



Pacific Community (SPC)

Government of the Republic of Fiji

**GLOBAL CLIMATE CHANGE ALLIANCE PLUS: SCALING UP
PACIFIC ADAPTATION (GCCA+ SUPA) PROJECT**

**PROJECT DESIGN DOCUMENT
Output 3**

Scaling up the Soasoa drainage system, Fiji

May 2020

Scaling Up the Soasoa drainage system, Fiji

Project Summary

This design document describes the framework for Fiji's activities under Output 3 "Scale up resilient development measures in specific sectors" of the Global Climate Change Alliance Plus - Scaling up Pacific Adaptation (GCCA+ SUPA) Project. The Output 3 activities, described here for Fiji, will be implemented in conjunction with related activities under Output 1 "Strengthen strategic planning at national levels" and Output 2 "Enhance the capacity of sub-national government stakeholders to build resilient communities" of the GCCA+ SUPA project.

Scaling up in the context of the GCCA+ SUPA Project is about enhancing, expanding, replicating and/or adding a complementary approach to existing, successful climate change adaptation interventions. The project will not set up demonstration projects but will instead use the lessons learnt from previous demonstration projects and apply them to scale up sector resilience.

The government of Fiji has selected coastal protection as their focus sector for Output 3. The overall objective of the project is resilience of vulnerable coastal communities of Macuata province, Fiji enhanced through comprehensive planning and scaled up infrastructure. The specific objective is the implementation of prioritised climate resilient flood control measures in the Soasoa watershed area. The three key result areas are: (1) Development of a watershed management plan (2020-2050) for Soasoa Drainage System; (2) Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system; (3) Implementation of the prioritised scaling up measures for the Soasoa drainage system.

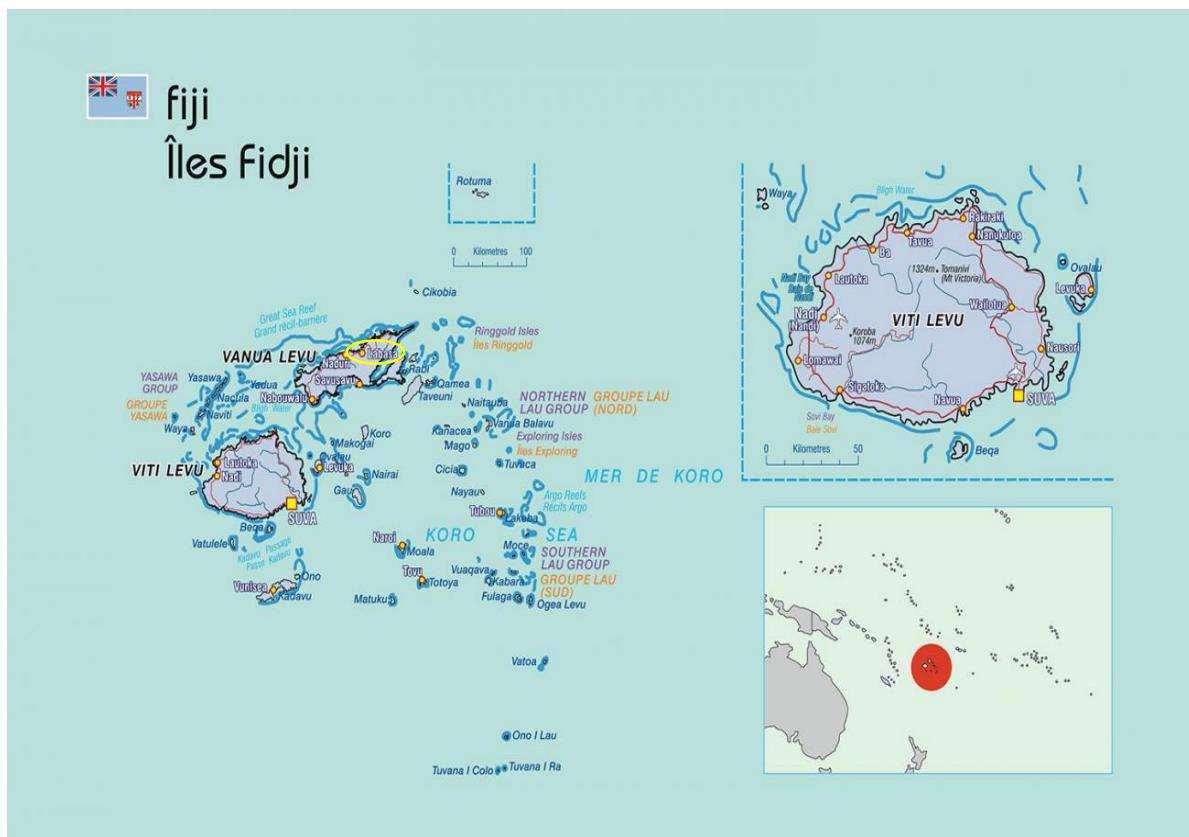
Fiji like many island countries is increasingly experiencing the negative impacts of climate change. These impacts exacerbate the vulnerability of coastal communities' and assets to coastal inundation and flooding. Following a national consultation in November 2019, the Fiji SUPA project key stakeholders determined that the SUPA project will focus on coastal protection. The largely coastal sugarcane farming Soasoa Drainage area in Labasa on the island of Vanua Levu was selected. The project will directly benefit the 4,140 persons (2017 Census) persons, in three major communities in the Soasoa watershed area. The indirect beneficiaries of the project include 35,947 persons and include people living and commuting along the Labasa-Wainikoro highway.

The project will involve the national government agencies and wherever possible Non-Government Organizations (NGO) and the private sector. The project is about enhancing the resilience of people and communities, and in this respect a participatory and community-led approach is adopted throughout the design and implementation with a particular emphasis on applying a gender-sensitive/rights-based approach.

The project will develop a 30 year Watershed Management Plan that will guide the future management of the Soasoa catchment and drainage area over the time frame to 2050. Using this plan as a guide, the project aims to build resilience especially to coastal inundation and flooding through upgrading of coastal protection measures. Coastal protection measures will likely include activities such as construction and replacement of floodgates, raising of the levee along the most vulnerable areas, upgrading of spillways and widening of existing channels.

The implementation period of this project will commence on the date of signature of this Project Design Document and end on 31 December 2022. The project will be implemented by the Ministry of Waterways and Environment, in collaboration with the Ministry of Economy. The project is consistent with Fiji's National Adaptation Plan 2018, National Climate Change Policy 2018-2030 and 5-Year & 20-Year National Development Plan.

Map of Fiji



Map showing Fiji SUPA project site circled in yellow namely Labasa including the Soasoa drainage area.

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List of Abbreviations

ACP	Africa, Caribbean, Pacific countries
ACSE	Adapting to Climate Change and Sustainable Energy
ADB	Asian Development
BPW	Bureau of Public Works
BSRP	Building Safety and Resilience in the Pacific
CSIRO	Commonwealth Scientific, Industrial Research Organisation (Australia)
CCCDR	Cabinet Committee on Climate and Disaster Risk
DRM	Disaster Risk Management
EPS	Ecological Purification System
EU	European Union
EUR	Euros
FRDP	Framework for Resilient Development in the Pacific
GDP	Gross Domestic Product
GCCA: PSIS	Global Climate Change Alliance: Pacific Small Island States project
GCCA+ SUPA	Global Climate Change Alliance Plus: Scaling Up Pacific Adaptation
M&E	monitoring and evaluation
NAP	National Adaptation Plan
NCCCC	Fiji National Climate Change Coordination Committee
NDMO	National Disaster Management Office
NGO	Non-governmental organisation
PAN	Protected Area Network
R2R	Ridge to Reef
RENI	Readiness for El Niño
SDG	Sustainable Development Goal
SPC	Pacific Community
SPC-GEM	Pacific Community Geosciences, Energy and Maritime Division
SPC-LRD	Pacific Community Land Resources Division
SPC-RRRT	Pacific Community Regional Rights Resources Team
SPC-SDP	Pacific Community Social Development Programme
UN	United Nations
UNDP	United Nations Development Programme
USAID	United States Agency for International Development

Signature Page

For Ministry of Economy

Name & Position	Signature	Date
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For Ministry of Waterways and Environment

Name & Position	Signature	Date
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For Pacific Community

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1. INTRODUCTION

This design document describes the framework for Fiji's activities under Output 3 "Scale up resilient development measures in specific sectors" of the Global Climate Change Alliance Plus - Scaling up Pacific Adaptation (GCCA+ SUPA) Project. The Output 3 activities, described here for Fiji, will be implemented in conjunction with related activities under Output 1 "Strengthen strategic planning at national levels" and Output 2 "Enhance the capacity of sub-national government stakeholders to build resilient communities" of the GCCA+ SUPA project. The government of Fiji has selected coastal protection as their focus sector for Output 3.

This section of the design document describes the background to Fiji and the background to the SUPA Project.

Background to Fiji

Geographical setting

The Republic of Fiji is located in the south Pacific, 1770km north of New Zealand. It is an archipelagic small island developing state with over 332 volcanic islands and 522 smaller islets. It has a total land area of 18,272km² and an Exclusive Economic Zone (EEZ) of 1,282,978 km². Only 110 islands are permanently inhabited. The capital is Suva City on the island of Viti Levu in the province of Rewa. The majority of the population live on the two main islands of Viti Levu and Vanua Levu. The population of Fiji is 884,887 (2017 Census) 55.9% of which live in urban areas. Ba was the most populous province with its 247,708 residents accounting for 28.0% of Fiji's population. Naitasiri and Rewa province are the second and third populous provinces having 177,678 and 108,016 residents respectively. The majority of Fiji's population, assets and infrastructure are located in coastal areas.

The economy is dominated by tourism, agriculture, overseas remittances, manufacturing and construction. The tourism and agriculture sectors are also among the largest employers and are heavily reliant on a healthy and productive natural environment. Fiji is rich in natural resources, and also exports timber, minerals, fish and fish products, manufactured goods and agricultural produce. Its main sources of foreign exchange are tourism and sugar. Tourism arrivals in 2018 were 870,309. The service sector dominates the economy, contributing more than 80% of gross domestic product (GDP) and employing around half of the population. In the service sector, tourism employs approximately 119,000 Fijians contributing above 30% of Fiji's GDP. In 2018 Fiji's per capita GDP stood at US \$6,208.

The principal economic challenge confronting the country is to ensure the long-term viability of its economy in the face of increasing natural hazards, climate change and loss of preferential market price of sugar with the European Union. Natural hazards and climate change represent a major obstacle to Fiji's development aspirations. Tropical cyclones have already affected GDP in a significant manner. Tropical Cyclone (TC) Winston in 2016 caused damages amounting to FJD \$2 billion, or 20% of GDP. The greatest opportunity for sustained growth in the Fijian economy is believed to lie in nurturing new and emerging growth sectors and diversifying existing major economic sectors particularly the tourism and agriculture sector.

Vulnerability and climate change projections for Fiji

Climate projections for Fiji based on the global climate models show that for the period to 2100:

- There is *very high confidence* that El Niño and La Niña events will continue to occur in the future, but there is little consensus on whether these events will change in intensity or frequency;
- There is *very high confidence* that annual mean temperatures and extremely high daily temperatures will continue to rise;
- There is a range in model projections in mean rainfall, with the model average indicating little change in annual rainfall but an increase in the November–April season (*low confidence*), with more extreme rain events (*high confidence*);
- There is *low confidence* that the proportion of time in drought is projected to decrease slightly;
- There is *very high confidence* that ocean acidification is expected to continue;
- There is *very high confidence* that the risk of coral bleaching will increase in the future;
- There is *very high confidence* that sea level will continue to rise; and
- There is *low confidence* that the wave height will decrease across the Fiji area in the wet season, with a possible small increase in dry season wave heights.
- Satellite data indicate sea level has risen in Fiji by about 6 mm per year since 1993. This is larger than the global average of 2.8–3.6 mm per year.

(These climate projections are based on the 2014 Australian Bureau of Meteorology and CSIRO Report: Climate variability, extremes and changes in the Western Tropical Pacific: New science and updated country reports¹).

These changes in climate are likely to exacerbate coastal inundation, water and food security issues in Fiji.

National policies and strategies

Climate change and disaster risk management, coastal protection, food and water security, and social inclusion are among the key priorities for Fiji and critical to achieve various policy and strategic objectives to achieve sustainable development. Among the key policies are the following:

- National Climate Change Policy 2018-2030
- National Adaptation Plan 2018
- 5-Year & 20-Year National Development Plan (2017)

¹

https://www.pacificclimatechange.net/sites/default/files/documents/PACCSAP_CountryReports2014_Ch5Fiji_WEB_140710.pdf

Related projects and Activities

Listed below are some of key related projects and activities that are presently ongoing in Fiji.

Project/Activity	Status
Global Climate Change Alliance Plus Intra ACP – Pacific Adaptation to Climate Change and Resilience (GCCA+ Intra ACP PACRES)	Ongoing
Institutional Strengthening in Pacific Island Countries to Adapt to Climate Change (ISACC)	Ongoing
GEF/Ridge to Reef (R2R): Regional component focuses on demonstrations, governance and knowledge management. The national component aims to preserve biodiversity, ecosystem services, sequester carbon, improve climate resilience and sustain livelihoods through a ridge to reef management of priority water catchments on the main islands of Fiji	Ongoing
UN Women, Increasing Community Resilience through Empowerment of Women to Address Climate Change and Natural Hazards Programme.	Ongoing
EU-GIZ/ - Adapting to climate change and sustainable energy (ACSE) – Fiji Sustainable Energy Hybrid Power Project (FSHPP)	Ongoing
EU Intra ACP/NDMO/SPC, Building Safety & Resilience in the Pacific (BSRP) – Planning for community based disaster risk resilience	Ongoing
USAID Climate Ready Project	Ongoing

About the SUPA Project

Description of the overall SUPA project

Climate change and natural disasters are among the greatest challenges jeopardising and undermining the ability of all countries, in particular Pacific countries, to achieve the sustainable development goals and reduce poverty. The Global Climate Change Alliance Plus – Scaling Up Pacific Adaptation (GCCA+ SUPA) project falls under the GCCA+ flagship initiative, which has three priorities: (i) mainstreaming climate change issues into poverty reduction and development efforts; (ii) increasing resilience to climate related stresses and shocks; and (iii) Supporting the formulation and implementation of concrete and integrated sector-based climate change adaptation and mitigation strategies.

The GCCA+ SUPA project is about scaling up climate change adaptation measures in specific sectors supported by knowledge management and capacity building. The 4.5-year project (2019 – 2023) is funded with EUR14.89 million from the European Union (EU) and implemented by the Pacific Community (SPC) in partnership with the Secretariat of the Pacific Regional Environment Programme (SPREP) and the University of the South Pacific (USP) in collaboration with the governments and peoples of Cook Islands, Federated States of Micronesia (FSM), Fiji, Kiribati, Republic of the Marshall Islands (RMI), Nauru, Niue, Palau, Tonga and Tuvalu.

The overall objective is to enhance climate change adaptation and resilience within ten Pacific Island countries. The specific objective is to strengthen the implementation of sector-based, but integrated, climate change and disaster risk management strategies and plans.

The three key outputs for the GCCA+ SUPA project are:

1. Strengthen strategic planning at national levels;
2. Enhance the capacity of sub-national government stakeholders to build resilient communities; and
3. Scale up resilient development measures in specific sectors.

The activities will adopt a gender-sensitive and rights-based approach throughout and will take into account lessons learnt and wise practices from the regional, national, sub-national and community-based projects and programmes implemented over the last decade.

The Action will contribute to the *Framework for Resilient Development in the Pacific (FRDP)*, the *Sendai Framework for Disaster Risk Reduction*, the *Paris Agreement* to the *United Nations Framework Convention on Climate Change*, and the *Sustainable Development Goals*, especially Goal 2: zero hunger, Goal 3: good health and well-being, Goal 6: clean water and sanitation and Goal 13: climate action, Goal 14: life below water and Goal 15: life on land.

The SUPA project in Fiji

Fiji like many island countries is increasingly experiencing the negative impacts of climate change. These impacts exacerbate the vulnerability of coastal communities' and assets to coastal inundation or flooding.

The Fiji National Climate Change Policy 2018 and National Adaptation Plan 2018 identified coastal protection as an area needing priority actions and interventions. Following an Inception and Planning Workshop in March 2019, the Fiji SUPA project key stakeholders selected to focus the SUPA project on coastal protection. The Soasoa Drainage area in Labasa, on the island of Vanua Levu in the Macuata province was selected.

The Fiji government sees climate-resilient infrastructure as a critical measure for adaptation particularly along coastal areas and areas that have been reclaimed. This is evident in NAP with short, medium, and long terms strategies outlined to develop climate-resilient infrastructure to better its adaptation efforts. The Soasoa drainage area is largely reclaimed land that is used for coastal agriculture and is dominated by sugarcane farming.

In the Soasoa drainage area levees protect the reclaimed area and a series of floodgates discharge water during low tide. The infrastructure was designed in the 1970s and there is now a need to strengthen this infrastructure to address changes in the climate such as rising sea levels, changing rainfall patterns and extreme rainfall events and associated runoff. This adaptation measure supports the Fijian Government's efforts to enhance the resilience of vulnerable coastal communities to climate change through the scaling up of drainage and coastal protection infrastructure with the integration of ecosystem-based adaptation.

The project will develop a 30 year watershed management plan for the Soasoa drainage area to guide the management of the basin over the next 30 years and the SUPA project activities. The project's on-the-ground activities aim to build the resilience of the assets and communities living close to the Soasoa drainage area to coastal flooding. This will be achieved by strengthening the levee and drainage infrastructure to adapt to high precipitation levels and sea level rise that have contributed to the increasing incidents of coastal flooding in the recent past for the Soasoa drainage community.

The 2017 population estimate for the Soasoa watershed area where prioritised coastal protection infrastructures will be built are shown in the table below. These are the direct and indirect beneficiaries of the coastal protection infrastructural project. It is anticipated that the population of not only the Soasoa drainage area but the wider Soasoa watershed and Labasa area population will also benefit from the SUPA project watershed management plan.

Population figures (2017 census) for the direct and indirect beneficiaries of the SUPA Project

State	Total population 2017 census
Direct Beneficiaries	
Soasoa Drainage Area Communities	729
Vunivau Village	3139
Vuo	272
Total	4,140
Indirect Beneficiaries	
Labasa	27,949
Wainikoro	3563
Valebasoga	1504
Nagigi	267
Vunika	1403
Naleba	495
Vunivutu	340
Vuniyalala	277
Malau	149
Total	35,947

Under Key Result Area (KRA) 1 of the Fiji SUPA project, management of the Soasoa watershed will be improved. Management measure(s) will include the development of a 30 year (2020 – 2050) watershed management plan for the Soasoa watershed. This will also include development of an implementation action plan to support the management plan and inclusive community and stakeholder consultations.

KRA 2 of the Fiji SUPA project will focus on preparing coastal protection infrastructural designs. This will include the preparation of a topographical survey and detailed engineering design of the prioritised scaling up measures identified for the Soasoa drainage system, and environmental screening.

The third KRA will focus on implementing the prioritised scaling up measures designed for the Soasoa drainage system. This will include the construction of a floodgate, replacement of flap gates, raising the levee along the most vulnerable areas, upgrading of existing spillways and widening of the channel in the selected SUPA project site.

The SUPA project will adopt a gender-sensitive/rights based approach throughout the design and implementation period with the assistance of SPC's Social Development Programme and Regional Rights Resources Team.

The Ministry of Waterways and Environment will lead in the implementation of the Fiji SUPA project, in partnership with the Ministry of Economy-Climate Change and International Cooperation Division.

Rationale

Based on the foregoing justification and rationale for the SUPA project in Fiji as follows:

- The sector selected by Fiji is one of the five sectors identified in the EU Delegation Agreement as priority sectors needing scaling up interventions for the SUPA project.
- The identified scaling up measure is an effective and tested measure that has elements of sustainability and can be implemented within the timeframe of the SUPA project.
- The selected scale up measure has socio-economic benefits for the communities and can be implemented using an evidence-based gender-sensitive and rights-based approach
- The selected scale up measure fits within the scope of the SUPA project budget.
- The geography and location of Fiji makes its people highly vulnerable to disaster and climate risks.
- Future projections for climate changes show a very high confidence in the El Niño/La Niña patterns continuing through to 2100; added to which there is a very high confidence in the projected increase in annual mean and daily extreme temperatures, and in sea level rise. These projections will continue to increase the vulnerability of persons living in Fiji.
- The government of Fiji, through its policies, strategies and plans, places a high priority on up-scaling coastal protection infrastructures.
- The SUPA project will provide tangible outcomes that will help the people of Fiji cope with future coastal inundation, water and food security challenges.
- Adopting a gender-sensitive/rights-based approach will ensure that the principles of equality and equity are provided to rights holders in Fiji.

2. PROJECT SELECTION PROCESS

This section provides a timeline of the planning activities that have led to this Project Design Document. Activities are listed below in chronological order.

March 2019: The SUPA Planning and Inception Meeting was held in Suva from 4th - 6th March 2019. The project was introduced to various stakeholders and partners including representatives from SUPA project countries namely Cook Islands, Federated States of Micronesia (FSM), Fiji, Kiribati, Republic of the Marshall Islands (RMI), Nauru, Niue, Palau, Tonga and Tuvalu. Participants contributed to the development of the draft criteria for scaling up climate change adaptation interventions under Output 3 of the project.

August 2019: Coastal protection was selected as the focus sector by the National Adaptation Plan (NAP) Committee and the Soasoa Drainage Basin was identified as the specific location.

October 2019: A consultation meeting was held in Fiji (Labasa) on 1 October 2019 to introduce SUPA to the key stakeholders made up of the Ministry of Waterways and Ministry of Economy-Climate Change and International Cooperation Division to help confirm their selection of a focus sector and develop a draft concept note. Invited partners were asked to come prepared with a list of activities they want scaled up in SUPA.

October 2019: A concept note was submitted by Fiji and was approved by EUD.

November 2019: A project design workshop was held in Labasa, Fiji 1 November 2019. There were 17 participants (F=3, M=14) from Ministry of Waterways and Environment, Ministry of Agriculture, Fiji Sugar Cooperation, University of the South Pacific and other local stakeholders including the local farmers association, local advisory council, and local village representative(s) among others, as well as SPC. The objectives, KRAs and budget were discussed and agreed. Representatives from other government ministries were not able to attend due to various reasons.

March 2020: The full Project Design Document was submitted for review and signature.

3. DETAILED PROJECT DESCRIPTION

This section describes the overall objective, specific objective and outputs, as well as the logical framework that is used to monitor progress. The section also includes the project budget and the schedule.

Overall Objective

Vulnerable coastal communities of Macuata province, Fiji, more resilient to climate change

Specific Objective

Comprehensive approach to the management of the Soasoa watershed, incorporating climate resilient flood control measures, adopted.

Key result areas and activities

KRA 1: Development of a watershed management plan (2020-2050) for Soasoa drainage system

1.1 Consultancy to prepare a watershed management plan for the Soasoa drainage catchment

This will involve contracting a policy development and water management consultant team to lead and coordinate the development of a Watershed management plan for the Soasoa drainage area including convening community and stakeholder consultations. The consultant team will also develop an implementation action plan as part of the watershed management plan.

1.2 Seek endorsement by Cabinet for the Soasoa watershed management plan

The Ministry of Waterways and Environment in collaboration with the water management consultant team will seek endorsement by Cabinet of the final watershed management plan developed for the Soasoa drainage area within the SUPA project timeframe.

1.3 Preparation and delivery of a communication plan

This will involve the contracting of a local communications consultant to lead and coordinate the development of a communications plan for the Fiji SUPA project. The communications plan will include identification of strategic communication goals and objectives, target audiences, key messages, methods of communication, channels of communication, branding, reporting formats etc. Communications will be an important part of the 3-year implementation period, especially recognising that the SUPA project only has funding for some of the required activities. It is important to realistically manage the expectations of the people residing in the project area and its environs.

KRA 2: Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system

2.1 Topographical surveys of the prioritised areas

The Fiji Ministry of Waterways will conduct a topographic survey of the Soasoa watershed area and produce a topographic map to inform the watershed management plan and design and construction of the selected flood control measures to be implemented under SUPA project and future projects. This will be an in-kind contribution to the SUPA project by the Fiji government drawing on from its in-house qualified staff and resources.

2.2 Preparation of design documents for the prioritised measures

The Ministry of Waterways and Environment will develop detailed engineering designs for the prioritised flood control measures likely including engineering drawings for one floodgate, one flapgate, raising of levee by 0.2m along identified vulnerable areas and the widening of existing channels. This will be an in-kind contribution by the Fiji government to the SUPA project using their in-house qualified engineers, support staff and resources.

2.3 Preparation of procurement documents

This will involve the development of the necessary procurement documents, including a Request for Proposals (RFP), terms of reference, detailed designs, and materials specifications by the Ministry of Waterways and Environment. This will be an in-kind contribution by the Fiji government to the SUPA project using their in-house qualified engineers, support staff and resources.

2.4 Environmental screening and preparation of Environmental Management Plan/or Environmental Impact Assessment

This will involve the Department of Waterways submitting a project proposal for the planned SUPA project activities (i.e. construction of flood protection measures in the Soasoa drainage area) to the Department of Environment to conduct environmental screening and provide a decision on whether the SUPA project will need to prepare an Environmental Management Plan (EMP) or conduct a full Environmental Impact Assessment (EIA). If required, the SUPA project will hire an environmental and engineering consultant to prepare an EMP or EIA.

KRA 3: Implementation of the prioritised scaling up measures for the Soasoa drainage systems

3.1 Construction of the floodgate

This will involve the contracting of a construction and structural engineering contractor to construct a 2 barrel floodgate adjacent to the existing 4-barrel floodgate in the Soasoa drainage area.

3.2 Replacement of the flapgate

This will involve the contracting of a construction and structural engineering contractor to construct and upgrade one identified existing 1-barrel flapgate to a 2-barrel floodgate in the Soasoa drainage area.

3.3 Materials for raising the levee by 0.2m along the most vulnerable areas

This will involve the identification of the most vulnerable areas to flooding along the existing levee and purchasing the necessary materials for raising of selected portion of that area by 0.2m. Raising of the levee is dependent upon final design and costing for the floodgate and flap gate.

3.4 Construction cost for raising the levee by 0.2m along the most vulnerable areas

This will involve the labour and the construction cost for raising the levee by 0.2m

3.5 Upgrading of the spillway

The existing spillway will be upgraded to accommodate increasing water levels brought in by changing rainfall patterns and rising sea levels. This will involve fortifying the existing spillway by increasing its dimensions. A construction and engineering contractor will be contracted to undertake this work.

3.6 Widening of channels

The Ministry of Waterways will widen the selected water channels to accommodate increasing water levels brought in by changing rainfall patterns and rising sea levels and new floodgates. This will be an in-kind contribution by the Fiji government to the SUPA project using their in-house qualified engineers, support staff and resources.

3.7 Project oversight

The Ministry of Waterways will provide and designate an in-house senior water engineer to oversee the implementation of the project activities including the construction of the prioritised flood control measures. This is an in-kind contribution by the Fiji government.

Efforts will be made to procure the services of one contractor for the KRA 3 activities through an open and competitive procurement process.

KRA 4: Recruitment and employment of a national coordinator

4.1 Recruitment and employment of a national coordinator

A SUPA Project National Coordinator has been contracted by the SPC for a period of 2.5 years to be housed jointly between the Ministry of Economy – Office of Climate Change and the Ministry of Waterways. The National Coordinator will help coordinate, report and support implementation of SUPA project activities in Fiji by the implementing government agencies and partners.

4.2 Support funds for national coordinator

The SUPA project will provide funds to cover the National Coordinator's workstation including laptop, office furniture and office supplies.

4. INSTITUTIONAL ARRANGEMENTS, RISK MANAGEMENT AND EXIT STRATEGY

Institutional Arrangements

Implementation

Implementation of this project in Fiji will be the responsibility of the Ministry of Waterways and Environment in collaboration with the Ministry of Economy – Climate Change and International Cooperation. The SUPA project in Fiji is being implemented under the ambit of the Co-Delegation Agreement, Global Climate Change Alliance Plus – Scaling Up Pacific Adaptation (GCCA+ SUPA), CRIS number: ENV/2018/398237, which was signed by representatives from the European Union Delegation to the Pacific, SPC and SPREP on 27th December 2018.

Project Steering Committee

A Project Oversight Committee will be established consisting of representatives from the Ministry of Waterways and Environment and the Ministry of Economy. Other members such as the Ministry of Agriculture, i-Taukei Lands Trust Board (TLTB), Fiji Sugar Corporation, NGO's and private sector may be added as required.

The Fiji SUPA National Coordinator will be responsible for establishing and providing administrative support for this Committee. It is expected that the Project Oversight Committee will meet quarterly and more often as required. Meetings will be minuted. The Fiji SUPA National Coordinator will provide regular (quarterly) updates on progress with the project and raising any concerns or problems that have been encountered. The committee will provide advice on how problems and issues may be addressed. Their main responsibility is the initial selection of activities and guidance and oversight during project implementation.

Reporting

The Fiji SUPA National Coordinator will be responsible for providing quarterly narrative and financial progress reports to the SUPA project team in SPC in Suva. A template for reporting will be provided. Short monthly progress reports will also be prepared.

Day to Day Implementation of the Project

The Fiji SUPA National Coordinator situated in the Ministry of Economy-Climate Change and International Cooperation Division will have responsibility for overall coordination of the SUPA activities, including regular financial and narrative reporting to Fiji government and to SPC as required. The National Coordinator is also responsible for day-to-day coordination of the delivery of the three outputs. The National Coordinator reports to the Climate Change Specialist, Climate Change & International Cooperation of the Climate Change and International Cooperation Division, and the SUPA Project Manager in SPC. The National Coordinator is expected to liaise very closely with the Ministry of Waterways and Environment and to spend time working from each ministry (Ministry of Waterworks and Environment and Ministry of Economy).

Risk Management

Risk	Risk level	Mitigating measure
Procurement challenges		
Procurement delays	High	<ul style="list-style-type: none"> • Programme in sufficient time for procurement procedures • Investigate option to have SPC do procurement of large items.
Implementing agencies have competing responsibilities		
Competing responsibilities within the implementing agencies	High	<ul style="list-style-type: none"> • Ensure agencies take ownership for the efficient delivery of their specific activities • Consider appointing a point person to be the “legs-on-the-ground” to keep activities on track in the Ministry of Waterways and Environment in Labasa. • Hold a review of progress December 2020 and revise targets if required
Competing commitments for National Coordinator time	High	<ul style="list-style-type: none"> • Prioritisation of National Coordinator project activities and deliverables • Careful scheduling of the activities so as to accommodate the staff needs for other competing commitments.
Extreme events		
Project implementation delayed by an extreme weather event e.g. cyclone, ocean surge, severe El Niño drought, or major social/cultural events.	High	<ul style="list-style-type: none"> • Ensure planning of activities contains sufficient buffering for minimum one severe and disruptive weather event. • Despite the above mitigating measure, a severe drought or cyclone will likely delay full delivery of all activities.
Assumptions		
<ul style="list-style-type: none"> • Global economic conditions and national governance do not prevent economic growth. • Global support for the Paris Agreement and Sendai Framework is maintained. • Continual high-level national government commitment to prioritising climate change and disaster risk management in the national development agendas. • Social and political stability is maintained. • Continuous collaboration amongst development partners occurs and is documented to ensure coherence, complementarity and efficiency amongst climate change and disaster risk management interventions. 		

Exit Strategy

Strategy 1: Mainstreaming

By transferring knowledge and application of climate and disaster risk resilience measures to the strategies and plans of the coastal protection sector, the delivery of the sector will be strengthened and enhanced beyond project life. The SUPA project will be developing a Watershed Management Plan using a participatory and rights and gender based approach. It will incorporate current and future climate and disaster risk challenges and projections. In keeping with the Framework for Resilient Development for the Pacific (FRDP), the integration of measures that address climate risk and disaster risk within a sector is another example of a mainstreaming approach that contributes to sector resilience beyond project life. Lessons learnt in applying a gender-sensitive/rights-based approach from the RENI project will be applied.

Strategy 2: Further Funding

Identifying alternative sources of grant funding or loan finance, or national government funds in order to continue a project's activity is a second exit strategy. SUPA also provides an opportunity for local stakeholders to voice their concerns directly to National Government, as was done during the Project design Consultation on 1 November 2019.

SUPA is working closely with a number of climate change adaptation and disaster risk management projects being implemented by SPC, as well as other projects implemented by regional and international organisations. Throughout the course of the project, routes to create synergies with other longer running activities will be pursued and where appropriate, developed.

Strategy 3: Private Enterprise

Developing an alternative business and/or operational model, through commercialising aspects of the project, is a third exit strategy. Within the scope of SUPA, private sector involvement in disaster risk management and climate change adaptation interventions will be encouraged where appropriate. Discussions with the Ministry of Agriculture, Fiji Sugar Corporation and other avenues will be pursued.

Strategy 4: Project Closure

Winding down a project's activities as efficiently and effectively as possible in order not to impact adversely on the project's staff and its stakeholders, and to capture the benefits and any lessons learned is a fourth exit strategy. The project will work to efficiently wind down the activities as the end date is approached.

Lessons learnt from the Global Climate Change Alliance: Pacific Small Island States (GCCA: PSIS) and RENI project will be applied and include allowing sufficient time and staff for an

efficient and complete closure process, complete documentation of all narrative and financial materials, and perhaps most importantly the compilation and sharing of lessons learnt through interactive discussion sessions with national stakeholders and regional partners.

Annex 1 Indicative Logframe Matrix SUPA Activities in Fiji

The activities, the expected outputs and all the indicators, targets and baselines included in the logframe matrix are indicative and may be updated during the implementation of the action. Note also that indicators will be disaggregated by sex whenever relevant

Intervention logic	Indicators	Baselines (2020)	Target 2022	Sources and means of verification	Assumptions
Overall objective: Vulnerable coastal communities of Macuata province, Fiji, more resilient to climate change.	<ul style="list-style-type: none"> • Soasoa Community understanding of climate change resilience enhanced • Specific climate change resilience measures incorporated into engineering designs. 	<ul style="list-style-type: none"> • Baselines for community understanding to be established in start-up phase • 0 designs that accommodate climate change 	<ul style="list-style-type: none"> • Minimum 20 community members have enhanced understanding of climate change resilience. • Minimum 10 media articles on climate resilience and drainage in the Labasa area over the period 2020 – 2022. • Minimum 2 engineering designs clearly incorporating measures to accommodate climate changes e.g. sea level rise and changed precipitation patterns. 	<ul style="list-style-type: none"> • Community pre and post project questionnaire surveys. • Engineering designs prepared for the SUPA project and other projects. • Newspaper and other media reports. • Reporting on SDGs especially 3, 5, 6, 13. • Reporting on national and sector policies & plans. 	
Specific objective: Comprehensive approach to the management of the Soasoa watershed,	<ul style="list-style-type: none"> • Comprehensive watershed planning approach that incorporates climate change adopted for 	<ul style="list-style-type: none"> • Currently no watershed planning and zero approaches that incorporates climate change 	<ul style="list-style-type: none"> • Watershed management plan to be submitted to Cabinet 	<ul style="list-style-type: none"> • Watershed management plan and implementation action plan. 	<ul style="list-style-type: none"> • Communities willing to contribute to the planning process.

Intervention logic	Indicators	Baselines (2020)	Target 2022	Sources and means of verification	Assumptions
incorporating climate resilient flood control measures, adopted.	<ul style="list-style-type: none"> the control of flooding in minimum one watershed. • Formulation of watershed coordination group. • Number of community groups participating in the watershed planning process. 	<ul style="list-style-type: none"> • Currently zero group • Estimate 0 	<ul style="list-style-type: none"> • 1 multi-stakeholder watershed coordination group • Minimum 2 different community groups actively participate in the watershed planning process for the Soasoa catchment, e.g. Farmers, Association, Community groups. 	<ul style="list-style-type: none"> • Assessments of past constructed flood protection measures. • Flooding incident reports in the Soasoa drainage area. • Reports of community meetings • Media reports 	<ul style="list-style-type: none"> • Fiji government and partners continue to support and implement projects and programmes that promote flood protection.
KRA 1: Development of a watershed management plan (2020-2050) for Soasoa Drainage System	<ul style="list-style-type: none"> • Number of watershed management plan developed, endorsed and adopted for Soasoa drainage system integrating climate change and disaster risks considerations and gender sensitive/rights based approach • Number of vulnerable groups in the Soasoa area engaged in the Soasoa watershed 	<ul style="list-style-type: none"> • Zero Soasoa Watershed Management plans • Zero Project Communications Plan developed • Zero consultation and planning process conducted for Soasoa watershed area. 	<ul style="list-style-type: none"> • At least one watershed management plan developed for Soasoa watershed area. • At least two community and key stakeholders' consultations conducted using a gender sensitive/rights based approach. • Minimum 10 vulnerable persons (women, youth, elderly, persons with disabilities, migrants) engaged in 	<ul style="list-style-type: none"> • Soasoa watershed management plan published. • Consultation reports prepared during the watershed planning process. • Social surveys. • Communications Plan endorsed and published 	<ul style="list-style-type: none"> • Suitable consultant team to develop watershed management plan • Communities and key stakeholders including Fiji government support the development of the watershed management plan

Intervention logic	Indicators	Baselines (2020)	Target 2022	Sources and means of verification	Assumptions
	<ul style="list-style-type: none"> consultation and planning process. Number of project Communications Plan integrating climate change and disaster risks considerations and gender sensitive/rights based approach developed. 		<ul style="list-style-type: none"> the watershed planning process. 1 Project Communications Plan developed 		
KRA 2: Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system	<ul style="list-style-type: none"> Number of topographic surveys conducted for Soasoa watershed area Number of climate proof detailed engineering designs developed for i) floodgates, ii) levees, iii) spillways, and iv) water channel widening. 	<ul style="list-style-type: none"> Zero topographic surveys conducted for Soasoa watershed area, some small scale topographic surveys from Lands Division exist 0 climate proof detailed engineering designs 	<ul style="list-style-type: none"> One topographic survey conducted for Soasoa watershed area. Climate proof detailed engineering designs developed for i) 2 floodgates, ii) levee of most vulnerable area, iii) 1 spillway, and iv) area of water channel to be widened in the Soasoa drainage area. 	<ul style="list-style-type: none"> Topographic survey report for Soasoa watershed area 2 floodgates detailed engineering designs developed 1 detailed engineering design for levee of most vulnerable area developed 1 detailed engineering design for 1 spillway developed 1 detailed engineering design for area of water channel to be 	<ul style="list-style-type: none"> Communities and key stakeholders including Fiji government support the prioritised scaling up activities Ministry of Waterways/ Fiji government have in-house capacity to conduct topographic survey Major flooding or cyclone event does not

Intervention logic	Indicators	Baselines (2020)	Target 2022	Sources and means of verification	Assumptions
				widened developed	cause significant interruption or divert relevant staff to other activities.
KRA 3: Implementation of the prioritised scaling up measures for the Soasoa drainage system	<ul style="list-style-type: none"> Number of floodgates constructed. Improvements to the levee, spillway and water channels constructed 	<ul style="list-style-type: none"> 1 floodgate and 1 flapgate existing No of flooding incident in past 10 years to be compiled during start up. 	<ul style="list-style-type: none"> 1 floodgate constructed/upgraded 1 flapgate constructed/upgraded Levee in the most vulnerable area raised by 0.2 m. 1 Spillway structure upgraded. 1 water drainage channel widened 	<ul style="list-style-type: none"> Construction completion reports for floodgate, flapgate, spillway, levee and water channel Site visit confirmation Media releases 	<ul style="list-style-type: none"> Contractor and construction materials available. Communities and key stakeholders including Fiji government support the prioritised scaling up activities. Major flooding or cyclone event does not cause significant interruption or divert relevant staff to other activities.
KRA 4: Recruitment and employment of a National Coordinator	<ul style="list-style-type: none"> Number of quarterly narrative and financial reports submitted by SUPA 	<ul style="list-style-type: none"> 0 reports 	<ul style="list-style-type: none"> 10 reports 	<ul style="list-style-type: none"> Quarterly narrative and financial reports 	SUPA National Coordinator is recruited by Q2 2020

Intervention logic	Indicators	Baselines (2020)	Target 2022	Sources and means of verification	Assumptions
	National Coordinator				

Annex 2 Project Activities and Indicative Budget

Project Title: Scaling up the Soasoa drainage system, Fiji				
Activity	Project costs (Euros)	KRA sub-total (Euros)	In-kind contribution (Euros)	SPC (Euros)
KRA 1: Development of a watershed management plan (2020-2050) for Soasoa drainage system				
1.1. Consultancy to prepare a watershed management plan for the Soasoa drainage catchment - Community consultations; - Data collection and analysis to include physical, hydrological, meteorological, climate projection, socio economic information; - Preparation and review of the watershed management plan; - Preparation of catchment management implementation plan	70,000			
1.2 Seek endorsement by Cabinet for the Soasoa Watershed Management Plan				
1.3 Preparation and delivery of a Communications Plan	15,000			
KRA 1 Total	85,000	85,000		85,000
KRA 2: Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system				
2.1 Topographical surveys of the prioritised areas			7,000	
2.2 Preparation of design documents for the prioritised measures			20,000	
2.3 Preparation of procurement documents			5,000	
2.4 Environmental screening and preparation of EMP/EIA	20,000			20,000
KRA 2 total		20,000		
KRA 3: Implementation of the prioritised scaling up measures for the Soasoa drainage system				
3.1 Construction of the floodgate				
3.2 Construction the floodgate [replacement of flapgate]				
3.3 Materials for raising of the levee by 0.2 m along the most vulnerable areas	295,000			
3.4 Construction cost for raising of the levee by 0.2 m along the most vulnerable areas			45,000	
3.5 Upgrading of the spillway			50,000	
3.6 Widening of channel			20,000	
3.7 Project oversight			30,000	
KRA 3 total	295,000	295,000		295,000
KRA 4: Recruitment and employment of a National Coordinator				
4.1 Recruitment and employment of a National Coordinator	70,000			
4.2 Support funds for National Coordinator	10,000		5,000	
KRA 4 total		80,000		80,000
Contingencies	20,000	20,000		20,000
Grand total	500,000	500,000	182,000	500,000

Note budget allocation above is indicative only. Budget will be reviewed once detailed engineering design and costings have been finalised.

Efforts will be made to procure the services of one contractor for the KRA 3 activities through an open and competitive procurement process.

At the request of the Government of Fiji, a National Coordinator (KRA 4) was recruited by SPC and now housed jointly by the Ministry of Economy and the Ministry of Waterways and Environment.

SPC will undertake the procurement for KRA 1 and for the direct project-funded infrastructure in KRA 3 (budget lines 3.1 to 3.3). Procurement will follow the SPC Procurement Policy. The Ministry of Waterways and Environment will be represented in the technical review of bidding documents.

The survey and design work in KRA 2 (budget lines 2.1 to 2.3), the construction of the additional infrastructure in KRA 3 (budget lines 3.4 to 3.6 will be undertaken as part of scheduled maintenance work in the scheme by the Ministry), and the engineering oversight of the construction (Budget lines 3.7) will be the responsibility of the Government of Fiji.

Other information

The Government of Fiji will oversee accurate and regular records and accounts of the implementation of the Action. The following conditions will also apply:

Fixed assets (equipment): All fixed assets (equipment) will remain the property of SPC until the closure of the project. On closure of the project, the assets will officially be handed over by SPC to the respective stakeholders in Fiji. An asset register of all assets purchased should be maintained by the SUPA Project National Coordinator and kept in the Ministry of Economy/Waterways office.

Annex 3 Schedule of activities

Activity	M 1-6 2020	M7-12 2020	M1-6 2021	M7-12 2021	M1- 6 2022	M7-12 2022
KRA 1: Development of a watershed management plan (2020-2050) for Soasoa Drainage System						
1.1. Consultancy to prepare a watershed management plan for the Soasoa drainage catchment - Community consultations; - Data collection and analysis to include physical, hydrological, meteorological, climate projection, socio economic information; - Preparation and review of the watershed management plan; - Preparation of Catchment Management Implementation Plan						
1.2 Seek endorsement by Cabinet for the Soasoa Watershed Management Plan						
1.3 Preparation and delivery of a Communications Plan						
KRA 2: Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system						
2.1 Topographical surveys of the prioritised areas						
2.2 Preparation of design documents for the prioritised measures						
2.3 Preparation of procurement documents						
2.4 Environmental screening and preparation of EMP/EIA						
KRA 3: Implementation of the prioritised scaling up measures for the Soasoa drainage system						
3.1 Construction of the floodgate						
3.2 Construction the floodgate [replacement of flapgate]						
3.3 Materials for raising of the levee by 0.2 m along the most vulnerable areas						
3.4 Construction costs for raising the levee by 0.2 m along the most vulnerable areas						
3.5 Upgrading of the spillway						
3.6 Widening of channel						
3.7 Project oversight						

Activity	M 1-6 2020	M7-12 2020	M1-6 2021	M7-12 2021	M1- 6 2022	M7-12 2022
KRA 4: Recruitment and employment of a National Coordinator						
4.1 Recruitment and employment of a National Coordinator						
4.2 Support funds for National Coordinator						



Funded by
the European Union



Pacific
Community
Communauté
du Pacifique

Pacific Community (SPC)

Government of the Republic of Fiji

GLOBAL CLIMATE CHANGE ALLIANCE PLUS: SCALING UP PACIFIC ADAPTATION (GCCA+ SUPA) PROJECT

PROJECT DESIGN DOCUMENT Output 3

Scaling up the Soasoa drainage system, Fiji

May 2020

Scaling Up the Soasoa drainage system, Fiji

Project Summary

This design document describes the framework for Fiji's activities under Output 3 "Scale up resilient development measures in specific sectors" of the Global Climate Change Alliance Plus - Scaling up Pacific Adaptation (GCCA+ SUPA) Project. The Output 3 activities, described here for Fiji, will be implemented in conjunction with related activities under Output 1 "Strengthen strategic planning at national levels" and Output 2 "Enhance the capacity of sub-national government stakeholders to build resilient communities" of the GCCA+ SUPA project.

Scaling up in the context of the GCCA+ SUPA Project is about enhancing, expanding, replicating and/or adding a complementary approach to existing, successful climate change adaptation interventions. The project will not set up demonstration projects but will instead use the lessons learnt from previous demonstration projects and apply them to scale up sector resilience.

The government of Fiji has selected coastal protection as their focus sector for Output 3. The overall objective of the project is resilience of vulnerable coastal communities of Macuata province, Fiji enhanced through comprehensive planning and scaled up infrastructure. The specific objective is the implementation of prioritised climate resilient flood control measures in the Soasoa watershed area.

The three key result areas are: (1) Development of a watershed management plan (2020-2050) for Soasoa Drainage System; (2) Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system; (3) Implementation of the prioritised scaling up measures for the Soasoa drainage system.

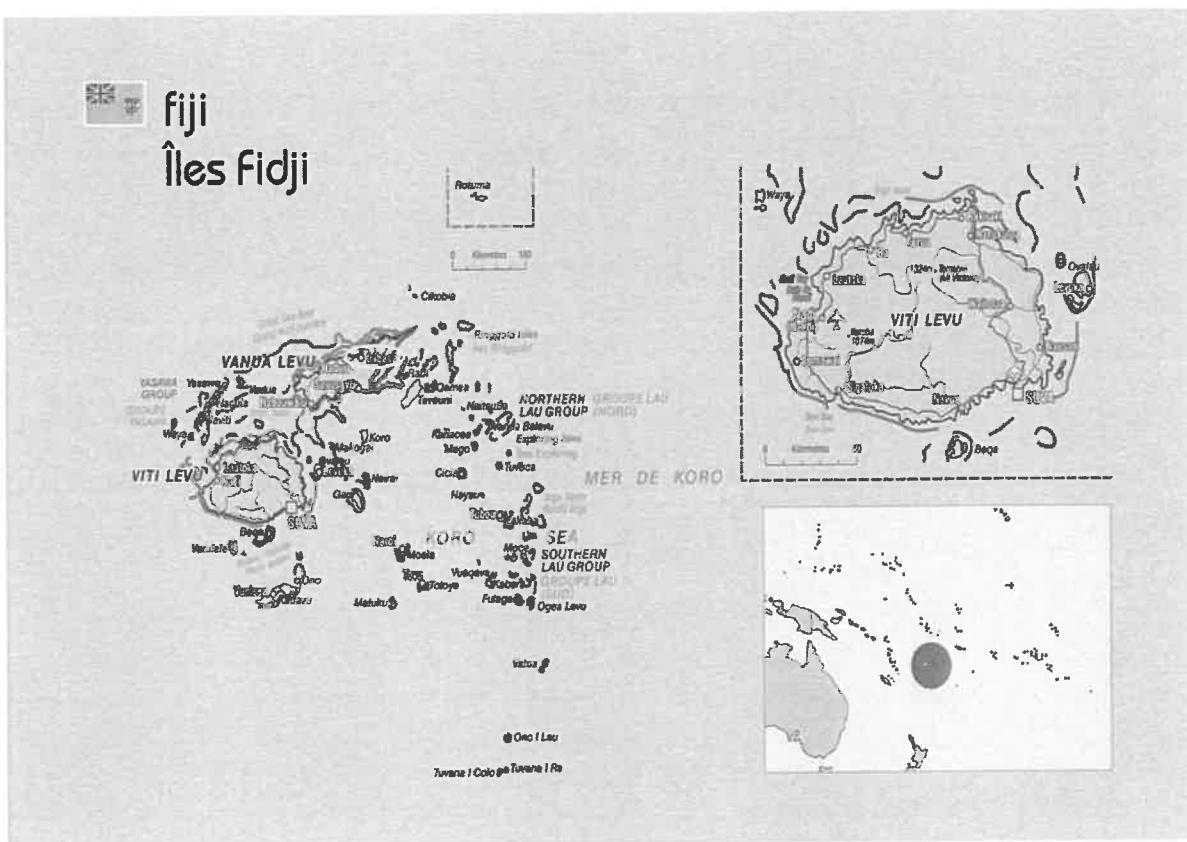
Fiji like many island countries is increasingly experiencing the negative impacts of climate change. These impacts exacerbate the vulnerability of coastal communities' and assets to coastal inundation and flooding. Following a national consultation in November 2019, the Fiji SUPA project key stakeholders determined that the SUPA project will focus on coastal protection. The largely coastal sugarcane farming Soasoa Drainage area in Labasa on the island of Vanua Levu was selected. The project will directly benefit the 4,140 persons (2017 Census) persons, in three major communities in the Soasoa watershed area. The indirect beneficiaries of the project include 35,947 persons and include people living and commuting along the Labasa-Wainikoro highway.

The project will involve the national government agencies and wherever possible Non-Government Organizations (NGO) and the private sector. The project is about enhancing the resilience of people and communities, and in this respect a participatory and community-led approach is adopted throughout the design and implementation with a particular emphasis on applying a gender-sensitive/rights-based approach.

The project will develop a 30 year Watershed Management Plan that will guide the future management of the Soasoa catchment and drainage area over the time frame to 2050. Using this plan as a guide, the project aims to build resilience especially to coastal inundation and flooding through upgrading of coastal protection measures. Coastal protection measures will likely include activities such as construction and replacement of floodgates, raising of the levee along the most vulnerable areas, upgrading of spillways and widening of existing channels.

The implementation period of this project will commence on the date of signature of this Project Design Document and end on 31 December 2022. The project will be implemented by the Ministry of Waterways and Environment, in collaboration with the Ministry of Economy. The project is consistent with Fiji's National Adaptation Plan 2018, National Climate Change Policy 2018-2030 and 5-Year & 20-Year National Development Plan.

Map of Fiji



Map showing Fiji SUPA project site circled in yellow namely Labasa including the Soasoa drainage area.

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List of Abbreviations

ACP	Africa, Caribbean, Pacific countries
ACSE	Adapting to Climate Change and Sustainable Energy
ADB	Asian Development
BPW	Bureau of Public Works
BSRP	Building Safety and Resilience in the Pacific
CSIRO	Commonwealth Scientific, Industrial Research Organisation (Australia)
CCCDR	Cabinet Committee on Climate and Disaster Risk
DRM	Disaster Risk Management
EPS	Ecological Purification System
EU	European Union
EUR	Euros
FRDP	Framework for Resilient Development in the Pacific
GDP	Gross Domestic Product
GCCA: PSIS	Global Climate Change Alliance: Pacific Small Island States project
GCCA+ SUPA	Global Climate Change Alliance Plus: Scaling Up Pacific Adaptation
M&E	monitoring and evaluation
NAP	National Adaptation Plan
NCCCC	Fiji National Climate Change Coordination Committee
NDMO	National Disaster Management Office
NGO	Non-governmental organisation
PAN	Protected Area Network
R2R	Ridge to Reef
RENI	Readiness for El Niño
SDG	Sustainable Development Goal
SPC	Pacific Community
SPC-GEM	Pacific Community Geosciences, Energy and Maritime Division
SPC-LRD	Pacific Community Land Resources Division
SPC-RRRT	Pacific Community Regional Rights Resources Team
SPC-SDP	Pacific Community Social Development Programme
UN	United Nations
UNDP	United Nations Development Programme
USAID	United States Agency for International Development

1. INTRODUCTION

This design document describes the framework for Fiji's activities under Output 3 "Scale up resilient development measures in specific sectors" of the Global Climate Change Alliance Plus - Scaling up Pacific Adaptation (GCCA+ SUPA) Project. The Output 3 activities, described here for Fiji, will be implemented in conjunction with related activities under Output 1 "Strengthen strategic planning at national levels" and Output 2 "Enhance the capacity of sub-national government stakeholders to build resilient communities" of the GCCA+ SUPA project. The government of Fiji has selected coastal protection as their focus sector for Output3.

This section of the design document describes the background to Fiji and the background to the SUPA Project.

Background to Fiji

Geographical setting

The Republic of Fiji is located in the south Pacific, 1770km north of New Zealand. It is an archipelagic small island developing state with over 332 volcanic islands and 522 smaller islets. It has a total land area of 18,272km² and an Exclusive Economic Zone (EEZ) of 1,282,978 km². Only 110 islands are permanently inhabited. The capital is Suva City on the island of Viti Levu in the province of Rewa. The majority of the population live on the two main islands of Viti Levu and Vanua Levu. The population of Fiji is 884,887 (2017 Census) 55.9% of which live in urban areas. Ba was the most populous province with its 247,708 residents accounting for 28.0% of Fiji's population. Naitasiri and Rewa province are the second and third populous provinces having 177,678 and 108,016 residents respectively. The majority of Fiji's population, assets and infrastructure are located in coastal areas.

The economy is dominated by tourism, agriculture, overseas remittances, manufacturing and construction. The tourism and agriculture sectors are also among the largest employers and are heavily reliant on a healthy and productive natural environment. Fiji is rich in natural resources, and also exports timber, minerals, fish and fish products, manufactured goods and agricultural produce. Its main sources of foreign exchange are tourism and sugar. Tourism arrivals in 2018 were 870,309. The service sector dominates the economy, contributing more than 80% of gross domestic product (GDP) and employing around half of the population. In the service sector, tourism employs approximately 119,000 Fijians contributing above 30% of Fiji's GDP. In 2018 Fiji's per capita GDP stood at US \$6,208.

The principal economic challenge confronting the country is to ensure the long-term viability of its economy in the face of increasing natural hazards, climate change and loss of preferential market price of sugar with the European Union. Natural hazards and climate change represent a major obstacle to Fiji's development aspirations. Tropical cyclones have already affected GDP in a significant manner. Tropical Cyclone (TC) Winston in 2016 caused damages amounting to FJD \$2 billion, or 20% of GDP. The greatest opportunity for sustained growth in the Fijian economy is believed to lie in nurturing new and emerging growth sectors and diversifying existing major economic sectors particularly the tourism and agriculture sector.

Vulnerability and climate change projections for Fiji

Climate projections for Fiji based on the global climate models show that for the period to 2100:

- There is *very high confidence* that El Niño and La Niña events will continue to occur in the future, but there is little consensus on whether these events will change in intensity or frequency;
- There is *very high confidence* that annual mean temperatures and extremely high daily temperatures will continue to rise;
- There is a range in model projections in mean rainfall, with the model average indicating little change in annual rainfall but an increase in the November– April season (*low confidence*), with more extreme rain events (*high confidence*);
- There is *low confidence* that the proportion of time in drought is projected to decrease slightly;
- There is *very high confidence* that ocean acidification is expected to continue;
- There is *very high confidence* that the risk of coral bleaching will increase in the future;
- There is *very high confidence* that sea level will continue to rise; and
- There is *low confidence* that the wave height will decrease across the Fiji area in the wet season, with a possible small increase in dry season wave heights.
- Satellite data indicate sea level has risen in Fiji by about 6 mm per year since 1993. This is larger than the global average of 2.8–3.6 mm per year.

(These climate projections are based on the 2014 Australian Bureau of Meteorology and CSIRO Report: Climate variability, extremes and changes in the Western Tropical Pacific: New science and updated country reports¹).

These changes in climate are likely to exacerbate coastal inundation, water and food security issues in Fiji.

National policies and strategies

Climate change and disaster risk management, coastal protection, food and water security, and social inclusion are among the key priorities for Fiji and critical to achieve various policy and strategic objectives to achieve sustainable development. Among the key policies are the following:

- National Climate Change Policy 2018-2030
- National Adaptation Plan 2018
- 5-Year & 20-Year National Development Plan (2017)

¹

https://www.pacificclimatechange.net/sites/default/files/documents/PACCSAP_CountryReports2014_Ch5Fiji_WEB_140710.pdf

Related projects and Activities

Listed below are some of key related projects and activities that are presently ongoing in Fiji.

Project/Activity	Status
Global Climate Change Alliance Plus Intra ACP – Pacific Adaptation to Climate Change and Resilience (GCCA+ Intra ACP PACRES)	Ongoing
Institutional Strengthening in Pacific Island Countries to Adapt to Climate Change (ISACC)	Ongoing
GEF/Ridge to Reef (R2R): Regional component focuses on demonstrations, governance and knowledge management. The national component aims to preserve biodiversity, ecosystem services, sequester carbon, improve climate resilience and sustain livelihoods through a ridge to reef management of priority water catchments on the main islands of Fiji	Ongoing
UN Women, Increasing Community Resilience through Empowerment of Women to Address Climate Change and Natural Hazards Programme.	Ongoing
EU-GIZ/ - Adapting to climate change and sustainable energy (ACSE) – Fiji Sustainable Energy Hybrid Power Project (FSHPP)	Ongoing
EU Intra ACP/NDMO/SPC, Building Safety & Resilience in the Pacific (BSRP) – Planning for community based disaster risk resilience	Ongoing
USAID Climate Ready Project	Ongoing

About the SUPA Project

Description of the overall SUPA project

Climate change and natural disasters are among the greatest challenges jeopardising and undermining the ability of all countries, in particular Pacific countries, to achieve the sustainable development goals and reduce poverty. The Global Climate Change Alliance Plus – Scaling Up Pacific Adaptation (GCCA+ SUPA) project falls under the GCCA+ flagship initiative, which has three priorities: (i) mainstreaming climate change issues into poverty reduction and development efforts; (ii) increasing resilience to climate related stresses and shocks; and (iii) Supporting the formulation and implementation of concrete and integrated sector-based climate change adaptation and mitigation strategies.

The GCCA+ SUPA project is about scaling up climate change adaptation measures in specific sectors supported by knowledge management and capacity building. The 4.5-year project (2019 – 2023) is funded with EUR14.89 million from the European Union (EU) and implemented by the Pacific Community (SPC) in partnership with the Secretariat of the Pacific Regional Environment Programme (SPREP) and the University of the South Pacific (USP) in collaboration with the governments and peoples of Cook Islands, Federated States of Micronesia (FSM), Fiji, Kiribati, Republic of the Marshall Islands (RMI), Nauru, Niue, Palau, Tonga and Tuvalu.

The overall objective is to enhance climate change adaptation and resilience within ten Pacific Island countries. The specific objective is to strengthen the implementation of sector-based, but integrated, climate change and disaster risk management strategies and plans.

The three key outputs for the GCCA+ SUPA project are:

1. Strengthen strategic planning at national levels;
2. Enhance the capacity of sub-national government stakeholders to build resilient communities; and
3. Scale up resilient development measures in specific sectors.

The activities will adopt a gender-sensitive and rights-based approach throughout and will take into account lessons learnt and wise practices from the regional, national, sub-national and community-based projects and programmes implemented over the last decade.

The Action will contribute to the *Framework for Resilient Development in the Pacific (FRDP)*, the *Sendai Framework for Disaster Risk Reduction*, the *Paris Agreement* to the *United Nations Framework Convention on Climate Change*, and the *Sustainable Development Goals*, especially Goal 2: zero hunger, Goal 3: good health and well-being, Goal 6: clean water and sanitation and Goal 13: climate action, Goal 14: life below water and Goal 15: life on land.

The SUPA project in Fiji

Fiji like many island countries is increasingly experiencing the negative impacts of climate change. These impacts exacerbate the vulnerability of coastal communities' and assets to coastal inundation or flooding.

The Fiji National Climate Change Policy 2018 and National Adaptation Plan 2018 identified coastal protection as an area needing priority actions and interventions. Following an Inception and Planning Workshop in March 2019, the Fiji SUPA project key stakeholders selected to focus the SUPA project on coastal protection. The Soasoa Drainage area in Labasa, on the island of Vanua Levu in the Macuata province was selected.

The Fiji government sees climate-resilient infrastructure as a critical measure for adaptation particularly along coastal areas and areas that have been reclaimed. This is evident in NAP with short, medium, and long terms strategies outlined to develop climate-resilient infrastructure to better its adaptation efforts. The Soasoa drainage area is largely reclaimed land that is used for coastal agriculture and is dominated by sugarcane farming.

In the Soasoa drainage area levees protect the reclaimed area and a series of floodgates discharge water during low tide. The infrastructure was designed in the 1970s and there is now a need to strengthen this infrastructure to address changes in the climate such as rising sea levels, changing rainfall patterns and extreme rainfall events and associated runoff. This adaptation measure supports the Fijian Government's efforts to enhance the resilience of vulnerable coastal communities to climate change through the scaling up of drainage and coastal protection infrastructure with the integration of ecosystem-based adaptation.

The project will develop a 30 year watershed management plan for the Soasoa drainage area to guide the management of the basin over the next 30 years and the SUPA project activities. The project's on-the-ground activities aim to build the resilience of the assets and communities living close to the Soasoa drainage area to coastal flooding. This will be achieved by strengthening the levee and drainage infrastructure to adapt to high precipitation levels and sea level rise that have contributed to the increasing incidents of coastal flooding in the recent past for the Soasoa drainage community.

The 2017 population estimate for the Soasoa watershed area where prioritised coastal protection infrastructures will be built are shown in the table below. These are the direct and indirect beneficiaries of the coastal protection infrastructural project. It is anticipated that the population of not only the Soasoa drainage area but the wider Soasoa watershed and Labasa area population will also benefit from the SUPA project watershed management plan.

Population figures (2017 census) for the direct and indirect beneficiaries of the SUPA Project

State	Total population 2017 census
Direct Beneficiaries	
Soasoa Drainage Area Communities	729
Vunivau Village	3139
Vuo	272
Total	4,140
Indirect Beneficiaries	
Labasa	27,949
Wainikoro	3563
Valebasoga	1504
Nagigi	267
Vunika	1403
Naleba	495
Vunivutu	340
Vuniyalala	277
Malau	149
Total	35,947

Under Key Result Area (KRA) 1 of the Fiji SUPA project, management of the Soasoa watershed will be improved. Management measure(s) will include the development of a 30 year (2020 – 2050) watershed management plan for the Soasoa watershed. This will also include development of an implementation action plan to support the management plan and inclusive community and stakeholder consultations.

KRA 2 of the Fiji SUPA project will focus on preparing coastal protection infrastructural designs. This will include the preparation of a topographical survey and detailed engineering design of the prioritised scaling up measures identified for the Soasoa drainage system, and environmental screening.

The third KRA will focus on implementing the prioritised scaling up measures designed for the Soasoa drainage system. This will include the construction of a floodgate, replacement of flap gates, raising the levee along the most vulnerable areas, upgrading of existing spillways and widening of the channel in the selected SUPA project site.

The SUPA project will adopt a gender-sensitive/rights based approach throughout the design and implementation period with the assistance of SPC's Social Development Programme and Regional Rights Resources Team.

The Ministry of Waterways and Environment will lead in the implementation of the Fiji SUPA project, in partnership with the Ministry of Economy-Climate Change and International Cooperation Division.

Rationale

Based on the foregoing justification and rationale for the SUPA project in Fiji as follows:

- The sector selected by Fiji is one of the five sectors identified in the EU Delegation Agreement as priority sectors needing scaling up interventions for the SUPA project.
- The identified scaling up measure is an effective and tested measure that has elements of sustainability and can be implemented within the timeframe of the SUPA project.
- The selected scale up measure has socio-economic benefits for the communities and can be implemented using an evidence-based gender-sensitive and rights-based approach
- The selected scale up measure fits within the scope of the SUPA project budget.
- The geography and location of Fiji makes its people highly vulnerable to disaster and climate risks.
- Future projections for climate changes show a very high confidence in the El Niño/La Niña patterns continuing through to 2100; added to which there is a very high confidence in the projected increase in annual mean and daily extreme temperatures, and in sea level rise. These projections will continue to increase the vulnerability of persons living in Fiji.
- The government of Fiji, through its policies, strategies and plans, places a high priority on up-scaling coastal protection infrastructures.
- The SUPA project will provide tangible outcomes that will help the people of Fiji cope with future coastal inundation, water and food security challenges.
- Adopting a gender-sensitive/rights-based approach will ensure that the principles of equality and equity are provided to rights holders in Fiji.

2. PROJECT SELECTION PROCESS

This section provides a timeline of the planning activities that have led to this Project Design Document. Activities are listed below in chronological order.

March 2019: The SUPA Planning and Inception Meeting was held in Suva from 4th - 6th March 2019. The project was introduced to various stakeholders and partners including representatives from SUPA project countries namely Cook Islands, Federated States of Micronesia (FSM), Fiji, Kiribati, Republic of the Marshall Islands (RMI), Nauru, Niue, Palau, Tonga and Tuvalu. Participants contributed to the development of the draft criteria for scaling up climate change adaptation interventions under Output 3 of the project.

August 2019: Coastal protection was selected as the focus sector by the National Adaptation Plan (NAP) Committee and the Soasoa Drainage Basin was identified as the specific location.

October 2019: A consultation meeting was held in Fiji (Labasa) on 1 October 2019 to introduce SUPA to the key stakeholders made up of the Ministry of Waterways and Ministry of Economy-Climate Change and International Cooperation Division to help confirm their selection of a focus sector and develop a draft concept note. Invited partners were asked to come prepared with a list of activities they want scaled up in SUPA.

October 2019: A concept note was submitted by Fiji and was approved by EUD.

November 2019: A project design workshop was held in Labasa, Fiji 1 November 2019. There were 17 participants (F=3, M=14) from Ministry of Waterways and Environment, Ministry of Agriculture, Fiji Sugar Cooperation, University of the South Pacific and other local stakeholders including the local farmers association, local advisory council, and local village representative(s) among others, as well as SPC. The objectives, KRAs and budget were discussed and agreed. Representatives from other government ministries were not able to attend due to various reasons.

March 2020: The full Project Design Document was submitted for review and signature.

3. DETAILED PROJECT DESCRIPTION

This section describes the overall objective, specific objective and outputs, as well as the logical framework that is used to monitor progress. The section also includes the project budget and the schedule.

Overall Objective

Vulnerable coastal communities of Macuata province, Fiji, more resilient to climate change

Specific Objective

Comprehensive approach to the management of the Soasoa watershed, incorporating climate resilient flood control measures, adopted.

Key result areas and activities

KRA 1: Development of a watershed management plan (2020-2050) for Soasoa drainage system

1.1 Consultancy to prepare a watershed management plan for the Soasoa drainage catchment

This will involve contracting a policy development and water management consultant team to lead and coordinate the development of a Watershed management plan for the Soasoa drainage area including convening community and stakeholder consultations. The consultant team will also develop an implementation action plan as part of the watershed management plan.

1.2 Seek endorsement by Cabinet for the Soasoa watershed management plan

The Ministry of Waterways and Environment in collaboration with the water management consultant team will seek endorsement by Cabinet of the final watershed management plan developed for the Soasoa drainage area within the SUPA project timeframe.

1.3 Preparation and delivery of a communication plan

This will involve the contracting of a local communications consultant to lead and coordinate the development of a communications plan for the Fiji SUPA project. The communications plan will include identification of strategic communication goals and objectives, target audiences, key messages, methods of communication, channels of communication, branding, reporting formats etc. Communications will be an important part of the 3-year implementation period, especially recognising that the SUPA project only has funding for some of the required activities. It is important to realistically manage the expectations of the people residing in the project area and its environs.

KRA 2: Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system

2.1 Topographical surveys of the prioritised areas

The Fiji Ministry of Waterways will conduct a topographic survey of the Soasoa watershed area and produce a topographic map to inform the watershed management plan and design and construction of the selected flood control measures to be implemented under SUPA project and future projects. This will be an in-kind contribution to the SUPA project by the Fiji government drawing on from its in-house qualified staff and resources.

2.2 Preparation of design documents for the prioritised measures

The Ministry of Waterways and Environment will develop detailed engineering designs for the prioritised flood control measures likely including engineering drawings for one floodgate, one flapgate, raising of levee by 0.2m along identified vulnerable areas and the widening of existing channels. This will be an in-kind contribution by the Fiji government to the SUPA project using their in-house qualified engineers, support staff and resources.

2.3 Preparation of procurement documents

This will involve the development of the necessary procurement documents, including a Request for Proposals (RFP), terms of reference, detailed designs, and materials specifications by the Ministry of Waterways and Environment. This will be an in-kind contribution by the Fiji government to the SUPA project using their in-house qualified engineers, support staff and resources.

2.4 Environmental screening and preparation of Environmental Management Plan/or Environmental Impact Assessment. (Amended on the 26th of January 2021as annexed 4)

This will involve the Department of Waterways submitting a project proposal for the planned SUPA project activities (i.e. construction of flood protection measures in the Soasoa drainage area) to the Department of Environment to conduct environmental screening and provide a decision on whether the SUPA project will need to prepare an Environmental Management Plan (EMP) or conduct a full Environmental Impact Assessment (EIA). If required, the SUPA project will hire an environmental and engineering consultant to prepare an EMP or EIA.

KRA 3: Implementation of the prioritised scaling up measures for the Soasoa drainage systems

3.1 Construction of the floodgate

This will involve the contracting of a construction and structural engineering contractor to construct a 2 barrel floodgate adjacent to the existing 4-barrel floodgate in the Soasoa drainage area.

3.2 Replacement of the flapgate

This will involve the contracting of a construction and structural engineering contractor to construct and upgrade one identified existing 1-barrel flapgate to a 2-barrel floodgate in the Soasoa drainage area.

3.3 Materials for raising the levee by 0.2m along the most vulnerable areas. (Amended on the 26th of January 2021as annexed 4)

This will involve the identification of the most vulnerable areas to flooding along the existing levee and purchasing the necessary materials for raising of selected portion of that area by 0.2m. Raising of the levee is dependent upon final design and costing for the floodgate and flap gate.

3.4 Construction cost for raising the levee by 0.2m along the most vulnerable areas

This will involve the labour and the construction cost for raising the levee by 0.2m

3.5 Upgrading of the spillway

The existing spillway will be upgraded to accommodate increasing water levels brought in by changing rainfall patterns and rising sea levels. This will involve fortifying the existing spillway by increasing its dimensions. A construction and engineering contractor will be contracted to undertake this work.

3.6 Widening of channels

The Ministry of Waterways will widen the selected water channels to accommodate increasing water levels brought in by changing rainfall patterns and rising sea levels and new floodgates. This will be an in-kind contribution by the Fiji government to the SUPA project using their in-house qualified engineers, support staff and resources.

3.7 Project oversight

The Ministry of Waterways will provide and designate an in-house senior water engineer to oversee the implementation of the project activities including the construction of the prioritised flood control measures. This is an in-kind contribution by the Fiji government.

Efforts will be made to procure the services of one contractor for the KRA 3 activities through an open and competitive procurement process.

KRA 4: Recruitment and employment of a national coordinator

4.1 Recruitment and employment of a national coordinator

A SUPA Project National Coordinator has been contracted by the SPC for a period of 2.5 years to be housed jointly between the Ministry of Economy – Office of Climate Change and the Ministry of Waterways. The National Coordinator will help coordinate, report and support implementation of SUPA project activities in Fiji by the implementing government agencies and partners.

4.2 Support funds for national coordinator

The SUPA project will provide funds to cover the National Coordinator's workstation including laptop, office furniture and office supplies.

(KRA 5 is new addition, amended on the 26th of January 2021as annexed 4)

4. INSTITUTIONAL ARRANGEMENTS, RISK MANAGEMENT AND EXIT STRATEGY

Institutional Arrangements

Implementation

Implementation of this project in Fiji will be the responsibility of the Ministry of Waterways and Environment in collaboration with the Ministry of Economy – Climate Change and International Cooperation. The SUPA project in Fiji is being implemented under the ambit of the Co-Delegation Agreement, Global Climate Change Alliance Plus – Scaling Up Pacific Adaptation (GCCA+ SUPA), CRIS number: ENV/2018/398237, which was signed by representatives from the European Union Delegation to the Pacific, SPC and SPREP on 27th December 2018.

Project Steering Committee

A Project Oversight Committee will be established consisting of representatives from the Ministry of Waterways and Environment and the Ministry of Economy. Other members such as the Ministry of Agriculture, i-Taukei Lands Trust Board (TLTB), Fiji Sugar Corporation, NGO's and private sector may be added as required.

The Fiji SUPA National Coordinator will be responsible for establishing and providing administrative support for this Committee. It is expected that the Project Oversight Committee will meet quarterly and more often as required. Meetings will be minuted. The Fiji SUPA National Coordinator will provide regular (quarterly) updates on progress with the project and raising any concerns or problems that have been encountered. The committee will provide advice on how problems and issues may be addressed. Their main responsibility is the initial selection of activities and guidance and oversight during project implementation.

Reporting

The Fiji SUPA National Coordinator will be responsible for providing quarterly narrative and financial progress reports to the SUPA project team in SPC in Suva. A template for reporting will be provided. Short monthly progress reports will also be prepared.

Day to Day Implementation of the Project

The Fiji SUPA National Coordinator situated in the Ministry of Economy-Climate Change and International Cooperation Division will have responsibility for overall coordination of the SUPA activities, including regular financial and narrative reporting to Fiji government and to SPC as required. The National Coordinator is also responsible for day-to-day coordination of the delivery of the three outputs. The National Coordinator reports to the Climate Change Specialist, Climate Change & International Cooperation of the Climate Change and International Cooperation Division, and the SUPA Project Manager in SPC. The National Coordinator is expected to liaise very closely with the Ministry of Waterways and Environment and to spend time working from each ministry (Ministry of Waterworks and Environment and Ministry of Economy).

Risk Management

Risk	Risk level	Mitigating measure
Procurement challenges		
Procurement delays	High	<ul style="list-style-type: none"> • Programme in sufficient time for procurement procedures • Investigate option to have SPC do procurement of large items.
Implementing agencies have competing responsibilities		
Competing responsibilities within the implementing agencies	High	<ul style="list-style-type: none"> • Ensure agencies take ownership for the efficient delivery of their specific activities • Consider appointing a point person to be the “legs-on-the-ground” to keep activities on track in the Ministry of Waterways and Environment in Labasa. • Hold a review of progress December 2020 and revise targets if required
Competing commitments for National Coordinator time	High	<ul style="list-style-type: none"> • Prioritisation of National Coordinator project activities and deliverables • Careful scheduling of the activities so as to accommodate the staff needs for other competing commitments.
Extreme events		
Project implementation delayed by an extreme weather event e.g. cyclone, ocean surge, severe El Niño drought, or major social/cultural events.	High	<ul style="list-style-type: none"> • Ensure planning of activities contains sufficient buffering for minimum one severe and disruptive weather event. • Despite the above mitigating measure, a severe drought or cyclone will likely delay full delivery of all activities.
Assumptions		
<ul style="list-style-type: none"> • Global economic conditions and national governance do not prevent economic growth. • Global support for the Paris Agreement and Sendai Framework is maintained. • Continual high-level national government commitment to prioritising climate change and disaster risk management in the national development agendas. • Social and political stability is maintained. • Continuous collaboration amongst development partners occurs and is documented to ensure coherence, complementarity and efficiency amongst climate change and disaster risk management interventions. 		

Exit Strategy

Strategy1: Mainstreaming

By transferring knowledge and application of climate and disaster risk resilience measures to the strategies and plans of the coastal protection sector, the delivery of the sector will be strengthened and enhanced beyond project life. The SUPA project will be developing a Watershed Management Plan using a participatory and rights and gender based approach. It will incorporate current and future climate and disaster risk challenges and projections. In keeping with the Framework for Resilient Development for the Pacific (FRDP), the integration of measures that address climate risk and disaster risk within a sector is another example of a mainstreaming approach that contributes to sector resilience beyond project life. Lessons learnt in applying a gender-sensitive/rights-based approach from the RENI project will be applied.

Strategy 2: Further Funding

Identifying alternative sources of grant funding or loan finance, or national government funds in order to continue a project's activity is a second exit strategy. SUPA also provides an opportunity for local stakeholders to voice their concerns directly to National Government, as was done during the Project design Consultation on 1 November 2019.

SUPA is working closely with a number of climate change adaptation and disaster risk management projects being implemented by SPC, as well as other projects implemented by regional and international organisations. Throughout the course of the project, routes to create synergies with other longer running activities will be pursued and where appropriate, developed.

Strategy 3: Private Enterprise

Developing an alternative business and/or operational model, through commercialising aspects of the project, is a third exit strategy. Within the scope of SUPA, private sector involvement in disaster risk management and climate change adaptation interventions will be encouraged where appropriate. Discussions with the Ministry of Agriculture, Fiji Sugar Corporation and other avenues will be pursued.

Strategy 4: Project Closure

Winding down a project's activities as efficiently and effectively as possible in order not to impact adversely on the project's staff and its stakeholders, and to capture the benefits and any lessons learned is a fourth exit strategy. The project will work to efficiently wind down the activities as the end date is approached.

Lessons learnt from the Global Climate Change Alliance: Pacific Small Island States (GCCA: PSIS) and RENI project will be applied and include allowing sufficient time and staff for an

efficient and complete closure process, complete documentation of all narrative and financial materials, and perhaps most importantly the compilation and sharing of lessons learnt through interactive discussion sessions with national stakeholders and regional partners.

Annex 1 Indicative Logframe Matrix SUPA Activities in Fiji

The activities, the expected outputs and all the indicators, targets and baselines included in the logframe matrix are indicative and may be updated during the implementation of the action. Note also that indicators will be disaggregated by sex whenever relevant

Intervention logic	Indicators	Baselines (2020)	Target 2022	Sources and means of verification	Assumptions
Overall objective: Vulnerable coastal communities of Macuata province, Fiji, more resilient to climate change.	<ul style="list-style-type: none"> Soasoa Community understanding of climate change resilience enhanced Specific climate change resilience measures incorporated into engineering designs. 	<ul style="list-style-type: none"> Baselines for community understanding to be established in start-up phase 0 designs that accommodate climate change 	<ul style="list-style-type: none"> Minimum 20 community members have enhanced understanding of climate change resilience. Minimum 10 media articles on climate resilience and drainage in the Labasa area over the period 2020 – 2022. Minimum 2 engineering designs clearly incorporating measures to accommodate climate changes e.g. sea level rise and changed precipitation patterns. 	<ul style="list-style-type: none"> Community pre and post project questionnaire surveys. Engineering designs prepared for the SUPA project and other projects. Newspaper and other media reports. Reporting on SDGs especially 3, 5, 6, 13. Reporting on national and sector policies & plans. 	<ul style="list-style-type: none"> Community pre and post project questionnaire surveys. Engineering designs prepared for the SUPA project and other projects. Newspaper and other media reports. Reporting on SDGs especially 3, 5, 6, 13. Reporting on national and sector policies & plans.
Specific objective: Comprehensive approach to the management of the Soasoa watershed,	<ul style="list-style-type: none"> Comprehensive watershed planning approach that incorporates climate change adopted for 	<ul style="list-style-type: none"> Currently no watershed planning and zero approaches that incorporates climate change 	<ul style="list-style-type: none"> Watershed management plan to be submitted to Cabinet 	<ul style="list-style-type: none"> Watershed management plan and implementation action plan. 	<ul style="list-style-type: none"> Communities willing to contribute to the planning process.

Intervention logic	Indicators	Baselines (2020)	Target 2022	Sources and means of verification	Assumptions
incorporating climate resilient flood control measures, adopted.	<ul style="list-style-type: none"> the control of flooding in minimum one watershed. Formulation of watershed coordination group. Number of community groups participating in the watershed planning process. 	<ul style="list-style-type: none"> 1 multi-stakeholder watershed coordination group Currently zero group Estimate 0 	<ul style="list-style-type: none"> 1 multi-stakeholder watershed coordination group Minimum 2 different community groups actively participate in the watershed planning process for the Soasoa catchment, e.g. Farmers, Association, Community groups. 	<ul style="list-style-type: none"> Assessments of past constructed flood protection measures. Flooding incident reports in the Soasoa drainage area. Reports of community meetings Media reports 	<ul style="list-style-type: none"> Fiji government and partners continue to support and implement projects and programmes that promote flood protection.
KRA 1: Development of a watershed management plan (2020-2050) for Soasoa Drainage System	<ul style="list-style-type: none"> Number of watershed management plan developed, endorsed and adopted for Soasoa drainage system integrating climate change and disaster risks considerations and gender sensitive/rights based approach Number of vulnerable groups in the Soasoa area engaged in the Soasoa watershed 	<ul style="list-style-type: none"> Zero Soasoa Watershed Management plans Zero Project Communications Plan developed Zero consultation and planning process conducted for Soasoa watershed area. 	<ul style="list-style-type: none"> At least one watershed management plan developed for Soasoa watershed area. At least two community and key stakeholders' consultations conducted using a gender sensitive/rights based approach. Minimum 10 vulnerable persons (women, youth, elderly, persons with disabilities, migrants) engaged in 	<ul style="list-style-type: none"> Soasoa watershed management plan published. Consultation reports prepared during the watershed planning process. Social surveys. Communications Plan endorsed and published 	<ul style="list-style-type: none"> Suitable consultant team to develop watershed management plan Communities and key stakeholders including Fiji government support the development of the watershed management plan

Intervention logic	Indicators	Baselines (2020)	Target 2022	Sources and means of verification Assumptions
	<ul style="list-style-type: none"> consultation and planning process. Number of project Communications Plan integrating climate change and disaster risks considerations and gender sensitive/rights based approach developed. 	<ul style="list-style-type: none"> the watershed planning process. 1 Project Communications Plan developed 		<ul style="list-style-type: none"> Communities and key stakeholders including Fiji government support the prioritised scaling up activities Ministry of Waterways/ Fiji government have in-house capacity to conduct topographic survey Major flooding or cyclone event does not
KRA 2: Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system	<ul style="list-style-type: none"> Number of topographic surveys conducted for Soasoa watershed area Number of climate proof detailed engineering designs developed for i) floodgates, ii) levees, iii) spillways, and iv) water channel widening. 	<ul style="list-style-type: none"> Zero topographic surveys conducted for Soasoa watershed area, some small scale topographic surveys from Lands Division exist 0 climate proof detailed engineering designs 	<ul style="list-style-type: none"> One topographic survey conducted for Soasoa watershed area. Climate proof detailed engineering designs developed for i) 2 floodgates, ii) levee of most vulnerable area, iii) 1 spillway, and iv) area of water channel to be widened in the Soasoa drainage area. 	<ul style="list-style-type: none"> Topographic survey report for Soasoa watershed area 2 floodgates detailed engineering designs developed 1 detailed engineering design for levee of most vulnerable area developed 1 detailed engineering design for 1 spillway developed 1 detailed engineering design for area of water channel to be

Intervention logic	Indicators	Baselines (2020)	Target 2022	Sources and means of verification	Assumptions
KRA 3: Implementation of the prioritised scaling up measures for the Soasoa drainage system	<ul style="list-style-type: none"> Number of floodgates constructed. Improvements to the levee, spillway and water channels constructed 	<ul style="list-style-type: none"> 1 floodgate and 1 flapgate existing No of flooding incident in past 10 years to be compiled during start up. 	<ul style="list-style-type: none"> 1 floodgate constructed/upgraded 1 flapgate constructed/upgraded Levee in the most vulnerable area raised by 0.2 m. 1 Spillway structure upgraded. 1 water drainage channel widened 	<ul style="list-style-type: none"> Construction completion reports for floodgate, flapgate, spillway, levee and water channel Site visit confirmation Media releases 	<ul style="list-style-type: none"> Contractor and construction materials available. Communities and key stakeholders including Fiji government support the prioritised scaling up activities. Major flooding or cyclone event does not cause significant interruption or divert relevant staff to other activities.
KRA 4: Recruitment and employment of a National Coordinator	<ul style="list-style-type: none"> Number of quarterly narrative and financial reports submitted by SUPA 	<ul style="list-style-type: none"> 0 reports 	<ul style="list-style-type: none"> 10 reports 	<ul style="list-style-type: none"> Quarterly narrative and financial reports 	<ul style="list-style-type: none"> SUPA National Coordinator is recruited by Q2 2020

Intervention logic	Indicators	Baselines (2020)	Target 2022	Sources and means of verification	Assumptions
	National Coordinator				

Annex 2 Project Activities and Indicative Budget (*Amended on the 26th of January 2021 as annexed 4)*

Activity	Project costs (Euros)	KRA sub- total (Euros)	In-kind contribution (Euros)	SPC (Euros)
KRA 1: Development of a watershed management plan (2020-2050) for Soasoa drainage system				
1.1. Consultancy to prepare a watershed management plan for the Soasoa drainage catchment	70,000			
- Community consultations;				
- Data collection and analysis to include physical, hydrological, meteorological, climate projection, socio-economic information;				
- Preparation and review of the watershed management plan;				
- Preparation of catchment management implementation plan				
1.2. Seek endorsement by Cabinet for the Soasoa Watershed Management Plan				
1.3. Preparation and delivery of a Communications Plan	15,000			
KRA 1 Total	85,000	85,000		85,000
KRA 2: Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system				
2.1. Topographical surveys of the prioritised areas				7,000
2.2. Preparation of design documents for the prioritised measures			20,000	
2.3. Preparation of procurement documents			5,000	
2.4. Environmental screening and preparation of EMP/EIA	20,000			20,000
KRA 2 total		20,000		
KRA 3: Implementation of the prioritised scaling up measures for the Soasoa drainage system				
3.1 Construction of the floodgate				
3.2 Construction the floodgate [replacement of flapgate]				
3.3 Materials for raising of the levee by 0.2 m along the most vulnerable areas	295,000			
3.4 Construction cost for raising of the levee by 0.2 m along the most vulnerable areas				45,000
3.5 Upgrading of the spillway				50,000
3.6 Widening of channel				20,000
3.7 Project oversight			30,000	
KRA 3 total		295,000	295,000	295,000
KRA 4: Recruitment and employment of a National Coordinator				
4.1 Recruitment and employment of a National Coordinator	70,000			
4.2 Support funds for National Coordinator	10,000			5,000
KRA 4 total		80,000		80,000
Contingencies		20,000	20,000	20,000
Grand total		500,000	182,000	500,000

Note budget allocation above is indicative only. Budget will be reviewed once detailed engineering design and costings have been finalised.

Efforts will be made to procure the services of one contractor for the KRA 3 activities through an open and competitive procurement process.

At the request of the Government of Fiji, a National Coordinator (KRA 4) was recruited by SPC and now housed jointly by the Ministry of Economy and the Ministry of Waterways and Environment.

SPC will undertake the procurement for KRA 1 and for the direct project-funded infrastructure in KRA 3 (budget lines 3.1 to 3.3). Procurement will follow the SPC Procurement Policy. The Ministry of Waterways and Environment will be represented in the technical review of bidding documents.

The survey and design work in KRA 2 (budget lines 2.1 to 2.3), the construction of the additional infrastructure in KRA 3 (budget lines 3.4 to 3.6 will be undertaken as part of scheduled maintenance work in the scheme by the Ministry), and the engineering oversight of the construction (Budget lines 3.7) will be the responsibility of the Government of Fiji.

Other information

The Government of Fiji will oversee accurate and regular records and accounts of the implementation of the Action. The following conditions will also apply:

Fixed assets (equipment): All fixed assets (equipment) will remain the property of SPC until the closure of the project. On closure of the project, the assets will officially be handed over by SPC to the respective stakeholders in Fiji. An asset register of all assets purchased should be maintained by the SUPA Project National Coordinator and kept in the Ministry of Economy/Waterways office.

Annex 3 Schedule of activities

Activity	M 1-6 2020	M7-12 2020	M1-6 2021	M7-12 2021	M1- 6 2022	M7-12 2022
KRA 1: Development of a watershed management plan (2020-2050) for Soasoa Drainage System						
1.1. Consultancy to prepare a watershed management plan for the Soasoa drainage catchment						
- Community consultations;						
- Data collection and analysis to include physical, hydrological, meteorological, climate projection, socio economic information;						
- Preparation and review of the watershed management plan;						
- Preparation of Catchment Management Implementation Plan						
1.2 Seek endorsement by Cabinet for the Soasoa Watershed Management Plan						
1.3 Preparation and delivery of a Communications Plan						
KRA 2: Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system						
2.1 Topographical surveys of the prioritised areas						
2.2 Preparation of design documents for the prioritised measures						
2.3 Preparation of procurement documents						
2.4 Environmental screening and preparation of EMP/EIA						
KRA 3: Implementation of the prioritised scaling up measures for the Soasoa drainage system						
3.1 Construction of the floodgate						
3.2 Construction the floodgate [replacement of flapgate]						
3.3 Materials for raising of the levee by 0.2 m along the most vulnerable areas						
3.4 Construction costs for raising the levee by 0.2 m along the most vulnerable areas						
3.5 Upgrading of the spillway						
3.6 Widening of channel						
3.7 Project oversight						

Activity	M 1-6 2020	M7-12 2020	M1-6 2021	M7-12 2021	M1- 6 2022	M7-12 2022
KRA 4: Recruitment and employment of a National Coordinator						
4.1 Recruitment and employment of a National Coordinator						
4.2 Support funds for National Coordinator						

Annex4



Pacific
Community
Communauté
du Pacifique

Project Design Document Amendment #1

Between

Pacific Community (SPC)

And

Government of the Republic of Fiji

For the Implementation of the Global Climate Change Alliance Plus – Scaling Up Pacific Adaptation Project in Fiji

The Project Design Document (PDD) dated 3rd June 2020 which was endorsed for the implementation of the Global Climate Change Alliance Plus – Scaling Up Pacific Adaptation (GCCA+SUPA) Project in Fiji is hereby amended to apply the utilization of EUR 60,000 reallocated from the project's savings for 2020, as follows:

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KRA 2: Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system

2.4 Environmental screening and preparation of Environmental Management Plan/or Environmental Impact Assessment

Following confirmation on 24th June 2020 from the Ministry of Environment that an environmental impact assessment was not required for the proposed Soasoa works, there is a saving of EUR 19,900 from budget line 2.4.

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KRA 3: Implementation of the prioritised scaling up measures for the Soasoa drainage systems

3.3 Materials for raising the levee by 0.2m along the most vulnerable areas and other additional drainage works

This will involve the identification of the most vulnerable areas to flooding along the existing levee and purchasing the necessary materials for raising of selected portion of that area by 0.2m and other additional drainage works. Raising of the levee is dependent upon final design and costing for the floodgate and flap gate. An additional EUR 35,000 from the 2020 savings and another EUR 19,900 reallocated from budget line KRA 2.4 will be added to the budget for this activity in 2021 bringing the total funds for this activity to EUR 54,900.

New Activity

KRA 5: Training in Costing Methodology for Fiji's National Adaptation Plan

5.1 Technical assistance to provide training in costing methodology.

This will involve the hiring of an overseas consultant (working remotely) and one local consultant to conduct a 1-week training workshop for government personnel from key ministries on applying a costing methodology to proposals being prepared as part of Fiji's National Adaptation Plan. It will include preparation of work and training schedules, content for training manuals, list of trainers, list of trainees, conducting the training sessions and preparation of the workshop report. All activities will use a rights based and gender sensitive approach. EUR 15,000 is allocated to budget line 5.1

5.2 Logistical Costs for 1-week training workshop

This will involve costs for logistical arrangements for a 1-week training workshop including venue hire, refreshments, materials, local transportation and other logistical costs. EUR 10,000 is allocated to budget line 5.2.

Project Activities and Indicative Budget

Project Title:	<i>Scaling up the Soasoa drainage system, Fiji</i>		
	Activity	Budget in PDD (Euros)	Amended Budget (Euros)
KRA 1: Development of a watershed management plan (2020-2050) for Soasoa Drainage System			
1.1. Consultancy to prepare a watershed management plan for the Soasoa Drainage Catchment - Community consultations; - Data collection and analysis to include physical, hydrological, meteorological, climate projection, socio economic information; - Preparation and review of the watershed management plan; - Preparation of Catchment Management Implementation Plan		70,000	70,000
1.2 Seek endorsement by Cabinet for the Soasoa Watershed Management Plan			
1.3 Preparation and delivery of a Communications Plan		15,000	15,000
KRA 1 Total		85,000	85,000
KRA 2: Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system			
2.1 Topographical surveys of the prioritised areas			
2.2 Preparation of design documents for the prioritised measures			
2.3 Preparation of procurement documents			

2.4 Environmental screening and preparation of EMP/EIA	20,000	100
KRA 2 total	20,000	100
KRA 3: Implementation of the prioritised scaling up measures for the Soasoa drainage system		
3.1 Construction of the floodgate		
3.2 Construction the flapgate		
3.3 Raising of the levee by 0.2 m along the most vulnerable areas and other additional drainage works	295,000	349,000
3.4 Upgrading of the spillway		
3.5 Widening of channel		
3.6 Project oversight		
KRA 3 total	295,000	349,900
KRA 4: Recruitment and employment of a National Coordinator		
4.1 Recruitment and employment of a National Coordinator	70,000	70,000
4.2 Support funds for National Coordinator	10,000	10,000
KRA 4 total	80,000	80,000
KRA 5: Training in Cost Methodology for National Adaptation Plan		
5.1 Technical assistance to provide training in costing methodology		15,000
5.2 Logistical costs for 1-week training workshop		10,000
KRA 5 total		25,000
Total	480,000	540,000
Contingencies*	20,000	20,000
Grand total	500,000	560,000

* Utilisation of the Contingency budget line will require SPC's approval

The additional EUR 60,000 that form the basis for this Amendment will be made available to the Government of Fiji and confirmed by letter from SPC after approval has been received from the European Union.



Pacific Community
Communauté
du Pacifique

Project Design Document Amendment #2

Between

Pacific Community (SPC)

And

Government of the Republic of Fiji

For the Implementation of the Global Climate Change Alliance Plus – Scaling Up Pacific Adaptation Project in Fiji

The Project Design Document (PDD) dated 3rd June 2020 and amended on 1st March 2021 for the implementation of the Global Climate Change Alliance Plus – Scaling Up Pacific Adaptation (GCCA+SUPA) Project in Fiji is hereby amended to apply the utilization of EUR 49,770 reallocated from the project's savings for 2021, as follows:

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KRA 3: Implementation of the prioritised scaling up measures for the Soasoa drainage systems

KRA 3.7 Replacement of 6 pairs of steel doors for existing floodgate structures in the Soasoa drainage system

KRA 3.8: Fabrication and installation of two sets of flapgate doors, one set to be placed just past the spillway in the Soasoa drainage system and the second set to be placed in the Qawa drainage system

KRA 3.9: Fabrication and installation of one new trash rack structure on the Qawa River system

An additional EUR 39,770 will be added to cover activities, 3.7, 3.8, 3.9, bringing the total funds for KRA 3 to EUR 389,670.

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KRA 5: Training in Costing Methodology for Fiji's National Adaptation Plan

5.1 Technical assistance to provide training in costing methodology.

This will involve the hiring of an overseas consultant and a local consultant to conduct a training workshop for government personnel from key ministries on applying a costing methodology to proposals being prepared as part of Fiji's National Adaptation Plan. An additional EUR 10,000 from the 2021 savings will be added to this budget line to extend the duration of the training bringing the total funds for KRA 5.1 to EUR 25,000.

Annex 2 Project Activities and Indicative Budget

Project Title:	<i>Scaling up the Soasoa drainage system, Fiji</i>		
Activity	Project costs (Euros)	Project costs amended (Euros)	
KRA 1: Development of a watershed management plan (2020-2050) for Soasoa Drainage System			
1.1. Consultancy to prepare a watershed management plan for the Soasoa Drainage Catchment Community consultations; - Data collection and analysis to include physical, hydrological, meteorological, climate projection, socio economic information; Preparation and review of the watershed management plan; Preparation of Catchment Management Implementation Plan	70,000	70,000	
1.2 Seek endorsement by Cabinet for the Soasoa Watershed Management Plan			
1.3 Preparation and delivery of a Communications Plan	15,000	15,000	
KRA 1 Total	85,000	85,000	
KRA 2: Preparation of a survey and detailed engineering design for the prioritised scaling up measures for the Soasoa drainage system			
2.1 Topographical surveys of the prioritised areas			
2.2 Preparation of design documents for the prioritised measures			
2.3 Preparation of procurement documents			
2.4 Environmental screening and preparation of EMP/EIA	100	100	
KRA 2 Total	100	100	
KRA 3: Implementation of the prioritised scaling up measures for the Soasoa drainage system			
3.1 Construction of the floodgate			
3.2 Construction the flapgate			
3.3 Raising of the levee by 0.2 m along the most vulnerable areas and other additional drainage works	349,900	349,900	
3.4 Upgrading of the spillway			
3.5 Widening of channel			
3.6 Project oversight			
3.7 Replacement of 6 pairs of steel doors for existing floodgate structures in the Soasoa drainage system		29,520.00	
3.8 Fabrication and installation of two sets of flapgate doors, one set to be placed just past the spillway in the Soasoa drainage system and the second set to be placed in the Qawa drainage system		6,560.00	
3.9 Fabrication and installation of one new trash rack structure on the Qawa River system		3,690.00	
KRA 3 Total	349,900	389,670	
KRA 4: Recruitment and employment of a National Coordinator			
4.1 Recruitment and employment of a National Coordinator	70,000	70,000	
4.2 Support funds for National Coordinator	10,000	10,000	
KRA 4 Total	80,000	80,000	