







Secretariat of the Pacific Community

Government of the Federated States of Micronesia

GLOBAL CLIMATE CHANGE ALLIANCE: PACIFIC SMALL ISLAND STATES

PROJECT DESIGN DOCUMENT

Increasing Coastal Water Security for Climate Change in Selected FSM State Outlying Islands

AMENDMENT 1

11th August 2014

Contents:

Background Signature page

Annex 1: Revised Project Log Frame (August 2014)

Annex 2: Revised Project Budget (August 2014)

Annex 3: Updated Project Summary and Implementation Arrangements

Background

Since the Project Design Document was signed on 21st September 2013, changes have been made to the budget allocations and the scope of the project. This amendment addresses these changes.

Changes in budget

Further consultations were held in Chuuk State on 23-24 October 2013 to plan the project activities. As a result of these consultations, the hydrological assessment identified as the principal activity in the original Project Design Document was replaced by a plan to enhance communal water storage facilities in two islands of Chuuk Lagoon, Eot and Udot. As with the infrastructure activities in Yap, costing was based on estimation.

During the first half of 2014, detailed project planning continued together with assessments, surveys and site visits. Engineering designs and costs of the planned water infrastructure activities in Chuuk and Yap States were finalized in July 2014. These costs showed a 77% increase over those estimated in the original Project Design Document. This budget shortfall was largely due to under-estimation of the cost of local transport and labour in the initial planning.

Changes in scope

A meeting was held in Pohnpei, 7-8th August 2014, with representatives of the national government (Office of Environment and Emergency Management), Director of SPC North Pacific Regional Office, and the team from the Global Climate Change Alliance: Pacific Small Island States (GCCA: PSIS) project, to discuss how to address the budget shortfall and implementation arrangements. The Director of Chuuk State Environmental Protection Agency was consulted via telephone during the discussions.

It was decided to focus the project's infrastructure improvements in Yap State only. This would free up sufficient funds to allow completion of all the planned infrastructure improvements in Yap State. This decision was based on the fact that planning and coordination of activities in Yap State was much more advanced and therefore more likely to be completed in the project's time frame.

The final engineering designs for the proposed water infrastructure in Eot and Udot Islands, Chuuk State, together with other supporting documents, will be provided to the Chuuk State Government, for use to access other funding.

In addition, the words "and food" were removed from the project title which referred to coastal water and food security. As the project has evolved the focus has narrowed to water security.

As a result of this decision the project's logical framework and budget have been revised and are shown in Annexes 1 and 2 respectively. A revised project summary and outline of institutional arrangements are presented as Annex 3.

SIGNATURE PAGE

Country: Federated States of Micronesia

Amendment 1 to the Project Design Document agreed by:

Office of Environment and Emergency Management:

Mr. Andrew atilman, Director

Date: 14/08/2614

Department of Finance and Administration:

Mr. Kensley Ikosia, Secretary

Date:

Department of Foreign Affairs:

Mr. Lorin Robert, Secretary

Date:

Secretariat of the Pacific Community

Dr. Gillian Cambers, Project Manager

Global Climate Change Alliance: Pacific Small Islands States Project

Date:

Annex 1: Project Log Frame (Revised 8th August 2014)

Project title: Increasing coastal water security for climate change in selected Federated States of Micronesia (FSM) state outlying islands

| Description | Verifiable Indicators | Verification Sources | Assumptions |
|--|--|--|--|
| Overall Objective: Contribute to water security as a climate change adaptation strategy for FSM | • Document on lessons learnt in FSM outlying islands about sustainable use of quality water in the context of climate change; and checklist for the planning of water infrastructure installation, monitoring and maintenance available by 09/2015. | Annual reports, work plans, budgets for Yap State Agencies OEEM annual report Climate Change Policy Water Policy JSAP Lessons learnt workshop report Project reports | Plans, policies and strategies have a stakeholder or community buy-in and willingness to implement. |
| Purpose: Contribute to increased access and sustainable use of quality water in the outlying islands of FSM States | Demonstration model showing implementation of water security measures for climate change adaptation and disaster risk management in place in one outlying island by 06/2015. 5% of Yap State population adopt a long term water conservation measure by 06/2015 | Annual reports, work plans, budgets for Yap State Agencies Project progress reports Questionnaires Before and after survey results | Communities receptive to information and willing to take proactive action. |
| Key Result Area 1 Education and awareness on sustainable water use and conservation in the context of climate change enhanced in FSM. | Water security education and awareness plan distributed by 01/2015 Printed materials on water conservation and maintenance distributed to at least two outlying islands by 05/2015. At least two awareness programs conducted in Yap state so as to reach 15% of the population by 05/2015 | Annual reports, work plans, budgets for Yap State Agencies Awareness raising reports and awareness materials Project progress reports Education and awareness plan | Residents willing to adopt water conservation measures Suitable staff available for timely recruitment. |

4 | Page



| Description | Verifiable Indicators | Verification Sources | Assumptions |
|---|---|---|---|
| Key Result Area 2 | Final designs for communal water supply completed for 2 outlying | Annual reports, work plans, budgets for Yan State Arencies | Basic logistics: materials, transport available within project timeframe |
| Improved water infrastructure for catchment, storage and emergency services in place for at | islands in Chuuk State by 09/2014 New installation or upgrade of | Project progress reports Procurement and tender documents | Delivery and installation not affected by an extreme weather event e.g. typhoon |
| least one outlying island | water catchment storage in place for 80% of Fais Island population | | |
| | by 09/2015 | | |
| | Emergency water supply operational for Fais Island by | | |
| Key Result Area 3 | Monitoring management and | Annual reports work plans hudgets | Community willing to adopt monitoring and |
| | maintenance program for all | for Yap State Agencies | maintenance activities. |
| Household and communal water systems | households in Fais Island agreed | Reports on training activities | |
| maintained, monitored and managed | by Fais community by 02/2015 | Training toolkit | |
| sustainably in at least one outlying island | Maintenance training tool kit trialed in one outlying island of Yap State | Monitoring and maintenance plan for Fais Island | |
| | by 06/2015 | Signed agreement for monitoring | |
| | | with Fais Community | |
| Key Result Area 4 | Basic inventory of all existing water | Inventory results | Hydrologist available to undertake the |
| Improved information on available water | infrastructure in all outlying Islands of Yap available by 12/2014. | Report on hydrological assessment Water quality data | assessment in view of the long travel time to reach the outlying islands |
| resources in at least five outlying islands of | Hydrological assessment of water | Report on lessons learnt workshop | Shipping schedules can be flexible so |
| Yap State | resources in four outlying islands | | as to allow the hydrological work to |
| | of Yap State available by 09/2015 | | take place |
| Activities | Means: | Indicative Budget | |
| 1.1 Develop an education and awareness | Technical assistance | Indicative cost €0.5 million | |
| action plan for 1 ap State With a focus on Fais Island to include baseline and end-of-project | Information snaring systems Missions to countries | | |
| surveys to determine uptake of water | Meetings and consultations | | |
| conservation and climate change adaptation | Training activities | | |
| education activities. | Procurement of equipment and | | |
| T.z Develop education and awareness materials and activities including materials in | transportation Media involvement | | |
| materials and activities including. materials in | Media IIIvolverriefil | | |



| Description | Verifiable Indicators | Verification Sources | Assumptions |
|---|--------------------------|----------------------|-------------|
| English and local languages using print, radio and other media; and at least 3 community workshops/events on water conservation and climate change. | Reporting and evaluation | | |
| 2.1 Update and verify preliminary design for existing household and communal water demand/infrastructure needs in three islands in Chuuk and Yap States. 2.2 Procure, transport and install around 42 household water catchment and storage systems, including guttering, pipes, brackets, tie down and platforms, and improvements to an additional 23 (approximately) existing catchment systems in Fais Island. 2.3 Assess groundwater specifications, procure and install solar pump system for emergency well in Fais Island. | | | |
| 3.1 Form a Yap State Project Steering Committee, hold regular meetings; recruit a Project Officer based in Yap R&D support project focal point in Fais Island; and travel support for FSM National Coordinator. 3.2 Provide training and establish regular monitoring of water quality and maintenance of catchment systems to continue beyond project life and be included in an agreement with Fais residents. 3.3 Based on lessons learnt develop a checklist for the planning of water infrastructure installations, monitoring and maintenance which will include the possibility of payment arrangements, for outlying islands in FSM | | | |

6 | Page

| Description | Verifiable Indicators | Verification Sources | Assumptions |
|---|-----------------------|----------------------|-------------|
| 4.1 Prepare a basic inventory of all existing water infrastructure in all outlying islands of Yap 4.2 Conduct a desktop assessment of water resources for Ifalik, Eurpik, Satawaal, Ulithi; and a field hydrological assessment of water resources in Ifalik. 4.3 Hold a lessons learnt workshop on sustainable use of quality water in outlying islands of FSM (to be funded under a separate budget line – dependent on formal request by Yap State through OEEM/DFA, FSM.) | | | |

Annex 2: Overall Project Budget (Revised 8th August 2014)

| Activities | Total Budget | Tranche 1 | le 1 | Tranc | Tranche 2 |
|---|-----------------|------------------|------------------|-------------|------------------|
| | (asn) | YSRD | Supplier/ SPC | YSRD | Supplier/ SPC |
| KRA 1 Education and awareness on sustainable water use and conservation in the context of climate change enhanced in Yap State, FSM. Total KRA 1 = \$40,000, | n the contex | t of climate cha | ange enhanc | ed in Yap S | tate, FSM. |
| 1.1 Develop an education and awareness action plan for Yap State with a focus on Fais Island to include baseline and end-of-project surveys to determine uptake of water conservation and climate change adaptation education activities. | 20,000 | 0 | 0 | 0 | 20,000 |
| 1.2 Develop education and awareness materials and activities including: materials in English and local languages using print, radio and other media; and at least 3 community workshops/events on water conservation and climate change. | 20,000 | 0 | 0 | 0 | 20,000 |
| KRA 2 Improved water infrastructure for catchment, storage and emergency services in place for at least one outlying island. Total KRA 2 = \$406,465 | ervices in pla | ace for at least | one outlyin | g island. | |
| 2.1. Update and verify preliminary design for existing household and communal water demand/infrastructure needs in three islands in Chuuk and Yap States. | 10,000 | 10,000 | 0 | 0 | 0 |
| 2.2 Procure, transport and install around 42 household water catchment and storage systems, including guttering, pipes, brackets, tie down and platforms, and improvements to an additional 23 (approximately) existing catchment systems in Fais Island. | 352,500 | 0 | 0 | 0 | 352,500 |
| 2.3 Assess groundwater specifications, procure and install solar pump system for emergency well in Fais Island. | 43,965 | 0 | 0 | 0 | 43,965 |

8 Page

| Activities | Total Budget | Tranche 1 | le 1 | Tranche 2 | the 2 |
|--|-----------------|-----------------|------------------|----------------|------------------|
| | (asn) | YSRD | Supplier/ SPC | YSRD | Supplier/ SPC |
| KRA 3 = \$105,000 | managed su | stainably in at | least one ou | ıtlying islanc | I. Total |
| 3.1 Form a Yap State Project Steering Committee, hold regular meetings; recruit a project officer based in Yap R&D support project focal point in Fais Island; travel support for FSM National Coordinator. | 45,000 | 12,500 | 0 | 32,500 | 0 |
| 3.2 Provide training and establish regular monitoring of water quality and maintenance of catchment systems to continue beyond project life and be included in an agreement with Fais residents. | 30,000 | 5,000 | 0 | 25,000 | 0 |
| 3.3 Based on lessons learnt develop a checklist for the planning of water infrastructure installations, monitoring and maintenance which will include the possibility of payment arrangements, for outlying islands in FSM | 30,000 | 0 | 10,000 | 0 | 20,000 |
| KRA 4 Improved information on available water resources in at least five outlying islands in Yap State. Total KRA 4 = \$ 74,000 | ying islands i | n Yap State. | | | |
| 4.1 Prepare a basic inventory of all existing water infrastructure in all outlying islands of Yap | 5,000 | 5,000 | 0 | 0 | 0 |
| 4.2 Conduct a desktop assessment of water resources for Ifalik, Eurpik, Satawaal, Ulithi; and a field hydrological assessment of water resources in Ifalik. | 000'69 | 0 | 0 | 0 | 000'69 |
| 4.3 Hold a lessons learnt workshop on sustainable use of quality water in outlying islands of FSM (to be funded under a separate budget line – dependent on formal request by Yap State through OEEM/DFA, FSM.) | 0 | 0 | 0 | 0 | 0 |

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Annex 3 Revised Project Summary and Implementation Arrangements









PROJECT SUMMARY

Secretariat of the Pacific Community Government of the Federated States of Micronesia

GLOBAL CLIMATE CHANGE ALLIANCE: PACIFIC SMALL ISLAND STATES PROJECT FUNDED BY THE EUROPEAN UNION

Increasing Coastal Water Security for Climate Change in Selected FSM State Outlying Islands

PROJECT SUMMARY

The **overall objective** of the project is to contribute to water security as a climate change adaptation strategy for the Federated States of Micronesia (FSM) and the **purpose** is to contribute to increased access and sustainable use of quality water in the outlying islands of FSM States. The project will be implemented over the period starting on the date of signature of this project design document and finish by 31 December 2015.

The project's focus was determined by the Government of the FSM and included widespread consultation. FSM is responsible for the project's implementation. The **key result areas** (KRAs) are as follows: (i) Education and awareness on sustainable water use and conservation in the context of climate change enhanced in FSM; (ii) Improved water infrastructure for catchment, storage and emergency services in place for at least one outlying island; (iii) Household and communal water systems maintained, monitored and managed sustainably in at least one outlying island; and (iv) Improved information on available water resources in at least five outlying islands of Yap State.

The project will provide FSM National and State Government agencies and selected outer island communities with the necessary technical assistance, staff support, equipment, and training opportunities so that they can monitor, maintain, and improve water systems in the outlying islands, in collaboration with other partners. The project will enhance water catchment and storage, together with improved access to emergency water supply in Fais Island in Yap State. Hydrological assessments and infrastructure design in other outlying islands will be undertaken to enhance existing information on long term water supply. Public education and outreach, relating to water conservation, monitoring and management for the outlying islands of FSM will also be conducted. This will especially target vulnerable groups such as women, children and the disabled.

The availability of fresh water in the outlying island communities of FSM is dependent upon favourable environmental conditions. Climate change can affect water security in these communities in a number of ways, including: (i) higher air temperatures can affect evaporation rates and the availability of quality water, (ii) changes in precipitation (rainfall) and extreme weather events will aggravate water scarcity, and (iii) the sea level will continue to rise, which can affect the availability and quality of water supply in small, low-lying islands.

This project is consistent with the climate change adaptation needs and priorities for FSM as identified in the FSM Nationwide Integrated Climate Change and Disaster Risk Management Policy and Act 2013 and FSM National Resolution No. 01-2011 which provides a rationale for development of a comprehensive policy, water sector investment plan and enhanced coordination across the four states. Intensive participatory consultations have informed the development of this project.

1|Page Q

INSTITUTIONAL ARRANGEMENTS

The project will coordinated at the national level by the Office of Environment and Emergency Management (OEEM). In Yap it is managed and implemented by Yap State Resources and Development (YSRD) with assistance from Yap State Environmental Protection Agency (YSEPA) and other partners.

The GCCA: PSIS project is being implemented under the ambit of the Letter of Agreement signed on 23rd October 2012 by SPC and the Government of FSM. The FSM signatories to the Letter of Agreement were the Director, OEEM; Acting Secretary, Department of Finance and Administration; Acting Secretary, Legal Sufficiency Determined, Department of Justice.

Project Oversight Committee

Project oversight at the national level will be through OEEM and the National Climate Change Country Team, which has a rotational chairmanship by the States, and meets annually back to back with EPA Director's meetings and as opportunities arise.

In Yap this function will be provided by a Project Steering Committee whose membership will comprise representatives from YSRD, YSEPA, Yap State Public Service Corporations (YSPSC), YAPCAP, Department of Public Works & Transportation, Office of Finance, OEEM and the SPC GCCA: PSIS Climate Change Adviser. The Steering Committee in Yap will be chaired by the representative from YSRD

Work in Chuuk will inform the designated Chuuk State Water steering committee with multisector representation and involvement of community representatives.

The Project Steering Committees will be responsible for providing technical and policy advice on the implementation of the project. The Steering Committees will meet (face-to-face meetings and skype) once every quarter and/or on needs basis. The SPC/FSM Coordinator, situated in OEEM, and/or the Project Officer recruited for this project in Yap, will provide secretarial support to the Steering Committees.

Reporting

The SPC/FSM CC Coordinator and the YSRD-based Project Officer, are responsible for overseeing the implementation of project activities, asset management and providing quarterly progress reports, to the Oversight Committees.

Day to Day Implementation of the Project

Designated project officers implement and manage the project activities. They work closely with the SPC/FSM Climate Change Coordinator based in OEEM, as well as the SPC Climate Change Advisor at the SPC North Pacific Regional Office in Pohnpei.

12 | Page 🔎 🛴