

Concept Note

Project/Programme Title: Supporting Resilient Island Communities in Tuvalu, the Solomon Islands, Fiji and Vanuatu through the Local Climate Adaptive Living (LoCAL) Mechanism

Country(ies): Tuvalu, Solomon Islands, Fiji, Vanuatu

National Designated Authority(ies) (NDA): Government of Tuvalu (Tuvalu)
Ministry of Environment, Climate Change, Disaster Management and Meteorology (Solomon Islands)
Ministry of Economy (Fiji)
Ministry of Climate Change, Change Adaptation, Meteorology, Geo-Hazards, Environment, Energy and Disaster Management (Vanuatu)

Accredited Entity(ies) (AE): Pacific Community (SPC)

Date of first submission/ version number: [2021-05-18] [V.1]

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Notes

- The maximum number of pages should **not exceed 12 pages**, excluding annexes. Proposals exceeding the prescribed length will not be assessed within the indicative service standard time of 30 days.
- As per the Information Disclosure Policy, the concept note, and additional documents provided to the Secretariat can be disclosed unless marked by the Accredited Entity(ies) (or NDAs) as confidential.
- The relevant National Designated Authority(ies) will be informed by the Secretariat of the concept note upon receipt.
- NDA can also submit the concept note directly with or without an identified accredited entity at this stage. In this case, they can leave blank the section related to the accredited entity. The Secretariat will inform the accredited entity(ies) nominated by the NDA, if any.
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A. Project/Programme Summary (max. 1 page)			
A.1. Project or programme	<input checked="" type="checkbox"/> Project <input type="checkbox"/> Programme	A.2. Public or private sector	<input checked="" type="checkbox"/> Public sector <input type="checkbox"/> Private sector
A.3. Is the CN submitted in response to an RFP?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, specify the RFP: _____	A.4. Confidentiality¹	<input type="checkbox"/> Confidential <input checked="" type="checkbox"/> Not confidential
A.5. Indicate the result areas for the project/programme	<p>Mitigation: Reduced emissions from:</p> <input type="checkbox"/> Energy access and power generation <input type="checkbox"/> Low emission transport <input type="checkbox"/> Buildings, cities and industries and appliances <input type="checkbox"/> Forestry and land use <p>Adaptation: Increased resilience of:</p> <input checked="" type="checkbox"/> Most vulnerable people and communities <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		
A.6. Estimated mitigation impact (tCO₂eq over lifespan)	NA	A.7. Estimated adaptation impact (number of direct beneficiaries and % of population)	1,763,323 beneficiaries, of which 264,498 direct beneficiaries (which corresponds to 15% of target population) and 1,498,825 indirect beneficiaries
A.8. Indicative total project cost (GCF + co-finance)	Amount: USD 48,551,647	A.9. Indicative GCF funding requested	Amount: USD 48,140,647
A.10. Mark the type of financial instrument requested for the GCF funding	<input checked="" type="checkbox"/> Grant <input type="checkbox"/> Reimbursable grant <input type="checkbox"/> Guarantees <input type="checkbox"/> Equity <input type="checkbox"/> Subordinated loan <input type="checkbox"/> Senior Loan <input type="checkbox"/> Other: specify _____		
A.11. Estimated duration of project/ programme:	a) disbursement period: 6 years	A.12. Estimated project/ Programme lifespan	15 years
A.13. Is funding from the Project Preparation Facility requested?²	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Other support received <input type="checkbox"/> If so, by who: _____	A.14. ESS category³	<input type="checkbox"/> A or I-1 <input type="checkbox"/> B or I-2 <input checked="" type="checkbox"/> C or I-3
A.15. Is the CN aligned with your accreditation standard?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	A.16. Has the CN been shared with the NDA?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
A.17. AMA signed (if submitted by AE)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If no, specify the status of AMA negotiations and expected date of signing: _____	A.18. Is the CN included in the Entity Work Programme?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
A.19. Project/Programme rationale, objectives and approach of programme/project (max 100 words)	<p>Brief summary of the problem statement and climate rationale, objective and selected implementation approach, including the executing entity(ies) and other implementing partners.</p> <p>Climate change magnifies socio-economic development challenges and compounds the negative impacts of unsustainable resource management practices in the Pacific Small Island Developing States of Tuvalu, the Solomon Islands, Fiji and Vanuatu. While local government and communities are uniquely placed to address these challenges, local adaptive capacity is constrained by limited technical capacity and financial resources.</p>		

¹ Concept notes (or sections of) not marked as confidential may be published in accordance with the Information Disclosure Policy ([Decision B.12/35](#)) and the Review of the Initial Proposal Approval Process ([Decision B.17/18](#)).

² See [here](#) for access to project preparation support request template and guidelines

³ Refer to the Fund's environmental and social safeguards ([Decision B.07/02](#))

	<p>The LoCAL Pacific facility is an Enhanced Direct Access (EDA) project that will strengthen the climate resilience of local communities and economies by improving the capacity of communities and local governments to access and use financing for adaptation investments. The establishment of a performance-based climate finance transfer mechanism and targeted capacity development will improve how climate funds are channelled to the local level and effectively programmed for locally led adaptation. The EDA project will be managed by SPC and implemented by SPC and UNCDF, in partnership with the Governments of Tuvalu, the Solomon Islands, Vanuatu and Fiji, and aims at an expansion to 37 local governments by year 5.</p>
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B. Project/Programme Information (max. 8 pages)

B.1. Context and baseline (max. 2 pages)

Describe the climate vulnerabilities and impacts, GHG emissions profile, and mitigation and adaptation needs that the prospective intervention is envisaged to address.

Geographic, climatic and socio-economic context

Tuvalu, the Solomon Islands, Vanuatu and Fiji are Small Island Developing States (SIDS) in the South Pacific and all except Fiji are Least Developed Countries (LDCs). Pacific Island countries and territories already face a range of development challenges due to their specific geographic and socio-economic characteristics, and their generally high exposure to natural hazards.⁴

The Solomon Islands are two parallel chains of volcanic islands and small coral atolls in the south-western Pacific. The country is mainly mountainous and covered in forests, although it has some extensive plains. The Solomon Islands' nearest neighbours are Vanuatu to the south-east. Vanuatu consists of a chain of 13 principal and many smaller islands located about 800 km west of Fiji. The islands are characterised by diverse relief ranging from rugged mountains and high plateaus to rolling hills and low plateaus, with coastal terraces and offshore coral reefs. Fiji is made up of over 322 islands, including two large islands, three significant outlying islands and a number of archipelagos. Both large islands are mountainous, with peaks up to 1,300 m rising abruptly from the shore and covered with tropical forests. The islands of Tuvalu are characterised by poor soil and a total land area of only about 26 km². The country is very low-lying, with narrow coral atolls providing the only habitable areas and a maximum elevation of 4.6 m above sea level.

Agriculture, forestry and fisheries underpin the livelihoods of a large number of people across the region and also account for a significant share of export income for most countries. According to nationally defined poverty indicators, 26.3% of the population in Tuvalu, 12.7% in the Solomon Islands, 12.7% in Vanuatu and 34% of the population in Fiji live below the poverty line.⁵ The Solomon Islands and Vanuatu have rapid annual population growth rate projections of 2.5% and have overwhelmingly rural communities, but urban population growth exceeds rural population growth. Fiji has a significant urban population of around 56%.⁶ Rapid population growth, urbanisation, and increasing private and public sector development are driving significantly increased freshwater demand in these countries⁷.

Furthermore, international tourism has historically been a major source of income and alternative livelihoods but has dried up due to the COVID-19 pandemic. Resultant economic hardship is expected to trigger amplified exploitation of environmental resources in Pacific Islands. Several island nations, including the Solomon Islands and Vanuatu, have raised concerns with the International Monetary Fund over debt relief.

The average seasonal climate of the tropical Pacific is affected by various large-scale atmospheric features. Air temperatures are strongly tied to the ocean temperatures surrounding the islands. To the north, the Solomon Islands and Tuvalu's maximum temperature is between 31–32°C and minimum 25–26°C. To the south, Fiji and Vanuatu experience more temperate climates in winter where temperatures can be as low as 18°C.⁸ All four countries experience wet seasons from November to April and a dry season from May to October. Wet seasons in Tuvalu, Fiji and Vanuatu are affected by the movement and strength of the South Pacific Convergence Zone. Low-pressure systems embedded in this band of heavy rainfall often become tropical cyclones during the cyclone season. These areas are heavily influenced by the trade winds, which blow from the east or south-east. The trade winds bring moisture onshore causing heavy showers in the mountain regions. In the Solomon Islands, rainfall is affected by both the South Pacific Convergence Zone and the Intertropical Convergence Zone resulting in areas of heavier rainfall ~5,000 mm annually. The West Pacific Monsoon also influences rainfall in the Solomon Islands. Across the Pacific, climate varies considerably from year to year due to the El Niño-Southern Oscillation. The number of cyclones varies widely from year to year, with none in some seasons but up to six in others.⁹

Climate change context:

Since observations began in the late-1920s to mid-1950s, all four countries have experienced: (i) increased annual and seasonal mean, maximum and minimum temperatures; (ii) no clear trends in annual or seasonal rainfall; and (iii) substantial variation in rainfall from year to year. Data show that since the 18th

⁴ SPC. 2016. Observed and projected changes in surface climate of tropical Pacific Islands.

⁵ World Bank. World Databank. See: http://data.worldbank.org/indicator/SI.POV.NAHC?locations=CO&view=map&year_high_desc=true

⁶ Fiji Bureau of Statistics. 2018. 2017 Population and Housing Census.

⁷ UNEP & SPC. 2012. Freshwater Under Threat: Pacific Islands Vulnerability Assessment of Freshwater Resources to Environmental Change.

⁸ SPC. 2016. Vulnerability of Pacific Island agriculture and forestry to climate change.

⁹ SPC. 2016. Vulnerability of Pacific Island agriculture and forestry to climate change.

century, the level of ocean acidification has been slowly increasing in Pacific waters.¹⁰ Countries' specific observed climate changes include the following:¹¹

Tuvalu	<ul style="list-style-type: none"> • Current average temperature: 21–32°C • Changes in temperature: 0.11°C per decade • Rainfall: substantial variation year on year (YoY) (2,000–5,500 mm), little change in extreme daily rainfall** • Sea level rise: 5 mm per year*
Solomon Islands	<ul style="list-style-type: none"> • Current average temperature: 23–31°C • Changes in temperature: 0.12–0.18°C per decade • Rainfall: substantial variation YoY (1,150–4,400 mm), little change in extreme daily rainfall** • Sea level rise: 8 mm per year*
Vanuatu	<ul style="list-style-type: none"> • Current average temperature: 23.5–27.5°C • Changes in temperature: 0.14°C per decade • Rainfall: substantial variation YoY (700–4,200 mm), little change in extreme daily rainfall** • Sea level rise: 6 mm per year*
Fiji	<ul style="list-style-type: none"> • Current average temperature: 20–27°C • Changes in temperature: 0.04–0.26°C per decade (highly variable across islands) • Rainfall: substantial variation YoY (2,000–5,500 mm), little change in extreme daily rainfall** • Sea level rise: 6 mm per year*

* Sea level rise recorded since 1993. Global average is 2.8–3.6 mm per year.

** Since recordings began

Projected climate change:

The projected climate changes under RCP 4.5 (low emissions) and RCP 8.5 (very high emissions) across the region include:

- annual mean temperatures and extremely high daily temperatures will continue to rise regionwide (potential warming of 1.9–4.0°C for the region under RCP 8.5);
- annual rainfall is projected to increase or decrease with various degrees of variation in the models;
- while there is uncertainty in the rainfall projections as not all models show consistent results, the region is expected to experience an increase in the frequency and intensity of extreme rainfall events under all emissions scenarios;
- the incidence of drought is projected to decrease slightly (especially under RCP 8.5) in Vanuatu, the Solomon Islands and Tuvalu;
- the proportion of time in drought is projected to decrease slightly in Fiji;
- tropical cyclones are projected to be less frequent but more intense;
- extreme El Niño events are projected to occur about twice as often under both RCP 2.6 and RCP 8.5 in the 21st century when compared to the 20th century (medium confidence).¹²
- under all emissions scenarios, sea level rise combined with natural year-to-year changes will increase the impact of storm surges and coastal flooding;
- under RCP 8.5, sea level is expected to rise by 28–86 cm by 2090; and
- under all emissions scenarios the acidity level of sea waters in the Pacific region will continue to increase over the 21st century, with the greatest change under RCP 8.5.¹³

Country-specific climate change projections include the following by 2050:

Tuvalu	<ul style="list-style-type: none"> • Average annual temperature: RCP 4.5: 0.7–1.4°C, RCP 8.5: 1.0–1.9°C • Rainfall: uncertainty around rainfall projections for Tuvalu as model results are not consistent • Sea level rise projections: RCP 4.5: 13–31 cm, RCP 8.5: 16–34 cm • Wave heights: December to March wave heights and periods are projected to decrease slightly
Solomon Islands	<ul style="list-style-type: none"> • Average annual temperature: RCP 4.5: 0.7–1.4°C, RCP 8.5: 1.0–1.9°C • Rainfall: Average annual and season rainfall is projected to increase over the 21st century • Sea level rise: RCP 4.5: 14–31 cm, RCP 8.5: 16–35 cm

¹⁰ SPC. 2016. Vulnerability of Pacific Island agriculture and forestry to climate change

¹¹ Extracted from: Pacific-Australia Climate Change Science and Adaptation Planning Program. 2015. Current and future climate of Tuvalu; Current and future climate of the Solomon Islands; Current and future climate of Vanuatu; and Current and future climate of Fiji.

¹² IPCC. 2019. Special Report on the Ocean and Cryosphere in a Changing Climate.

¹³ Extracted from: Pacific-Australia Climate Change Science and Adaptation Planning Program. 2015. Current and future climate of Tuvalu; Current and future climate of the Solomon Islands; Current and future climate of Vanuatu; and Current and future climate of Fiji.

	<ul style="list-style-type: none"> Wave heights: December to March wave heights and periods are projected to decrease
Vanuatu	<ul style="list-style-type: none"> Average annual temperature: RCP 4.5: 0.6–1.5°C, RCP 8.5: 1.8–2.0° Rainfall: slight increase in wet season rainfall and a decrease in dry season rainfall Sea level rise: RCP 4.5: 15–32 cm, RCP 8.5: 17–35 cm. Wave heights: wet season wave heights and periods are projected to decrease slightly
Fiji	<ul style="list-style-type: none"> Annual average temp.: RCP 4.5: 0.6–1.4°C, RCP 8.5: 0.8–2.0°C Rainfall: greater increase in wet season rainfall Sea level rise: RCP 4.5: 14–30 cm, RCP 8.5: 16–33 cm. Wave heights: projected to decrease across the Fiji area in the wet season, with a possible small increase in dry season

Climate change impacts:

Pacific Island Countries already face high exposure to recurrent and damaging natural hazards; this combined with low capacity to manage resulting risks makes them among the most vulnerable countries to climate change¹⁴. This magnifies socio-economic development challenges faced in Pacific Islands and compounds the impacts of negative resource management practices and high dependence on natural resources. Adaptive capacity is further constrained by low economic diversification and a lack of human and financial resources, leaving Pacific communities, economies and social constructs among the most vulnerable populations to climate change.¹⁵ In the ND-GAIN index (2018), which ranks 180 countries in terms of their vulnerability to climate change and other global challenges in combination with their readiness to improve resilience (with a higher score indicating lower vulnerability)¹⁶, out of 100, Solomon Islands scored 41.6, Vanuatu 40.5 and Fiji 49.9. Albeit data for Tuvalu was not available in the assessment, the country is recognized internationally as one of the most vulnerable countries to the effects of climate change¹⁷. The likely consequences of predicted climate variability and change are expected to have large impacts on key sectors in each country, with the magnitude and severity of the impacts on specific sectors varying between countries.

- **Water supply and sanitation:** The survival of many communities is fundamentally linked to the state of their freshwater resources and sanitation, whether these occur as rivers and streams, underground aquifers, or rainwater collected from roofs. Water scarcity driven by changing precipitation patterns threatens communities solely dependent on rainfall as a water source while salinisation from sea level rise threatens quality and quantity of water supplies and sanitation, particularly in low lying atoll islands.
- **Agriculture and fisheries:** Projected changes such as changing rainfall and increased frequency and intensity of extreme rainfall events, sea level rise and ocean acidification threaten livelihoods, economic security and food security. There will be increased pressure on agriculture (food-crops in particular) and reduced agricultural productivity because of changing rainfall patterns and increased saline water infiltration in groundwater due to sea level rising and cyclone activity with high wave activity and flood surges. Higher temperatures are likely to increase both the heat stress on crops and water loss by evaporation which are likely to change the duration of a crop's growing season or where crops can be grown¹⁸. With regards to fisheries, rising ocean temperatures, coral bleaching, sea level rising and increased wave activity from cyclones is leading to coastal erosion and increased pressure on, damage to and shrinking of coral reefs. As a result, declined productivity of coastal ecosystems and breeding grounds, as well as the migration of important fish stocks, are reducing fish quantities and diversity.¹⁹
- **Forest ecosystems:** In fragile island ecosystems, forests, agroforests and trees – along with their associated biodiversity – are vital for economic prosperity and building resilience to all forms of change, particularly on high islands of Fiji, the Solomon Islands and Vanuatu. The loss of forest areas through agriculture conversion, forest degradation arising from unsustainable harvesting, forest clearance for development and plantation establishment, is likely to exacerbate sensitivities associated with increased intensity of extreme rainfall and hot period events.
- **Infrastructure:** Increased intensity of extreme rainfall, storm and cyclone events, sea level rise, increased wind speeds, wave activity and storm surges due to changing weather patterns in the Pacific and El Nino events are expected to impact infrastructure and reduce natural coastal defences due to flooding, inundation in coastal areas, coastal erosion, land subsidence and landslides. Critical infrastructures – especially those close to the shoreline such as schools, hospitals, human settlements and port infrastructure – and infrastructure serving essential services such as energy, communication

¹⁴ World Bank. 2013. Acting on Climate Change and Disaster Risk for the Pacific

¹⁵ Weir et al. 2017. Social and cultural issues raised by climate change in Pacific Island countries: an overview.

¹⁶ No data available for Tuvalu. See: <https://gain.nd.edu/our-work/country-index/rankings/>.

¹⁷ World Bank. 2021. Climate Change Knowledge Portal.

¹⁸ SPC. 2016. Vulnerability of Pacific Island agriculture and forestry to climate change

¹⁹ SPC. 2011. Vulnerability of Tropical Pacific Fisheries and Aquaculture to Climate Change

and transport links are particularly vulnerable. Ultimately, climate change will continue to drive the disappearance of low-lying atoll islands and submersion of inhabited coastlines, particularly in Tuvalu.

Climate change is also exacerbating inequalities in the most vulnerable communities and intensifying gender inequalities and poverty. Impacts will be particularly pronounced for subsistence agriculture-dependent communities. Land has significant cultural and symbolic value, not just because it meets most subsistence requirements in Pacific Islands. Furthermore, systems of land ownership, inheritance and use are complex and vary considerably. Social/cultural and legal norms restricting access to arable land increases the vulnerability of those who are likely to be most impacted by the effects of climate change. This is particularly the case for women who have restricted access to resources, such as land, climate financing, and technologies, essential for adapting to climate change and achieving gender equality. Furthermore, women tend not to have access to critical information and education essential for adapting to a rapidly changing climate.²⁰ Climate change can also exacerbate the vulnerability of the most vulnerable populations including those at risk of – or already experiencing – displacement, for example, populations in low lying atolls of Tuvalu.

Further details on the effect of climate change on the livelihoods of communities are elaborated in the design documents (feasibility studies) prepared for Tuvalu and Solomon Islands and currently being prepared for Vanuatu and Fiji. The studies will inform the design of full project funding proposal and identify adaptation measures for each country.

Please indicate how the project fits in with the country's national priorities and its full ownership of the concept. Is the project/programme directly contributing to the country's INDC/NDC or national climate strategies or other plans such as NAMAs, NAPs or equivalent? If so, please describe which priorities identified in these documents the proposed project is aiming to address and/or improve.

Overarching national priorities of all four countries identify local governments as key stakeholders in governance arrangements and planning processes for climate change adaptation as well as in implementation of adaptation projects. The Local Climate Adaptive Living (LoCAL) Facility presents a unique mechanism to support this charter and drive adaptation efforts at the local level following the Green Climate Fund (GCF) EDA modality. The project will be designed to align with and contribute to both Nationally Determined Contributions (NDC) and National Adaptation Plan (NAP) processes, where applicable, as well as with key national regulatory and legal frameworks in each country. Furthermore, the project will be conducted in synergy with initiatives targeting local governments, providing an institutionalised anchor for the local consideration of adaptation as outlined below.

Tuvalu: Te Kakeega III (2016–2020), Tuvalu's National Strategy for Sustainable Development, allocates the highest priority to increasing adaptation capacity and island resilience, and aligns these with the targets of its NDC. More recently, a policy paper on 'Reinvigorating Decentralization and Local Government Reform Program through Capacity Development' was endorsed by Tuvalu's Cabinet in February 2019. The LoCAL project already underway in Tuvalu has been designed and implemented to align with the National Strategic Action Plan for Climate Change and Disaster Risk Management (NSAP) which is part of the Pacific Islands Framework for Action on Climate Change (PIFACC) and the Regional Framework for Action on Disaster Risk Management. Tuvalu is also in the process of developing its NAP, which will highlight the role of the expanded third phase of LoCAL in Tuvalu to meet the goals of the NAP. Based on the results of the previous phase of LoCAL and lessons learned, the Government has: (i) prioritised full national roll-out of LoCAL and institutionalisation of the mechanism across all LAs; and (ii) expressed its desire and need to target international climate finance for scaling up LoCAL to become the national system for channelling adaptation finance to the local level.

Solomon Islands: The National Development Strategy (NDS, 2016–35) provides the overarching long-term policy framework for national development priorities and outlines a vision for 'improving the social and economic livelihoods of all Solomon Islanders. The LoCAL project will be designed and implemented to align with and achieve the NDS Objective Four, which targets: "Resilient and environmentally sustainable development with effective disaster risk management, response and recovery." LoCAL will also specifically target objectives of the following policies and plans: National Climate Change Policy 2012–2017 (new draft being developed); Draft Climate Change Bill; National Adaptation Programme of Action 2008; NDC 2016; National Disaster Management Plan 2017; Agriculture Sector Policy 2015–2019; National Water Resources and Sanitation Policy (draft).

Fiji: Fiji's 5-Year and 20-Year National Development Plan outlines the way forward for Fiji to realising both the SDGs and NDC. Those plans both acknowledge and account for the impacts of Fiji's changing climate and related risks. Fiji has also formulated its National Climate Change Policy 2018–2030 (NCCP), which presents a more detailed and deliberate articulation of Fiji's priorities in reducing present and future climate

²⁰ McOmber et al. 2013. Investigating climate information services through a gendered lens. CCAFS Working Paper no. 42.

risks. The LoCAL programme is well aligned with the NCCP, which recognises that local government is a critical player in the formulation of adaptation activities as well as implementing them at the local level. Furthermore, Fiji's NAP – launched in 2018 – targets vertical integration of adaptation interventions and resource mobilisation action that LoCAL will directly support Fiji to achieve.

Vanuatu: Vanuatu's 2030 *The Peoples Plan* is the country's National Sustainable Development Plan (NSDP) for the period 2016 to 2030. The NSDP recognises that the economy is dependent on a narrow range of productive sectors that are vulnerable to external shocks and charts the country's vision and overarching policy framework for achieving a prosperous Vanuatu. The environment pillar seeks to ensure a pristine natural environment on land and at sea that continues to serve Vanuatu's food, cultural, economic and ecological needs, and enhance resilience and adaptive capacity to climate change and natural disasters. The objectives of LoCAL are well aligned with the objectives of Vanuatu's NSDP.

Describe the main root causes and barriers (social, gender, fiscal, regulatory, technological, financial, ecological, institutional, etc.) that need to be addressed.

Although the central role of local governments is recognised directly or indirectly through their mandates for a range of sectors sensitive to climate change such as water management and land-use planning (zoning, buildings), local governments too often lack institutional, technical and financial capacities to play their full role in promoting the resilience of local communities and economies in a participatory and gender-sensitive manner. Municipal funding, largely provided through financial transfers from the state, is not sufficient to finance the transformational change required to achieve inclusive action for climate adaptation locally that builds the resilience of the most vulnerable communities, including women.

Overall, there is a lack of awareness, knowledge and incentives to take action on the issue of climate change adaptation. There are **limited technical capacities and knowledge**, particularly in terms of access and use of localised climate risk analysis to inform local adaptation planning. For example, communities have limited knowledge of climate-resilient agricultural practices that can increase yields. Likewise, local authorities struggle to identify and design the best coastal adaptation interventions to address increased sea level rise and storm surge. Limited technical capacity and knowledge are compounded by **limited operational capacity** with regards to human resources, equipment and tools as well as **limited skills and experience**, including financial management for grants and project management. There is also an inherent **inability of government budgets alone to finance the incremental costs** of climate change adaptation. With limited direct access to climate finance or budgetary allocations from the national level, local governments are unable to absorb the additional costs of climate change adaptation, while they also lack the capacity and funding to identify and support potentially income-generating adaptation projects that could be co-financed by the private sector.

Poverty and climate change are closely related. The poorest and most disadvantaged groups in the Pacific tend to depend on climate-sensitive livelihoods (such as agriculture) and also lack resources needed to weather climatic impacts which makes them disproportionately vulnerable to climate change. Climate shocks impact health and human capital, especially through mal-adaptive responses of poor households in post-disaster situations.²¹ Poor and rural households in the Pacific are disproportionately exposed to climate hazards and disasters. Physically, farmers and the rural and urban poor typically settle in at-risk areas due to lower land and housing prices. Furthermore, housing stock is usually made of cheaper and less resilient materials and design. Socio-economically, when poor people are affected by natural hazards or long-term impacts of climate change, their absolute losses can be smaller than those of wealthier households, but they typically lose a larger fraction of their wealth and income. These factors increase sensitivity to climate change and natural disasters. Beyond exposure and vulnerability, poor people have less ability to cope with a disaster given low incomes and savings which further diminishes their adaptive capacity and can make them even more vulnerable.

A number of gender specific issues can further compound impacts of climate change. Despite the critical role that women play in food production, they often face barriers to accessing agricultural land, training, credit and services. The cumulative effects of poverty combined with social, economic and political barriers result in **women often being disadvantaged in coping with the adverse impacts of the changing climate.**²²

As a result of the significant barriers facing Pacific Island communities, local communities are unaware of the considerable environmental and socio-economic benefits that can be generated from adaptation measures for agriculture, water security and coastal protection.

Each of the barriers will be addressed comprehensively by the project interventions.

²¹ World Bank. 2019. Climate Change and Poverty: Conference Summary.

²² UN Women. 2019. Climate change, gender and food security in the Pacific.

Where relevant, and particularly for private sector project/programme, please describe the key characteristics and dynamics of the sector or market in which the project/programme will operate.

NA

B.2. Project/Programme description (max. 3 pages)

Describe the expected set of components/outputs and subcomponents/activities to address the above barriers identified that will lead to the expected outcomes.

Local governments in the Pacific Islands are best placed to understand the diversity and complexity of local social, economic and ecological systems and thus to identify climate change adaptation actions that best meet local needs. While local governments typically have the mandate to undertake the small- to medium-sized adaptation investments required for building climate resilience, they do not have the technical and financial resources to do so – particularly in a manner that would achieve lasting changes aligned with established local decision-making processes and planning, budgeting and budget execution cycles. The overall goal of the proposed EDA project is **to strengthen the climate resilience of communities and the local economies in the Pacific SIDS of Tuvalu, the Solomon Islands, Fiji and Vanuatu** through the LoCAL Pacific facility. LoCAL combines performance-based climate resilience grants (PBCRG²³) for locally led adaptation investments with technical assistance and capacity building to strengthen the awareness of climate threats and risk reduction processes at subnational and community levels. The design and execution of a PBCRG mechanism will support small-scale grants for the implementation of the locally led adaptation interventions selected from a menu of eligible adaptation investments²⁴ (please see Annex 4: Sample of investment menu). Awareness raising, monitoring and evaluation²⁵ will ensure achievement of the program's adaptation objectives and demonstrate the program's contributions to adaptation through PBCRG. See Annex 2 for the Theory of Change for the project.

The project has two objectives:

Objective 1: Increase local governments' capacity to access climate finance to implement locally led adaptation investments in Fiji, the Solomon Islands, Tuvalu and Vanuatu

Objective 2: Establish and institutionalise a standard and internationally recognised country mechanism for performance-based climate resilience grants in Fiji, the Solomon Islands, Tuvalu and Vanuatu

The following section outlines the project design and activity plan under three interrelated components that contribute to achieving Objectives 1 and 2 and are aligned with the EDA guidelines.

Component 1: Awareness and capacity raised to respond to climate change at the local level and climate change adaptation is mainstreamed into local governments' planning and budgeting systems

Output 1.1 Awareness and capacities to respond to climate change adaptation at the local level are increased

- Assessment of awareness and capacity-building needs on a regular basis
- Climate Risk, Vulnerability and Adaptation Assessment (CRVA) for local adaptation which develops local capacity to identify priorities, incorporates local climate change metrics and baselines and informs climate-proofed local development plans
- Identification of adaptation options by each local government (from a list of nationally approved measures that will be identified during full proposal development)
- Establishment of a Local Information System for Adaptation (LISA) which will improve climate information availability, dissemination and accessibility for local actors, helping them to better anticipate, assess, adapt to and manage climate risks
- Establishment of monitoring and evaluation (M&E) support bodies for local governments (to implement activities under Output 2.2 and MEAL)

²³ PBCRGs are financial top-ups to cover the incremental costs of climate resilience investments and complement allocations made from central to local governments through intergovernmental fiscal transfer systems. PBCRGs are disbursed as part of local governments' regular budget envelopes, allowing them to cover the incremental cost of making projects climate resilient. PBCRGs are characterised by a number of minimum conditions, performance measures and a menu of eligible investments which must be met. APAs analyse compliance with the minimum access conditions to the PBCRGs (e.g. sound financial management of subsidies, functioning of decision-making bodies) and examine the performance of local governments against a set of predetermined criteria named performance measures (e.g. planning informed by climate risks, compliance with the menu of eligible investments, participation, gender and environmental considerations). APAs are conducted each year to determine the size of PBCRG for the following year and define capacity-building activities

²⁴ In each country, a menu of investments or interventions eligible for adaptation at the local level is defined, taking into account the specific situation of the country, namely: (i) hazards, climate vulnerabilities and risks; (ii) appropriate responses at the level of local and regional governments, taking into account their mandates and capacities; (iii) conventional and new technologies available or to be disseminated; and (iv) the priority areas of NDCs and / or NAPs. The investment menu defines the appropriate areas of action for which increased resilience can be supported; it does not define individual public or private investment projects, which are to be selected at local level from year to year.

²⁵ The LoCAL Facility has worked closely with the World Resources Institute to develop the ACCAF, an adaptation monitoring and evaluation framework for gauging the extent to which the results of the LoCAL mechanism have contributed to increased resilience.

- Development of a local outreach and communication strategy
- Targeted information and training workshops (local governments, deconcentrated services, communities) on climate risks and adaptation measures

Output 1.2. Climate change adaptation integrated into local authorities' plans and budgets

- Strengthening of planning activities related to adaptation and local development in the target communities in a participatory and gender-sensitive way
- Climate change integrated into the development plans at the municipal (communes) level
- Investment programming (e.g. estimation of costs and benefits of adaptation options, multi-criteria analysis and selection of priority measures, development of annual investment programmes, feasibility studies, specification of technical standards)
- Technical assistance (TA) to strengthen project and financial management
- Establishment of a mechanism for monitoring investments and adaptation measures by the local governments, with the support of decentralised services and communities

Component 2: Adaptation interventions implemented in line with the established PBCRG mechanism

Output 2.1 Adaptation interventions implemented in line with PBCRG mechanism

- ESS and ESMP capacity building for final categorisation and assessment of adaptation interventions
- Implementation of investments and climate-adaptation interventions (e.g. nature-based coastal defence enhancement, rooftop water harvesting and storage, climate-resilient crops and improved land management practices, etc.; please see Annex 4: Sample of investment menu)

Output 2.2 The PBCRG system is institutionalised to increase the amount of climate finance available to local governments and economies

- Progressive scale-up of the mechanism for climate-resilient small-scale community-level infrastructure investments via the deployment of the national PBCRG
- Annual Performance Assessments (APA) of Local Governments (LGs) in terms of good governance and response to adaptation
- TA for institutionalisation of the PBCRG mechanism within government sub-national financial management structure, systems and policy
- TA for mobilisation and securing domestic and international, systemic and long-term financing

Monitoring and Evaluation

Knowledge management and Monitoring, Evaluation, Accountability and Learning reporting and evaluation systems are running

- Deployment of the Assessing Climate Change Adaptation Framework (ACCAF) to monitor and evaluate adaptation results at the local level²⁶
- Advocacy for the national PBCRG system and capitalisation of results
- Peer learning and knowledge sharing through national and international fora
- Project audits and establishment and operation of the Monitoring, Evaluation, Accountability and Learning (MEAL) system

As demonstrated in Table 1, the PBCRGs will be expanded from 24 LGs in years one and two (phase I) to 37 LGs from year three onwards (see below table). During the inception phase, PBCRGs will be delivered to 3–4 local governments in Fiji and Vanuatu and from 8-9 LGs in Tuvalu and Solomon Islands. This phase will involve collecting lessons and demonstrating the mechanism's effectiveness at a larger scale (except for Tuvalu, which has had two cycles of LoCAL and will be starting the third cycle. From year three onwards, PBCRGs will be scaled-up nation-wide (national rollout) in Vanuatu and Fiji based on the results of the previous phase and lessons learned. In Tuvalu and Solomon Islands, PBCRGs will be expanded to all LGs as of year 1 considering they already have experience with a consolidated system of performance-based grants, such as the PCDF in the Solomon Islands (with which LoCAL is aligned) and the LoCAL pilot in Tuvalu. This phase will pave the way for LoCAL to become the national decentralised system for channelling adaptation finance to the local level in Vanuatu, Tuvalu, the Solomon Islands and Fiji.

Table 1. The expansion of target LGs

²⁶ The ACCAF will monitor and evaluate adaptation metrics/results achieved by the sub-projects implemented by Local Governments. Performance will be measured against climate change baselines and metrics established by the CRVA conducted under Component 1. Overall project results will be monitored and evaluated under the Knowledge management and MEAL system.

An example menu of eligible activities under LoCAL is provided in Annex 4. Proposed adaptation interventions include both TA activities, and investments via the PBCRG mechanisms. Please note that all proposed adaptation interventions will undergo a mandatory ESS screening under SPC ESS and ESMP procedures before final selection for funding from PBCRGs. Minimum access conditions have to be satisfied to ensure access to PBCRGs and this monitoring and evaluation continues through the grant cycle, as outlined in figure 1.

Countries	Y1	Y2	Y3	Y4	Y5
Tuvalu	8	8	8	8	8
Vanuatu	3	3	6	6	6
Solomon Islands	9	9	9	9	9
Fiji	4	4	14	14	14
Total per year	24	24	37	37	37

1.

In terms of rationale, please describe the theory of change and provide information on how it serves to shift the development pathway toward a more low-emissions and/or climate-resilient direction, in line with the Fund's goals and objectives.

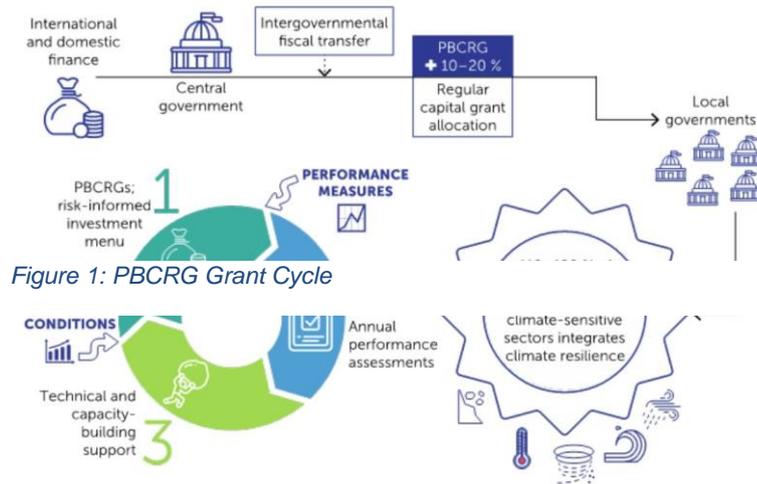


Figure 1: PBCRG Grant Cycle

UNCDF through the LoCAL mechanism has been intervening in sub-national adaptation since 2011. The mechanism was initiated and / or deployed in 14 countries, mostly LDCs (Bangladesh, Benin, Bhutan, Cambodia, Gambia, Ghana, Lao PDR, Lesotho, Mali, Mozambique, Nepal, Niger, Tanzania and Tuvalu), benefiting more than 293 local governments – representing more than 11 million beneficiaries. Another 11 countries have officially requested

to deploy the mechanism, mostly LDCs or SIDS, among which are Vanuatu, the Solomon Islands and Fiji.

As highlighted in section B.1, in many cases, management of sectors impacted by climate change and adaptation to climate change are already part of local governments' remit. Local governments are, therefore, in a unique position to address local adaptation needs. Nevertheless, most local governments in both SIDS and LDCs lack the institutional, technical and financial capacities to plan and implement locally led adaptation solutions. Financial transfers from the central government level are generally insufficient to cover the cost of adaptation interventions – local governments are unable to absorb the additional costs associated with climate change adaptation and available funds are inadequate to identify and support adaptation projects that could potentially generate income. Furthermore, when local governments access funds, they often rely on ad hoc fund transfers from national programmes, rather than on ongoing and planned country processes and systems. While development aid programmes supporting SIDS provide direct grant finance for adaptation interventions, they fail to address the unique barriers faced by local governments necessary to achieve performance improvements in adaptation programming to encourage enhanced resilience at the local level or are delivered on a project basis, and thus not embedded in the government's systems and processes.

In light of these challenges, a project implementation strategy and theory of change (see Annex 2) has been defined. First, if localised CRVA is undertaken with national and local stakeholders and a system is established to sustain the effort; if needs and capacities are assessed and addressed across stages of local climate change adaptation programming; if a LISA is established to improve climate information availability, their dissemination and accessibility for local actors; and if various stakeholders are sensitised, then awareness, knowledge and capacity will be improved for adaptation and resilience-building (Outputs 1.1 and 1.2).

Second, if climate change adaptation is integrated into local development planning and budgeting processes – building on the CRVA; and, if climate change adaptation measures are selected through participatory and gender-sensitive methods in line with the plans and the menu of eligible investments; and if the measures are implemented with local actors, then climate change adaptation can be mainstreamed into LGs' operations in an inclusive and accountable manner (Outputs 2.1 and 2.2).

Last, if the PBCRG system is designed in a collaborative manner aligned with the intergovernmental fiscal transfer mechanisms and related M&E processes; if grants are disbursed timely and effectively; if annual performance assessments are conducted in the participating local governments; and if the country is

supported to mobilise and secure sources of international climate finance, then an effective PBCRG system can be established and function in a sustained manner (Output 3.1); furthermore, if these processes and successes are well monitored and evaluated, lessons learned and best practices are documented, and knowledge products created through MEAL, then the project's interventions can be scaled up and replicated in other local government jurisdictions within the countries and beyond in other SIDS.

In turn, if awareness and capacities are improved for locally led adaptation and resilience-building; if climate change adaptation is integrated into local development planning and budgeting; and if an effective PBCRG system is developed and deployed, then the transfer of climate finance to local governments through national institutions and procedures for building verifiable climate change adaptation and resilience will be increased (outcome). The climate resilience of communities in selected local areas will be improved (project impact) in the long run.

Describe how activities in the proposal are consistent with national regulatory and legal framework, if applicable.

The LoCAL project will be designed to align with and contribute to key national regulatory and legal frameworks in each country. In particular, the project will align with the national regulatory frameworks for climate change in each country, as identified in section B.1., among which are the respective countries' national climate change policies and programmes, NDCs and NAP processes, as applicable. Furthermore, the project is consistent with legal and regulatory frameworks for decentralisation as outlined in scoping analysis/design documents for LoCAL implementation for Tuvalu currently being developed by UNCDF for the Solomon Islands, Fiji and Vanuatu.

Describe in what way the Accredited Entity(ies) is well placed to undertake the planned activities and what will be the implementation arrangements with the executing entity(ies) and implementing partners.

SPC is a regional Direct Access Entity that will manage the project. SPC has the following fiduciary functions: small project management (Category B E&S) and grants award. SPC's comparative advantage lies in:

- 1) Its extensive ties with Pacific Islands governments, administrations, agencies and partners in all Pacific Island Countries, particularly through its regional offices for Melanesia, Micronesia and Polynesia as well as SPC staff stationed in member states and locally recruited staff embedded in line ministries.
- 2) Its broad mandate on development issues including health, agriculture and forestry, fisheries, energy and transport, water, gender in development, human rights and natural resource management, with climate change and environmental sustainability integrated across all of these sectors.

SPC and national executing entities will lead technical assistance, awareness and capacity building activities of Outputs 1.1, 1.2, 2.1 and 2.2. SPC and executing entities will also ensure the implementation of the transfer of funds to local governments. UNCDF will lead the delivery of Outputs 3.1 and 3.2, ensuring the design and implementation, interface and functioning of the LoCAL mechanism as well as monitoring and evaluation of the mechanism. A regional project board will be established with national representation – including NDAs and UNFCCC FPs, and typically the ministries of local government, and ministries of finance.

This structure provides valuable north-south and south-south cooperation, which will be a necessary prerequisite for ensuring the sustainability of the programme after its financial close.

Tasks and responsibilities are organised around three functions:

- Control and monitoring of implementation, conducted by SPC
- Steering and coordination, handled by an inter-ministerial steering body at the national level in each country, constituted such that composition of the LoCAL Committee will include at a minimum the institutions/ministries responsible for local governments, finance, environment and supported by a LoCAL Technical Committee. The committees will be validated during the design of the full funding proposal for the project.
- Provision of technical assistance provided by entities at the departmental and communal levels.

Please provide a brief overview of the key financial and operational risks and any mitigation measures identified at this stage.

The following risks key financial and operational risks and mitigation measures have been identified:

Risk	Risk Probability	Mitigation measure
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Funding allocation processes not integrated into national systems	Low	Secure political leadership and institutional arrangements, including through the NDAs in each country
Funds not disbursed to local authorities	Medium	Define the financing circuit of the mechanism, including the relevant treasury arrangements to receive funds; policies and governance needed to initiate financial flows; monitoring and auditing processes
Investments do not contribute to improving climate resilience	Low	TA, advisory and capacity building services are defined, provided and verified to guide investment election in the project cycle. Integration of TA grants with investments Assessment of local climate risk analysis and vulnerabilities, monitoring/evaluation system/reporting
Local communities and vulnerable groups, including women, have little involvement in the selection of measures	Low	Dedicated capacity building and gender action plans to ensure inclusivity and women's participation
Adaptation measures are not implemented	Low	Implement and verify capacity building to create awareness and build supply; Implement an incentive system taking into account the execution rate of investments
Problems of procurement, corruption and embezzlement	Medium	Fiduciary control, capacity building, incentive system taking into account the results of audits
Use of funds and performance not tracked/documented/reported/evaluated	Low	Capacity building, community monitoring system, incentive system valuing best practices, monitoring and audit process
Implemented investments have negative environmental and/or social consequences	Low	Assessment of local climate risks, capacity building, environmental and social safeguards
Change of authorities and government officials	Low	Secure political leadership and institutional arrangements, UNCDF technical assistance, training manuals for new staff and the systematisation of PBCRG and MEAL will ensure that impacts are low
Natural disasters in any of the selected communities	Medium	LoCAL directly supports national disaster risk reduction and preparedness through adaptation solutions relevant to the local context.
COVID-19 economic downturn	Low	Climate finance channelled through the LoCAL mechanism will support direct green economic recovery efforts and will create jobs, secure livelihoods and close the gender gap and reduces inequalities

B.3. Expected project results aligned with the GCF investment criteria (max. 3 pages)

The GCF is directed to make a significant and ambitious contribution to the global efforts towards attaining the goals set by the international community to combat climate change, and promoting the paradigm shift towards low-emission and climate-resilient development pathways by limiting or reducing greenhouse gas emissions and adapting to the impacts of climate change.

Provide an estimate of the expected impacts aligned with the GCF investment criteria: impact potential, paradigm shift, sustainable development, needs of recipients, country ownership, and efficiency and effectiveness.

Impact potential

Based on LoCAL implementation in existing countries, the programme will benefit an estimated 15% of those residing in local governments' administrative boundaries where the programme is active. 100% of each targeted local population will benefit from at least one investment and/or activity and, more generally, from the project's outputs. The table below summarises the estimated direct and indirect beneficiary numbers from each country.

Country and targeted local governments	Direct beneficiaries	Indirect beneficiaries
Tuvalu: 8 LG (Kaupules) with a population of 11,646.	1,747	9,899
Solomon Islands: 9 LGs (provincial governments) with a population of 667,044	100,057	566,987
Fiji: 14 LGs (Provincial councils) with a population of 884,887	73,530	416,667
Vanuatu: 6 LGs (provincial government councils) with a population of 199,746.	29,962	169,784
TOTAL	264,498	1,498,825

The design, implementation and execution of all outputs described will serve the direct beneficiaries of the project through:

- Communities' involvement in planning and local governance processes
- Access to appropriate infrastructure and services in the face of climate change impacts
- Support for green economic recovery promoting alternative livelihoods in the face of reduced tourism
- Delivery of TA to local governments
- Opportunities to participate in the implementation of adaptation measures and infrastructure management

More broadly, the following will accrue to indirect beneficiaries:

- local economic development generated by investments and infrastructure improvements; and
- improved sub-national planning and public financial management at the local level.

Paradigm shift

Communities and local governments are gaining prominence in the design and implementation of climate change adaptation action. Climate-proof infrastructure, resilient processes and environments, and increased protection from critical vulnerabilities and the adverse effects of climate change directly benefit local communities.

While national governments transfer responsibilities through decentralisation policies, these responsibilities are not always accompanied by the relevant fiscal and human capital resources necessary to design and manage adaptation interventions at the local level.

The proposed project resolves these barriers and aims to achieve a paradigm shift in the way local governments build resilience. The project achieves a paradigm shift through empowering local communities and governments with the adaptive capacity necessary to mainstream climate change adaptation into plans and budgets, and improving access to climate finance. Annual performance assessments ensure that planned investments effectively contribute to strengthening the resilience of local communities (e.g. localised and spatialised hazard, climate vulnerabilities and risks analysis undertaken to inform the planning of adaptation interventions), that local governments' performance improves from year to year (e.g. through annual performance assessments), that the mechanisms put in place in each country persist in the long term and can be scaled up in the country with different sources of funding. The institutionalisation of the PBCRG system in national processes in Bhutan and Cambodia, for example, has allowed the scaling up of the approach in a growing number of local governments, and ultimately a national deployment in almost all vulnerable local governments. The programme is designed in a context where few sources of funding are available for small-scale sub-national adaptation funding investments. In the long term, the programme will facilitate the mobilisation of financing once sustainable and transparent mechanisms are in place and the capacities of the actors have been strengthened for planning informed by climate risks, implementation of the PBCRGs and investment management. This was the case, for example, in Cambodia where, once the LoCAL mechanism was rolled out (phase II), funding was provided by other donors (IFAD's ASPIRE programme, GEF funded Resilient Livelihoods Project).

Community monitoring and evaluation tools will strengthen the impacts of local actions and the accountability of local actors, in line with new decentralisation measures adopted by governments to enhance local budgeting and local governments' financial performance. LoCAL will strengthen/improve/reinforce some of the regional toolkits already in place to cooperate and share

technical capacity and knowledge. Furthermore, the implementation of the LoCAL facility will create significant and valuable technical and institutional knowledge within local communities, but also knowledge exchange between them and those in other SIDS. They share common issues and solutions that can inform the successful implementation of similar finance mechanisms in climate resilience.

The project will facilitate the scale-up of this holistic approach of delivering TA and performance-based grants in Tuvalu and gradual national rollout in the Solomon Islands, Fiji and Vanuatu while contributing to LoCAL replication in other Pacific SIDS. The mechanism deployment process itself allows replication. The programme is a scaling up of the LoCAL mechanism that has been initiated or rolled out across 14 countries in Asia, the Pacific and Africa. The programme aims specifically to continue scaling up LoCAL in Tuvalu and to introduce the approach in the Solomon Islands, Fiji and Vanuatu. The integration of the mechanism within inter-governmental transfer systems will allow its continued deployment in other local governments at the end of the 5 years of the programme, and in the long term in all vulnerable local governments in the countries. Working in 4 countries in the Pacific will provide economies of scale, help generate and test tools with greater replication potential to mobilize financing as well as to contribute to the formalization of an internationally recognized standard to channel and deploy climate finance at the local level and ensure vertical integration of NAP and NDC processes and ensure enhanced direct access for local governments.

Sustainable development

The project is aligned with and contributes to several Sustainable Development Goals (SDGs). In particular, LoCAL will contribute directly to achieving SDG 1: No Poverty and SDG 13: Climate Action. Indirectly the project will contribute to SDG 5: Gender Equality; SDG 6: Clean Water; and SDG 8: Decent Work and Economic Growth. The programme will fund a variety of projects and activities (infrastructure, ecosystem adaptation, equipment, awareness and capacity building) that will each provide cross-cutting co-benefits, including the following:

- Economic: improved critical resilient infrastructure to prevent damage, delays and disruption, and enhance services and operations throughout supply chains. Enhanced support to local stakeholders through technical assistance activities will enhance local conditions and livelihoods, resulting in more dynamic local economies and support green economic recovery;
- Social: improved local governance; improved knowledge and awareness of climate change and climate-proofing responses for the community;
- Gender: the programme will target women's participation in decision-making processes and investment implementation and management; and
- Environmental: positive effects of nature-based adaptation measures, environmentally-friendly agricultural practices, improved forest ecosystem management will further enhance the resilience of the land.

Needs of recipients

In the face of climate challenges, the target countries share several common issues, notably common impacts of climate change and the high dependence of communities on natural resources due to the importance of the agricultural and fisheries sectors. While tourism has become the primary economic driver of growth in Fiji and Vanuatu, Tuvalu and the Solomon Islands have continued to be dependent upon agriculture, fisheries and natural resources. While there are differences in the nature of the dependence upon natural resources, the impacts of climate change across sectors threaten to reverse the development achieved in Pacific SIDS and create a wave of climate refugees as islands become uninhabitable. Local governments are unable to absorb the additional costs associated with climate change adaptation as financial transfers from the central government level are generally insufficient to cover the cost. Inadequate funds are available to identify and support adaptation projects that could potentially generate income. Consequently, the project proposes to directly address these existing vulnerabilities and enhance the climate resilience of local communities by systematically targeting vulnerabilities and supporting and strengthening a variety of local context-specific processes to strengthen resilience. Additionally, it aims to help local actors better anticipate, plan, budget, and implement adaptation actions. This is particularly relevant in the context of COVID-19 where some SIDS are experiencing a reduction in critical foreign exchange gained through key export sectors like tourism.

Country ownership

The LoCAL facility responds to and will be designed in coherence with each country's national frameworks on climate change and decentralisation and is aligned with NDCs and the NAPs as applicable (e.g. Fiji). This concept note has been endorsed for submission to GCF by the NDAs of the four countries, each of which will co-chair the respective national steering committees in their countries. Likewise, national representation is ensured on the regional project board. The design documents (feasibility studies) of the national mechanisms in each country make it possible to anchor the mechanism in their various specific contexts – political framework, institutional framework, complementarities with initiatives in place or in

preparation. A menu of eligible adaptation investments or interventions eligible for adaptation at the local level will be developed in each country, taking into account the specific situation of the country.

Efficiency and effectiveness

As explained in section C.2, interventions require the use of non-repayable grants. Yet, a part of the programme is extended for result-based payments, which is a relevant incentive model in climate finance to bring about both liquidity for the investment but also knowledge and capacity that derives from the design and implementation of those measures at local level. Extensive implementation of the LoCAL mechanism globally and evidenced in monitoring reports for Tuvalu has demonstrated that if targeted TA is delivered and PBCRGs are put in place, performance improvements in enhanced resilience will be possible and climate funds will be effectively and efficiently channelled to the local level with local ownership of climate issues. In general, development finance actors recognise the potential gains in efficiency and effectiveness related to local ownership of climate risks. More specifically, with regard to the proposed mechanism, feedback from current initiatives shows that: (i) the PBCRG incentive system works and contributes to a better consideration of climate issues at the local level, the amount of year-to-year grants being impacted by the relative scores of the previous year; (ii) integrating the mechanism into government systems avoids the creation of parallel planning and funding management systems; (iii) integrating the mechanism into government systems allows efficient scaling (geographic expansion) and facilitates national ownership of the mechanism; and (iv) the use of performance measures ensures a progressive reinforcement of the capacities of the local governments.

One of the main advantages of the LoCAL mechanism is that it requires very few specific systems and procedures, as it builds on those existing at the national level (intersectoral cooperation and coordination with other country-specific initiatives) and is embedded within national and local planning processes thus limiting transaction costs and institutionalising results obtained overtime.

B.4. Engagement among the NDA, AE, and/or other relevant stakeholders in the country (max ½ page)

Please describe how engagement among the NDA, AE and/or other relevant stakeholders in the country has taken place and what further engagement will be undertaken as the concept is developed into a funding proposal.

Project development was initiated as part of a joint effort made between the SPC (the AE) and UNCDF and based on requests from the NDAs of Tuvalu, Fiji, the Solomon Islands and Vanuatu to UNCDF and SPC to develop a climate change adaptation proposal focusing on the subnational level and building on the LoCAL mechanism. The request from Tuvalu made reference to the scale up of the LoCAL mechanism being implemented in the country since 2015. The NDAs requested SPC and UNCDF to support in developing a regional proposal to support increased resilience of communities and local economies through the LoCAL mechanism. This Concept Note has since been endorsed for submission to GCF by the NDAs of each country.

A scoping exercise to assess the conditions to successfully launch the LoCAL mechanism in the Solomon Islands, Vanuatu and Fiji and to scale up the mechanism in Tuvalu took place throughout 2020. This process was followed by a series of consultations with the target Governments to validate the concept note. This included regular exchanges with the NDA and key ministries such as those in charge of local governments, environment and finance, to keep them updated on the Concept Note development process, and also to receive inputs and guidance.

As the Concept Note develops into a funding proposal, additional multi-stakeholder consultations for both the design and implementation phase will take place before the proposal will be endorsed and no-objection letters issued by the NDAs for submission to the GCF.

C. Indicative Financing/Cost Information (max. 3 pages)

C.1. Financing by components (max ½ page)

Please provide an estimate of the total cost per component/output and disaggregate by source of financing.

Components	Indicative cost (USD)	GCF financing		Co-financing		
		Amount (USD)	Financial Instrument	Amount (USD)	Financial Instrument	Name of Institutions
Component 1: Awareness and capacity raised to respond to climate change at the local level and climate change adaptation is mainstreamed into local governments' planning and budgeting systems						
Output 1.1 Awareness and capacities to respond to climate change adaptation at local level are increased	5,435,705	5,385,705	Grants	50,000	Grants	UNCDF

Output 1.2 Climate change adaptation is integrated into local authorities' plans and budgets	2,951,747	2,901,747	Grants	50,000	In Kind	UNCDF
Subtotal Component 1	8,387,452	8,287,452		100,000		UNCDF
Component 2: Adaptation interventions implemented in line with the established PBCRG mechanism						
Output 2.1 Adaptation interventions are implemented in line with PBCRG mechanism	28,681,475	28,581,475	Grants	100,000	Grants	UNCDF
Output 2.2 The PBCRG system is institutionalized to increase the amount of climate finance available to local governments and economies	7,393,180	7,343,180	Grants	50,000	In Kind	UNCDF
Subtotal Component 2	36,074,655	35,924,655		150,000		UNCDF
Monitoring and Evaluation. Knowledge management and Monitoring, Evaluation, Accountability and Learning (MEAL) reporting and evaluation systems are running	1,403,045	1,383,045	Grants	20,000	In Kind	UNCDF
Project Management Costs	2,686,494	2,545,494	Grants	141,000	In Kind	UNCDF
Total Project Financing (USD)*	48,551,647	48,140,647		411,000		

* The budget figures presented in this proposal exclude the accredited entity fee.

For private sector proposal, provide an overview (diagram) of the proposed financing structure.

NA

C.2. Justification of GCF funding request (max. 1 page)

Explain why the Project/ Programme requires GCF funding, i.e. explaining why this is not financed by the public and/ or private sector(s) of the country.

While the institutional and operational context in the selected SIDS is favourable to a larger-scale deployment of the LoCAL programme, climate adaptation remains fundamentally underfunded at the local level due to the prioritisation of essential services provision and the reactive, rather than pre-emptive nature of adaptation expenditure. Given the programme's geographical location (rural, semi-urban and isolated areas in Pacific Islands that are frequently hard to reach) and targeted actors (local governments who do not have stable revenue sources), its interventions are not likely to be financed without support and capacity building. Second, they do not have consistent and reliable revenue sources. Furthermore, in all four countries, local governments are not currently eligible to borrow from the financial sector and funds can only be transferred to local governments as grants. The current context also includes weak banking sectors and available funds; local governments that are not creditworthy; no regulatory frameworks conducive to public sector borrowing; and a lack of bankable projects. Given the public goods nature of LoCAL interventions, non-refundable subsidies to local governments are the most suitable mechanism to fund adaptation investments.

GCF funding is needed to structure and implement a multi-instrument approach that can support both the enabling environment and the mobilisation of additional resources that will scale up the programme in these pilot Pacific SIDs as well as in additional countries currently under exploration by SPC and UNCDF including Kiribati and Papua New Guinea. The project is designed in a context where few sources of funding are available for small-scale, sub-national adaptation investments. Technical assistance matched with PBCRGs through LoCAL presents a unique solution in Pacific SIDS, which will not only create enhanced use of climate finance in some of the most vulnerable countries in the world, but will also support the improvements of technical performance, awareness-raising, good governance, and financial management at the local level which can improve the creditworthiness of local governments over time.

The objective of the programme is directly in line with the GCF's goal of strengthening the domestic capacity of countries to address climate change, as it involves: (i) deploying a climate finance facility led by the government and aligned to national systems; and (ii) contributing to local community adaptation through the institutionalisation of new practices in planning, budgeting, implementation and monitoring of adaptation measures at the local level. Feedback from the first and second phases of LoCAL in Tuvalu and the early stages of the pilot in the Solomon Islands has demonstrated the relevance and feasibility of the LoCAL approach in the Pacific and encouraged the government of Tuvalu to aim for large-scale deployment, transitioning from a pilot project approach to a systemic approach secured over the long run.

Describe alternative funding options for the same activities being proposed in the Concept Note, including an analysis of the barriers for the potential beneficiaries to access to finance and the constraints of public and private sources of funding.

Currently, given the financial and capacity constraints faced by local government, there are no alternative sources of funding for the activities proposed in the absence of the project's interventions. Neither government nor local communities have the means to manage or invest in adaptation measures given the large fiscal and balance of payments gaps in the four countries and the limited fiscal flow of resources from

central government to local government institutions. Furthermore, given the unalienable public good nature of many adaptation investments that would benefit LGs and communities and a lack of incentives and awareness of suitable measures, measures are unlikely to be financed by the private sector in the absence of the project. However, as experienced in other countries, it is expected that the project will enable the systems and capacities to be put in place and that the demonstration effect will attract additional sources of funding. In the long term, the programme will facilitate the mobilisation of domestic and international sources of climate finance. The capacities of stakeholders and actors to mobilise and manage climate finance will be strengthened through planning, mobilisation of own resources and investment management at the local level to ensure sustainability of the PBCRG mechanism and continuation of adaptation investments. Furthermore, the project will enhance private sector demand for, and capacity to develop and deliver, climate-oriented products and services (see section C.3).

Justify the rationale and level of concessionality of the GCF financial instrument(s) as well as how this will be passed on to the end-users and beneficiaries. Justify why this is the minimum required to make the investment viable and most efficient considering the incremental cost or risk premium of the Project/ Programme (refer to Decisions B.12/17; B.10/03; and B.09/04 for more details). The justification for grants and reimbursable grants is mandatory.

Due to the geographical location (rural, semi-urban and remote areas/islands) and the targeted actors (local governments), interventions are not likely to be financed without financial support, technical assistance and capacity building. This situation justifies the use of non-repayable grants, which in this programme are deployed both as TA and capacity building grants, and result-based payment grants in the form of PBCRGs (investment grants). There is therefore a level of incentivisation as well as support for co-financing through the local communities to ensure the durability and eventually self-sustainability of these measures. The local communities are the ultimate beneficiaries of the concessionality that is extended, as beneficiaries of the TA assistance, the knowledge that is generated, the local capacity that is enhanced, as well as being beneficiaries of the food and water security interventions as well as climate-resilient infrastructure that will be built. PBCRGs may be used to fund the following:

- 1. Sectoral Services for Climate Change Adaptation and Risk Reduction:** activities that directly support communities that are vulnerable to climate change through outreach activities, community group strengthening and associated trainings to assist communities to become more climate resilient.
- 2. Climate Proofing of Sector and Community Infrastructure:** comprises of the additional cost (incremental cost) of constructing or adapting general infrastructure and public facilities, for example roads, schools or health facilities, to prevent damage from rising sea levels, extreme weather events and other climate change related processes.
- 3. Investment servicing costs/support costs:** support vulnerability and risk assessments, planning and budgeting, including costing of CC investments, monitoring, evaluation and data-handling related with the operations of the cc activities

In the case of private sector proposal, concessional terms should be minimised and justified as per the Guiding principles applicable to the private sector operations (Decision B.05/07).

NA

C.3. Sustainability and replicability of the project (exit strategy) (max. 1 page)

Please explain how the project/programme sustainability will be ensured in the long run and how this will be monitored, after the project/programme is implemented with support from the GCF and other sources.

To ensure the long-term sustainability of the mechanism in the countries concerned, the program relies on its ownership by national stakeholders through a gradual deployment in the countries. Focusing on performance-based and bottom-up approaches will, in turn, build legitimacy, opportunities, and, ultimately, technical, institutional, and operational sustainability at local levels while facilitating improvements over time and encouraging private sector co-finance of enhanced resilience (discussed below). Sustainability will be ensured as: (i) institutional processes for sub-national climate change adaptation mainstreaming will be in place; (ii) capacities of local governments will be strengthened; (iii) better management of climate risks will make local investments more attractive to financial institutions; (iv) lessons learned will facilitate further improvement of the methodology.

GCF funding is needed to structure and implement a multi-instrument, phased approach (PBCRGs, MEAL etc.), that can support both the enabling environment and the mobilisation of additional resources that can scale up the programme in these pilot Pacific SIDs as well as in additional SIDs. The LoCAL mechanism will be implemented in three phases that ensure that systems are appropriately established, lessons learned are integrated and then systematised to ensure sustainability of the projects interventions.

Phase I: Test - The aim is to test the mechanism in a small number of local governments (between two and four) for one to two investment cycles. It has been successfully conducted in Tuvalu; it is being set up

in the Solomon Islands. It has been demonstrated that capacities of local governments have been improved through the support provided through the implementation of the programme. **Phase II: Consolidate** - integrates the lessons of the first phase. It is deployed to at least 5–10 local governments, in different regions and / or ecosystems. **Phase III: Systematise** - consists of progressively covering all vulnerable local governments and ultimately the entire national territory.

The success of this approach from a sustainability point of view can be illustrated with the examples of Bhutan and Cambodia, the two countries to have benefited from the LoCAL mechanism and which are in the process of deploying phase III. In Bhutan, LoCAL has indeed served as a standard to enhance local climate governance and has been gradually scaled up to cover 100 out of 205 Gewogs as part of the national rollout, with support from the European Union. In Cambodia, since the first piloting in two provinces, LoCAL has been deployed in 50 provinces and districts. In both cases, LoCAL has provided a framework to pursue access to international climate finance through a country-owned mechanism to localise climate action and introducing a learning- and improving-by-doing approach through the deployment of performance-based grants and a system of annual performance assessments. In turn, the mechanism has incentivised local governments to pursue higher standards in climate change adaptation planning, budgeting and management as well as governance and public financial management in general. The LoCAL mechanism can be used to support direct access entities to access climate finance such as the GCF. Examples include Benin (FNEC), Cambodia (NCDDs), Bhutan (BTFEC) and this project led by SPC.

Throughout the implementation of the program, emphasis will be placed on the mobilization of additional domestic and external resources and on the ownership of processes by national and local governments, communities and the private sector to secure sustainability. The capacities of the actors will have been strengthened for planning informed by climate risks, implementation of the PBCRGs and investment management. This was the case, for example, in Cambodia where, once the LoCAL mechanism was rolled out (phase II), funding was provided by other donors (IFAD's ASPIRE programme, GEF-funded Resilient Livelihoods Project).

While they may offer positive economic and / or financial returns, adaptation investments in the four countries are currently not privately funded as, most of the time, investments are perceived as too risky for generally underdeveloped domestic financial sectors. Through LoCAL, adaptation investments can be de-risked through grant finance and better consideration of climate risks and capacity building of local public and private actors contributing to greater attractiveness of local projects to the financial sector by demonstrating their viability.

Based on LoCAL experience in other countries, it is expected that the project will leverage private sector finance and stimulate demand for services in new areas of adaptation. Likewise, it is expected that the private sector will enter new service sectors and markets which may also encourage new technical specifications for technologies that are climate oriented. A study on leveraged finance as a result of UNCDF local development fund pilots which preceded LoCAL deployment showed that in 8 out of the 10 countries studied, the impact of the pilots has had a very significant impact on the scope and ways in which local governments have been supported to deliver service and basic infrastructure from domestic and international, public and private sector finance. It is estimated that the total funds leveraged by these pilots, where UNCDF made a smaller but crucial contribution over the reviewed period in the tune of USD 56 million (for the 10 countries), was in the region of USD 3.5 billion over the period from the original start of the pilot in Uganda in 1997–2017. Similar results will be pursued through engagement of the private sector and with other climate finance donors throughout the project. Furthermore, a strategy to secure additional domestic and international (public and private) sources of climate finance will be developed at the projects mid-term based on findings of the project mid-term review process.

For non-grant instruments, explain how the capital invested will be repaid and over what duration of time.

N/A

D. Supporting documents submitted (OPTIONAL)

- Map indicating the location of the project/programme (Annex 1)
- Diagram of the theory of change (Annex 2)
- Economic and financial model with key assumptions and potential stressed scenarios
- Pre-feasibility study
- Evaluation report of previous project (Annex 3)
- Results of environmental and social risk screening

Self-awareness check boxes

Are you aware that the full Funding Proposal and Annexes will require these documents? Yes No

- Feasibility Study
- Environmental and social impact assessment or environmental and social management framework
- Stakeholder consultations at national and project level implementation including with indigenous people if relevant
- Gender assessment and action plan
- Operations and maintenance plan if relevant
- Loan or grant operation manual as appropriate
- Co-financing commitment letters

Are you aware that a funding proposal from an accredited entity without a signed AMA will be reviewed but not sent to the Board for consideration? Yes No

Annex 1: Map indicating the location of the project.

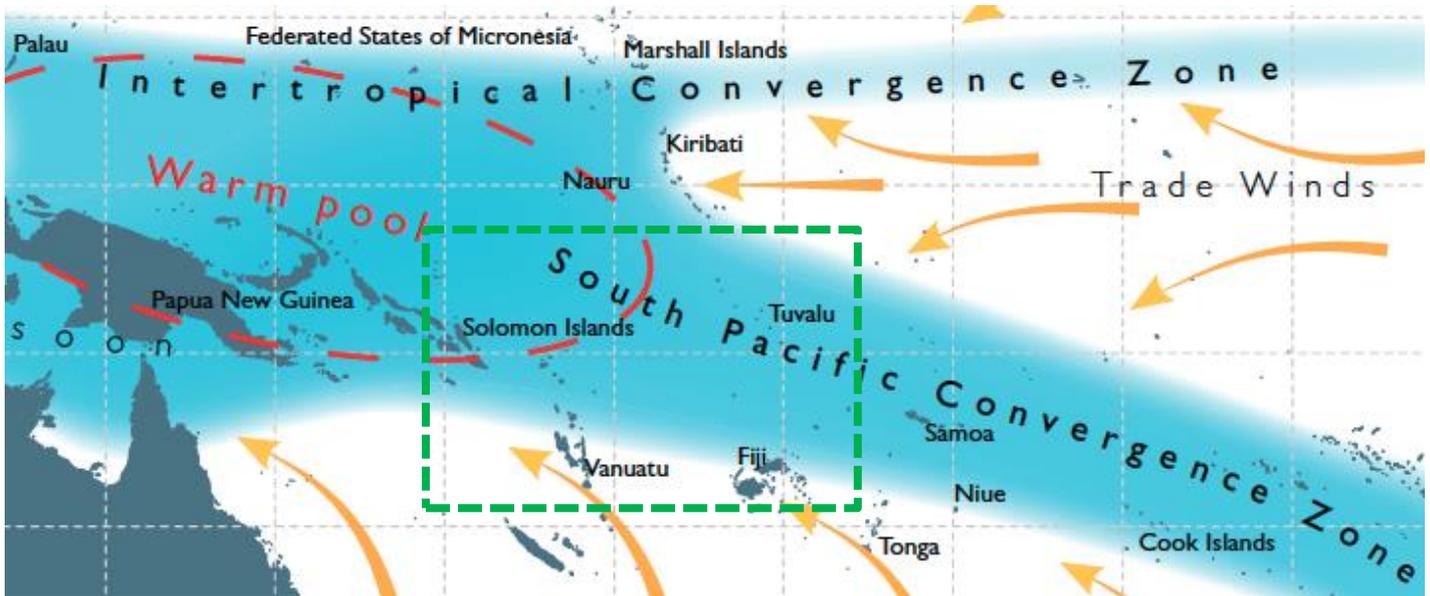


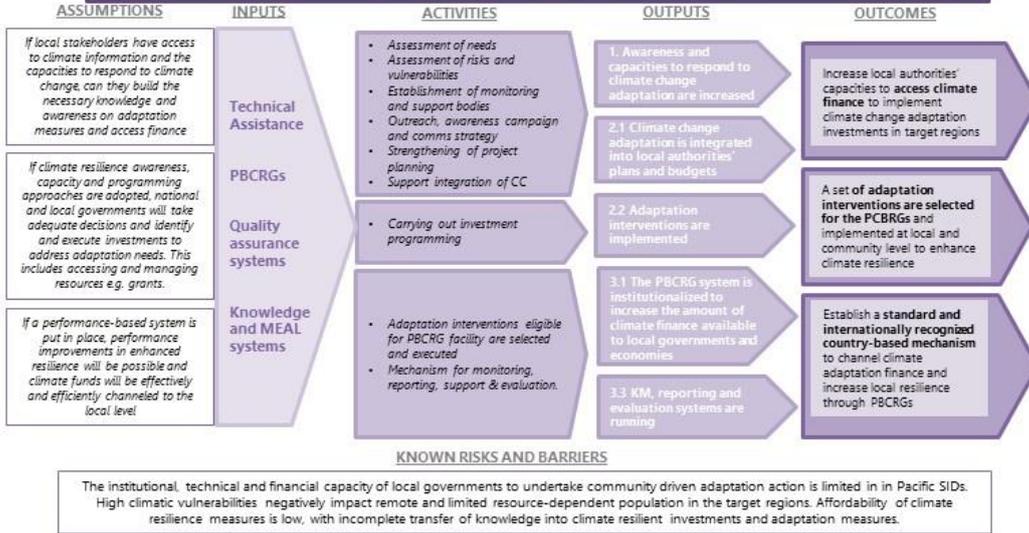
Figure 1: Map indicating the location of the project (green box). The map also demonstrates the average position of major climate features from November to April. Arrows show near-surface winds, blue shading indicates bands of rainfall convergence zones and the dashed red oval shows the West Pacific Warm Pool.

Annex 2: Project Theory of Change diagram

UNDCF-SPC-GCF LoCAL Pacific Theory of Change

PROGRAMME IMPACT

IF the project delivers capacity and awareness activities alongside performance based grants for adaptation interventions and scales up and replicates LoCAL Phase I in Tuvalu to additional Kapules as well as the Solomon Islands (and possibly two other Pacific SIDs), **THEN** climate resilience will be increased, contributing to the achievement of the Paris Agreement targets, national sectoral targets and specific SDG targets. **BECAUSE** the share of climate compatible investments in the key sectors of intervention of the programme (water, health, agriculture, forest ecosystems) will be increased, paving the way for further public and private investment.



Annex 3: Annual Performance Assessment of LoCAL Tuvalu



APA report of
Tuvalu _ 19 July 201

Annex 4: Sample of investment menu – Eligible Projects for PBCR Grants (LoCAL-Tuvalu)

1.1.1 Purpose of the Investment Menu

The strong eligibility conditions introduced by LoCAL for the use of the PBCR Grants are to ensure grants are not used for ‘business as usual’ development but for solely for climate adaptation and risk reduction. In addition it allows for a distinction to be made between climate change ‘mitigation’ and ‘adaptation’ projects. Tracking special earmarked adaptation funding to LGs through Government PFM systems is important for donors as well as Government itself. As presented above, ensuring climate change conditionality requires an integration of CC concerns and opportunities throughout all phases of the LG development process: inputs - procedures – outputs - (and in the longer term) outcomes. The value of introducing CC conditionality therefore goes well beyond the individual CC investments, to strengthening the whole local development process.

The LoCAL investment menu is thus a limiting set of projects, which are clearly related to CC and climate adaptation and risk reduction (CARR) measures. At the same time it provides an overview of adaptation measures, which often goes beyond existing LG projects and it is thus also an important means to inform LG on adaptation opportunities. This has proven to be instrumental in generating more discussion on underlying causes of noted problems and in identifying more structural CARR solutions, and thus in moving away from the often largely singular focus of LGs on infrastructure development.

1.1.2 Categories of Investment Projects

The investment menu has three broad categories of eligible projects: a) Sector services for CARR, including community infrastructure, b) Strengthening climate resilience of infrastructure, and c) Technical support component (up to 10 % of the grant). CARR projects under category ‘a)’ can be fully funded under LoCAL because they are fully attributed to addressing CC impacts. For category ‘b)’ the additional cost of making development infrastructure more resilient to climate change can be funded under LoCAL, while the basic design and construction are to be funded from other Kaupule funds. Category ‘c)’ investments are in support to CARR project research, design, procurement and implementation, for which initially existing capacities of LG may be too low. The latter category is especially relevant for designing CARR projects, which need to address more complex under-lying causes and/or need an integrated approach (see below on CARR project design). In addition some type of expenditures, mostly related to operational and staffing costs, transport and administrative buildings, are explicitly listed as non-eligible expenditures. The full investment menu with detailed description of eligible and non-eligible expenditures is provided in PBCRGS Guidelines.

1.1.3 Sectoral Services for Climate Change Adaptation and Risk Reduction

PBCRG may be used to fund activities that directly support communities that are vulnerable to climate change through outreach activities, community group strengthening and associated trainings in the areas listed below. It is emphasized that PBCRG may only be used to support costs related with climate change activities for communities. Up to 100 % of the costs can be covered for these climate change related activities, but only for public goods in CC affected areas.

Under this category are two sub-categories. The first one (A) comprises strategic interventions at the Kaupule level, which assist in better understanding and addressing climate vulnerabilities and risks at a strategic island level. The second category (B) comprises of sectoral interventions, which in practical ways help communities to increase resilience and to adapt to climate vulnerabilities and risks.

A. Strategic adaptation and risk reduction capacities

- a) **Community campaigns and awareness raising** to understand and identify climate change impacts, vulnerabilities, risks, adaptation measures and to strengthen community resilience to climate change
- b) Development of **community climate change vulnerability and risks maps**, based on local livelihood strategies and environmental context
- c) Developing and updating **CC analysis and strategies**, as part of the Island Strategic Plan and the yearly update of CC summary in the Kaupule Annual Development Plan, through collection of localized data on CC scenarios, -impact and –vulnerabilities. This in order to strengthen climate resilience and strategic outlook of integrated area-based development plans (watershed, eco-systems) at all levels on the island (including considerations for socio-economic development, poverty linkages, local environment and natural resources preservation)
- d) Improved **data collection** on climate change, e.g. weather stations;
- e) Studies on **gender** and climate change and climate change impact on (other) vulnerable groups, to inform strategic plan development and CARR measure identification;

- f) Developing an **island disaster risk reduction and preparedness plan** to reduce the impact of cyclones, including e.g. the design of an early warning system, through **participatory studies** on local climate change vulnerabilities, development of climate change scenarios and localised adaptation measures. This can be integrated in the Island Strategic Plan;
- g) Kaupule level studies and strategic plans for **water resource availability and use sustainability**:
 - Studies on seasonal fluctuations and longer-term changes in rainfall water availability;
 - Development of rainwater management plans to ensure adequate water storage capacity, water use efficiency, and to tackle droughts and extreme weather events;
 - Plans for community operation and maintenance as well as for water use efficiency.
- h) Kaupule level studies and strategic plans for **sustainable natural resource management**, especially related to reef and coastal fisheries and maintaining natural island vegetation;
- i) Support to integrating above listed studies and strategies into Kaupule Annual Development Plans and Budgets;
- j) Development of **capacity development (CD) strategy and CD plan** for Kaupule councils, staff, organizations and communities on climate change resilience and –adaptation. CD activities are not allowed to be standalone events and need to be conducted as part of actual implementation of LoCAL activities associated with local CC vulnerability assessments, CARR activity planning, CARR activity design and costing, CARR activity implementation and improved operation and maintenance.

B. Sectoral Climate Change Interventions

a) Water Resources Management

- Integrated community water catchment and supply systems, combining household, community and Kaupule level rainwater catchment and storage facilities, including new or expansion of roof water harvesting and storage facilities for community buildings, schools, health posts, churches, and other local institutions. Facilities for individual households are excluded (private good); household needs have to be addressed at the community level.
- Where feasible this can also include appropriate water distribution points, with water pressure towers and solar pumps to distribute water over island communities during periods of drought when household water storage capacity is depleted. This could complement or replace the existing water distribution through transport by tractor. This would require a suitable fee collection system;
- Community level training in water use efficiency and rainwater harvesting practices;
- Community organization strengthening for water supply operation and maintenance, for water use efficiency and for hygiene behaviour;

b) Agricultural and Coastal Fishery development and Food Security

- Training of communities on agricultural crop diversification and on resilient farm/garden management practices, including on combining traditional and modern varieties to balance resilience with nutrition intake and speed of growth cycles;
- Establishing of community nurseries for more climate resilient crop varieties (drought and saltwater intrusion), provision of more resilient seeds and seedlings to communities;
- Community level demonstrations for adoption of climate resilient practices and crop varieties;
- Community level water efficient irrigation (drip, sprinkler), including studies on water availability and agricultural water use;
- Improvement of fish habitats in reef and coastal areas, including corral regeneration activities;
- Improved animal health services, protection of animals against disease and heat, vaccination and deworming campaigns, promotion of animal welfare.

c) Community-based Natural Resource Management and Coastal protection

- Establish protected areas for natural resources, especially related to protection of island and islet vegetation and natural habitat, and protection of reef and coastal habitats, including monitoring arrangements;
- Develop plans and action for sustainable management of natural resources;
- Community waste management programmes for solid and liquid waste;
- Prevention of livestock waste (e.g. from pig farming) causing ground water pollution and pollution of coral reefs through coastal water run-off;
- Plans and action for prevention of corral gravel extraction;
- Small infrastructure works for coastal erosion and wave action protection (adequate design required to address complexity of coastal morphology disruption)
- Tree and scrub planting to reduce coastal erosion (using different species for complementary characteristics) and to create an in-land coastal zone barrier for wind and wave surge action;

d) Cyclone protection and risk reduction

- Upgrade existing infrastructure to function as cyclone refuge, as e.g. community buildings, schools, health posts, churches, other institution, as identified under the island disaster risk reduction and preparedness plan (or Island Strategic Plan):
 - Increased water catchment and storage capacity for emergency situations;
 - Strengthening buildings structurally to withstand increased wind and wave activity;
 - Increased floor levels to avoid flooding during cyclone wave activity, if possible through constructing cisterns which also function as water storage facility;
 - Construct safe rooms to safeguard communication equipment, emergency supplies, medicines and other valuables, so they can be used during and after the disaster for emergency assistance and recovery;
 - Protect people inside refuge buildings from flying objects during cyclones by closing open spaces and windows with e.g. mesh;
- Anchoring and protection of household, community and Kaupule PVC water tanks to protect them against wave surge activity and the risk of being flushed out to the ocean during a cyclone;
- Early warning system development;
- Protecting of radio and other communication equipment, including antennas, against storm and wave surge activity. The protection of assets of public utility companies is the responsibility of these public enterprises and should not be covered under the Kaupule Plan and Budget. Because of the extreme importance of communication before, during and after cyclones, LoCAL has created this investment exception;
- Provide community refuge facilities for livestock, which are at risk of drowning and being flushed out to the ocean during a cyclone due to wave surges;

e) Human Health

- Awareness raising of communities and outreach staff on impacts of climate change on disease transmission and occurrence;
- Awareness raising on environmental hazards and risks caused by pollution and solid waste;
- Facilitating community agreement and capacity on improved community solid waste management;
- Training of mothers on child nutrition, clean water and hygiene;

f) Education

- Developing climate change awareness programmes, nature clubs, home gardening plots, waste management programmes, water use efficiency programmes and other exposure activities for children to increase awareness on CC and environmental sustainability, as well as to create knowledge and skills for adaptation;
- Engage teachers and children in community programmes for increased resilience;

1.1.4 Climate Proofing of Sector and Community Infrastructure

The additional costs caused by climate change may be funded from PBCRG for new or existing infrastructure in this category (needs minimum 20 % co-funding from other Kaupule sources of funding). For any infrastructure project, the Kaupule must certify that the project design is according to climate resilient standards for which, if required, a design expert can be recruited (under project support cost). The design can include undertaking location, geotechnical and environmental studies prior to improving infrastructure projects design and e.g. water demand and availability studies for drinking water systems or calculation of wind strengths and wave surge levels for cyclone activity.

The below listed CARR Activities for improved climate resilience of existing small-scale community infrastructure works in the Kaupule are eligible. Please note that there is some overlap with category I because of very small scale of outer islands and the specific rainfall dependency and water scarcity context in Tuvalu.

a) Water Supply, Sanitation and Hygiene

The PBCR Grants can be used for any of the following activities to improve the climate resilience of an existing or already planned water supply scheme and sanitation and hygiene project

- Community and village water supply systems upgraded to cope with climate change
- Increase the water storage capacity of a tank or reservoir (for example, additional or larger tanks and additional small pumps or lengths of pipe to connect additional water storage facilities to the distribution network);
- Increased rainwater utilization through e.g. rainwater harvesting and storage systems;
- Improving erosion protection for pipes and structures, including bio-engineering measures;
- Locally made solid waste collection bins/pits and preparation of proper local solid waste disposal sites;
- Constructing of community toilets and sanitation facilities for common public use, together with hygiene and CARR awareness training;
- Improved drainage of public areas in communities for improved sanitation and hygiene;

- Cost of flood protection of solid waste disposal facilities (prevent solid waste entering groundwater or sea during flooding)
- Improved water treatment facilities for services centres to ensure safe water

b) Community vegetable garden irrigation

The PBCR Grants can be used for any of the following activities to improve the climate resilience:

- Small drip irrigation schemes for community-based vegetable cultivation;
- Increase the water storage capacity.

c) Community Buildings (for example a school, health post, community centre, local market)

The PBCR Grant cannot be used to make settlements and buildings bigger (more rooms) or for structural improvements (unless for purpose of creating a cyclone refuge as presented under category I). The PBCR Grant can be used for any of the following activities to improve the climate resilience of the community building:

- Strengthen the roof in order to withstand extreme weather events with storms and high intensity rainfall;
- Improved drainage of the building area, erosion protection and slope stabilization measures, especially bio-engineering, to protect the building from e.g. increased surface water run-off and wave surges;
- Wind breaks to protect community buildings, house clusters and agriculture fields (crops) and in general along the coastline with added functionality of stabilizing coastal areas;
- Provide a water harvesting, storage and supply facility for public use;
- Improved community infrastructure/building maintenance procedures and capacities, including strengthened community capacity, to deal with higher maintenance requirements due to extreme weather events;
- Climate proof storage facilities for agricultural produce and other community assets;
- Climate proofing of rural markets, including drainage facilities;
- Undertaking location studies (geotechnical, environmental, flood levels) to ensure safety of existing buildings;
- Coastal protection structures to protect community buildings;
- Raise the floor level of the building or providing small embankments to protect the structure from flooding, improve access to the building during flood times by making an elevated footpath to the building;
- Provide sanitation (latrines) at the building for public use.
- Improved, climate proofed sheds/pens for livestock

d) Measures to protect Communities

The PBCR Grant can be used for infrastructure investments to improve the climate resilience of communities by any of the following activities:

- Support to protect drainage channels and increased size of drainage channels
- Erosion protection and slope stabilization measures, especially bio-engineering, to improve community protection against damages caused by increased extreme weather events;
- Strengthening or additional coastal protection in hot spots where communities are at risk;
- Stream training works and erosion protection, especially bio-engineering, of local streams to improve community protection against damages caused by increased extreme weather events;
- Measures to protect agricultural land and agricultural produce (storage facilities) from flooding, erosion and wave surges;
- Cost of re-locating community buildings (but not cost of buying land for re-location and not cost of complete re-construction)

e) Community Access Roads

The PBCR Grants cannot be used to increase the length of the road, provide pavement, nor for new road construction. The PBCR Grants can be used for any of the following activities to improve the climate resilience of the community access road:

- Provide additional culverts, stone soling causeways or other type of small water crossings, upgrade side drains to lined drains;
- Small gabion or dry walls with integrated bio-engineering measures to stabilize slopes and ensure adequate road width;
- Increase the height of the road embankment in parts where the road can be affected by flooding;
- Planting trees/vegetation along the road for shoulder and slope stabilization and erosion protection;
- Provide over short distances (<200 m) stone soling pavement in parts of the road going through marshy areas and/or are vulnerable to water logging, water flowing over the road or damage by floods;
- Stream training works and erosion protection for existing water crossing to improve resilience against extreme weather event related risks.