

## **EU – North Pacific – Readiness for El Niño (RENI) project**

### **Republic of the Marshall Islands (RMI)**

#### **Concept Note**

##### **1. Background**

Recognizing the impact of the 2015 – 2016 El Niño drought in RMI (and also the 2013 drought), and future climate change projections for increased rainfall variability, the Government of the RMI identified food security as the focus sector (15.09.17) for RENI activities on the basis that the food security sector had received less attention than the water sector.

##### **2. Prioritization of Atolls**

Also on 15.09.17, the government prioritized six atolls that are most affected and vulnerable to drought:

1. Ailuk
2. Mejit
3. Wotho
4. Utrik
5. Santo – Kwajalein
6. Enewetek.

##### **3. Selection of Atolls for the RENI Project Activities**

Based on experiences with past projects, the very short implementation period for the RENI project (2 years), and logistical challenges including transport costs, it is not feasible to conduct sustainable food security measures in all six atolls. To attempt this would result in a very real risk of project failure, spreading limited resources too thin, and achieving piecemeal actions with no real chance of sustainability.

To assist in the selection process, a review was conducted of past drought preparedness activities and a national consultation was conducted (04.12.17).

The atolls were assessed using five criteria:

- Agricultural potential
- Crop loss in 2016
- Water availability
- Number of people living in the atoll
- Accessibility.

The results of the assessment are shown in Annex 1.

Three atolls did not have a high agricultural potential. Utrik and Enewetak both have a soil contamination problem from the nuclear testing and the residents are recipients of the US Food Service Program. Thus agricultural potential is very low. In Wotho, agricultural potential is also very low, since the island is very dry. Recent revegetation projects that have been attempted on Wotho have failed, no doubt due in part to Wotho's harsh climate conditions (Source: German Government funded Local Early Action Plan 2016).

The other three atolls were prioritized as follows: 1. Ailuk, 2. Mejit, 3. Santo Kwajalein. Ailuk was recommended as the choice for Model Atoll for the RENI project. Ailuk scored high on the criteria and it

was also the top priority identified by the National Disaster Committee (15.09.17). Further, this recommendation was supported by the Ministry of Natural Resources and Commerce. Mejit also scored highly but there are already two food security projects ongoing in Mejit: (i) breadfruit planting, conservation zones, dry leaf piggery through the German funded Local Area Action Plan, and (ii) Mejit is part of the FAO Technical Assistance Programme (TAP) project focusing on capacity building, provision of seeds and seedlings, 2018-2019. Santo Kwajalein also met the criteria.

#### 4. Proposal

Based on the foregoing, the Government of RMI confirmed (13.12.17) that the RENI project focus on 1. Ailuk and 2. Santo – Kwajalein.

It has also been proposed that funds be set aside (approx. one quarter of the activities budget<sup>1</sup>) from the RENI budget for a Lessons Learnt/Training event for farmers from the other four atolls towards the mid-point/end of the project, so that they can visit the target atoll and benefit from training and capacity building in food security measures. Appropriate small-scale equipment can also be provided to the farmers in the other four atolls e.g. shredders, pig pen fencing materials. This approach has been called a “Shared Model Approach”. A schedule for proposed activities is shown in Table 1.

**Table 1 Schedule for proposed activities**

Timeframe	Activity
Q1 2018	Conduct an agricultural assessment and community consultations in Ailuk using a gender-sensitive/right-based approach.
Q2 2018	Based on the assessment and consultations in Ailuk, prepare a Project Design Document for RENI activities in RMI. Discuss at the national level.
Q3 2018	Depending on the budget in the Project Design Document, undertake an agricultural assessment and community consultations in Santo – Kwajalein.
Q3 2018 – Q2 2020	Implement/enhance in Ailuk, and possibly Santo-Kwajalein, nurseries, backyard gardens and agriculture plots, piggeries, and incorporate capacity building for men and women using a combination of traditional and conventional practices such as: <ul style="list-style-type: none"> <li>○ water saving</li> <li>○ use of drought tolerant crop varieties</li> <li>○ agroforestry e.g. multi-tier planting</li> <li>○ seed saving</li> <li>○ food preservation</li> </ul>
Q1, 2020	Hold a Lessons Learnt event in the selected atoll (Ailuk or Santo) to share the model approach practices with farmers from the other atolls and provide them with training and small scale equipment
2019-2020	Seek funding to upscale the Model Approach following closure of the RENI project.

<sup>1</sup> The budget for on-the-ground activities in RMI is ≈ €800,000.

## Annex 1 Atoll Assessment using the established criteria

### Summary Table

Criteria	Ailuk	Mejit	Wotho	Utrik	Santo-Kwajalein	Enewetak
>300 Population	Yes	Yes	No	Yes	Yes	Yes
Accessibility by air & sea	Good	Good	Poor	Good	Good	Poor
Crop loss in 2016	Yes	Yes	Yes	Yes	Yes	Yes
Agricultural potential	High	High	Low	Soil contaminated	Medium-High	Soil contaminated
Water supply	RWH*/underground lens	RWH/small pond/underground lens	RWH/underground lens	RO plant	RO plant (?)	RO plant

\*Rainwater harvesting

### Selection of Atoll for RENI Model

Ailuk, Mejit and Santo-Kwajalein meet the criteria. There are several other ongoing food security activities in Mejit, e.g. breadfruit planting, conservation zones, dry leaf piggery by TNC and MICS with German funding; Mejit is part of the FAO TAP project focusing on capacity building, provision of seeds and seedlings, 2018-2019. The recommended choice for a Model atoll is Ailuk since there are fewer food security activities than in Mejit.

### Atolls not suitable for selection as the RENI Model

Wotho: agricultural potential is very low (very dry and recent revegetation projects have failed), and the population is very small. Enewetak and Utrik are not suitable due to the soil contamination issue.

### Detailed Table

Parameter	Ailuk	Mejit	Wotho	Utrik	Santo-Kwajalein	Enewetak
Population (census)	338	348	97	435	680	644
Population (2017 estimate UNICEF)	310	362		452		690
Crop/livestock loss	21,133	45,662	9,578	15,542	16,597 (all of	53,523

<b>Parameter</b>	<b>Ailuk</b>	<b>Mejit</b>	<b>Wotho</b>	<b>Utrik</b>	<b>Santo-Kwajalein</b>	<b>Enewetak</b>
in 2016 (USD)	(Badly affected in 2013 drought and population had to move from Enejelar to Ailuk)				Kwajalein)	
Agricultural potential	High	High	Poor – climate very dry, soil poor (but could be improved with compost).	Poor due to soil contamination – Residents are recipients of US Food Service Program	Medium-high, queries during Consultation as to why Santo was chosen?	Poor due to soil contamination – Residents are recipients of US Food Service Program
Existing agricultural activities	Nursery and agriculture in one area - over water lens; famous for pandanus sweets; no piggery.	Home gardens; breadfruit especially important, seedlings planted in 2017 by women's group (See LEAP report for more details); piggery;	Piggery, previous efforts with crops failed. The GIZ LEAP project is focusing on marine resources.	Some agriculture? But soil contaminated.	Home gardening in fenced compounds, existing piggery.	Have breadfruit trees but cannot eat the fruit because of contamination issue.
Water supply	RWH and water lens by nursery/mayor's residence	Freshwater pond, used for human needs, could be used for agriculture	RWH	Large RO plant	?water issues?	Large RO plant
Accessibility	Regular air service and boat service (have a dock accessible at high tide)	Regular air service, But there is no sea channel.	Air service when sufficient passengers	Regular air service and boat service	Regular air service and boat service	Air services but very costly, atoll's own boat has had maintenance issues.