

**EU – North Pacific – Readiness for El Niño (RENI) project
Yap State and Pohnpei State, FSM
Concept Note**

1. Background

Recognising the impact of the 2015 – 2016 El Niño drought in FSM, and future climate change projections for increased rainfall variability, the National Government of FSM identified water security as the focus sector (04.10.17) for the RENI project. On 30.11.17, Yap State was identified as the focus state, with some small-scale community water security activities in Kapingamarangi, Pohnpei State.

The Government of FSM requested that while most of the activities will be focused in Yap State, up to USD 50,000 of the funding be set aside for water security measures in Kapingamarangi, Pohnpei State, specifically community water storage tanks and accoutrements for the school and the church. These will be designed as soon as a visit to Kapingamarangi can be scheduled.

The remainder of this Concept Note refers specifically to the activities to be undertaken in Yap State.

2. Criteria for selection of beneficiary communities

The following criteria were developed to select target communities for water security activities in Yap State:

- Number of completed and ongoing/planned projects which include water security.
- Vulnerability and needs
- Number of people to benefit from the project activities
- Accessibility of the communities
- Feasibility in view of the short (2 years) implementation period

3. Assessment of outer island communities

Criteria	Comments
Completed and ongoing/planned projects which include water security	<p>Outer Islands (Partial list of projects)</p> <p>Fais Island (1) water security through GCCA: PSIS project, completed early 2016; (2) Typhoon Maysak reconstruction (IOM) houses + public infrastructure (including water).</p> <p>Ulithi (1) Typhoon Maysak reconstruction (IOM) houses + public infrastructure (including water); (2) 2016 funding from Guam following the damage caused by the waterspout.</p> <p>Woleai: IOM-CADRE – Outreach, assessment and preparation of community action plan, to lead to small grants – ongoing 2018.</p> <p>Eauripik, Ifalik, Satawal, and Ulithi: 2015 hydrological assessments including groundwater (GCCA: PSIS/WERI)</p> <p>Outer Islands: Canada Fund for Local Initiatives (through IOM) – 2017-Feb 2018 – assessing the effect of natural disasters on women and girls (also includes Yap Proper).</p>
Vulnerability and needs	<p>All of the outer islands face water security challenges with very shallow water lenses, which in most cases are less than 4m thickness and many less than 2m; the main exception is Satawal which has a 10m lens thickness. Thus during drought they are dependent on stored water from rainwater harvesting and brackish water from underground lenses.</p> <p>Recent projects have improved water security in Fais and Ulithi.</p>

Number of people to benefit from project activities	Outer island populations are below 500 persons, with the exception of Ulithi, Woleai, Ifalik and Satawal, however these four municipalities show declining populations (evidenced by comparison of the 1994 and 2000 census by municipality data) and more recent local knowledge.
Accessibility	Access is by ship only, except for Fais, Ulithi and Woleai where there are air strips served from Yap Proper, however, the Woleai airstrip is vulnerable to flooding and in need of repair.

Based on the above overview, the feasibility of implementing project activities in outer islands is **LOW**; taking into account:

- Two of the islands with air access have already benefitted from past water projects and the airstrip on the third island group, Woleai, is vulnerable to flooding and in need of repair.
- Whilst the vulnerability and need is high, the challenges of implementing water security activities in 2 years are formidable. Noting that the implementation of the water security project in Fais Island (through the GCCA: PSIS project) took 3 years from design to implementation and Fais Island has an airstrip.

The Government of Yap State has also noted that maintenance of outer island infrastructure, including new infrastructure, is a very serious problem, and there have been reports of vandalism partly a result of a lack of oversight. Added to which the “self-help” ethic, which used to be intrinsic in outer island communities is declining.

4. Assessment of communities in Yap Proper

There has been a trend for increasing numbers of outer islanders to migrate to Yap Proper. This trend is evident throughout the Pacific Islands. In Yap Proper five settlements for displaced island communities have been the focus of water and food security activities under the Pacific –American Climate Fund (PACAM). Furthermore, five settlements for displaced outer islanders: Gargery Ablul, Daboch, Ruu, Makiy and Satawal, are scheduled to receive funding (USD 960,000) from the Italian Mission (in USA) to (i) improve and enhance community water security infrastructure (mainly rainwater harvesting systems); (ii) water conservation and education; and (iii) food security. This funding is likely to be confirmed in 2018 and the activities will be implemented through the College of Micronesia-FSM, Cooperative Research and Extension, Yap Campus.

Most of the communities on Yap Proper receive piped water. There are three main water utilities:

- Yap State Public Services Corporation (YSPSC) is the largest utility and services the central municipalities
- Southern Yap Water System services the southern municipalities
- Gagil/Tomil Water Authority services two of the eastern municipalities.

There is also a fledgling Maap Water system for the northern municipality. Studies have been carried out as to the merger of the utilities, but no merger has yet taken place. All the utilities have needs and plans for refurbishing and upgrading the water infrastructure, many of which are beyond the scope of the RENI project. During the 2015-2016 drought YSPSC could not supply the needs of all their customers.

Prior to the establishment of the water utilities, communities relied on local water sources – wells, tanks and standpipes. Some of these water sources have been abandoned, but during recent droughts, communities resorted to these water sources for their needs.

5. Proposal

Recognising there are significant water security needs throughout Yap State, and limited by the short timeframe available to deliver the RENI project, the proposal is to **refurbish abandoned community water systems in Yap Proper**. These refurbished water sources can then provide “point water sources” or “hotspots” during drought for nearby and distant households in Yap Proper.

Maintenance of these point sources is an issue that will have to be addressed at the start of activities and YSPSC has agreed to discuss this issue at the management level.

Three communities with abandoned water systems have tentatively been identified as possible “hot spots” – Rang, Fanif municipality; Rumuu, Fanif municipality; and Dugor, Weloy municipality. Hydrological assessments will be conducted prior to selection.

6. Proposed Next Steps:

Activity	Responsibility
1. Establish a RENI Yap project steering committee to guide the project activities and, in the first instance, to confirm the hot spots where hydrological assessments will be conducted	R&D and EPA and others
2. Conduct hydrological assessments at the identified sites.	SPC-RENI team in consultation with SPC-Water Programme colleagues
3. Conduct community consultations at the identified sites.	R&D Disaster/Climate Office (DCO) in collaboration with SPC-RENI team
4. Prepare a RENI Project Design Document with activities, costing and schedule	Led by SPC-RENI team but with input of all above.