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Global Climate Change Alliance: Pacific Small Island States Individual Country Evaluation Report - Federated States of Micronesia

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REPORT PREPARED BY

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1. INTRODUCTION

This is one of nine individual country evaluation summary reports produced as part of the Global Climate Change Alliance: Pacific Small Island States post-project evaluation¹.

The Global Climate Change Alliance: Pacific Small Island States (GCCA: PSIS) Project is a European Union (EU) funded initiative to assist nine smaller Pacific Island states (Cook Islands, Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Niue, Palau, Tonga and Tuvalu) to adapt to climate change. The project was implemented by the Pacific Community (SPC), with an implementation period from July 2011 through to November 2016².

The overall objective of the project was to support the governments of nine small island states of the Pacific in their efforts to tackle the adverse effects of climate change.

The GCCA: PSIS project consisted of on-ground climate change adaptation activities in specific sectors – coastal protection, marine resources, health, agriculture, and freshwater; supported by mainstreaming of climate change into national and sectoral policies, plans, budgets and procedures. The project also provided technical assistance, capacity building and supported regional collaboration.

The four components and key result areas (KRA) of the project were:

1. Climate change mainstreamed into national and/or sector response strategies.
2. Well-articulated sectoral adaptation strategies that address budget support criteria.
3. National climate change adaptation projects implemented.
4. Streamlined technical assistance that supports national adaptation responses delivered by regional organisations in a collaborative manner.

The individual country evaluation report presented below is guided by responses to the key evaluation criteria provided in the original terms of reference:

- Relevance & EU Coherence
- Effectiveness
- Impact
- Efficiency
- Sustainability
- Cross-Cutting themes of gender and the environment
- Visibility

The report also provide a summary of best practices and any specific recommendations for future action or improvement.

¹ The evaluation report is presented as a full report containing all sections, as well as separate executive summary, individual country evaluation summaries and case studies.

² The project was granted a one-year extension.

2. FSM EVALUATION REPORT

Sector for Climate Change Adaptation Project

Water sector

Project

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

The project installed 1,200 gallon rainwater tanks in 40 households and five government buildings in three villages in Fais Island, Yap State. An additional 23 existing tanks were refurbished (First Flush Diverters (FFD), guttering, fascia boards).

Training was delivered in the installation of rainwater tanks and appurtenances in Yap. Fais community members were trained in monitoring and maintenance of rainwater harvesting systems.

The project also refurbished a groundwater well with a solar pump on Fais. Members of the community and Yap State Public Services Corporation (YSPSC) were trained in the operations and maintenance of the well and solar pump.

Designs for community water tanks on the islands of Eot and Udot in Chuuk State were completed.

Hydrological assessments of water resources were conducted in four outlying islands of Yap State³.

There was an extensive community education and awareness raising component that included a partnership with the Water for Life project. A demonstration site consisting of 2 rainwater harvesting systems was established at the Community Centre in the Yap capital Colonia, which also facilitated sharing products resulting from the project (e.g. reports, videos, etc.).

Implementing Entity

The Office of Environment and Emergency Management (OEEM) at the national government level provided a facilitation/coordination role for the project. The National Coordinator was based in OEEM, in Pohnpei.

The implementing entity was the Yap State Resources & Development (Energy, Water, Agriculture). Yap State Environmental Protection Agency (EPA) was an implementation partner, as well as Yap States Public Works Department and Yap State Public Service Corporation (YSPSC). The Yap State Project Steering Committee provided oversight of the on-ground water security project in Yap.

This structure worked relatively well, though it was reported that it would have been better if the National Coordinator spent more time in Yap (either based there, or longer stays). An increased on-site presence would have made it easier to work with different agencies.

Relevance & EU Coherence

The project was highly relevant to the needs of FSM, Yap State and the Fais Island community.

³ Ifalik, Eauripik, Satawaal, and Ulithi

The project is consistent with FSM's Environmental 5-year Plan and strategic goals; Climate Change Policy; Federal Emergency Management Agency (FEMA) Mitigation Plan, Vulnerability and Adaptation Assessment; Food and Agricultural Organisation (FAO) Food Security, Water Declaration and Sustainable Development Plan; as well as state plans which prioritise water resources.

Fais was selected as it had previously been the subject of scientific studies of the water sector by the University of Guam Water and Environmental Research Institute (WERI). The WERI report for Fais outlined costs of implementing a range of recommendations to improve water security, based on a socio-economic and hydrological assessment conducted in 2006.

The initial consultations that took place with community leaders prioritised the need for improving water and food security for sustainability of the community. Improving water security has the additional benefit of supporting crop and food security improvements, including the Yap seed bank project which has a site in Fais.

The original project design included a component in Chuuk State. Community survey, consultations, land use agreement and design for two large rainwater storage tanks were completed for Udot and Eot (two islands in Chuuk State Lagoon), replicating a GEF-funded IWRM model for communal water storage. Following detailed costings indicating insufficient funds to complete both Yap and Chuuk components, the procurement of the tanks and on-ground activities in Chuuk were removed in late 2014. A number of factors influenced the decision to remove the Chuuk component and progress works in Yap. Firstly there were delays by the Chuuk State government in appointing a designated counterpart/project officer within Chuuk EPA or another agency with suitable water sector experience to manage both reporting and implementation in Eot/Udot sites. Secondly, there was a lack of baseline data on water resources for the Chuuk sites. Lastly, the Chuuk State government could not make decisions as to a narrowed project selection within the timeframes provided. The final decision to not fully implement the Chuuk component was made by the FSM national government after consultation with the Chuuk State government.

GCCA's focus on the water sector ensures that it does not duplicate efforts made under the EU-funded *North Pacific ACP Renewable Energy and Energy Efficiency Project (North-REP) 2010 – 2015* that focuses on energy. The GCCA project complements the German-funded *Coping with Climate Change in the Pacific Island Region (CCCPIR) 2009–2015*, which in FSM primarily looked at coastal fisheries management.

Effectiveness

The project was most effective in providing new rainwater capture and storage infrastructure to the outlying island of Fais

The project was successful in achieving most of its expected results outlined in the revised logframe (revised August 2014)

Expected result	Indicator	Indicator achieved
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	Achieved: The lessons have been shared with all four states of FSM during a 2-day lessons learnt workshop. Lessons included, the need for baseline

Expected result	Indicator	Indicator achieved
		data and the use of the logical framework approach to inform project selection; and the importance of accurate cost estimates to inform project design, as well as a high contingency budget for outer island activities. Participants identified ' <i>outer islands need special attention</i> ' as a key lesson to share at the regional lessons learnt meeting.
	Checklist for the planning of water infrastructure installation, monitoring and maintenance available by 09/2015	Partial: A checklist for the planning of rainwater harvesting systems has been drafted. It currently covers regulatory requirements, site conditions. It has not yet been finalised.
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	Achieved: The project installed 1,200 gallon rainwater tanks in 40 households and five government buildings in three villages in Fais, Yap State, providing an additional 54,000 gallons of rainwater storage. The project also funded fascia boards and guttering. (17 homes improved roofing through assistance from AusAID). An additional 23 existing tanks were refurbished. The project also refurbished a groundwater well with a solar pump on Fais.
	5% of Yap State population adopt a long term water conservation measure by 06/2015	Achieved – Fais population is approximately 5 % of Yap State total, all 65 households now have improved rainwater harvesting systems including first flush diverters which reduce need to manually divert water at commencement of rain events. The education awareness programs on radio and events such as World Water Day, as well as community training in

Expected result	Indicator	Indicator achieved
		<p>water tank maintenance reached a significant proportion of the population. The education and awareness consultant indicated an approximately 18-19% increase in awareness from the baseline and end-line surveys. The current Yap State of Emergency (due to drought) has resulted in water rationing and increased uptake of tanks nationally.</p>
<p>Key Result Area 1: Education and awareness on sustainable water use and conservation in the context of climate change enhanced in FSM</p>	<p>Water security education and awareness plan distributed by 01/2015</p>	<p>Achieved: A work plan and tentative schedule was developed. The plan could have been improved by identifying target audiences, key messages, and appropriate communications methods for each target audience, rather than a list of activities and dates. The report on awareness activities provides a better example of an education and awareness plan (target audience & approach), though it was produced post-activity.</p>
	<p>Printed materials on water conservation and maintenance distributed to at least two outlying islands by 05/2015</p>	<p>Achieved: Fais and Ulithi islands received copies of translated stickers, brochures and posters.</p>
	<p>At least two awareness programs conducted in Yap state so as to reach 15% of the population by 05/2015</p>	<p>Achieved: The education and awareness team comprised of inter-agencies from the government sector and from private sectors and NGO's namely PREL-Water for Life. Awareness programs included World Water Day activities, logo drawing and essay competition for students, community workshops, and radio programs. The community workshops reportedly had strong community participation. The awareness raising activity report indicates a good</p>

Expected result	Indicator	Indicator achieved
		number of students participated in the logo and essay contests, and participated in the World Water Day activities.
Key Result Area 2: Improved water infrastructure for catchment, storage and emergency services in place for at least one outlying island	Final designs for communal water supply completed for 2 outlying islands in Chuuk State by 09/2014	Achieved: Procurement plan for communal water storage in two islands (Udot & Eot) in Chuuk prepared. This includes a costing, timeline, and a schematic diagram for Udot installation. These can be used to support future funding applications.
	New installation or upgrade of water catchment storage in place for 80% of Fais Island population by 09/2015	Achieved: There are approximately 360 residents on Fais, living in 65 compounds. The project installed 40 household tanks and refurbished 23 (2 compounds had relatively new systems), as well as installed 5 rainwater tanks in community buildings. All of the Fais population spread over the three communities have access to new community storage during water rationing.
	Emergency water supply operational for Fais Island by 04/2015	Achieved: Groundwater well specifications, procurement and installation of a quality solar pump system for Sahagow Well completed and operating almost immediately following typhoon Maysak. Further work to address minor defects, conduct training, and monitor water quality continued to early 2016. Community now has access to emergency back-up groundwater which is in regular use due to the current Yap state of emergency associated with the El Niño related drought.
Key Result Area 3: Household and communal water systems maintained,	Monitoring, management and maintenance program for all households in Fais Island	Achieved: Households receiving new or refurbished rainwater tanks signed an

Expected result	Indicator	Indicator achieved
monitored and managed sustainably in at least one outlying island	agreed by Fais community by 02/2015	agreement to maintain rainwater tanks, and agree to water quality monitoring. The project assisted in the purchase of equipment and chemicals required for the water quality testing which will continue beyond project life.
	Maintenance training tool kit trialled in one outlying island of Yap State by 06/2015	Achieved: Kit procured by GCCA Technical Adviser, who conducted the first training in July 2015. Training was continued by Project Officer Raymond Tamow in late 2015. One of the demonstration tanks at the Yap State community centre was damaged in late 2015 and this provided an opportunity to successfully test the welding kit.
Key Result Area 4: Improved information on available water resources in at least five outlying islands of Yap State	Basic inventory of all existing water infrastructure in all outlying islands of Yap available by 12/2014	Achieved: International Organisation for Migration commissioned the work, and allowed the project to use and disseminate the report. The accuracy of the report is based on infrastructure before the Fais upgrade- as such it notes 54 plastic tanks, and 3 concrete tanks present. The project installed 45 new plastic tanks and refurbished a further 23.
	Hydrological assessment of water resources in four outlying islands of Yap State available by 09/2015	Achieved: WERI conducted desktop hydrological assessment of four outlying islands- Ifalik, Eauripik, Satawaal, and Ulithi. The results indicate that there is much variability in future groundwater resources, depending on future rainfall patterns and the expected rate of sea level rise. A detailed field study completed for two islands (Ifalik & Eauripik).The assessment results were

Expected result	Indicator	Indicator achieved
		published in two articles ⁴ , and recommend practices to improve groundwater management and rainwater storage.

The GCCA project in Yap demonstrated an effective use of partnerships between national and state government, the community, and with other organisations (e.g. IOM, PREL-Water for Life). It was reported that the project had led to improved relationships between the national level and state level departments and agencies.

All education and awareness activities focused on water conservation, maintenance of rainwater harvesting systems, climate change, and water-related health topics. The education and awareness component had partnerships with national and state departments and agencies, IOM, PREL-Water for Life, College of Micronesia, private businesses like Drops of Life, Adalbai's Enterprises, and community groups such as the Fais Health Board to deliver the education messages.

The education and awareness activities used different communication methods to ensure effectiveness. Traditional leaders and community elders were engaged in a formal manner where meetings were pre-arranged with the Chief's permission, refreshment provided, and information was communicated through presentations and printed materials.

Members of the Health Board were consulted separately and some of their feedback got incorporated into the development of materials produced. They also received some training to be able to assist in the end-of-campaign survey.

The community workshops were intended to encourage participation from women and youth through group activities, presentations, and practical demonstrations. Women were also engaged through one-on-one consultations during home visits. The World Water Day specifically targeted youth through essay and drawing contests, raffle drawings, short quizzes with school supplies handed out as prizes, displays and demonstrations. Radio programs were developed to reach all target groups.

Funds reallocated from the Nauru GCCA project to FSM were allocated to FSM's National Disaster Fund for the Typhoon Maysak recovery effort.

Additional Activities beyond the Focus of the Water Sector

The project, through the national coordinator and the Climate Change Advisor based in Pohnpei, contributed to the consultations leading up to the enactment of the FSM nationwide Integrated Disaster Risk Management and Climate Change Policy, 2014, as well as the Yap, Kosrae, and Pohnpei Joint State Action Plans for Climate Change and Disaster Risk Management.

⁴ Beikmann, A., Bailey, R., (2015) *Freshwater Resources for Selected Atolls - Recommendations based on Modeling Study*, & Taborosi, D. and Kottermair, M. (2015) *Ifalik Atoll Freshwater Resources - Recommendations based on field observations and interviews*. In: Kottermair, M., Taborosi, D., and Jenson, J. W. (Eds.), *Enough Water for Everyone? A Field Study of Freshwater Resources on Ifalik and Eauripik atolls, Yap State, FSM*. WERI Technical Report 157. Water and Environmental Research Institute of the Western Pacific, University of Guam, Mangilao, Guam.

Though FSM now has a nationwide Integrated Disaster Risk Management and Climate Change Policy, 2014, it was reported that there is still a need to raise awareness of climate change with the leadership of different sectors, especially at the State level. A participatory process for developing Joint State Action Plans for Climate Change and Disaster Risk Management is being undertaken in partnership by OEEM and State Governments as well as the EU funded Building Safety and Resilience in the Pacific Project (EU BSRP). Yap State is the first to endorse their JSAP, while Chuuk is developing theirs in the first third of 2016.

A review of climate change mainstreaming into national plans and policies in FSM was conducted in 2013. A subsequent assessment report of budget support readiness indicated that FSM had a low likelihood to qualify for direct budget support for climate change given its capacity constraints.

The project also provided assistance to FSM for preparation of the Green Climate Fund Readiness Grant. FSM was successful in its application.

A sub-regional climate change and energy efficiency media training was held in Pohnpei in October 2012.

Training in 'Proposal Preparation using the Logical Framework Approach (LFA)' was delivered to 104 people in all four States in February and May 2014⁵. The post-training evaluation indicated that the training was successful in building capacity and motivation of government staff and community based groups to use the LFA approach to design projects and inform the preparation of proposals.

Impact

Whilst some project impacts will not be known or proven until one or more years into the future, some noted short term impacts have been observed.

An additional 54,000 gallons of rainwater storage was provided in Fais

Sixty-three of the 65 residential⁶ compounds in Fais now have access to new or upgraded water storage infrastructure. A total of 54,000 gallons of additional rainwater storage was provided by the project. People no longer have to walk long distances to access water. All tanks have leaf eaters and first flush diverters which have been shown to reduce bacterial contaminants entering the water from the roof by over 95%.

Fais is located next to Ulithi, one of the most populated islands in Yap, so in an emergency, Fais can be used as a water source.

The project built local capacity and skills in maintenance of tanks, and how to install FFDs. This means that there is no longer a need to call on experts, and the people trained can be used to train others in FSM.

The Sahagow Well is providing a valuable back up supply of water during the current drought

The installation of a solar pump at the Sahagow Well means that there is a back-up supply of water during times of water rationing and droughts, as is currently occurring. It was reported that the community was happy about getting the pump at the Sahagow Well, as the well had been in place

⁵ 28 people in Chuuk, 25 in Kosrae, 33 in Pohnpei, 18 in Yap.

⁶ Two compounds had relatively new systems.

for many years but the government never had funds to put in a pump. As such the well was never really used prior to the GCCA project's support.

Efficiency

Time

The on-ground water infrastructure activities did not commence until early 2015. It was not until late 2014 that the Chuuk on-ground activities were removed and the decision was made to concentrate on Yap.

Delays were also caused by the logistical constraints related to outlying islands. The project had to wait for scheduled cargo transport. The project also procured HDPE tanks from New Zealand, due to the outcome of the procurement best practice international bidding process, which added to the logistical delays.

There were delays in payments to some contractors due to incomplete deliverables or incorrect invoices.

Despite the short on-ground implementation time-frame, the project managed to complete all infrastructure work within 12 months which is a testament to willingness of the project partners at all levels to work towards a shared objective.

Cost

FSM had acquitted 63% of its €710,000 allocation for the on-ground project by March 2016 and all remaining funds are allocated which will result in 100% expenditure by the end of the project. €54,000 was allocated for national coordination and 100% of these funds were acquitted.

FSM National and Yap State Governments requested during the project design workshop (January 2013) that the bulk of procurement and other payments be facilitated by SPC. Therefore no funds were released to the State, except for funds allocated to the project officer position, which was direct from the FSM national government.

The detailed costing for the project turned out to be 77% higher for both Fais and Chuuk. Reasons for the discrepancy were that original estimates were not based on direct quotations, and the amount and cost of labour, aggregate, and travel was underestimated. One of the suggestions from the lessons learnt meeting in FSM was to include a contingency of 10 - 20% for outer island projects.

Some cost savings were achieved through a joint purchase of rainwater tanks for FSM and Palau, which led to cost efficiencies especially on the transportation. Some cost savings were also achieved on transport for some rainwater tanks as boats supported by other funding were going to Fais for the Typhoon Maysak recovery effort.

It was suggested that basing the national coordinator role in Yap would have reduced the costs on transport (flights from Pohnpei to Yap). However, this could have meant the link with partners, SPC NPRO, national government, and financial reporting would have been weakened.

The detailed hydrological study was originally planned for one island, but as the most costly aspect is to get the hydrologist on an island, the project ended up doing two islands that were close together. The desktop modelling assessment work was also extended from four islands to all the outlying islands of Yap and some of Chuuk.

Yap stakeholders reported that it was difficult for Yap State to implement the project with the finances controlled at the national level. There was often a need for immediate funds to take a plane or ship (as a contingency) but there were no up-front funds available to do this. Whilst a small up-front funding of approximately US\$2,000 may assist, the lack of immediate funds is likely a reflection of a need for better project management, especially with regards to scheduling activities and preparing budgets. It was reported that it often fell to the national coordinator, or SPC, to plan and acquit for last minute supplies for community engagement activities. It was also reported that there was frequently insufficient documentation to acquit DSA and other advance payments.

Stakeholders reported that SPC's financial reporting period needed to recognise FSM's financial system procedures and limitations, suggesting that a longer financial reporting period was required⁷. This reinforces the need for improved financial management across FSM as a step towards increasing its likelihood of getting direct budget support for climate change finance.

There was a considerable level of community contribution in the water infrastructure activities, which included making sure that the roofing was suitable, and providing sand, aggregate, other materials and the labour required to complete the rainwater project. Seventeen households required roofing improvements and this need was addressed by applying for an Australian Aid community grant.

Staffing

The project funded a national coordinator in Pohnpei, and a project officer in Yap. The national coordinator role was important in facilitating the project between the state and national government, and contributing to national level policy discussions. It was suggested by some stakeholders that positioning the national coordinator in Yap would have been more efficient as it would have helped move the project along at a faster rate. However, this would likely have negatively impacted the national coordinator's impact in contributing to national level climate change adaptation discussions in Pohnpei. An alternative would have been to fund a project coordinator in Yap to act as the local liaison to the national coordinator, whose role would focus on project management tasks (budgeting, acquittals, timeline) whilst the project officer could focus on the technical implementation.

Efficiency-related issues (e.g. incomplete invoices, delayed acquittals, last minute planning for trips etc.) may have been overcome had the project officer received more training in project management, including scheduling and budgeting, or a project coordinator been employed.

The education and awareness consultant was from Ulithi and spoke the same language as on Fais, which is likely of great benefit during community engagement activities.

Sustainability

The project outputs and outcomes are highly likely to be sustained. The community was well consulted during the project design, and demonstrated a high level of involvement and contribution to the project implementation.

Community members had to sign recipient agreements for the water tank project. These agreements outline household maintenance responsibilities and requirements (cleaning and repairs) in cooperation with state agencies and community leaders (chiefs). The agreement also provides permission for Yap EPA to undertake water quality testing.

⁷ FSM usually have up to 90 days to close transactions which did not match up to SPC reporting.

Designated focal points in EPA and Yap State Resources and Development have agreed to follow up and sustain project activities within their agencies' mandates. It is reported that the YSPSC and EPA will continue water quality testing of rainwater tanks.

Technical support and training and further education and awareness activities will be continued by PREL-Water for Life and the Yap Department of Education. Yap State has joined with other UN countries to designate 20th March as World Water Day.

The Integrated Disaster Risk Management and Climate Change Policy, 2014 has prompted the development of sector and state plans. These have been identified for elaboration and implementation including through the Green Climate Fund.

Participants in the media training continue to cover climate change matters in a more accurate manner (e.g. through the FSM Public Information Office page and on radio).

Cross-Cutting

Gender

Gender was considered at all stages of the project due to the cultural context in Yap. The initial consultations that took place with community leaders included representation from the various community groups including women, youth, and children. Separate consultations were undertaken with women so that they were encouraged to speak up and share information.

Women and children are primarily responsible for collecting water for daily use, and were the main beneficiaries from the water project as it reduced the distance required to travel to access water. First flush diverters help improve the quality of water, and should reduce the incidence of water-related illnesses that impact the most on the children and elderly. The project also provided water containers to make it easier to collect water. It was reported that women expressed gratitude for the project.

Training participants were predominantly men (Table 1), particularly for the training on installation of rainwater harvesting systems. There was a greater balance of male and female participants in the LFA training in Pohnpei and Kosrae.

Table 1. Male and female representation in country training activities

Date	Training	Male	Female	Total
May 2014	Chuuk Proposal Preparation Training	22	6	28
Apr-May 2014	Kosrae Proposal Preparation Training	16	9	25
Feb 2014	Pohnpei Proposal Preparation Training	23	10	33
Mar 2014	Yap Proposal Preparation Training	13	5	18
May 2015	Yap Training on Installation of Rainwater Harvesting Systems	35	0	35
Total		109	30	139

Environment

There was no requirement for an environmental impact assessment. A checklist for the installation of water infrastructure in the outlying islands was been prepared which included all water resource and environmental management issues. No negative environmental risks were encountered during the project implementation.

The hydrological assessments at four of the outlying islands of Yap State will provide input for future planning of water management in those islands.

The project raised awareness and understanding of environment issues through regular participation in and presentations on climate change issues at events such as the National Women's Council, Youth Day, International Day for Disaster Risk Reduction, and World Food Day.

Visibility

There was a high level of EU visibility from the project. The education and awareness material in English, Yapese and Ulithian (bumper sticker, tank sticker, poster) featured the required logos. The World Water Day event featured the project banners with logos. Signage has been placed on the Sahagow Well Site. The project was featured in a number of media releases (e.g. 2015 SPC Media Release: Food, water and energy security tops SPC concerns following Typhoon Maysak) and regional newsletters. A number of videos were produced and screened, including:

- 2012 GCCA Global Learning Event Cynthia Ehmes Video Interview and Pasha Carruthers Video Interview
- 2013 video Adapting to Climate Change in the FSM: The Food and Water Security Dimension
- 2014 FSM video on 'Improving water security for traditional island living' is one of nine country-specific videos in the series 'Climate Change Adaptation – the Pacific Way'. Shown extensively at regional meetings, available on YouTube, and shown on television throughout the Pacific on the Pacific Way.

Best Practices & Recommendations

Best practices

1. The project engaged staff or contractors that spoke local dialects for community engagement activities.
2. The project translated materials into local languages to improve the effectiveness of education and awareness raising activities.
3. The procurement process for rainwater tanks was combined with the purchase for Palau, which achieved efficiencies in transport costs.
4. The project leveraged off existing programs (e.g. PREL-Water for Life. Awareness programs) to reduce duplication, and to make efficient use of resources.

Recommendations

1. Use the "rule of thumb" developed by the GCCA: PSIS project to realistically deliver projects in outer islands: carefully plan schedules and budgets and then multiply by 2.
2. Implement projects in one State at a time where there are large distances between proposed project sites (e.g. Yap and Chuuk).
3. Consider funding a project coordinator (could be part time), acting as the State-based liaison between the national coordinator and technical project officer, to ensure project is run efficiently at the State level.
4. Provide project management training, particularly in scheduling and budgeting, in project staff if required.