financial value and financial returns are unattractive. While some adaptation options may ultimately result in increased revenue generation for individuals, it is often difficult to quantify specific returns on grant investments ex-ante particularly since sub-grants are unknown. Such adaptation investments are currently not attractive to private investors because (i) return on investment is difficult to predict and (ii) attractive and affordable debt finance is unavailable.

98. Secondly, FSM local, State and national financial and technical capacity is extremely constrained, particularly when considering the magnitude of potential climate change impacts. Specifically, a previous capacity assessment for FSM from USAID highlighted that estimated costing for operationalizing climate change policies and action at the State and local level currently far outweighs department budgets and that there is limited capacity in national and State governments to effectively coordinate climate finance and adaptation priorities. Outside funding has been leveraged in this space, but the funding amount is still inadequate to meet adaptation needs and furthermore than 60% of the funds go “uncoordinated” by national decision makers which further creates a void for effective and coordinated financing for climate adaptation in FSM communities. All of this highlights the important need for GCF grant financing in order to unlock adaptation outcomes for FSM communities.

#### **Concessional**

99. The project seeks the maximum possible level of concessionality in accordance with FSM's economic, institutional and fiscal constraints and specificities. Although the Government of FSM is taking actions to build a policy and legal framework to enable climate change action, structural barriers to accessing finance remain. Public resources, which are largely dependent on ODA, are currently insufficient to achieve the meaningful reductions in climate change vulnerability and to improve resilience of LAs and beneficiary populations. FSM's spending on climate change has thus far been tilted towards mitigation. FSM's public debt, all of which is external, is currently low at around 20% of GDP, with the fiscal cliff expected to put public debt on an upward trajectory from 2024, FSM is assessed as high-risk of debt distress. Compounding the high risk of debt distress, potential extreme climate events could have a significant negative impact on growth and debt sustainability. Damages to public infrastructure and private capital as well as drops in total factor productivity would cause a loss to GDP, while higher spending on post-disaster rehabilitation and reconstruction of damaged infrastructure would lead to higher fiscal deficit and public debt.<sup>109</sup> Modelling suggest that a cyclone causing damages of around 50% of GDP is to be expected once every 100 years. The Pacific Catastrophe and Risk Financing Initiative (PCRAFI) estimates that it is likely that FSM will incur on average USD 8 million per year in losses from earthquakes and tropical cyclones.<sup>110</sup> In the coming 50 years, FSM has a 50% chance of experiencing natural disaster losses exceeding USD 105 million and casualties larger than 220 people. In addition, there is a 10% chance of experiencing a loss exceeding USD 470 million and casualties larger than 600 people.<sup>111</sup>
100. Due to the nature and extent of the climate change risks, the government is not able to build resilience of FSM at scale without grant support from the GCF. The IMF-World Bank Debt Sustainability Analysis confirms that natural disaster shocks pose major risks to FSM's debt sustainability and assesses FSM's risk of debt distress to be high<sup>112</sup>. Growth impacts could be worse given spill overs from FSM-specific impacts such as El Niño and La Niña events will continue to occur in future, raising uncertainty and volatility in the fishery sector and fisheries-related government revenue. In addition, rising temperature and sea-level rise will dampen the authorities' efforts to revive sustainable agriculture growth in FSM. Agriculture contributes significantly to the livelihoods and food security of a large proportion of FSM's population and is identified as a key productive sector for sustainable economic growth. Impacts on these sectors mean that the economy barely produces and sells enough goods and services to pay off its debts without incurring more debt.
101. Given the national debt trajectory from 2024, financial instruments such as loans and guarantees are not appropriate financial instruments for this project, as this would increase the country's public debt burden even further. The IMF concludes that “Further mobilizing external grant financing is therefore crucial to implement the climate change strategy while maintaining fiscal sustainability” and strongly recommends speeding up

<sup>109</sup> International Monetary Fund. 2019. FSM Climate Change Policy Assessment

<sup>110</sup> Pacific Catastrophe and Risk Financing Initiative. 2011. Federated States of Micronesia, Country Risk Profile.

<sup>111</sup> Lee et al. 2018. The Economic Impact of Natural Disasters in Pacific Island Countries: Adaptation and Preparedness. IMF Working Papers, 18/108.

<sup>112</sup> International Monetary Fund. 2019. FSM Climate Change Policy Assessment

implementation of adaptation investment projects.<sup>113</sup> Reimbursable grants are not an appropriate financial instrument for the project because sub-grants focus on LAs who have no recourse for repayment of grants, and interventions will have limited income generation, particularly for LAs. While the benefits of the project will mainly fall to the general population, farmers, fisherfolk and businesses dependent on water and food security, the benefits gained would generate insufficient cash surpluses for these beneficiaries to build their own resilience while reimbursing the cost of GCF support. **The urgent need for adaptation investments to support disaster risk reduction, coastal protection and food and water security coupled with the inability of national Government, LAs and the population to afford debt finance for the proposed activities, justifies grant funding, which is not available at the scale needed from sources other than the GCF.**<sup>114</sup>

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

##### Capacity building and developing a track record of project execution and financial management

102. The GCF financial exit strategy is a key factor that is at the centre of resource mobilization and capacity enhancement efforts from the project inception. Each sub-grant will have to include an exit strategy, to demonstrate the long-term sustainability of the proposed project intervention and how the project will provide long-term resilience in the specific LAs. GCF financial exit is achieved through identification and mobilization of additional resources during implementation and well before project closure through activity 2.3.4 which will not only include the development of a resource mobilization strategy and action plan to ensure recapitalization of the EDA facility but also establishes responsibilities within government at the LA and national scale to ensure continued mobilization of resources for climate adaptation investment activities.
103. The EDA model from this Programme has the strong potential to catalyse additional financing for FSM and its LAs, particularly through its focus on capacity building for LAs to develop and implement projects, developing a fundable track record of project execution, and crucial capacity/experience showcasing effective project and financial management. All of this can help build donor/investor confidence, reduce investment risk, and ultimately unlock future projects and investment for FSM and the LAs.
104. The sub-projects are characterized by high social and environmental returns but low cash returns. These investments are not likely to attract significant flows of private finance during the implementation of the proposed EDA programme because of perceived high risks and the limited cashflow generated. However, private sector actors will be invited to engage in consultations and workshops to learn about the opportunities and successes generated by the programme and the implementation of sub-grants. Indeed, resilient livelihoods, infrastructure and ecosystems will reduce the risks for complementary private investments, for example loans for farm improvements, increased trading activity, agriculture processing, fisheries etc. The improvement of ecosystem services will directly contribute to the increased attractiveness of sectors such as agricultural processing and fisheries. As the programme matures, emphasis will be placed on the mobilization of additional domestic and external resources and the ownership of processes by national and local governments, communities and the private sector to secure sustainability.

##### Recapitalization of the EDA facility

105. The primary source of revenue for the government of FSM is financial assistance provided under the terms of the Compact of Free Association between FSM and the United States. This Compact will be re-negotiated in 2023. Given the level of uncertainty and the highly political nature of the decision, it is impossible for the government of FSM to make a quantifiable commitment to recapitalization of the RCGF from such revenue at this stage. Moreover, there is limited potential for allocation of tax or other revenues to the RCGF at this stage, particularly with the extremely low tax rates in FSM. Given the federal nature of FSM's government and the decentralized decision-making, State and municipal governments may be in a position to later agree on allocating local revenues to the RCGF, but such agreement is challenging with the nascent and innovative nature of the EDA pilot globally.
106. Further and as acknowledged in the GCF Country Programme, the extent of private sector engagement in the context of FSM is currently limited to projects or programmes which have a private sector development component, rather than for projects or programmes that are generated or co-financed by private sector actors. As detailed in the CP and in the Funding Proposal and its annexes, the private sector in FSM is relatively small and under-developed, generally comprised of micro or small businesses in the agriculture or fisheries sectors. External private sector actors face important constraints such as high operational and transport costs, which limits their ability to engage in climate resilience initiatives.

<sup>113</sup> International Monetary Fund. 2019. FSM Climate Change Policy Assessment

<sup>114</sup> The cap for funding is USD 10 million per project for the GEF and USD 10 million per country for the Adaptation Fund. Therefore, the proposed project cannot be funded by these funds.

107. Given these constraints, the project will seek opportunities to build awareness within the private sector of opportunities for adapting to climate change. For example, private sector actors will continue to be engaged in consultations and workshops – as is already happening under climate change projects in FSM – to learn about the opportunities and successes generated by the programme and the implementation of sub-grants (e.g. Activities 1.1.2, 1.3.2 and 1.3.3). Private sector actors will thus be better informed on opportunities for resilience building. Moreover, such actors may be engaged through participation in bids as well as procurement for sub-grants under the RCGF. Bidders will be encouraged to involve local companies, as the EOI assessment and sub-grants assessment criteria include consideration of the involvement of local private sector entities in bids. As the programme matures, emphasis will be placed on the mobilization of additional domestic and external resources and the ownership of processes by national and local governments, communities and the private sector to secure sustainability. This is expected to have a catalytic effect in unlocking potential future investment from the private sector into resilience-building activities. Public funds from the RCGF will de-risk such investments by bridging viability gaps and covering risks that can't be borne by private sector actors.
108. After the completion of the GCF funding period for the EDA programme, the RCGF will be handed over from SPC to the Government of FSM. By this time, the EDA programme will have established the practices, processes, guidelines and other regulations necessary for the ongoing functioning of the RCGF. Moreover, the relevant capacities for management of the RCGF will have been established through the capacity development activities of the EDA programme.
109. Upon handover of the EDA programme, the ECU will be absorbed into a relevant FSM government institution – provisionally identified as the Department of Finance and Administration and within the remit of the NDA's office. SPC will thus step back from its role within the ECU as well as the EPB, with these functions being taken on by the Government of FSM. Any future role that SPC may have in ongoing support to the RCGF will be considered based on a request from the Government of FSM to that effect.

**Effective knowledge transfer and dissemination of information on benefits**

110. Capacity development of LAs focusses on the technical, financial and managerial capacity to prioritize, plan for and implement climate-risk informed local DRR and coastal protection, water management solutions, adopt technologies and systems for climate resilient agricultural production and sustain climate resilience infrastructures and ensure their viability post-project. LAs are key to ongoing operations and maintenance of project infrastructure after project implementation ends. A request for further detail on this has been included in the *Innovation, Change and Sustainability* section of the Grant Application Form (Appendix II to Annex 21 Operations Manual). Institutional arrangements have been defined to facilitate political processes between the central government, local governments and the sub-grant in order to establish the roles and responsibilities of each stakeholder, in particular in relation to operations and maintenance of project infrastructure beyond the GCF project lifetime. At project implementation stage, criteria would be developed to ensure maintenance is included before funds are disbursed and assets are delivered. The O&M costs during the project implementation period should be included in the sub-grant proposals and it will be mandatory to request funds allocated to the operation and maintenance of financed assets and equipment. At the end of the 7 years' implementation period, legal owners of the assets and equipment will bear the maintenance costs.
111. Under component 2, the project will strengthen knowledge management at the local and national levels and systematize and disseminate the results of sub-grant investments. Knowledge and learning will be promoted, at the conclusion of implementation, all grant awards will be evaluated, and lessons gathered and codified into a catalogue format with tailored and gender-sensitive adaptation measures, completed lessons learned reports and design documents of projects located uploaded to project knowledge portal (1.3.1) and other regional portals/websites. The project will adopt a systemic approach demonstration of project successes and engagement of public and private sector in efforts to replicate and scale-up results which will contribute to reinforce its paradigm shift potential. The food and water security sub-grants will create conditions for investments by public and private sector actors. Farmers will see concrete benefits in a variety of ways, for example through better allocation of resources and increased productivity, and protection of productive assets. By delivering tangible economic benefit to beneficiaries that adopt climate-resilient agriculture and efficient water management practices, the project will stimulate economic activity across FSM even under conditions of climate change. The effect of knowledge, experience of implementation and lessons learned during implementation will allow LAs to continue to apply these results beyond GCF financial exit and create conditions for investments by public and private sector actors.

**C. FINANCING INFORMATION**

**C.1. Total financing**

<b>(a) Requested GCF funding (i + ii + iii + iv + v + vi + vii)</b>		<b>Total amount</b>		<b>Currency</b>			
		16,591,556		million USD (\$)			
<b>GCF financial instrument</b>		<b>Amount</b>	<b>Tenor</b>	<b>Grace period</b>	<b>Pricing</b>		
(i)	Senior loans	Enter amount	Enter years	Enter years	Enter %		
(ii)	Subordinated loans	Enter amount	Enter years	Enter years	Enter %		
(iii)	Equity	Enter amount	Enter years		Enter % equity return		
(iv)	Guarantees	Enter amount					
(v)	Reimbursable grants	Enter amount					
(vi)	Grants	16,591,556					
(vii)	Results-based payments	Enter amount					
<b>(b) Co-financing information</b>		<b>Total amount</b>		<b>Currency</b>			
		3,119,081		million USD (\$)			
<b>Name of institution</b>		<b>Financial instrument</b>	<b>Amount</b>	<b>Currency</b>	<b>Tenor &amp; grace</b>	<b>Pricing</b>	<b>Seniority</b>
Government of the Federated States of Micronesia		In kind	2,916,571	million USD (\$)	Enter years Enter years	Enter%	Options
SPC		<u>In kind</u>	202,510	million USD (\$)	Enter years Enter years	Enter%	Options
Click here to enter text.		Options	Enter amount	Options	Enter years Enter years	Enter%	Options
Click here to enter text.		Options	Enter amount	Options	Enter years Enter years	Enter%	Options
<b>(c) Total financing (c) = (a)+(b)</b>		<b>Amount</b>		<b>Currency</b>			
		19,710,637		million USD (\$)			
<b>(d) Other financing arrangements and contributions (max. 250 words, approximately 0.5 page)</b>		<p>Please explain if any of the financing parties including the AE would benefit from any type of guarantee (e.g. sovereign guarantee, MIGA guarantee).</p> <p>Please also explain other contributions such as in-kind contributions including tax exemptions and contributions of assets.</p> <p>Please also include parallel financing associated with this project or Programme.</p>					

**C.2. Financing by component**

Please provide an estimate of the total cost per component and output as outlined in section B.3. above and disaggregate by source of financing. More than one co-financing institution can fund a single component or output. Provide the summarised cost estimates in the table below and the detailed budget plan as annex 4.

Component	Output	Indicative cost Options	GCF financing		Co-financing		
			Amount Options	Financial Instrument	Amount Options	Financial Instrument	Name of Institutions
Component 1: Local authorities empowered to deliver climate change adaptation services to their populations	Output 1.1 Build technical expertise to identify and prioritize adaptation solutions	1,262,364	1,232,364	Grants	30,000	In kind	GoFSM

	Output 1.2. Technical support on project preparation	183,208	151,208	Grants	32,000	In kind	GoFSM
	Output 1.3. Knowledge sharing mechanisms to develop and foster a network of local government authorities	349,064	341,064	Grants	8,000	In kind	GoFSM
Component 2: Priority project implementation-EDA Facility for strengthening local community resilience	Output 2.1 Establishment of Resilient Communities Grant Facility (RCGF)	130,508	120,508	Grants	10,000	In kind	GoFSM
	Output 2.2 Grant award selection	1,256,374	1,076,624	Grants	179,750	In kind	GoFSM and SPC
	Output 2.3 Sub-grant award implementation	15,456,155	12,746,584	Grants	2,709,571	In kind	GoFSM and SPC
<b>Monitoring and Evaluation</b>		168,364	168,364	Grants			
<b>Project Management Costs</b>		904,598	754,838	Grants	149,760	In kind	GoFSM and SPC
<b>Indicative total cost (USD)</b>		19,710,637	16,591,556		3,119,081		

*This table should match the one presented in the term sheet and be consistent with information presented in other annexes including the detailed budget plan and implementation timetable.*

### 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  No

C.3.2. Does GCF funding finance technology development/transfer? Yes  No

112. GCF financing will be used to invest in building capacity for DRR, food security and water security adaptation solutions for some of the most pressing needs of vulnerable communities. Component 1 will support three main outputs to strengthen the technical capacity of sub-national institutions and LAs across FSM. In particular, the activities that will fund capacity building are conducted in stages to support local climate governance: The first will build technical expertise to support climate adaptation decision making to help LAs identify and inform decisions for prioritizing adaptation solutions (Activity 1.1.1 and 1.1.2) reinforced through practical hands on support to prioritize actions. A train-the-trainer session (Activity 1.2.2) will be provided to national consultants and/or local NGOs in each state to become FAs to support sub-national entities/LAs to prepare sub-grant adaptation projects. While a knowledge sharing mechanism hosted on the project's web-portal will ensure a network of local government authorities across FSM and will be linked with regional knowledge platforms. In the second stage, organizational audits of sub-national entities and LAs will be undertaken to determine whether the applicant has the necessary capacity to implement the proposed sub-grant projects and a tailored training Programme will be developed and implemented through training to strengthen areas such as financial management, risk management, control (2.2.4), and governance processes as well as project management, MEL, reporting, finance and procurement (2.3.1).



113. The project will both develop, as well as transfer a set of nationally appropriate DRR, food and water security adaptation technologies and practices that would ensure the resilience of FSMs most vulnerable populations. Detailed description of potential technologies and practice prototypes are presented in Appendix 7 of Annex 2 and will provide gender-sensitive impact including:

- Solar water pumping to address water insecurity and promote climate-resilient agriculture (not widely practiced in FSM).
- Rainwater harvesting to address water insecurity (practiced at the household level in some areas of FSM).
- ITTA-ALLEY farming system to address food insecurity (while mixed-tree gardening and other forms of agro-forestry are practiced in FSM, the ITTA-ALLEY technique has not been introduced).
- Salt-water tolerant varieties of food crops to address food insecurity (being practiced in some areas of FSM).
- Drip and micro-irrigation to address water insecurity and promote climate-resilient agriculture (not widely practiced in FSM).
- Rock revetments for DRR (being practiced in some areas of FSM).
- Offshore structures for DRR (not widely practiced in FSM).
- Mangrove rehabilitation and protection for DRR (being practiced in some areas of FSM).

## D. EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

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

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

114. The proposed EDA Programme contributes to enabling climate-resilient sustainable development by improving the resilience of vulnerable people and communities, infrastructure and the built environment as well as ecosystems at LA levels. It does so by empowering municipalities and States in FSM to foster climate change adaptation at their operating scale, and by addressing top-priority vulnerabilities through the implementation of local projects in target sectors.
115. As the exact nature and scale of the sub-grants to be supported by the EDA Grant Facility is unknown, the estimates for the number of direct beneficiaries to be targeted by the Programme were built on the assumptions below. As a whole, it is anticipated that the Programme will indirectly benefit 80% of FSM LAs through the increased capacity of Local Authorities to effectively plan, develop and implement community-led adaptation measures.
116. For food security, the share of the total population depending on agricultural occupations for their livelihoods was derived using the share unpaid agricultural workers from the 2016 IAC. Adaptation measures would aim to address impacts related to increased temperatures, rainfall variability and sea level rise. Based on this assumption, the number of potential beneficiaries for food security adaptation interventions is **19,819 people** (of which 10,077 males and 9,742 females)
117. For water security, beneficiaries' estimates were derived using the share of surveyed households who had reported drought as the main barrier to agricultural production. Based on this assumption, the potential number of direct beneficiaries for water security adaptation interventions is **20,679 people** (of which 10,514 males and 10,165 females).
118. For DRR and coastal protection adaptation measures, aiming at addressing impacts from sea-level rise and extreme climate events, direct beneficiaries were derived by considering the share of the total FSM population living within 180 meters<sup>115</sup> from the shoreline. In line with the share of beneficiaries compared to the total FSM population to be targeted under the water security and food security interventions, and assuming that 20% of people living within 180 meters of the shoreline will benefit from DRR interventions, the potential number of direct beneficiaries for DRR interventions is **13,803 people** (of which 7,018 males and 6,785 females).
119. **The sum of the potential number of direct beneficiaries is 54,301, accounting for 47.2% of the total FSM population. For indirect beneficiaries, the proposed EDA Programme will indirectly benefit 80% of the total FSM population<sup>116</sup>.**
120. All 75 municipalities, including those with councils of chiefs primarily in smaller municipalities, will be targeted by the proposed EDA Programme. The EDA Facility has been structured and designed to enable all municipalities, even those without formal governance structures which are the most vulnerable, to benefit from technical and financial support from State agencies or SPC directly to implement adaptation solutions targeting the most vulnerable communities and assets<sup>117</sup>. The sub-grant screening form will support the assessment of eligible sub-projects by ensuring expected benefits and co-benefits are delivered to the most vulnerable groups by addressing identified climate impacts and vulnerabilities. By delivering on these adaptation sub-grants the EDA Programme will make a direct and transformative contribution to the climate resilience of FSM communities in line with GCF investment criteria through:
- Reduced vulnerability of Local Authorities through enhanced adaptive capacity to identify climate change impacts, and to design, plan and implement adaptation solutions to address them

<sup>115</sup> 200 yards.

<sup>116</sup> The assumption used to estimate the number of indirect beneficiaries is that 80% of FSM municipalities will indirectly benefit from improved ecosystem services, avoided loss and damage, improved adaptive capacity of local authorities, enhanced resilience of agroecosystems generated by the implementation of sub-grants (see Annex 2, Section 14).

<sup>117</sup> The beneficiary selection criteria are based on GCF's criteria. This will be assessed as part of the Sub-Grant Review process. Questions 11, 13–20 and 24–28 all deal with various aspects of beneficiary selection (see Appendix VII to Annex 21 Operations Manual).

- Increased awareness and utilization of climate information in decision-making at the local and state level
- Strengthened institutional systems for climate-responsive planning and development
- Avoidance of economic losses and loss of infrastructure assets
- Strengthened adaptive capacity and reduced exposure to climate threats of communities through improved delivery of ecosystem services

121. Ultimately, the Programme will work to shift the status quo from a pathway of climate vulnerability, elevated health risks and limited socioeconomic development for vulnerable communities in FSM to one of improved food/water security, enhanced DRR and recovery, and improved socioeconomic development by building local capacity to respond to climate change. The EDA Programme has been designed to deliver on the adaptation goals set out in the FSM National Climate Change Strategy and contribute to four of the GCF's adaptation results areas:

- **GCF adaptation results area 1 (A1) – Increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions:** Through the provision of technical assistance and capacity building, the EDA Programme will provide LAs with the required tools and knowledge to identify gaps in their adaptive capacity, and to prepare viable project proposals which will directly contribute to increasing the resilience of communities by developing local solutions delivering adaptation benefits over the short, medium and long term. All of the EDA Programme's thematic areas and proposed adaptation interventions aim to alleviate the impacts of identified climate drivers and strengthen the sustainability of livelihoods and ecosystems.
- **GCF adaptation results area 2 (A2) – Increased resilience of health and well-being, and food and water security:** The delivery of sub-grants to be financed by the EDA Grant Facility will directly contribute to increasing the adaptive capacity of communities who depend on agriculture for their livelihoods, and to alleviate the impacts of drought on agricultural production and water access. Under the food security thematic area, sub-grants relating to the implementation of sustainable and conservation agriculture techniques will mitigate the impacts of surface run-off and erosion caused by flooding, by improving soil structure and water retention capacity.
- **GCF adaptation results area 4 (A3) – Increased resilience of infrastructure and the built environment to climate change threats:** DRR adaptation interventions will make a considerable impact on the capacity of critical infrastructure to sustain extreme climate hazards, safeguarding communities' livelihoods and the delivery of basic services. For example, the implementation of rock revetment structures under the DRR thematic area will contribute to protecting people and assets from the damages caused by tidal surges.
- **GCF adaptation results area 4 (A4) – Increased resilience of ecosystem and ecosystem services:** By implementing sub-grants pertaining to mangrove restoration, coastal protection and reforestation, the EDA Facility will alleviate pressure on key ecosystems and strengthen the delivery of ecosystem services which are critical for communities who depend on agriculture and for the protection of water resources. For instance, mangrove reforestation activities will mitigate the impacts of storm surges while contributing to ecosystem health and biodiversity.

122. Although the risk of maladaptation exists in all adaptation solutions, adaptation actions that seek to increase adaptive capacity (as in Component 1 of the proposed EDA programme) are generally least likely to be maladaptive. Adaptation actions that aim to decrease sensitivity (as in Component 2 of the EDA Programme) can carry medium risk. In this light, the sub-grant screening form include several provisions designed to mitigate the risk of maladaptation (please see Annex 2 – Feasibility Study, Annex 4 for more information). Additionally, a list of Special Risk activities has been included (Addendum 1 of Appendix 2 in FS) to exclude potential sub-grants with associated risks relating to the displacement of environmental pressures as well as the displacement of people.

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

123. The entire focus of the EDA Programme and its sub-grants is centred on empowering local communities and States to develop and tailor climate change projects based on their specific needs and priorities. The implementation of the proposed Programme will lead to a paradigm shift away from systemic limits in capacity and resources to reduce communities' vulnerability to climate change impacts, to an increased availability of knowledge and technical ability to translate communities' identified needs into viable climate adaptation projects.

By addressing the identified knowledge, technical, financial, institutional and gender barriers, the GCF funding will enable the execution of innovative climate adaptation projects that adequately address impacts identified at the local level, therefore guaranteeing the sustainability of the GCF investment and its potential to generate long-lasting benefits. Further, by creating a pipeline of sub-projects aiming to reduce economic losses and improve the delivery of ecosystem services, the EDA Programme goes beyond one-off project investments and creates an enabling environment for LAs and sustained climate action. Securing the delivery of ecosystem services will enable the uptake of value chains and markets, especially in the agricultural processing and fisheries sectors.

#### **Potential for scale-up and replication**

124. The Programme will adopt a systemic approach to the dissemination, replication and scaling-up of results which will contribute to reinforce its paradigm shift potential. First, the relevance of the Programme's results to other SIDS in the Pacific region and beyond is of particular relevance as the implementation of the sub-grants will improve the delivery of ecosystem services and in doing so demonstrate the technical adequateness and financial viability of these investments by de-risking them, which will have the potential to crowd in private sector finance in the second phase of the RCGF. Second, the methodology applied, and processes followed for the design, planning and execution of these local-scale adaptation sub-grants will be able to be utilized in other FSM communities and replicated across other Pacific Island States. All of the Programme outputs and results will be collected and centralized in existing data portals, and workshop events have been planned to be regularly organised to gather momentum on the successes of sub-grant implementation and disseminate them to public and private sector actors. Indeed, Activity 2.3. will focus on finalising the resource mobilization strategy to secure funding sources to recapitalize the EDA Facility and handover its management. There is confidence that additional funding from public and private bodies can be secured and that the operating capacity of the EDA Facility could be expanded in a second phase in which the number of countries and LAs could be scaled-up.

#### **Potential for knowledge sharing and learning**

125. The sub-grants will focus on leveraging best available technology and approaches for the disaster risk reduction, water security, and food security activities including, but not limited to cyclone proofing, rainwater catchment systems, endemic species and ecosystem services, MPAs, livestock and fisheries development, etc. Further, given the focused effort to tailor technologies and approaches to the priorities and needs of the LAs and communities that the programme is focused on, it is expected that additional innovation and contributions to the fields will be learned through the programme applications. The Programme has been specifically designed to create pathways and channels to facilitate the generation and dissemination of knowledge through the learning exchanges, notably under Component 1. Lessons learned in the design and implementation of the capacity building activities and the delivery of trainings can help inform development of future EDA and local capacity building projects. The sub-grant development, review, and implementation process can likewise help enhance both the other sub-grants within this EDA as well as priority adaptation projects in other communities. Technical knowledge will be generated during the execution of the sub-grants through the implementation of innovative technology solutions to identified local constraints. This knowledge will be tapped and utilized for selecting appropriate technologies and approaches in other Pacific communities and will help tailor them to specific community needs. SPC will also be aggregating and synthesizing these lessons learned to help drive other projects in their portfolio and operations across the Pacific. Finally, the Programme will also connect to the data portals and knowledge communities that already exist in the Pacific such as SPC's [Pacific Data Hub](#), the [Pacific Climate Change Portal](#), and SPREP's [Pacific Environment Portal](#) and support staff and DECEM through strengthening their engagement with these portals.

#### **Contribution to the creation of an enabling environment**

126. The Programme will seek to catalyse local and national policy change by demonstrating the effectiveness of small-scale, locally designed adaptation projects, and provide incentives for a greater budget allocation to climate change adaptation. At its core, the Programme aims to build the capacity of LAs to understand climate change impacts to develop and implement their own priority adaptation projects. These efforts will drive community ownership and buy-in while demonstrating the long-term sustainability of these investments, particularly as it relates to long-term maintenance (i.e., green/blue/grey coastal infrastructure, rainwater systems, etc.) and behaviour change (i.e., fisheries and livestock practices). By empowering LAs to build their capacity and implement priority projects, the EDA Programme will also help to develop local frameworks and strategic plans for DRR, recovery, and response as well as new local frameworks supporting food and water security, particularly the deployment of both tested and innovative technologies and approaches to increase the resilience of

communities. All of these frameworks can support bottom-up advocacy at the national and State level, particularly for DRR. Lastly, the EDA Programme will place on strong emphasis on engaging with private sector actors throughout implementation, by inviting private actors to conferences, workshops and consultations to demonstrate the operational and financial sustainability of investments implemented as part of the sub-grants.

**Overall contribution to climate-resilient pathways**

127. Overall, the Programme helps to build the adaptive capacity of LAs and communities in FSM to climate change by developing new capacity, plans, and infrastructure (green, grey, and blue) for improving DRR and recovery, improving water security and access for vulnerable households, and improving livelihoods and food security. All of the activities and approaches are also highly replicable and scalable, as identified above, which builds the magnitude of impact that this Programme can have on influencing future climate-resilient pathways. Further, the pathways envisioned by the Programme and sub-grants help to advance the critical idea of local co-development and engagement for effective response to climate change which is a significant contribution to future climate-resilient development in FSM and is in accordance with identified national strategic goals set by the GoFSM.

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

128. The proposed EDA Programme will contribute to the achievement of several Sustainable Development Goals, presented in the table below.

*Table 7. Contribution of the EDA Programme to SDGs*

SDG 1: No Poverty	SDG 6: Clean Water and Sanitation	SDG 11: Sustainable Cities and Communities
SDG 2: Zero Hunger	SDG 8: Decent Work and Economic Growth	SDG 13: Climate Action
SDG 3: Good Health and Well-Being	SDG 10: Reducing inequalities	SDG 14: Life Below Water
SDG 5: Gender Equality		SDG 15: Life on Land

129. Additionally, the Programme will deliver the following co-benefits to both direct and indirect beneficiaries, disaggregated by sectoral focus.

*Table 8. Expected co-benefits of the EDA Programme*

GCF Category	DRR	Water Security	Food Security
<b>Economic co-benefits</b>	Economic co-benefits from DRR activities mostly centre on avoided economic losses from enhanced disaster resilience and improved recovery timelines. Specifically, the sub-grants will be supporting new grey and green coastal infrastructure, watershed rehabilitation, and flooding control to help limit economic damage to LAs and communities. Further the sub-grants will also be training and equipping LAs for improved emergency preparedness. Sub-grants required small constructions and/or maintenance will generate co-benefits through increased employment opportunities.	Water security activities will help to lower costs of water for households and communities by improving access and availability through new catchment systems and distribution.	By targeting livestock and fisheries as well as some specific crop value chains, the sub-grant activities will be helping to improve financial inclusion, income streams and income security for farmers in FSM by improving efficiency and output, but also developing and scaling market value chains and support for households.
<b>Social co-benefits</b>	The DRR activities are expected to lead to improved health outcomes from reduced disaster risk, particularly flooding. Further by reducing disaster risk and improving response times, social/community recovery can be improved. Finally, DRR activities can also help to preserve cultural sites and resources.	The principal social co-benefit from the water activities in the sub-grants will be improved access to and quality of water for vulnerable households through new catchment, pumping and distribution assets, as well as reduced morbidity related to water borne disease and unsafe drinking water.	Social co-benefits from food security activities focus on improved nutritional outcomes, especially for young children, and food security for vulnerable households.
<b>Environmental co-benefits</b>	To the extent that sub-grants utilize watershed management/restoration and green and blue infrastructure for climate resiliency and DRR, additional co-benefits for reforestation (particularly coastal mangroves),	Watershed management and restoration activities will help to improve water quality, ecosystem biodiversity, integrity and coastal resources. Reforestation activities	The activities focused on supporting improved coastal resource conservation and sustainable utilization will help to sustain biodiversity and improve

	<p>coastal/marine resource conservation, and biodiversity co-benefits will be realized. Activities implemented to mitigate the impacts of flooding will result in avoided soil loss, improved soil structure and improved recharge rate of groundwater reserves, overall enhancing ecosystem functions and services across agroecological zones.</p>	<p>and solar water pumping will potentially lead to marginal GHG/air quality benefits as well depending on the baselines for pumping.</p>	<p>habitat area. Depending on the activities improved agro-forestry and livestock management can also lead to improvements in ecosystem conservation and water quality. Improved livestock management and agroforestry may also lead to marginal GHG benefits.</p>
<p><b>Gender-Sensitive Development Impact</b></p>	<p>By supporting specific DRR activities implemented within the gender mainstreaming framework outlined in the Gender Action Plan (Annex 4) the sub-grants will help to identify and integrate key considerations for differing skills and capacity for DRR between men and women, improve access to resources for women, improve gender-responsive leadership by both men and women at the community and national level for disaster response, increase coordination and consultation with women stakeholders in planning and implementing effective gender-balanced strategies for disaster response, etc.</p>	<p>The sub-grants will be directly addressing identified gender barriers by supporting improved participation and decision-making for women in watershed management as well as access to, ownership, and maintenance of new assets like solar water pumps, rainwater harvesting and other catchment systems which can increase water security and decrease collection times and associated risks for women. All of the activities will be conducted within the gender mainstreaming framework outlined in the Gender Action Plan (Annex 4).</p>	<p>The Programme will support improved participation in decision making, control over financial resources, asset ownership, etc. for women on a variety of food security issues mostly related to fisheries and livestock.</p>

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

##### Vulnerability of the country

130. According to the Notre Dame Global Adaptation Initiative (ND-GAIN), FSM is the fourth most vulnerable country to climate change and the 78<sup>th</sup> least ready country in the world (FSM scored 0.640 on the vulnerability scale and 0.360 on the readiness scale).<sup>118</sup> The FSM GCF Country Programme<sup>119</sup> concluded that at present, none of the FSM States have a 'high' level of adaptive capacity required to ensure adaptation to the effects of climate change. As highlighted in Section B.1 above, climate change impacts are expected to severely threaten FSM across all sectors of its economy, particularly through increased sea level rise, increased variability of rainfall, increased severe weather events and king tides, and increased temperature. Past inundation, surge and storm events have caused significant damage to communities, including through lasting impacts to community-built infrastructure, coastal resources and fisheries, agriculture and water resources. Currently, approximately 60% of households in FSM live within 200 yards of the shoreline with millions of dollars' worth of agriculture, buildings, etc. exposed to climate threats. Further, the vast majority of FSM is reliant on underdeveloped agriculture, livestock, and fisheries value streams both for subsistence consumption as well as for primary income streams, and climate change is expected to limit these systems further constraining livelihoods and threatening community food security. Water security is likewise constrained due to insufficient technology like catchment systems and mismanaged watershed resources both of which are made more difficult due to future climate change. All these elements demonstrate the acute vulnerability of FSM to the effects of climate change and the need to urgently address the limited local capacity to design and implement climate adaptation projects, which is the core focus of the proposed EDA Programme.

##### Economic and social development level of the country

131. In FSM in 2013/2014, meeting essential caloric needs required an average of USD 1.84 per adult per day; meeting both food and non-food basic needs required on average USD 4.34 per day. At the national level, about 10% of people in FSM are below the food poverty line and 41% are below the total poverty line. The poverty gap index, which indicates the extent to which average adult equivalent expenditures fall short of the poverty lines, is estimated at 3.6% at the food poverty line and 15.1% at the total poverty line. In addition to this, FSM is an under-resourced country that is highly dependent on COFA funding. The COFA currently funds 80% of State budgets and over 90% of its funding is allocated for health and education. After 2023 when the current phase of financial support is due to expire, and if not renewed this funding source will be severely curtailed leading to an estimated annual financing gap of about USD 41 million (35–45% of current national government expenditures). Negotiations for renewal of the COFA are underway, but it is uncertain what amounts will be available for what purposes at this stage. This level of socioeconomic development highlights a key need for outside funding to support projects to address impacts from climate change.

<sup>118</sup> ND GAIN Country Index; Available [here](#).

<sup>119</sup> FSM GCF Country Programme; Available [here](#).

#### **Absence of alternative sources of financing**

132. FSM local, State and national financial and technical capacity is extremely constrained, particularly when considering the magnitude of potential climate change impacts. Specifically, a previous capacity assessment for FSM from USAID<sup>120</sup> highlighted that estimated costing for operationalizing climate change policies and action at the State and local level currently far outweighs department budgets and that there is limited capacity in national and State governments to effectively coordinate climate finance and adaptation priorities. Outside funding has been leveraged in this space, but the funding amount is still inadequate to meet adaptation needs and further, more than 60% of the funds go “uncoordinated” by national decision makers which creates a void for effective and coordinated financing for climate adaptation in FSM communities. It is worth noting that the total financing required for the identified pipeline of projects and programmes (est. USD 1.4 billion<sup>121</sup>) exceeds FSM’s national GDP five-fold<sup>122</sup>.

#### **Need for strengthening institutions**

133. The barrier analysis highlighted a number of capacity constraints for FSM. As concluded in the GCF Country Programme, at present none of the FSM States has the required level of adaptive capacity to adapt to the effects of climate change. Despite some variation in their adaptive capacities, all States are highly vulnerable due mainly to an inability to respond to climate impacts in a timely manner and the wide dispersion of the islands in the FSM which poses transportation, communication and development challenges for the nation, particularly for costs of goods and services, costs of energy and transportation, and scalability and connectivity of markets<sup>123</sup>. Further, institutional capacity to secure sufficient funds and implement coordinated adaptation and mitigation projects is also inadequate, making progress slow and challenging. While decision-makers’ awareness of climate change is reasonably high, a concrete institutional response is at a very early stage in FSM. All of this highlights the need to improve capacities for climate adaptation particularly at the local level of governance which is the primary focus of Component 1 of the Programme, which will aim to foster the transfer, receipt and integration of knowledge across LAs, and ultimately building long-term collaborative problem-solving capacity in FSM.

#### **Needs of local communities**

134. GCF financing will support building capacity and undertaking on-the-ground interventions for DRR, food security and water security to address the most pressing needs of FSM’s most vulnerable communities. The sub-grant facility will empower LAs to implement climate change projects based on the specific needs and priorities of vulnerable communities within their jurisdictions. This will be achieved by addressing technical, financial, institutional and capacity barriers that currently prevent the implementation of locally led climate action to address climate change impacts at the local level and generate long-lasting adaptation benefits. The sub-grants will focus on three thematic areas that are most severely felt by vulnerable communities in FSM, namely DRR, food security and water security.

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

#### **Existing national climate strategy**

135. The proposed EDA Programme is aligned with climate change policy frameworks at the national, state and municipal level. At the national level, the Programme complies with the Climate Change Policy (2013), the Climate Change Act (2014), and feeds into the objectives of the Nationwide Integrated Disaster Risk Management and Climate Change Policy (2013)<sup>124</sup>, specifically with Strategic Objective #2 “Promote, facilitate and develop training programs focused on disaster risk management and climate change for scientific, technical, managerial personnel and policy makers” and Strategic Objective 7: “Reduce and manage the risks associated with more frequent, severe and unpredictable extreme weather events”. Additionally, the Second National Communication identifies risks to food and water security and coastal flooding from climate change impacts (sea level rise, saltwater inundation, extreme weather events) as key adaptation initiatives and highlights the need to support community-based adaptation projects to institute locally effective adaptation measures.

136. At the State level, the Joint State Action Plans for Disaster Risk Management and Climate Change all also

<sup>120</sup> FSM Climate Change and Disaster Risk Finance. Available [here](#).

<sup>121</sup> FSM GCF Country Programme. Available here.

<sup>122</sup> Ibid.

<sup>123</sup> World Bank. 2017. Pacific Possible: Long-term Economic Opportunities and Challenges for Pacific Island Countries. Available [here](#).

<sup>124</sup> FSM Nation Wide Integrated Disaster Risk Management and Climate Change Policy; Available [here](#).

identify strategic objectives aligned with the proposed EDA Programme, as follows:

- **Pohnpei** – *Objective 4.1*: Strengthen food security in Pohnpei, *Objective 5.2*: Ensure water security of Pohnpei and *Objective 6.1*: Improve critical infrastructure in Pohnpei to withstand disasters and climate change<sup>125</sup>.
- **Kosrae** – *Objective 6.3*: Improve critical infrastructure in Kosrae to withstand disasters and climate change and *Objective 6.8*: Strengthen management of freshwater resources<sup>126</sup>.
- **Chuuk** – *Objective 1.2*: Improve infrastructure in Chuuk State to withstand disaster risk and climate change, *Objective 2.4*: Sustain productive agriculture and *Objective 4.1*: Ensure water security for Chuuk<sup>127</sup>.
- **Yap** – *Objective 3.1*: Improve data and knowledge management to better support disaster risk management and climate change adaptation and *Objective 3.5*: Address food security issues in Yap and the risks provided by climate change and other events and *Objective 6.3*: Improve critical infrastructure in Yap to withstand disasters and climate change<sup>128</sup>.

137. Lastly, at the municipal level, Local Early Action Plans (LEAPs), which were developed as part of the International Climate Initiative, provide essential information on the vulnerability and adaptive capacity of local communities. Priority adaption actions to be implemented as part of Component 2 of the proposed Programme were directly inspired from the LEAPs, in alignment with both the national climate change framework and the needs of local populations.

### Existing GCF country Programme

138. The GCF Country Programme also specifically identifies the need for food and water security projects, disaster risk management projects, and resilient infrastructure/roads projects<sup>129</sup>. Building on identified priorities, and given the centrality of climate change considerations, the GCF Country Programme endorses the sectoral focus of the JSAPs – food and water security, health and education, and infrastructure climate proofing. Further, the Country Programme acknowledges the difficulty in leveraging private sector financing for climate adaptation projects in FSM, due to the limited capabilities of national private sector actors. As recommended in the Country Programme, the EDA grant facility will streamline local-level, priority adaptation projects relating to the food and water security sectors and DRR. Additionally, this Programme will build LA technical capacity, so that LAs can utilize climate change information, implement an informed adaptation response, which will strengthen their overall capacity to implement climate finance projects.

### Alignment with existing policies such as NDCs, NAMAs, and NAPs

139. Although FSM's contribution to greenhouse gas emissions has always been marginal, the INDC states the need to implement priority adaption actions as laid out in the Nationwide Integrated Disaster Risk Management and Climate Change Policy (2013) and the FSM Climate Change Act (2014). The INDC emphasizes the urgency to enhance the local capacity to plan, design, implement, manage and operate adaptation projects and installed technologies, further demonstrating the relevance of the proposed EDA Programme. At time of writing, FSM's National Adaptation Plan is currently under development. A detailed list of regional, national, state and municipal policy frameworks of relevance to and aligned with the proposed EDA Programme can be found in Section 7 of the Feasibility Study.

### Capacity of Accredited Entities or Executing Entities to deliver

140. SPC is the principal scientific and technical organization in the Pacific region, supporting development since 1947. SPC is an international organization owned and governed by 26 member countries and territories. SPC applies science, knowledge and innovation in support of sustainable development, with a focus on critical cross-cutting issues such as climate change, disaster risk management, food security, gender equality, human rights,

<sup>125</sup> Federated States of Micronesia – Pohnpei Joint State Action Plan for Disaster Risk Management and Climate Change; Available [here](#).

<sup>126</sup> Federated States of Micronesia – Kosrae Joint State Action Plan for Disaster Risk Management and Climate Change; Available [here](#).

<sup>127</sup> Federated States of Micronesia – Chuuk Joint State Action Plan for Disaster Risk Management and Climate Change; Available [here](#).

<sup>128</sup> Federated States of Micronesia – Yap Joint State Action Plan for Disaster Risk Management and Climate Change; Available [here](#).

<sup>129</sup> GCF – Federated State of Micronesia Country Programme; Available [here](#).



non-communicable diseases and youth employment. Drawing on a multi-sectoral integrated approach, SPC aims to support the empowerment of Pacific communities through the generation and sharing of locally owned knowledge<sup>130</sup>. SPC gained GCF accreditation in February 2019, and is authorized to perform all financial, administrative and managerial processes for the execution of climate finance projects. The capacity of the AE to deliver is further strengthened by the presence of an SPC Regional Office in FSM. Located in Pohnpei, SPC's RO will be a key implementing partner in the delivery of the proposed EDA Programme.

**Role of National Designated Authority and Engagement with civil society organizations and other relevant stakeholders, including indigenous peoples, women and other vulnerable groups**

141. In addition to this strategic alignment, the EDA Programme has been co-developed by SPC and the NDA, with strong support and inputs from other FSM stakeholders, including all four States, civil society organizations and women's groups. Even despite difficulties caused by the global COVID-19 pandemic, initial needs assessments were conducted for a number of FSM municipalities and through this specific adaptation priorities were identified through direct stakeholder meetings. The NDA, which will also be the official focal point, and the four States will be fully involved and play a key strategic role in the Programme implementation. Resources will be provided to the NDA and LAs to guarantee ownership by developing key strategic partnerships between SPC, the NDA and LAs. Further, a national decision-making body made up of representatives from key stakeholders will endorse key milestones and lead key Programme implementation including the selection of sub-grants.

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

142. The envisaged GCF budget for the implementation of prioritized and identified pipeline of sub-grant projects is USD 12,000,000 while USD 4,591,556 is expected to fund TA support for the implementation of these sub-grants. The total project budget is USD 16,591,556, all of which is to be provided by the GCF in the form of a grant. The programme includes USD 3,119,081 in co-finance, of which USD 2,916,571 is from the FSM Government and USD 202,510 from SPC.

143. The GCF support in form of grant is crucial to address substantial adaptation needs of the FSM communities. The proposed programme aims to build the adaptive capacity of vulnerable LAs and to implement a variety of adaptation interventions for the increased climate resilience of communities and livelihoods. The aim is to initiate an overarching approach that would support the identification of locally led, most suitable interventions and in doing so lay the foundations for further scaling-up beyond the programme lifetime. The programme will support local public sector.

144. Furthermore, the request for grant financing is justified by (i) the needs of the recipients, who are local communities whose livelihoods are extremely vulnerable to climate change, (ii) the limited capacity of FSM LAs and States to leverage other sources of financing. Section B.1 of this Funding Proposal and Section 2 of the Feasibility Study provide more detail on the socioeconomic conditions of FSM communities. The current cost estimates for climate change adaptation solutions far exceed allocated budgets for both LAs and States. This highlights the necessity of the proposed GCF grant structure and concessionally to directly support local communities. Further, similar mechanisms from other donors including the Adaptation Fund<sup>131</sup>, GEF Small Grants Programme<sup>132</sup> and USAID PACAM<sup>133</sup> that have been shown to be both effective and efficient at supporting LAs and community groups in developing projects and delivering local climate change outcomes, including in DRR, ecosystem-based adaptation, food security, and water security.

145. Given that most of the interventions planned are public sector projects that use grant funding and therefore do not generate any revenues, a financial analysis is largely infeasible. Given this, a focus has been put on the economic analysis of the project. Generally, these types of investments produce outputs and outcomes that meet the classical definition of public goods (non-rivalrous and non-excludable).

146. The project has the potential to generate a broad range of environmental, social, and economic benefits and co-benefits, some of which include:

- Increased capacity of relevant stakeholders to identify, develop, and implement tailored and focused adaptation measures and needs;
- Increased resilience of buildings and infrastructure to severe climate impacts, especially those resulting from climate extremes;

<sup>130</sup> Pacific Community. 2019. SPC Results Report 2019; Available [here](#).

<sup>131</sup> Adaptation Fund – Practical Solutions for Reducing Community Vulnerability to Climate Change in FSM; Available [here](#).

<sup>132</sup> GEF Small Grants Programme – Micronesia OP 5 Strategy; Available [here](#).

<sup>133</sup> USAID PACAM Performance Evaluation Report. 2017. Available [here](#).

- Reduced flooding and seawater intrusion due to coastal management interventions;
- Reduced erosion and loss of coast, and loss of infrastructure such as roads;
- Avoided loss of biodiversity due to, for example, mangrove planting;
- Avoided crop losses and overall increased food security due to implementation of climate resilient crops/varieties such as saltwater resistant yam;
- Avoided cost resulting from erosion and soil damage due to implementation of soil and water conservation techniques;
- Increased water security and water subsistence due to implementation of water infrastructure such as rainwater harvesters;
- Increased productivity and avoided crop losses as a result of investing into water storage and irrigation systems; and
- Health benefits resulting from increased water security.

#### Efficiency and effectiveness of the project

147. An economic analysis of the project has been performed to assess the incremental adaptation benefits to climate change for communities. The economic cost-benefit analysis uses a cash flow model over a 20-year period, and a 50-year period for coastal management. These periods include all investment and operational costs of the project, as well as the monetized revenues from resulting externalities such as avoided losses. The approach undertaken was based on identifying the most probable interventions that would reflect the most pressing adaptation needs.
148. The results of economic analysis clearly show that the programme-level ENPV is positive at **USD 39,268,625** and the programme-level **EIRR is 11%**. The programme level EIRR is above 6% discount rate and therefore the conclusion is that the proposed programme is economically viable and can be justified on economic grounds, even with 30% of non-investment budget costs for which no direct benefits are envisaged. It is also noteworthy that the analysis included conservative assumptions and not all benefits have been included in the economic calculations since it was not possible to estimate their monetary values, but these benefits would nonetheless occur under the proposed interventions. Some of benefits would include avoided coastal erosion, avoided crops damage due to availability of water for irrigation, increased capacity of relevant stakeholders to identify, develop, and implement tailored and focused adaptation measures and needs, and health benefits resulting from increased water security. For more details, please see Annex 3.
149. **Accordingly, the EDA Programme will demonstrate a strong cost effectiveness and economic soundness.** The proposed financial structure of the facility is deemed adequate and reasonable in order to achieve the Programme's objectives while minimizing transaction costs, in particular given the high complexity of targeting all municipalities in each of the States to include particularly vulnerable populations living in rural areas and outer islands. Indeed, the long distances, at times unfavourable weather, logistics and high-cost challenges of inter-island transportation in FSM make it particularly difficult to deliver assistance.
150. Summarizing the comparable costs per beneficiary for sub-projects of the PACC grant mechanism presents the following:
- Cook Islands: cost per direct beneficiary: USD 4,000
  - FSM: cost per direct beneficiary: USD 8,415
  - Samoa: cost per direct beneficiary: USD 436
  - Vanuatu: cost per direct beneficiary: USD 2,291
151. Based on an estimate of 54,301 direct beneficiaries through the implementation of sub-grants through this EDA Programme with a total Programme cost of USD 19,710,637, **the cost per direct beneficiary is approximately USD 363**. The EDA Programme compares favourably against these benchmarks and is well below comparable sub-grant costs per direct beneficiaries.

#### Application of best practices

152. The programme has identified number of potential interventions that would most effectively and efficiently respond to adaptation needs (See table 4). The interventions were identified and prioritized based on stakeholder consultations. Interventions include proven sound technologies and practices completely aligned with the FSM context.
153. The sub-grants will focus on leveraging best available technology and approaches for the DRR, water security, and food security activities including, but not limited to cyclone proofing, rainwater catchment systems,

endemic species and ecosystem services, MPAs, livestock and fisheries development, and other as defined within table 4 of this proposal. Further, given the focused effort to tailor technologies and approaches to the priorities and needs of the LAs and communities that the Programme is focused on, it is expected that additional innovation and contributions to the fields will be learned through the Programme applications.

154. The EDA model from this Programme has the strong potential to catalyse additional financing for FSM and its LAs, particularly through its focus on capacity building for LAs to develop and implement projects, developing a fundable track record of project execution, and crucial capacity/experience showcasing effective project and financial management. All of this can help build donor/investor confidence, reduce investment risk, and ultimately unlock future projects and investment for FSM and the LAs.

**E. LOGICAL FRAMEWORK**

This section refers to the project/Programme's logical framework in accordance with the GCF's [Performance Measurement Frameworks](#) under the [Results Management Framework](#) to which the project/Programme contributes as a whole, including in respect of any co-financing.

**E.1. Paradigm shift objectives**

Please select the appropriated expected result. For cross-cutting proposals, tick both.

Shift to low-emission sustainable development pathways

Increased climate resilient sustainable development

**E.2. Core indicator targets**

Provide specific numerical values for the GCF core indicators to be achieved by the project/Programme. Methodologies for the calculations should be provided. This should be consistent with the information provided in section A.

E.2.1. Expected tonnes of carbon dioxide equivalent (t CO <sub>2</sub> eq) to be reduced or avoided (mitigation and cross-cutting only)	Annual	Click here to enter text. t CO <sub>2</sub> eq
	Lifetime	Click here to enter text. t CO <sub>2</sub> eq
E.2.2. Estimated cost per t CO <sub>2</sub> eq, defined as total investment cost / expected lifetime emission reductions (mitigation and cross-cutting only)	(a) Total project financing	___ USDUSD
	(b) Requested GCF amount	___ USDUSD
	(c) Expected lifetime emission reductions	<u>N/A</u> t CO <sub>2</sub> eq
	<b>(d) Estimated cost per t CO<sub>2</sub>eq (d = a / c)</b>	<u>N/A</u> Choose an item. / t CO <sub>2</sub> eq
	<b>(e) Estimated GCF cost per t CO<sub>2</sub>eq removed (e = b / c)</b>	<u>N/A</u> Choose an item. / t CO <sub>2</sub> eq
E.2.3. Expected volume of finance to be leveraged by the proposed project/Programme as a result of the Fund's financing, disaggregated by public and private sources (mitigation and cross-cutting only)	(f) Total finance leveraged	___ USDUSD
	(g) Public source co-financed	___ USDUSD
	(h) Private source finance leveraged	<u>None</u> Choose an item.
	<b>(i) Total Leverage ratio (i = f / b)</b>	
	(j) Public source co-financing ratio (j = g / b)	
	(k) Private source leverage ratio (k = h / b)	<u>0</u>
E.2.4. Expected total number of direct and indirect beneficiaries, (disaggregated by sex)	Direct	54,301 <sup>134</sup> 49.2% of female
	Indirect	92,016 49.2% of female
<i>For a multi-country proposal, indicate the aggregate amount here and provide the data per country in annex 17.</i>		
E.2.5. Number of beneficiaries relative to total population (disaggregated by sex)	Direct	47.2% (Expressed as %) of country(ies)
	Indirect	80% (Expressed as %) of country(ies)
<i>For a multi-country proposal, leave blank and provide the data per country in annex 17.</i>		

<sup>134</sup> The details on the rationale and calculations for direct and indirect beneficiaries can be found in Annex 2, Section 14.

E.3. Fund-level impacts						
Expected Results	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term	Final	
A1.0 Increased resilience and enhanced livelihoods of the most vulnerable people, communities and regions	A1.1 Change in expected losses of lives and economic assets (US\$) due to the impact of extreme climate-related disasters	<p>Post Disaster Assessments</p> <p>National census, Household Income Survey (HIES) and Multiple Indicator Cluster Surveys (MICS)<sup>135</sup></p> <p>Progress reports on the implementation of the sub projects</p>	<p>196 housing buildings and 33 public infrastructure buildings damaged or destroyed during the 2019 Typhoon Wutip</p>			<p>For mid-term target, assuming 2 interventions on housing or private buildings, 1 on public buildings and 1 on infrastructures, 4 sub-projects in total.</p> <p>For final target, assuming 5 interventions on housing or private buildings, 4 on public buildings and 1 on infrastructure, 10 sub-projects in total.</p> <p>For mid-term and final targets, assuming the average cost to repair one housing building is approximately 18,300 USD, and the average cost to repair one public infrastructure building is 78,500 USD. These figures were derived by dividing the total cost to replace all housing or public buildings damaged or destroyed by the number of buildings of each category.</p> <p>For average number of casualties, assuming one major climate-linked disaster similar to Typhoon Maysak occurs every four years.</p> <p>For the value of buildings, a proxy was used (cost estimate to replace assets) due to the unavailability of data.</p> <p>Absence of major natural disasters in the target area.</p> <p>No new buildings or infrastructure is established in exposed areas unprotected by the adaptation interventions.</p> <p>Selected adaptation interventions (rock revetment, sea walls etc.) effectively protect buildings and infrastructure on the coastline from extreme</p>
			<p>Estimated costs to repair housing buildings damaged or destroyed: 3.6 million USD</p> <p>Estimated costs to repair public infrastructure buildings damaged or destroyed: 2.6 million USD</p> <p>Estimated costs to repair damaged or destroyed utilities infrastructure: 330,000 USD <sup>136,137</sup></p> <p>4 casualties caused by Typhoon Maysak<sup>138</sup></p>	<p>Total avoided damage costs of DRR sub-projects = USD 445,100</p> <p>8 avoided casualties in the project area</p>	<p>Total avoided damage costs of DRR sub-projects = USD 735,500</p> <p>12 avoided casualties in the project area</p>	

<sup>135</sup> National census, HIES and MICS are being conducted in late 2021 and 2022 and will inform the baseline and progress towards targets now and during project inception.

<sup>136</sup> USAID and FEMA (2019) Typhoon Wutip Joint Damage Assessment Summary – Federated States of Micronesia (FSM)

<sup>137</sup> USAID/OFDA (2020) Program Summary Federated States of Micronesia and Republic of the Marshall Islands

<sup>138</sup> USAID (2015) Typhoon Maysak – Micronesia Fact Sheet. Available here.

						climate events.
<i>A2.0 Increased resilience of health and well-being, and food and water security</i>	<i>A2.2 Number of food secure households (in areas/periods at risk of climate change impacts)</i>	<p>National census, HIES, and MICS</p> <p>National surveys</p> <p>Progress reports on the implementation of the sub projects</p> <p>Independent surveys and interviews carried out as part of the evaluation process</p>	<p>13,584<sup>139</sup> households at risk of food insecurity and income loss caused by the impacts of sea level rise, extreme climate events and salinization (84,223 people)</p>	<p>1,598<sup>140</sup> households (9,909 people) with increased food security</p>	<p>3,196 households (19,819 people) with increased food security</p> <p>10,077 males</p> <p>9,742 females</p>	<p>Assuming 4 food security sub-projects will be implemented by LAs by mid-term, and 10 by the end of the programme.</p> <p>“Food security” and “food secure” in this programme will be understood according to the FAO four pillars framework to measure food security namely availability, accessibility, usability, and stability. <b>Availability</b> relates to the amount, type and quality of food that is available for consumption. This pillar also means that food can be produced, distributed and exchanged. <b>Accessibility</b> is the ability to access the type, quality and quantity of food required. <b>Usability</b> is the capacity to consume and benefit from. <b>Stability</b> is the resilience of availability and accessibility when there are changes in circumstances. Beneficiaries of food security sub-projects will be interviewed according to the four pillars described above.</p> <p>Beneficiary communities remain engaged and apply the proposed adaptation measures (climate resilient seeds, sustainable farming practices etc.)</p> <p>Absence of major natural disasters in the target area.</p>
<i>A2.0 Increased resilience of health and well-being, and food and water security</i>	<i>A2.3 Number of males and females with yearround access to reliable and safe water supply despite climate shocks and stresses</i>	<p>National census, HIES, and MICS</p> <p>Agricultural census</p> <p>National surveys</p> <p>Progress reports on the implementation of the sub projects</p>	<p>20,162 people reported being affected by drought<sup>141,142</sup></p> <p>10,242 males</p> <p>9,920 females</p>	<p>10,340 people with access to reliable and safe water supply for consumption and irrigation</p> <p>5,257 males</p> <p>5,083 females</p>	<p>20,679 people with access to reliable and safe water supply for consumption and irrigation</p> <p>10,514 males</p> <p>10,165 females</p>	<p>Assuming 4 water security sub-projects will be implemented by LAs by mid-term, and 10 sub-projects by the end of the programme.</p> <p>Water safety will be measured against national and international standards. Monitoring of water quality will be carried out as part of the evaluation process of sub-projects by independent surveyors.</p> <p>Absence of major natural</p>

<sup>139</sup> Number of people at risk of food insecurity derived by assuming 74% of the total population is growing crops for self-consumption (Integrated Agricultural Census, 2016), with 6.2 average household size (HIES 2013/2014).

<sup>140</sup> Share of population depending on agricultural occupations for their livelihoods derived using the share of unpaid agricultural workers (IAC, 2016) = 19,819.

<sup>141</sup> 45% of households in Yap, 21% in Chuuk, 9% in Pohnpei and 3% in Kosrae reported drought as being the main concern and affected their use of agricultural land, resulting in an average 20% of households nationally.

<sup>142</sup> Integrated Agriculture Census – Federated States of Micronesia (2016). Available [here](#).

						disasters in the target area.
<i>A3.0 Increased resilience of infrastructure and the built environment to climate change</i>	<i>A3.1 Number and value of physical assets made more resilient to climate variability and change, considering human benefits</i>	Government damage reports  Progress reports on the implementation of the sub projects	196 housing buildings and 33 public infrastructure buildings damaged or destroyed during the 2019 Typhoon Wutip  Total cost to restore, replace or repair damaged or destroyed buildings and infrastructure: 13 million USD <sup>143,144</sup>	4 physical assets climate-proofed (buildings and / or infrastructure) <sup>145</sup>  Total avoided damage costs of DRR sub-projects = USD 445,100	10 physical assets climate-proofed (buildings and / or infrastructure)  Total avoided damage costs of DRR sub-projects = USD 735,500	Absence of major natural disasters in the target area.  No new buildings or infrastructure is established in exposed areas unprotected by the adaptation interventions.  Selected adaptation interventions (rock revetment, sea walls etc.) effectively protect buildings and infrastructure on the coastline from extreme climate events.  Within the context of this Programme, physical assets will be considered “more resilient” to climate variability and change when, as a result of DRR interventions, they can withstand damage caused by climate change impacts and maintain their function in the face of climate stresses
<i>A4.0 Improved resilience of ecosystems and ecosystem services</i>	<i>A4.1 Coverage/scale of ecosystems protected and strengthened in response to climate variability and change</i>	Government damage reports  GIS Data/Remote Sensing  Progress reports on the implementation of the sub projects	7,123 ha <sup>146</sup> of mangroves and 6,432 ha <sup>147</sup> of seagrass insufficiently protected and at risk of degradation	1,068 ha of mangroves and 964 ha of seagrass restored and/or protected	2,136 ha of mangroves and 1,929 ha of seagrass restored and/or protected	Assumptions for target setting have been derived from the Micronesia Challenge targets for Protected Areas (PAs) for the States of Pohnpei, Kosrae and Yap. There was no assessment of the mangrove and seagrass surface area for the State of Chuuk in the Protected Area Network reports <sup>148</sup>  A 30% target for the restoration and protection of mangroves and seagrass areas was set in line with the targets set by the Micronesia Challenge. The target may be updated in the first year of implementation based on potential areas of interventions.  Absence of major natural disasters in the target area.  No perverse incentives (policies, prices, monoculture industries that affect natural capital) are introduced in the

<sup>143</sup> USAID and FEMA (2019) Typhoon Wutip Joint Damage Assessment Summary – Federated States of Micronesia (FSM)

<sup>144</sup> USAID/OFDA (2020) Program Summary Federated States of Micronesia and Republic of the Marshall Islands

<sup>145</sup> Including: community buildings (individual homes, schools, clinics, community halls, churches, cultural sites); roads and bridges; developed water resources and supply infrastructure.

<sup>146</sup> Total mangrove surface area (in hectares) for the States of Pohnpei, Yap and Kosrae.

<sup>147</sup> Total sea grass surface area (in hectares) for the States of Pohnpei, Yap and Kosrae.

<sup>148</sup> The Nature Conservancy – Gap analysis and Spatial Prioritization Reports: [Pohnpei](#), [Yap](#), [Kosrae](#) and [Chuuk](#)



						project area
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#### E.4. Fund-level outcomes

Select the appropriate outcome(s) to be reported for the project/Programme. Select key expected outcomes and corresponding indicators from GCF RMF and PMFs as appropriate. Note that more than one indicator may be selected per expected outcome. Add rows as needed.

Expected Outcomes	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term)	Final	
A7.0 Strengthened adaptive capacity and reduced exposure to climate risks	A7.1 Use by vulnerable households, communities, businesses and public-sector services of Fund supported tools, instruments, strategies and activities to respond to climate change and variability	<p>Capacity assessment and scoring system</p> <p>National census, HIES, and MICS Household surveys</p> <p>Vulnerability assessments</p> <p>Training and workshop reports</p>	<p>Scores from LAs (municipalities and State agencies)</p> <p>Capacity assessments carried out at project design phase</p> <p>Communities who benefitted from the adaptation sub-projects report having increased capacity and means to face climate stresses and shocks</p>	<p>Self-assessment using scoring system<sup>149</sup> where 40% of extremely low, low and moderate capacity LAs report higher scores and capacity to plan, manage and implement adaptation sub-projects and interventions</p> <p>40% of communities/individuals who benefitted from the sub-projects report having increased capacity and means to face climate stresses and shocks (21,455 people)</p>	<p>Self-assessment using scoring system where 80% of extremely low, low and moderate capacity LAs report higher scores and capacity to plan, manage and implement adaptation sub-projects and interventions</p> <p>80% of communities/individuals who benefitted from the sub-projects report having increased capacity and means to face climate stresses and shocks (43,441 people)</p>	<p>Constructive relations for collaboration between Government state agencies, LAs and beneficiary stakeholders to identify, design, implement and maintain adaptation measures.</p> <p>The Fund-supported tools and activities are the training materials developed for LAs and the sub-projects financed by the RCGF</p> <p>Beneficiaries have access to and are willing to use the information provided to implement adaptation interventions</p> <p>A self-assessment questionnaire will be administered to assess the communities' increased adaptive capacity</p>

<sup>149</sup> As described in Annex 2 – Feasibility Study and Annex 23 – Operations Manual.

**E.5. Project/Programme performance indicators**

*The performance indicators for progress reporting during implementation should seek to measure pre-existing conditions, progress and results at the most relevant level for ease of GCF monitoring and AE reporting. Add rows as needed.*

Expected Results	Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions
				Mid-term	Final	
Output 1.1 Local Authorities have an increased awareness of and capacity to identify and prioritize adaptation solutions	No. of adaptation planning support tools developed	Local Authorities websites/offices	0	At least 1 (Climate adaptation support framework)	4 support tools (Climate adaptation support framework, prioritization tool, training curriculum and interactive case studies)	Absence of economic, political or health issues that would hamper the programme's progress
	No. of Local Authorities who integrate the adaptation planning support tools in their decision-making processes	LAs meeting minutes and official statements	0	At least 20 municipalities and/or State authorities	At least 40 municipalities/State authorities	LAs understand the added value and benefits of the tools for adaptation planning.
Output 1.2 Local Authorities have increased capacity to design and develop viable adaptation projects that reflect the needs of communities	Number of private sector actors with increased knowledge of challenges and opportunities in local adaptation planning	Independent surveys Workshop reports	0	At least 10 entities	At least 20 entities	Absence of economic, political or health issues that would prevent the participation of a representative cohort of private sector actors
	Number of roadmaps / action plans developed for the recapitalization of the RCGF	Workshop report from Climate change adaptation local authorities conference	0	Implementation partners identified and committed	1 roadmap or action plan developed and implemented	There are sufficient participants in the conference and workshops with interest and capacity to recapitalize the RCGF  The number of implementation partners will be determined within the first year of implementation
Output 1.3 Local Authorities have access to climate change information and data to inform decision-making processes	Number of climate information products developed in line with identified local needs and priorities	Knowledge platform and partnering knowledge platforms (SREP, Pacific Datahub etc.) Assessment questionnaire	0	1 climate information product established (knowledge platform)	1 climate information product (knowledge platform) compiles all sub-project level lessons learned, data and results, along with relevant linkages with partnering platforms	Local Authorities have been successfully incentivized to use the climate information products

<p>Output 2.1 The RCGF is established and enables the financing of locally-led adaptation solutions</p>	<p>Recapitalized funding volume for the RCGF</p>	<p>Co-financing letters  Officials statements and press reports</p>	<p>0</p>	<p>USD 0</p>	<p>USD 12 million</p>	<p>It is assumed that securing capital for the RCGF by mid-term will be difficult until there is sufficient data and dissemination done on the results and benefits of the sub-projects implemented</p> <p>The targets may be revised by mid-term of programme implementation</p> <p>There is sufficient engagement and interest from private sector actors, development partners to recapitalize the RCGF</p>
<p>Output 2.2 Adaptation solutions are selected in with identified CC impacts, GCF investment criteria and the needs of beneficiaries</p>	<p>Number of beneficiaries with enhanced knowledge and capacity to adapt to climate change, including vulnerable groups</p>	<p>Self-assessment of sub-projects  Vulnerability assessments  Annual monitoring reports</p>	<p>0</p>	<p>27,150 people</p>	<p>54,301 people</p>	<p>This indicator will be assessed using the data collected pre- and post- sub-project implementation</p>
	<p>Number of municipalities and State authorities' officials who report increased knowledge and capacity to prioritize adaptation solutions and implement them</p>	<p>Organisational audit  Capacity self-assessment  Annual monitoring reports</p>	<p>0</p>	<p>70 (35 men and 35 women)</p>	<p>140 (75 men and 75 women)</p>	<p>There will be effective participation in the workshop from the LAs and other relevant stakeholders</p> <p>Absence of economic, political or health issues that would hamper the programme's progress</p>
<p>Output 2.3 Sub-grants deliver adaptation results and demonstrate the financial, technical and economic sustainability of selected interventions</p>	<p>Number of protected (climate-proofed) wells</p>	<p>Hydrological assessments, water balance reports  Expert assessments carried out for evaluation of sub-projects  National water supply monitoring</p>	<p>0</p>	<p>1 climate-proofed freshwater source</p>	<p>2 climate-proofed freshwater sources</p>	<p>The freshwater sources will be considered to be climate-proofed if hydrological assessments reveal overall safe drinking water levels according to national and international standards, and the source(s) are protected from contamination resulting from climate-induced sea level rise or storm surge.</p> <p>The targets may be revised based</p>

						on assessments and data to be collected at project implementation phase.
	Number of hectares of agricultural land with salinity levels >1g/l	Expert assessments carried out for evaluation of sub-projects	0	Reduced salinity levels in 20% of ha targeted by food security sub-projects	Reduced salinity levels in 40% of ha targeted by food security sub-projects	<p>This indicator will be assessed using the data collected pre- and post- sub-project implementation</p> <p>The targets for the number of hectares to be rehabilitated (i.e. with decreased salinity levels below 1g/l) will be established using the latest available data incl. census from the MCT SAP project</p> <p>Targets will be revised if necessary within the first year of implementation with latest available data</p>
	Number of people who benefitted from food security sub-projects reporting increased food security	<p>Reports from evaluation of sub-projects</p> <p>Agricultural Census</p> <p>HIES, MICS and Household surveys</p>	0	7,927 people (40% of estimated food security thematic area beneficiaries ) report increased food security	11,891 people (60% of estimated food security thematic area beneficiaries ) report increased food security	<p>This indicator will be assessed using the data collected pre- and post- sub-project implementation.</p> <p>Targets will be revised if necessary within the first year of implementation with latest available data</p>

### E.6. Activities

All project activities should be listed here with a description and sub-activities. Significant deliverables should be reflected in the implementation timetable. Add rows as needed.

Activity	Description	Sub-activities	Deliverables
<b>Component 1: Local authorities empowered to deliver climate change adaptation services to their populations</b>			
<b>Output 1.1 Build technical expertise to identify and prioritize adaptation solutions</b>			
1.1.1 Develop climate adaptation decision support framework and training curriculum including interactive case studies targeting government officials	An interactive, targeted training curriculum will be developed to support LA to identify/screen for climate change risks and impacts Tools and frameworks developed to prioritize adaptation solutions	Capacity gap assessment of LAs and target government officials Review of climate change risk tools and documents Identification of case studies Development of tools and frameworks	Capacity gap analysis Training manual on climate adaptation with case studies Adaptation measure prioritization and risk screening tools and national framework
1.1.2 Climate adaptation decision support training for local authorities	Training for LAs based on the curriculum developed under activity 1.1.1. Including awareness raising of the EDA Grant Facility to familiarize local government officials with the objectives of the facility, the process, eligibility criteria, and thematic areas for funding	Development of training materials for awareness raising of the EDA Grant Facility  Training workshops for local government officials of state agencies (80), municipalities (140) and private sector actors (to be identified)	Training materials on the EDA Grant Facility and thematic areas for funding uploaded onto portal

<p><b>1.1.3</b> Develop train-the-trainer's module and conduct training for national consultants and/or local NGOs in each State to become Facilitating Agents</p>	<p>The train-the-trainer's model will be utilized to ensure FSM nationals are well trained in the development of climate change projects and in particular as it relates to the Programme's Grant Facility.</p>	<p>Development of training of the trainer's manual and training materials</p> <p>Training of the trainers (20 people) in the development of climate change projects</p>	<p>Training of the trainer's manual</p>
<p><b>1.1.4</b> Facilitating Agents to support LAs prioritize adaptation actions for Grant Facility</p>	<p>Tailored support to catalyse relevant project ideas that will be channelled through the Grant Facility. NGOs and national consultants will be identified to undertake the follow-up with agencies</p>	<p>Site visits and workshops by facilitating agents with government officials and private sector actors</p>	<p>Report on recommendations for sub-grants and necessary support for LAs</p>

**Output 1.2. Technical support on project preparation**

<p><b>1.2.1</b> Project Preparation Trainings and Mentoring</p>	<p>Trainers to be paired with LAs to provide training on eligible activities, assessment criteria., and other factors related to the EDA Programme.</p>	<p>Preparation of training manuals</p> <p>Training workshops and meetings with trainers, LAs and States</p>	<p>Training manuals</p>
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**Output 1.3. Knowledge sharing mechanisms to develop and foster a network of local government authorities**

<p><b>1.3.1</b> Develop a knowledge platform and ensure the Programme is connected to regional platforms across the Pacific</p>	<p>Development of web portal to provide space for information specific to FSM on applying approaches, methods and tools that facilitate the planning and implementation of adaptation actions.</p>	<p>Procurement of service providers to develop platform.</p> <p>Training workshop and webinars</p>	<p>Web portal with linkage to other relevant platforms</p>
<p><b>1.3.2</b> Learning exchanges and site visits</p>	<p>A network of climate change advocates and practitioners created among local government officials across FSM</p>	<p>Plan workshops and site visits.</p> <p>Sensitize key stakeholders</p>	<p>Directory of climate change experts, advocates, practitioners and expert facilitators</p>
<p><b>1.3.3</b> Climate change adaptation local authorities conference</p>	<p>A conference will be organized to allow LAs and State government officials to showcase implemented projects to donors and the private sector</p>	<p>Plan workshop and preparation of materials on the climate change projects for the Micronesia adaptation project workshop</p>	<p>Workshop report and recommendations for funding, scaling up and replication of project interventions and results</p>

**Component 2: Priority project implementation-EDA Facility for strengthening local community resilience**

**Output 2.1 Establishment of Resilient Communities Grant Facility (RCGF)**

<p><b>2.1.1</b> Governance structure for Resilient Communities Grant Facility (RCGF) established and formalized</p>	<p>Establishment of an ECU, EPB, Grants Technical Evaluation sub-committee and FAs.</p>	<p>Identify and recruit personnel for committees from relevant organizations and plan steering committee meetings.</p>	<p>Manual on operations and contractual agreements for ECU, EPB, GTEC and FAs.</p>
<p><b>2.1.2</b> RCGF guidelines and procedures developed and finalized</p>	<p>Develop guidance documents and forms for LAs to access (based on feasibility study and operations manual).</p>	<p>Review of guidelines of similar type projects which provide grants for climate change activities.</p> <p>Develop guidance documents and forms for LAs</p>	<p>Procedures, guidelines and templates for operation of RCGF</p>

**Output 2.2 Grant award selection**

<p><b>2.2.1</b> Initial call for expressions of interest</p>	<p>Launch an initial call of expression of interest for LAs and state agencies (and 4 annual calls hereafter)</p>	<p>Direct engagement with LAs and state agencies to discuss the EOI.</p> <p>Information on the expression of interest disseminated in local media: newspapers, internet (social media), radio</p>	<p>Advertisements with the launch of expression of interest</p>
<p><b>2.2.2</b>-Screening of Expressions of Interest</p>	<p>Pre-screen sub-grants against the GCF investment criteria, eligibility under the EDA Facility's three thematic areas and development of report for recommendations on improvements of EOIs to meet criteria</p>	<p>Pre-screen of sub-grants EOI against set investment and eligibility criteria</p> <p>Support to failed EOIs to improve design against set investment and eligibility criteria</p>	<p>Pre-screening report identifying possible adaptation interventions, how they meet investment and how they can be improved in the next round</p>

2.2.3 Organizational audit of sub-national entities/LAs undertaken	Organizational audit of applicants to determine whether the applicant has the necessary capacity to implement the proposed sub-grant. Includes meetings and discussions with applicant, review of sub-grant EOI as well as applicant capacity assessment for financial management, risk management, control, and governance processes	Conduct organizational audit  Summarize audit reports to inform training of sub-national entities/LAs	Summarized audit reports to inform training manual to improve sub-national entity service delivery of climate adaptation interventions under 2.2.4 and 2.3.1
2.2.4 Invitations to submit full proposal	Selection committee to issue invitations to the LAs to submit project proposals.	Prepare and share invitation documents for LAs including full proposal document templates and guidelines	Full proposal document templates and guidelines for sub-grant project proposals addressing gender sensitive adaptation measures
2.2.5 Sub-grant preparation support provided	Project preparation support provided to applicants to prepare full project.	Selection of consultants to work with applicants to prepare projects  Delivery of sub-grant preparation support	Sub-grant full project proposals addressing gender sensitive adaptation measures
2.2.6 Sub-grant screening and selection	Screening of project proposals against review criteria by the Review committee	Pre-screened by the ECU against a set of review criteria E&S screening will be done by the social and environmental responsibility (SER) team from SPC Further support from FAs to strengthen proposals where necessary Secondary review and selection of sub-grants by SPC Final review and selection by the EDA Programme Board	Screening reports of sub-grant project proposals addressing gender sensitive adaptation measures
2.2.7 Awarding of grants in the three thematic areas, of food security, climate-induced disaster risk reduction and coastal protection, and water security	Inform applicant grant has been awarded and announce publicly the successful proposals.	Posting of grant award winners in portal and dissemination in local media  Development of initial catalogue of tailored and gender-sensitive adaptation measures	Initial catalogue of tailored and gender-sensitive adaptation measures in the in the three thematic areas, of food security, climate-induced DRR and coastal protection, and water security uploaded to portal
<b>Output 2.3 Sub-grant award implementation</b>			
2.3.1 Training to improve sub-national entity service delivery of adaptation interventions	Training of organizations as required to strengthen governance structures including areas such as improving the effectiveness of risk management, control, and governance processes. Project management training, including reporting, finance, procurement where appropriate for applicant entities	Development of training material for financial management, risk management, control, project management including reporting, finance, procurement and governance processes Organization and delivery of training workshops and meetings	Training manual for improved sub-national entity/LA service delivery of climate adaptation interventions
2.3.2 Grant agreements entered, implemented, monitored and reviewed	Grant agreements signed for successful applicants and dispersal of grants. Monitoring and Evaluation of projects and progress	Prepare grant agreements  Transfer of grants  Quarterly site visits and meetings with project implementation team  For category B projects, an E&S risk monitoring  Monitoring reports	Signed grant agreements  M&E reports  Data on effectiveness and efficiency of adaptation intervention
2.3.3 Sub-projects evaluated, and lessons gathered	Lessons learned and project completion reports	Evaluation of projects  Updated catalogue of adaptation measures  Development of lessons learned materials/reports	Catalogue with tailored and gender-sensitive adaptation measures, completed lessons learned reports and design documents of projects located on project portal and other regional portals/websites

<p>2.3.4 Resource mobilization strategy</p>	<p>SPC will develop a resource mobilization strategy that includes an action plan and funding sources to recapitalize the EDA Facility, including assessing the extent to which government expenditure for resilience building activities might be re-directed into the RCGF. In the last two years of the project, SPC will prepare funding application requests with the aim for acceptance from public and/or private actors before or during the final year of implementation. The plan will build on the initial results and lessons learned from the Programme Facility.</p>	<p>Site visits, meetings with bi-lateral and multilateral donors, and with identified private sector entities</p> <p>Development of resource mobilization strategy and action plan</p> <p>Development of funding application requests for climate finance</p>	<p>Resource mobilization strategy including action plan and funding streams for re-capitalization</p> <p>Funding application requests for climate finance</p>
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**E.7. Monitoring, reporting and evaluation arrangements (max. 500 words, approximately 1 page)**

**Programme Monitoring**

155. In its role as Accredited Entity, SPC will oversee and supervise the implementation of this project in accordance with the agreement signed between SPC and the GCF. SPC will be responsible for project-level MEL and reporting in compliance with approved SPC policies through coordination between its CFU, Strategy, Performance and Learning (SPL) Team and the ECU to implement tools and methods to monitor, evaluate and learn from the project activities. The logical framework contains performance indicators by component and sub-component, which will be jointly monitored by the NDA, ECU and SPC during program implementation via two six-monthly supervision missions per year (or as needed) and via regular monitoring and evaluation procedures that will be established during the project's inception phase.
156. A Monitoring and Evaluation advisor (a part time independent national consultant) will be based in the ECU to support MEL across the programme. This will include establishing M&E systems that are aligned with GCF, NDA and SPC policies and results framework. This advisor will work together with the ECU and FAs to develop a set of MEL tools, approaches and reporting arrangements for each of the sub-grants. This will include annual performance reports and project closure reports. The training, coaching and support provided to grant recipients will include capacity development in MEL, with a focus on how this can be used to maximize grant outcomes while building the evidence base for the results and impact of the initiative.
157. Results and outcomes that result from Programme activities will be monitored in accordance with SPC's Planning, Evaluation, Accountability, Reflection and Learning (PEARL) policy (See Annex 4 of the ESMP). The PEARL policy provides a framework for MEL. It is managed by the SPL team who oversees all MEL activities at SPC's corporate level. Monitoring results shall be recorded in the SPC Results Matrix and will be used to learn from Programme implementation towards a continuous improvement of the design, assessment, approval, administration and implementation within SPC and the EDA Programme itself. Monitoring will enable SPC to make adjustments to respond to unexpected events during the implementation phase as well as to build trust and respond to stakeholders and affected communities. The scope, robustness, frequency of Programme monitoring, and reporting will vary depending on the type of activities and the significance of risks/impacts identified through the screening process and, eventually, assessed before project approval. In addition, monitoring requirements will take into consideration the circumstances in which the project takes place and is implemented.
158. For the individual sub-grants awarded through the EDA Facility, regular M&E will be the responsibility of SPC in coordination with the grantees. Annual performance reports and end of project closure reports will include updated information on E&S risks, and this information will be reported to SPC and GCF. M&E of sub-grants will be supported by FAs and undertaken in accordance with SPC's PEARL policy.
159. For Category B sub-grants, an updated ESMP should be submitted annually and certified by SPC to ensure identified risks have been mitigated and that the ESMP is being followed appropriately. As per SPC's SER screening policies, the overall Programme results shall be monitored by SPC to verify if the Programme is effectively implemented as approved.

**Programme Evaluation**

160. The following evaluation exercises will be carried out as part of the MEL Framework under the proposed Programme (please see Annex 11 for cost information):
- Continuous evaluation of the sub-projects as they are completed (to be carried out by ECU and SPC)

CFU as a self-assessment) as part of activity 2.3.2

- A National MEL expert will conduct evaluations of sub-projects with a view to update the catalogue of adaptation measures and interventions and develop knowledge products based on the lessons learned. The MEL expert will be joined by a national ESS and GESI expert to report on environmental, social and gender indicators, as part of activity 2.3.3.
- An external pool of thematic experts will carry out expert analyses and assessments as relevant to the sub-project (CBAs, economic analysis, hydrology studies, ecosystem assessments, social assessments etc.) to ensure the adequacy and efficacy of adaptation interventions, as part of activity 2.3.3.
- A Mid-Term Evaluation to be carried out by an independent consultant four years after the start of the project implementation
- Final or Terminal Evaluation to be carried out by an independent consultant and to be completed within 6 months after the end of project implementation

161. The CFU and SPL Team will be jointly responsible for coordinating the independent interim and final evaluations. The evaluations will be conducted using a question-driven approach, and may include assessments against the criteria of relevance, effectiveness and sustainability, among others. The Mid-Term Evaluation will be instrumental in contributing – through operational and strategic recommendations – to improve implementation, setting out any necessary corrective and adaptive management measures for the remaining period of the project, and identifying relevant lessons learned for stakeholders in FSM as well as the broader Pacific region. The final evaluation will assess the relevance of the intervention, its overall performance, as well as sustainability and scalability of results, differential impacts and lessons learned. The evaluation should also assess the extent to which the intervention has contributed to the Fund's higher-level goal of achieving a paradigm shift in adaptation to climate change in FSM. Both evaluations will contribute to the evidence base for adaptation to climate change in FSM and across the Pacific region, and will be published on the SPC website and other relevant platforms.



<b>F. RISK ASSESSMENT AND MANAGEMENT</b>		
<b>F.1. Risk factors and mitigations measures (max. 3 pages)</b>		
<b>Limited interest or engagement from Local Authorities</b>		
Category	Probability	Impact
Governance	Low	High
Description		
Limited interest of engagement from LAs leads to underdeveloped project pipeline and limited impact for the EDA Facility and EDA Programme.		
Mitigation Measure(s)		
LAs have been directly included in the development of the Programme proposal to date, and through participatory governance, focused outreach, engagement, and delivered benefits through trainings and project development the Programme will build key leadership and buy-in from LAs and communities.		
<b>Geographic remoteness of certain Local Authorities</b>		
Category	Probability	Impact
Technical and operational	High	High
Description		
Some LAs are located in outer atolls that are very far from main islands/atolls. Transportation to these remote LAs is a significant challenge. Under the Programme, LAs will be engaged in the development of sub-grants for their respective communities. This engagement will include communicating project needs based on the relative geographic isolation of their community. SPC has well established and efficient procurement protocols and teams that will adjust to transportation needs accordingly.		
Mitigation Measure(s)		
Under the Programme, LAs will be engaged in the development of sub-grants for their respective communities. This engagement will include communicating project needs based on the relative geographic isolation of their community. SPC has well established and efficient procurement protocols and teams that will adjust to transportation needs accordingly.		
<b>Local Authorities have insufficient capacity and resources to implement priority projects</b>		
Category	Probability	Impact
Technical and operational	Medium	High
Description		
LAs have insufficient capacity and resources to implement priority projects which results in stranded or underperforming projects and limited results for local communities.		
Mitigation Measure(s)		
Existing capacity for LAs is quite limited which is why the EDA Programme deliberately builds multi-stage training for LAs on climate change, project development, and project management as well as sustained technical support, guidance, and oversight from project support bodies. In the event LAs need additional support beyond this in order to successfully implement a sub-grant, the LA will either (i) be paired with a State agency that will assist the LA in sub-grant development/implementation, or (ii) the ECU would serve as the financial and procurement provider and directly support project implementation in collaboration with the LA.		
<b>Local communities and individual households don't support or engage with local priority projects</b>		
Category	Probability	Impact
Governance	Low	Low
Description		
Local communities and individual households don't support or engage with local priority projects stemming from misaligned project objectives and priorities and limited stakeholder engagement and co-development.		
Mitigation Measure(s)		

<p>The core principle of the EDA Programme is co-development of adaptation projects tailored to local needs and priorities. As part of sub-grant development, the Programme will be working through locally elected officials and leaders to engage with the target communities and identify priority project needs. Community engagement and buy-in is a primary focus of the sub-grant application and review processes, so extensive due diligence will be undertaken to hedge against this risk. Further, the Programme will enlist formal/informal civil society organizations and other groups to help support Programme outreach and development.</p>		
<p><b>Localized data and information are insufficient to help support development of priority projects</b></p>		
Category	Probability	Impact
Technical and operational	Medium	Medium
<p>Description</p> <p>Localized data and information are insufficient to help support development of priority projects leading to underdeveloped projects, sub-optimal design, siting, and implementation of sub-grant activities, and ultimately limited climate adaptation outcomes.</p>		
<p>Mitigation Measure(s)</p> <p>The EDA Programme works directly with national and State agencies to catalogue existing climate, vulnerability, and other data to help engage LAs to develop projects and importantly identify gaps that need to be sourced.</p>		
<p><b>Difficulty in sourcing of technology and other inputs for Programme activities</b></p>		
Category	Probability	Impact
Technical and operational	Medium	Medium
<p>Description</p> <p>Procurement for the EDA Programme in FSM is complicated given the diverse, dispersed geographies of FSM as well as constrained supply chains from COVID-19 aftermath.</p>		
<p>Mitigation Measure(s)</p> <p>Existing capacity for LAs is quite limited which is why the EDA Programme deliberately builds multi-stage training for LAs on climate change, project development, and project management as well as sustained technical support, guidance, and oversight from project support bodies. In the event LAs need additional support beyond this in order to successfully implement a sub-grant, the LA will either (i) be paired with a State agency that will assist the LA in sub-grant development/implementation, or (ii) the ECU would serve as the financial and procurement provider and directly support project implementation in collaboration with the LA.</p>		
<p><b>COVID-19 constraints for engagement and operations</b></p>		
Category	Probability	Impact
Technical and operational	Medium	Medium
<p>Description</p> <p>Depending on the timeline of the Programme, stakeholder engagement could still be constrained by COVID-19 and the resulting shifts in staff and protocols.</p>		
<p>Mitigation Measure(s)</p> <p>The EDA Programme has been adaptive and proactive in finding pathways to engage with needed stakeholders at the local level during the COVID-19 pandemic by leveraging highly effective national consultants and local networks. This foundation will help the Programme to proactively plan for alternative pathways for stakeholder engagement.</p>		

## G. GCF POLICIES AND STANDARDS

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

162. In the development of this funding proposal and its accompanying feasibility study, an initial risk assessment for the potential priority adaptation measures has been conducted. In general, all of the sub-grant activities are expected to be limited both in scale and risk given the size of projects developed, resulting in the **overall Programme being classified as Category I-2 according to GCF's Environmental and Social Policy**.
163. Potential environmental impacts include:
- Overdrawing of aquifers due to insufficient recharge time
  - Impacts on freshwater resources quantity and quality due to pumping
  - Impact on local and migratory fish stocks and marine environment due to infrastructure projects
  - Erosion and soil degradation due to new building constructions
  - Noise and air pollution
  - Creation of electronic and hazardous waste
164. Potential social impacts include:
- Community aversion of sub-grants
  - Exacerbation of gender inequalities in newly created income opportunities and decision-making processes
  - Risks relating to working conditions (construction)
  - Impacts on cultural resources and heritage
165. To ensure the compliance of sub-grants with best practices in environmental and social protection and risk mitigation, SPC developed and adopted in 2020 its [SER Policy](#) which lays out all policies and procedures relating to the environmental and social management of SPC's interventions in the implementation of its projects and Programmes. The document contains guidelines, procedures and SPC's Environmental and Social Management System (ESMS) to be used to screen and appraise its activities.
166. Risks will be mitigated through the provision of technical support to LAs to enable them to undertake the required EIA and develop ESMP if required. Annex 6 of this Funding Proposal lays out a list of proposed mitigation measures for the potential E&S risks identified above, including provisions to assess adaptation measures using the Sub-Grant intake form.
167. The Sub-Grant intake form includes exclusionary provisions for special risk activities, which lists all activities which the EDA Facility will not fund either directly or indirectly, in accordance with FSM's Environmental Impact Assessment Regulations and SPC's [SER Policy](#). The combination of small-scale interventions, tight controls and trainings for LAs and sub-grants, as well as the overarching gender-inclusive and risk management approach suggests that the Programme can be effectively implemented in a socially and environmentally responsible manner.

#### DISCLOSURE

168. As part of the commitment to inclusive decision-making, SPC recognises the right of people to seek, receive and impart information about SPC's Programmes that have the potential to affect their livelihoods and ways of living. As part of the screening process, SPC will determine whether a report needs to be undertaken of the SER risks for a project. Where SPC commissions such a report, and where not restricted by its partners' or development partners' confidentiality requirements, SPC will:
- publish the relevant report on SPC's website;
  - ensure that copies of the report are accessible to affected peoples; and
  - provide the report to the development partner in line with their requirements under any funding agreement.
169. In the case of projects that are considered to be medium or higher risk for environmental or social impact, SPC will make the report publicly available at least 30 days before SPC or any relevant development partner makes a decision that may have an impact.

#### GRIEVANCE REDRESS MECHANISM

170. SPC is committed to receiving any concerns or grievances from any affected community, about the environmental and social plans or performance of any SPC project. At any time, an affected member of a community may raise their concerns by lodging a complaint through SPC's website or to the EDA Programme Board. In addition, SPC will develop specific mechanisms for Programmes or projects to allow members of an

affected community to provide feedback, or raise potential concerns or grievances, where the ESMS screening process determines it is appropriate. These mechanisms will be accessible and relevant to the affected communities. Communities and stakeholders will be able to access the [grievance complaint form](#). Such grievances will be raised to SPC as the Accredited Entity as well as to the EPB.

#### STAKEHOLDER ENGAGEMENT

171. An initial stakeholder workshop took place in October 2019. The workshop was conducted between SPC and representatives from key stakeholder agencies including the FSM NDA, FSM DECEM, the FSM Overseas Development Assistance (ODA) office, the FSM Department of Resources and Development, GCF focal points representing each state, the Micronesia Conservation Trust, the IOM office, representatives from the municipalities, as well as other relevant organizations (e.g., local NGOs) (please see Annex I of the SEP for the full report).
172. Following this workshop, the proposal was developed in close coordination with the FSM NDA and continuous consultations have taken place from June to November 2020. Due to precautionary measures and preventive practices that were in place to prevent the spread of COVID-19 such as travel restrictions and mandates prohibiting group gatherings, these consultations took place either virtually or with one or two people at a time.
173. During project development, key women's groups were also consulted to ensure appropriate gender mainstreaming and to validate the gender action plan. The Gender Analysis and Action Plan Annex 4 includes a summary of the outcomes of these consultations and how they were integrated into project design.

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

174. SPC facilitated extensive stakeholder consultations and data analysis to comprehensively assess the baseline in terms of gender gaps and opportunities for gender-inclusive sub-grants preparation and implementation. The context for each of the sectoral focuses of the EDA Programme was assessed to identify women's roles and responsibilities along with the challenges that they face.
175. With regards to DRR and coastal protection, the assessment found that both men and women play a critical role in the preparation and recovery process, but women may not have the same capacity to influence decision-making. Men, particularly those with greater levels of power and authority, are usually the ones informed and consulted by response agencies, including governments, and they directly participate in the decision-making and management processes for disaster risk management. This could mean that women's needs, and priorities are not properly addressed in early warning systems, preparedness, and during the recovery process. Further, there is evidence of increased violence against women during disaster recovery such as flooding from climate change and extreme events.
176. In terms of water security, results suggest that there is often a clear division of labour between men and women in water resources management. These different roles and responsibilities vary, but in general women are tasked with managing household water for drinking, cooking and other uses as well as making sure catchments are clean.
177. Lastly, with regards to food security, women play a critical role in food production both through subsistence farming to feed their families as well as growing cash crops for income and cultural ceremonies. Despite this, women often face barriers to accessing agricultural land, training, credit and services. The agricultural production that women and girls perform also tends to be considered part of "women's household responsibilities". Alongside these challenges, climate change will make it more difficult to make a living from agriculture and women may also struggle more than men to find alternative livelihoods, enter the formal employment sector, or migrate due to cultural barriers and limited opportunities and education.
178. To integrate gender-sensitive planning and considerations, the EDA Programme will integrate gender dimensions into all training and capacity building activities, while targeting at least 50% women in training attendees. To address the information gap on gender-sensitive adaptation measures, the EDA Programme will collect and centralise information and data on the integration of gender-responsiveness in sub-grant design. As a result, locally adapted baselines will be developed to promote gender mainstreaming to participating LAs. Additionally, SPC will recruit at least two women for the development of tender documents as part of Activity 2.1.2. Lastly, sub-grants will be evaluated using a dedicated Initial Sub-grant Gender Assessment form, which can be found in Annex 4.

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

179. Financial control and procurement processes will be implemented as per SPC rules and regulations, which were certified as acceptable to the GCF in the SPC accreditation process. SPC has specific policies for financial management including "Finance Regulations", "Anti-money laundering and counter-terrorism financing",

“Procurement” and “Grants and sub-delegation” as well as its “Staff Regulations and Manual of Staff Policies” that govern HR and other relevant processes and procedures. These and other policies are available on the SPC Intranet and are adhered to in the implementation of all SPC projects. All entities involved in the Programme’s implementation will comply with those aforementioned policies.

180. When under implementation, financial management will also remain in compliance with the FSM Financial Management Regulations. This will support the ongoing sustainability of the programme as it will already be operating within the framework of the rules and regulations that will govern the management of the programme and implementation of activities after the GCF-funded period.
181. SPC’s Financial Management Information System (FMIS) is a Microsoft Dynamics NAV-based enterprise resource planning system that has been deployed to all of its regional offices, which provides SPC employees with financial management functionalities. Using FMIS improves 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.
182. As mentioned in Section B.4., SPC as the Accredited Entity to the GCF will have overall responsibility for quality assurance and oversight of co-executing entities. In addition to this, as the sole executing entity for the project, SPC 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).
183. During implementation, SPC will provide oversight and quality assurance in accordance with its policies and procedures. This may include monitoring missions, spot checks and participation at relevant meetings. The project will be subject to SPC’s audit regime, including the external audit and internal audit functions with oversight provided by SPC’s independent Audit and Review Committee.
184. SPC’s CFU will be responsible for oversight of project management and financial monitoring, comprising a GCF Programme Manager, GCF Programme Officer and GCF Finance and Administrative Assistant. This team will interact with and support the work of the ECU (based within SPC’s MRO), which includes a Programme Coordinator, Programme Administrative Assistant, Finance and Procurement Officer and other part time support staff.
185. The financial and operational management of the sub-grants provided through the RCGF will be undertaken in line with the provisions of the Operations Manual (please see Annex 21). Disbursement of funds to successful grantees will proceed according to SPC’s Finance Regulations (2018), Finance Policy: Procurement (2020), Finance Policy: Grants and Sub-delegations (2020) and Finance Policy: Anti-Money Laundering and Counter-Terrorism Financing (2020). These policies contain controls and due diligence to ensure that funds provided to grantees are properly disbursed and managed. Disbursements will be conditional on the achievement of milestones as outlined in the grants agreements between the ECU and the grantees. Verification of milestones and approval of payment requests will be undertaken by the Grants Officer based on compliance with grant agreement conditions. Annual financial reports will be submitted by grantees for the review of the ECU concerning all activities implemented under the EDA facility for the grantees’ financial years. All reports will be reviewed and formally approved by the ECU. Grantees are also required to keep supporting documentation detailing expenses incurred in achievement of the grant milestones. Specific audits of grants will be undertaken based on requests made by the ECU, with grantees also expected to share details of their regular audits<sup>150</sup>.

#### G.4. Disclosure of funding proposal

*Note: The Information Disclosure Policy (IDP) provides that the GCF will apply a presumption in favour of disclosure for all information and documents relating to the GCF and its funding activities. Under the IDP, 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. Information provided in confidence is one of the exceptions, but this exception should not be applied broadly to an entire document if the document contains specific, segregable portions that can be disclosed without prejudice or harm.*

*Indicate below whether or not the funding proposal includes confidential information.*

**No confidential information:** The accredited entity confirms that the funding proposal, including its annexes, may be

<sup>150</sup> Noting that inclusion of regular audit details required in the grants application process as outlined in Annex 21: Operations Manual.

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

- ANNEX 1** NDA no-objection letter
- ANNEX 2** Feasibility study
- ANNEX 3A** Economic analysis in spreadsheet format
- ANNEX 3B** Economic analysis narrative
- ANNEX 4** Detailed budget plan
- ANNEX 5** Implementation timetable including key programme milestones
- ANNEX 6** E&S document corresponding to the E&S category (I2):
  - Environmental and Social Management System (ESMS)
- ANNEX 7** Summary of consultations and stakeholder engagement plan
- ANNEX 8** Gender assessment and programme-level action plan
- ANNEX 9** Legal due diligence (regulation, taxation and insurance)
- ANNEX 10** Procurement plan
- ANNEX 11** Monitoring and evaluation plan
- ANNEX 12** AE fee request
- ANNEX 13A** Co-financing commitment letter: Chuuk State
- ANNEX 13B** Co-financing commitment letter: Kosrae State
- ANNEX 13C** Co-financing commitment letter: Pohnpei State
- ANNEX 13D** Co-financing commitment letter: Yap State
- ANNEX 13E** Co-financing commitment letter: FSM Government
- ANNEX 13F** Co-financing commitment letter: SPC
- ANNEX 14** Term sheet including a detailed disbursement schedule

### H.2. Other annexes as applicable

- ANNEX 16** Map indicating the location of proposed interventions
- ANNEX 21** Operations manual
- ANNEX 22** iTAP questions and responses – first round
- ANNEX 23** iTAP questions and responses – second round
- ANNEX 24** iTAP assessment

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