

UPLAND RESOURCES, VCAP & ANIWA AC

RESULTS & RECOMMENDATIONS FROM VULNERABILITY ASSESSMENTS & COMMUNITY ENGAGEMENT

Recommendations for Upland Resources: Aniwa AC

- Priority upland actions communities suggested for Aniwa:

1.) Explore potential to support Isavai, Imatu, and Ikuakau villages with water hand pumps and additional rain catchment tanks

2.) Provide backup storage tanks for desalinization plant near Imatu Village.

3.) Consider replacing or complimenting diesel generator for desalinization plant with renewable energy power

4.) Support drought / pest resilient agriculture methods, to improve food security

- Minor erosion control activities around valued infrastructure in communities
- Review the multitude of water security initiatives that have take place on Aniwa and perform a scoping mission to suggest improved approach for VCAP
- Help DARD / Water Resources to document "lessons learned" from VCR project (2010 - 2015) supported by FAO / UNICEF to encourage food security on Aniwa before planning outputs for VCAP
- Work in partnership / avoid duplication with CARE International



(Above: manual water pump in need of repair nearby Ikuakau Village)

Water Security

Every village on Aniwa has requested the installation of manual or solar / generator powered water pumps, which could serve to supplement existing water storage tanks. Villagers indicate that their **biggest priority is improving access to safe drinking water** for communal use.

There are no upland or coastal water sources available on Aniwa and communities rely heavily on rain water harvesting. There is a multitude of above-ground cement rain tanks and fiber-glass rain tanks, however, many of them are in need of maintenance. Isavai Village and Ikuakau Village both have enclosed ground wells that require repair. There are a few broken manual water pumps on the island but none of these are currently used by locals, as they reported salt water intrusion and contamination from rusty piping.

Tropical Cyclone Pam badly damaged rain water harvesting systems throughout the island, leaving many rain catchment tanks damaged. Furthermore, due to constant exposure to sea spray many of the functional water harvesting systems with tin roofing catchment have visible levels of rust and locals fear it may contaminate their supply.

As there have been many different partners involved in attempting to improve water security on Aniwa reported by communities (ADRA, UNICEF, CARE International, JICA, Red Cross) it is important for VCAP to engage these partners and consider lessons learned, avoid duplication and possibly work to find innovative ways forward. Locals requested that any technical expert installing pumps on the island and drilling boreholes try to find alternative and improved locations with more reliable access to the water lens on Aniwa.

In October of 2015, all communities **reported having dangerously insufficient water supply levels**. Villagers increasingly consume water from an unprotected open ground well near the coastline with visibly contaminated water, leading to health concerns from the local population.



(Above: Pig pen in Isavai Village)

Food Security

Communities throughout Aniwa have reported moderate to severe food security issues, stemming from damage from Cyclone Pam, recurrent drought conditions worsened by in 2015 and 2016 by El Niño rain patterns and relatively poor soil quality and limited space for gardening as compared with other islands in Vanuatu. While some food relief has been shared with communities throughout 2015, food security concerns remain as villagers on Aniwa have reported very poor crop yields.

Some families in Isavai, Imatu, and Ikaukau report their reliance on “store-bought” food. The communities of Isavai, Imatu, and Ikaukau all experience similar challenges regarding food security, including a lack of fertile soil and water for gardening purposes.

Any agriculture training modules and planting specimens that could be specifically designed for the unique soil and drought conditions on Aniwa may prove beneficial. During the recent VCR project on Aniwa, climate resilient agricultural species were sent to Aniwa from the Agriculture College in Santo but many failed to thrive due to the unique conditions on the island. Overall the VCR project proved useful and reportedly provided additional food reserves for locals to use after the damage from Cyclone Pam. However, the same planting materials were sent to Aniwa were distributed to every other project site in each province of Vanuatu regardless of soil type and conditions according to the VCAP Site Coordinator. Utilizing studies from other Pacific nations with atoll islands with similar soil types may prove useful in finding a solution. Compiling lessons learned from the VCR project on Aniwa in terms of crops introduced for food security is essential to avoiding duplication.

A potential partnership with CARE International on Aniwa to compliment their food security efforts and possibly supporting household garden training, workshops and tools for community nurseries may be useful.

Erosion Control

There is minor erosion (moderate in a few small locations) experienced on the main footpaths of Aniwa. Technical assistance has been requested to help reduce this minor erosion and flooding of accessways with possibly with the planting of vetiver grass and trees.

Individual community members utilize chain saws for private logging, but the impact is perceived by communities as minimal. Most upland and coastal footpaths experience erosion due to heavy rainfall, poor drainage, and a small but significant number of livestock (mostly pigs and goats) damaging the accessways and surrounding vegetation.

It would be best if an erosion specialist could advise regarding erosion control techniques including the planting of vetiver grass along the main truck road and footpaths, especially those nearest the airport, wharf and desalinization plant. This specialist could assist communities in the creation of a technical plan to manage the vetiver grass and coordinate with any minor support PWD may provide in the very small areas with minor erosion.



(Above: Map of Aniwa AC)

Environment - Upland

While it may be beneficial to support the creation of Upland Conservation Areas to encourage management and sustainability of upland resources, suggesting that VCAP undertake this activity at other VCAP sub-sites first as locals have shown relatively little interest in this activity.

Communities did express an interest in invasive species control ("American Rope" vine) that is causing damage to the upland environment and local gardens.

Livestock

Currently with minimal livestock activities taking place on Aniwa due to the abundance of coastal resources for consumption, there are minimal threats to the environment posed by livestock. Recommending that no immediate support

of livestock activities be planned for Aniwa as part of VCAP, aside from some basic training and awareness activities aimed at preventing small livestock such as pigs and goats from creating the minor erosion on the island.

Site Coordinator

The Aniwa Island sub-site has a residing Site Coordinator who has some previous experience in coordinating a climate change adaptation project on Aniwa with food and water security components. In addition, voluntary the Provincial Area Secretary for the Aniwa Area Council has volunteered to assist with coordinating logistics and site-based reporting for VCAP implementation.

Data for Upland Resources

Refer to the Vulnerability Assessment Report for Aniwa from February 2016 to review data relating to upland resources.



(Above: Erosion on main access way to wharf and desalinization plant)