

Rotuma RANO GPS Survey Report

October 30th to November 14, 2013

Report from the Ground confirmation of the extend of the Swampland (Rano) Sites undertaken in Rotuma from October 30th to November 14th.

Introduction

The freshwater swamps or "rano" are key important wetland areas found in the 43 square kilometer volcanic island of Rotuma located 12^o South latitude, 177^o East longitude, about 465km North of Fiji. (GIS Scoping and mapping report, February 2013).

Rano wetland is an important part of the island ecosystem providing habitat and food source to many living flora and fauna as part of the island biodiversity. Very little is known of the biodiversity in these swamplands and how much of this resource remains except that the practice of harvesting the tuberous swamp plant for certain feasts is becoming less frequent. These swamps or *rano* capture much of the surface water that recharges the island's freshwater lens, the water source that supply for households. *Rano* swampland is culturally associated to certain customary practices and subsistence resource use in past coping strategies during times of natural disaster or extreme dry periods. Currently, these "rano" are fast disappearing mainly from change in weather patterns i.e. long periods of drought can dry up the swamplands, change in land use patterns (e.g. damage caused by feral pigs), increased monocrop agriculture, shift in community's resource use due to shift in resource value (e.g. the value of planting the tuberous plant), limited replanting of the *Cyrtosperma chamissonis* in the swampland upon harvesting and its slow growth that takes years before actual harvest.

The trip was organized by Laje Rotuma through funding from SPC/GIZ. The report document the results and the findings from the ground confirmation survey carried out during the term of the trip. Apart from the survey of the ranos, I also managed to mark out some of the heritage and cultural significant sites found on the Island. These sites include deed of cessions sites, Heritage buildings such as Catholic Churches as well as burial sites.

We had to fit in our program to the Village/Community weekly program, to ensure that their program is not affected and also have their support towards the field exercise.

Field Team

The survey team comprises of the two LRI volunteer namely Mr. Rupeti Vafoou, Mr. Mua Moni Vamarasi and me.

Objectives

The main objective of the trip was to conduct a field confirmation or ground truthing of the actual Swampland (Ranos) and at the same time mark out the freshwater sources in each site.

Methodology

- Confirmations of the swampland areas by walking the boundary and tracking using the GPS device.
- Hands on training on the use of GPS was also conducted out in the field with a volunteer from LRI

Apart from the GPS survey, I also attended the district meeting where I briefly talked about my role as a GIS officer as well as a Protected Area officer with National Trust.

A meeting was also conducted with the Rotuman Women's Association (RWA). The purpose of this meeting was basically to meet with the women and talked about the work I do for the project as well as my role as a Protected Area Officer with the National Trust of Fiji. It was very encouraging to see that the women were very enthusiastic and also keen to learn about the project and all the other components involved.

Results

There is evidence of the decrease in the Ranos in few villages this was noted during the survey, as most of the area that were planted before are under grassland and bushes while other areas have dried up completely.

These may be due to two factors:

- i. The effect of climate change may have dried up the soil or
- ii. The non-cultivation of the swamp Taro caused the soil to dry up, hence less Papoe are growing.

Conclusions & Recommendations.

In conclusion, the field survey was an important component in terms of getting a real true picture on the extend of the swampland. It was also very interesting to note that some of these Papoe plantations have been in existence for over 10 year.

In each of the four villages that were surveyed, there still exist freshwater wells, even though not maintained properly but well-kept in terms of stoned fenced. However, these could be looked at again, and perhaps could be considered as a source of water for washing and other uses.

Even though there were some hiccups in the trip, but I enjoyed my time in Rotuma especially meeting new people, learn new cultures and make new friends. It was a worthwhile experience that I will never forget.

Acknowledgement

I would like to express my appreciation to the Director National Trust, Mrs. Elizabeth Erasito for approving my trip despite the late notice. I would also like to thank LRI coordinator, Ms. Monifa Fiu for supporting the trip and especially the two volunteer Fay and Moni for looking after me while in Itumuta for 3 weeks.

Foeksia. Noa'ia vinaka vakalevu. Wish you all a Blessed Christmas and Prosperous new year.

Appendices

Some of the pictures taken during the GPS survey on the different sites.

Friday 1nd November: GPS survey at Itumuta



Saturday November 2: Field Survey at Fapufa Rano.



Tuesday 5th November, Motusa Rano



Area used to be under Papoe are covered with grassland brush.



Our field guide from Motusa.

Noatau Rano and Paptea Freshwater pond Wed 6th November 13, 2013



Field guide for the Noatau Survey



Other Heritage Buildings and Structures mapped



Deed of cession site at Motusa



Catholic Church at Upu, Itumuta.





MAP SHOWING LOCATION OF THE SURVEYED SWAMPLAND

