

TREATY VILLAGE RESILIENCE PROGRAM

South Fly District, Western Province, Papua New Guinea



Progress Report: January-June 2015

For the Strongim Pipol Strongim Nesen (SPSN) Program

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Prepared by the Reef & Rainforest Research Centre



1 Introduction

The Treaty Village Resilience Program has been operating in four of the Treaty Villages of the South Fly District, Western Province, Papua New Guinea (PNG) since September 2014. This pilot program is focused on Mabaduan, Sigabaduru, Buzi/Berr and Sui/Parama. These communities are impacted by seasonal flooding, extended drought periods, high water tables, extreme coastal erosion, sea level rise and no roads that present operational barriers to enabling improvements in clean water, sanitation and hygiene. High birth rate, communicable diseases and poor personal security have a significant impact on the social and economic development of the region.

The program has received AUD\$1.85million of funding from the Australian Government with an additional AUD\$400,000 investment from the Reef and Rainforest Research Centre.

On 19 November 2014 the program was successfully launched in Daru with the Acting Provincial Administrator, District Administrator, PNG and Australian officials, elected Ward Members, NGOs representatives, and community leaders all present. The program has progressed successfully to date, with the selection of 52 Community Ranger candidates (40 men and 12 women), design and delivery of four custom-built vessels, construction of a training facility on Poah Island near Mabaduan, completion of stages 1 and 2 of ranger training, and delivery of an additional 880,000 L of effective water storage in three Treaty Villages. The trainee rangers have been involved in all stages of the water resource audit, and in the practical repair and construction of improved water storage, sanitation and hand-washing facilities through hands-on training. Trainee rangers have also been involved in the baseline audit of the food garden and community management planning.

All ranger trainees have also achieved a First Aid Certificate 1 as part of their training. Female trainees have also been receiving initial training from two specialist nurses from Daru Hospital on paediatric health and birthing assistance. In addition, with the assistance of the Queensland Health Department, three specialised tuberculosis (TB) awareness training events have been delivered in Sigabaduru, Mabaduan and Buzi/Berr to more than 500 community members; with specific TB home-nursing training for womens groups conducted in Mabaduan, Sigabaduru and Buzi/Berr.

It is planned that the implementation phase will commence in July 2015. At that time, training will transition from a centralised model to a decentralised mentoring and on-the-job training/on-the-job experience. During this time, Community Rangers will operate from their hub villages, implementing practical and educational projects in their own, and surrounding, villages. This phase will run until the end of 2015, and include further leadership and public speaking training late in the year. Although the focus of the Community Ranger presentations is water and sanitation hygiene (WASH), it is very apparent in the participant villages that there is very little community education occurring regarding TB and women's health.

Notable progress to date includes:

1. Baseline survey of WASH infrastructure in pilot Treaty Villages.
2. Agreement on Community Ranger selection and project implementation approach with community clan leadership.
3. Commencement of training of 52 Community Rangers (40 men and 12 women) selected by Clan Elders.
4. Construction of a training facility on Poah Island near Mabaduan following completion of land use agreement.
5. Design and delivery of four Australian Standard 'fit for purpose' vessels to improve transport safety.
6. On-water safety and marine rescue training completed.
7. Training of Community Rangers in First Aid.

8. Training of Community Rangers to Certificate I in water systems management and water infrastructure maintenance.
9. Assessment and repair of community water storage infrastructure delivering an additional 600,000 litre of water storage in Mabaduan, 120,000 litre in Sigabaduru and 160,000 litre in Buzi/Berr. This has been achieved after agreement on refurbishment and commissioning of new water storage with each of the communities.
10. Training of Community Rangers in hygiene and sanitation promotion.
11. Training in public speaking, lessons instruction and leadership.
12. Drafting of five (5) Community Management Plans (now requiring further community approvals).
13. Base line food garden assessment.
14. Research and development of new technologies in innovative water harvesting through 'fit for purpose' and cost effective individual roofing material, first flush extractors and water bladder storage at each cooking site.
15. Discussions with community on individual co-invest arrangements for the individual water harvesting and storage products.
16. Hosting of two Treaty Village Awareness Trips with delegations from Australian and PNG government departments with interests the Torres Strait Treaty. The first TVA trip was hosted at the Community Ranger training camp.
17. Discussions with community on gender-based security associated with sanitation.
18. Exploration of 'fit for purpose' sewage disposal.

Program Benefits

The program focuses on enhancing WASH in the four pilot Treaty Villages in Phase 1 that will be the foundation for supporting improved community health, food security and well-being for communities in Phase 2. A major benefit of the program is the broad reach of initiatives that will benefit not only the four pilot villages (4,700 people) but also other Treaty Villages including villages in their rural catchments in the coastal South Fly District (17,000 people) and Daru. The target number of people who will directly and potentially indirectly benefit in the District is anticipated to be up to 59,000 people.

Additionally, the candidates selected by the community Clan Elders to train as Community Rangers are future leaders in their villages and surrounding catchments, and will play an integral role in improving the well-being of South Fly communities.

2 Project Status

Program Launch

The program was launched on 19 November 2014 in Daru, with Western Province Provincial Treasury, Health, Customs and Administration representatives, South Fly District Treasury and Administration representatives, Australian DFAT representatives, Treaty Village leaders, NGOs and interested parties present.



2.1 Agreement on implementation approach

A baseline survey of water and sanitation infrastructure has been completed for the 4 pilot villages of Mubaduan, Sigabardu, Buzi and Sui. The village Community Management Plans include consideration and prioritisation of potential activities associated with WASH investment in the District including:

- Selection criteria
- Payments to trainee Community Rangers trainees
- The role of women community rangers
- Security
- Hours of work
- Approvals to enter villages
- Disiplinary breeches
- Community input and community management planning



2.2 Baseline WASH Infrastructure Survey

A baseline survey of water and sanitation infrastructure has been completed for the 5 pilot villages of Mabaduan, Sigabaduru, Buzi/Berr, Parama and Sui. The village Community Management Plans include consideration and prioritisation of potential activities associated with WASH investment in the District including:

- Determination of water needs – quantity and quality
- Identification and creation of new groundwater wells by the Community Rangers
- Mapping of perched aquifers to determine potential supply and probability of contamination
- Mapping of water storage



2.3 Construction of First Training Facility in Mubaduan

Each of the pilot Treaty Villages has agreed to provide a training site for the Community Ranger training activities. A land use agreement was made with the representative Clans from Mabaduan identifying Poah Island as the primary training site. Water storage has been the most significant challenge for the site. Construction of the training facility commenced in January 2015 and was completed in February 2015. The training facility is now operational and is being used to train the 52 Community Rangers.





2.4 Training of 52 Community Rangers

The selection of Community Ranger candidates was undertaken by the Community Clan leadership of each pilot Treaty Village; 40 male and 12 female candidates were selected for training:

- Mubaduan – 12 male and 4 females plus 2 chaperones
- Sigabardu – 12 males and 3 females candidates
- Buzi/Bur – 8 males and 3 females candidates
- Sui/Parama – 8 males and 2 females candidates

The male candidates began their orientation and training on 19 January 2015. Academic and medical assessments were conducted for each trainee. Individual bank accounts with the Bank of South Pacific (Daru) were established to allow direct payment of the training allowance. For training in Mubaduan, Sigabaduru and Buzi/Berr, Visa Debit cards were also acquired to enable financial access to accounts from Siabai and Boigu.



2.5 Drafting Community Management Plans

The role and function of the Community Management Plans were agreed upon at the workshop held on 19 November 2014, which has informed the drafting of five (5) Community Management Plans for Mabaduan, Sigabaduru, Buzi/Berr, Sui and Parama. Broadly, the Community Management Plans will inform the mandated Ward Development Plans which form the basis for each Ward to attract District funding. Ward Plans feed into the local level Government Development plans and the District Development plans.

The Community Management Plans prioritise project activities in each of the pilot Treaty Villages and are currently being reviewed by communities.

The 12 female community ranger trainees are leading engagement with >400 women from the 5 villages to ensure women have the opportunity to input into the Community Management Plans.

The draft Plans are being prepared for further consideration/approval by the communities.

2.6 Delivery of four Australian Standard 'fit for purpose' vessels to improve transport safety

Four vessels were commissioned and constructed to Australian safety standard. The vessels are custom-made to Torres Strait conditions and are cost effective with high utility for the Treaty Villages. The 6.8 m vessels were delivered in January 2015, and are being used for coastal transport and between Treaty Villages and ranger training. The vessels are a significant improvement to safe transport for the program. Along with appropriate coxswain training these vessels will enable safe transport for other programs, including health and quarantine programs in the region.



2.7 Community Ranger Training

Community Rangers have been instructed and mentored on water catchment and storage projects. Water is being approached as a system for catchment, storage and quality control. In conjunction with theory, WASH training has included practical repair and construction of water catchment and storage for Treaty Villages.

The female Community Rangers commenced training in April 2015. Female Community Rangers have undertaken theoretical and practical instruction in WASH, focussing on sanitation and hygiene, as well as women's health, including basic first aid, TB home-nursing and birthing assistance.

Community Ranger training includes:

- Community water, sanitation and hygiene
- First Aid
- Marine craft handling/safety
- Cert I small motor maintenance
- Cert I Plumbing/water systems
- Communication/radio operations
- GPS Navigation
- Workplace Health and Safety
- Computing and stores administration
- Disaster preparedness, contingency planning, emergency response and evacuation plans
- Public speaking, presentation and lesson delivery
- Gender issues and domestic violence

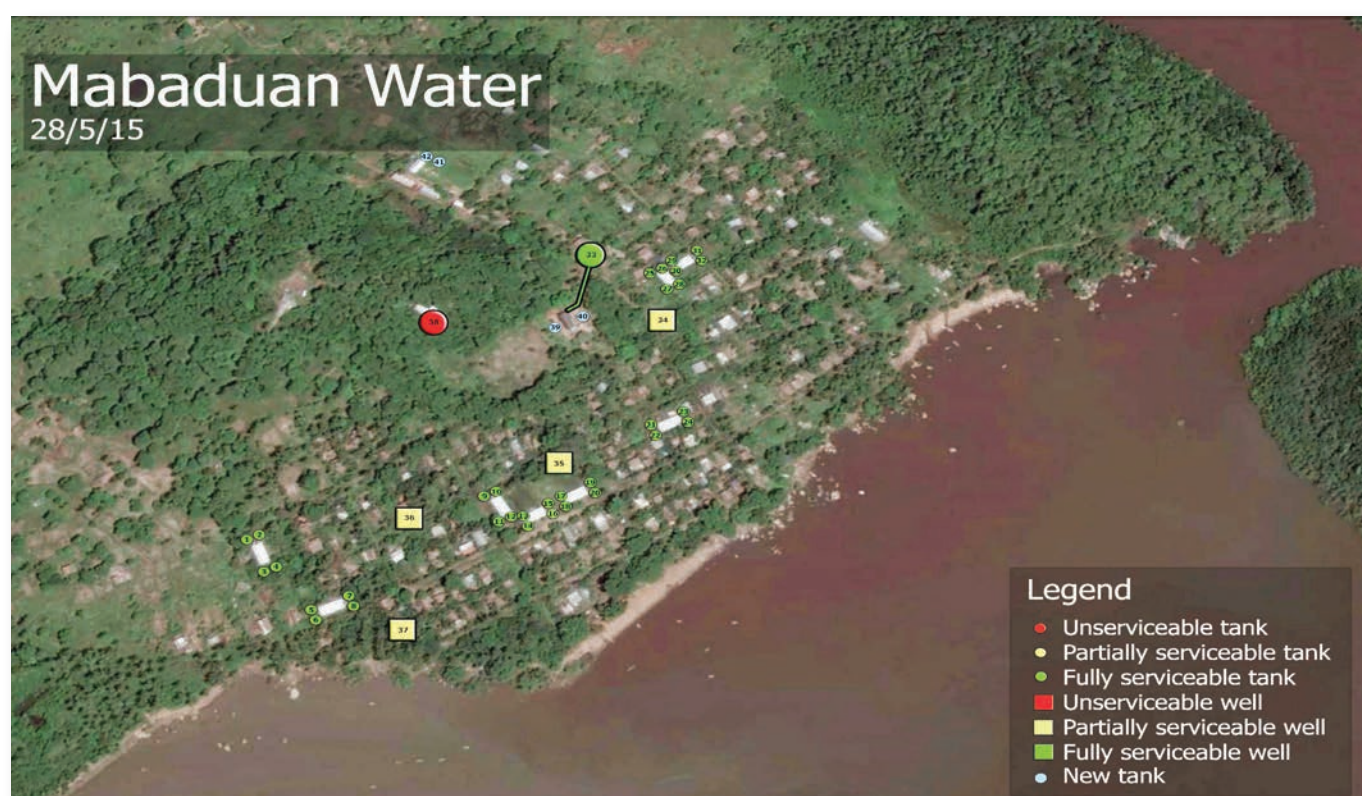
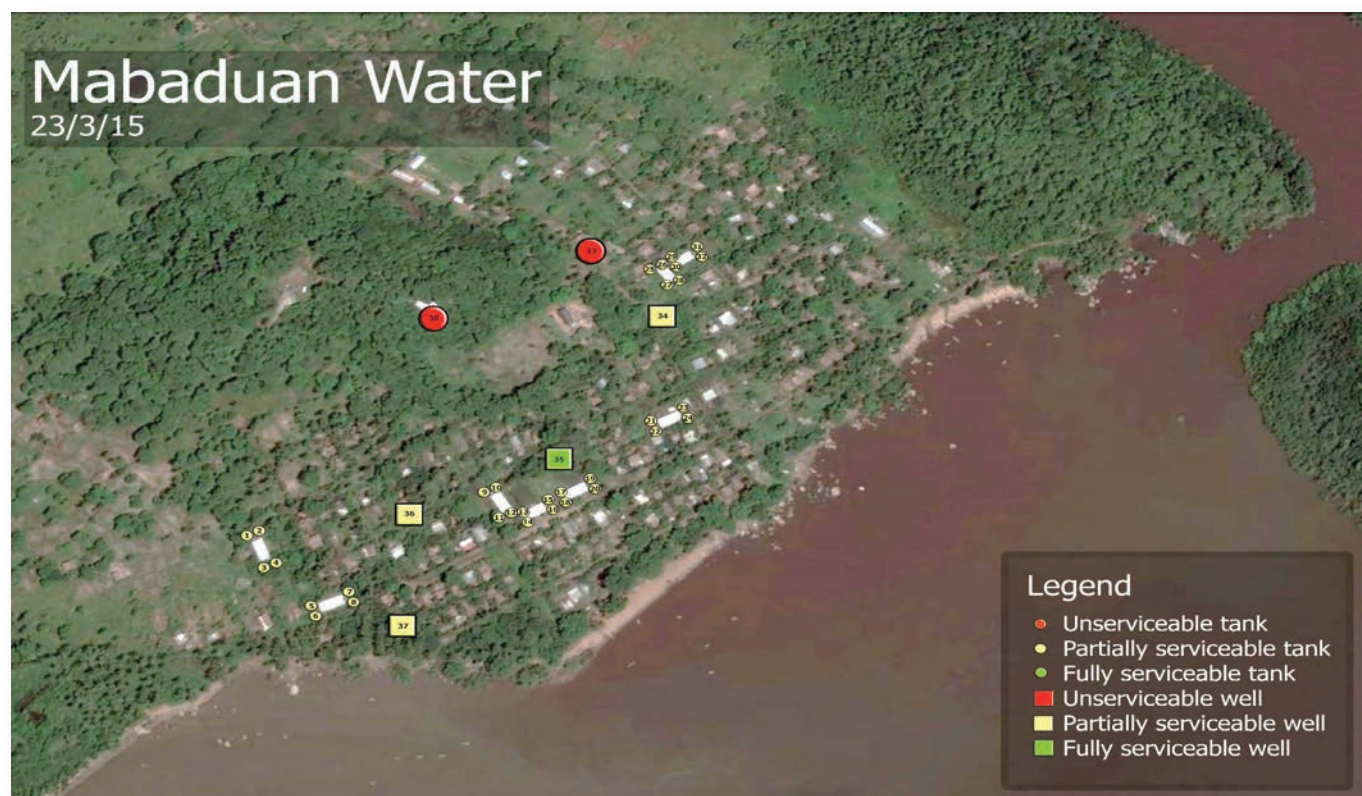
Initial disaster response training and 'first-on-scene' training has been conducted with all 52 Community Rangers. Response equipment and safety equipment has been supplied (e.g. chainsaws) to villages with training on using this equipment.





2.8 Assessment and repair of community water storage infrastructure

An audit was conducted of all community water storage infrastructure in the five pilot Treaty Villages in January 2015 and assessed their condition and repair requirements. Since then, water storage infrastructure that could be serviced was repaired and has been re-commissioned for use by Treaty Villagers, with an 80% repair rate. This infrastructure is now fully operational. The results of the infrastructure audit and repair requirements have been mapped for each village.



To date in the practical training phase, approximately 70 facilities or 880,000 litres of water catchment and storage has been added to three Treaty Villages – 600,000 L in Mabaduan, 120,000 L in Sigabaduru, and 160,000 L in Buzi/Berr. The hands-on ranger training is now focussing on the capping of existing wells and construction of new wells to further increase water storage capacity in pilot villages.

The repair and installation of hand-washing facilities in all five pilot Treaty Villages is now complete and has directly benefited all community members in the five villages, estimated at 4,700 people. The hands-on ranger training is now focussing on the installation of latrines in the pilot villages, with the first two being installed at the Mabaduan school.



2.9 Research and development of new technologies in water collection, storage and well building

Introduction of new water harvesting and storage techniques, in particular the adaptive use of water bladders and improved water collection materials for use in traditional housing. The local geography and lack of roads results in the transport of bulky materials, such as roofing iron and water tanks, being extremely costly which in turn limits the practical application of these components. In response developing a water collection and storage system that utilises cost effective, easy to transport components is essential to achieving the aims of the Program. Fortunately the communities have shown themselves as 'early adopters' of new technologies e.g. the mobile phone and mobile banking.



The Program is also focused on developing new approaches that enable the community to undertake activities such as water well capping, utilising the materials that are available to them in the village. To this end the Community Rangers have innovated to develop a water well process utilising bush materials and a small amount of cement powder.





3 Program Issues

To date the most significant issue for the program has been associated with the movement of vessels and equipment from Cairns, Australia to Mabaduan, PNG. This has proved to be a challenging exercise with the various Australian Government agencies not having a developed policy position on undertaking an aid-based program on the border. Fortunately, through a directed effort from all parties, these issues were overcome with significant ongoing support from all agencies involved.

4 Financial Report

4.1 Expenditure

The project received AUD1,257,586 between 1 July 2014 and 31 May 2015.

The project expended AUD976,685.85 between 1 July 2014 and 31 May 2015, and has a surplus of AUD280,900.15 (see Annex 2 for Expenditure Report).

4.2 Budget Projections

Project expenditure for the next 6 months will primarily be on completion of Community Ranger training for the 52 candidates, on-the-job training and experience for the Community Rangers, capping and construction of water wells in pilot Treaty Villages, construction of sanitation facilities in pilot villages (where possible), continued education on WASH and community health, finalising the Community Management Plans, leadership training, and implementing food security and livelihood options.

It is anticipated that budget expenditure will be on-track for the remainder of 2015.

5 The Future

The primary aim of the program is to build the WASH capacity of the Treaty Village communities. This pilot is aimed at testing the Community Ranger concept as a vehicle for the delivery of WASH and potentially other agendas such as gender equity, food security and community health and health seeking behaviour.

The use of the Community Ranger model has allowed for focused capacity building of emerging community leaders, both male and female. It is anticipated that the WASH and skills training of the emerging community leaders will deliver greater penetration and sustainability of the WASH agenda within the communities into the future. The model incorporates the well proven 'Train the Trainer' technique where the trainers are also the future leaders. Cultural obligations associated with leadership and good governance are the foundations of the approach.

The development of an operational platform provides the logistic support to enable practical skills and maintenance knowledge acquired for the Community Rangers to deliver direct benefit of the community in real time. Under this model the community also receive tangible benefits that they direct and control and have ownership and responsibilities over.

It is not anticipated that the collective of training and operational platform will be sustained into the future in its current form. The enduring components of pilot program include:

- Up-coming leadership with an applied understanding of WASH and WASH infrastructure maintenance.
- Up-coming leadership with an applied understanding of leadership, good governance, gender equity and occupational health and safety.
- Substantial increase in the Treaty Villages access to clean water and water storage and hygiene understanding. Substantial increase in Clan based ownership and maintenance of water infrastructure.
- Increase of community members with strong first aid skills and community health understanding.
- Increase of community members with improved mid-wifery assistance skills and paediatric nutrition.
- Improved food gardens and food security.
- The skills and qualification obtained will allow individuals to seek higher skilled employment within or external to the South Fly District. Wage components may be expatriated back to the South Fly to sustain communities.
- The skills obtained will allow a number of specialist small business village enterprises e.g. making water wells, plumbing and water systems repairs, building repairs – these opportunities are already emerging.
- With the equipment and skills trained members may tender for Ward, LLG and District activities including building refurbishment and road repair which will enable funds to be utilised for community sustainability.
- Pilot Treaty Villages will now have a critical mass of personnel trained in emergency and 'first on scene' response and the equipment to enable competent responses to natural and health disasters.
- Improved marine safety and small craft handling is already delivering opportunities to the Treaty Villages with groups such as Queensland Health purchasing the 'safe travel' and support services provided by the Treaty Villages themselves.

Annex 1: Case Study

Community health issues, particularly in relation to TB transmission and management, and womens' health has prompted an increased focus on health for the project. Daru Hospital has provided two specialised nurses to conduct training on paediatric health and birthing assistance. In addition, with the assistance of Queensland Health, three specialised TB awareness events have been delivered in Sigabaduru, Mabaduan and Buzi/Berr to more than 500 community members; with specific TB home-nursing training for womens groups conducted in Mabaduan, Sigabaduru and Buzi/Berr.

The project will continue this focus on community wellbeing education, providing further specialised training for female rangers and community members, as well as ongoing support for female rangers to extend their knowledge and capacity.

