

# TREATY VILLAGE RESILIENCE PROGRAM

South Fly District, Western Province, Papua New Guinea



## Annual Report 2016-2017

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Prepared by the Reef & Rainforest Research Centre







Report compiled by the project team:  
Johanna Johnson, Sheriden Morris,  
David Rutherford and Wayne Spencer



# 1 Introduction

The Treaty Village Resilience Program funded by Australian Department of Foreign Affairs and Trade (DFAT) extends the pilot project that focused on Mabaduan, Sigabaduru, Buzi/Berr, Sui/Parama in the South Fly District of Western Province, Papua New Guinea. The program is delivered by the Reef and Rainforest Research Centre (RRRC) in partnership with INLOC International.

The pilot project tested an innovative approach to building resilience and providing support for community development in four remote and disadvantaged communities on the PNG-Australian border. The region was selected as the pilot site because of its strategic importance to Australia under the Torres Strait Treaty and the close family ties between the PNG Treaty Villages and the Torres Strait and Cape York region in North Queensland.

The Treaty Villages 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 healthcare, clean water, sanitation and hygiene. The recent severe *El Nino* weather pattern had significant impact on the Treaty Villages however there was a clear difference between the communal 'fortunes' of those pilot villages with infrastructure and skills delivered by the pilot project and other Treaty Villages. For example, new water storage has enabled the Mabaduan School to remain open while the other schools are closing due to water restrictions.

The 'change to resilience' framework developed by the project is based on the successful *Land and Sea Ranger* programs in action across northern Australia over the last decade. The experience and lessons learnt from the Australian Ranger programs has informed both the theory and the practical implementation of the Treaty Village Resilience Program (TVRP).

The current transition phase commenced on 1 October 2016 with continued training and support for the 52 Community Rangers in community health and first responder, construction of concrete tanks, the introduction of Community Action Days, and food security activities around garden cultivars and fisheries. These activities were supported by the addition of three Ranger Support Officers and the first distribution of donated linen as part of the *RRRC Connect* initiative.

This phase particularly focused on advanced leadership and project coordination to facilitate greater autonomy of Community Rangers in planning, costing and running community projects.

Building on the notable progress to date:

- 1 Three disabled villagers have now joined the TVRP as Ranger Support Officers.
- 2 The Rangers have been trained in the construction of concrete tanks, using modular concrete rings made with the ring moulds developed for lining of hand-dug water wells.
- 3 The introduction of monthly Community Action Days lead by Rangers in support of a TVRP-initiated community projects.
- 4 The distribution of donated linen to the first two Treaty Villages went smoothly, coordinated by village women's groups and supported by the Rangers.
- 5 New drought- and salt-resistant food crops were introduced with agronomy training for Rangers in planting and harvesting these new cultivars that has been passed onto villagers.
- 6 Review of current fishing practices and exploration of opportunities to target alternative species and support post-harvest preservation and storage.

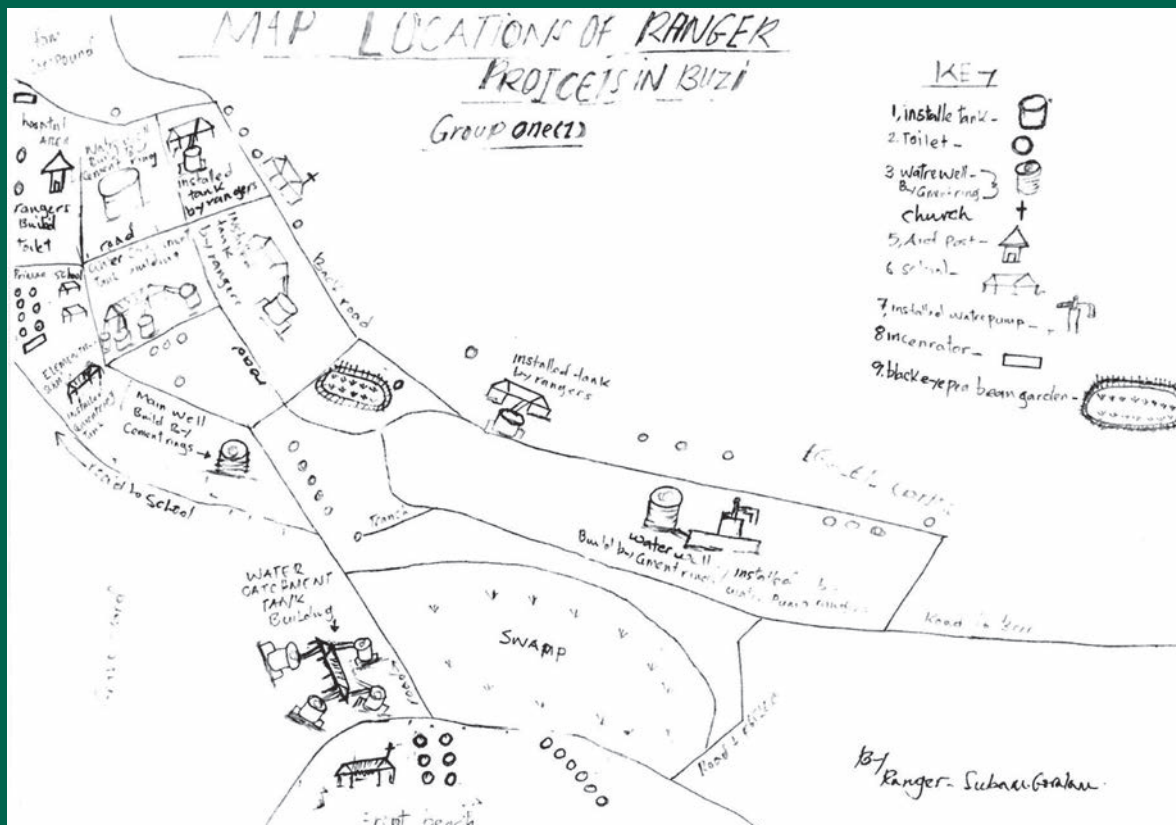
## 2 Governance

The project faces the same governance and project delivery challenges that are well-recognised throughout PNG. Despite the mining wealth of Western Province, the Human Development Index is well below most other PNG Provinces, with the Middle and South Fly Districts being the most poorly developed and under-served. The South Fly District has a Human Development Index of 0.26, equivalent to the Democratic Republic of Congo and one of the lowest globally. The district struggles with even basic service delivery, resulting in extremely limited infrastructure and poor law and order. Official accountability is poor and resources are rarely delivered where they intended. As a result, there is limited trust by the citizens in the South Fly District, Western Provincial and PNG governments.

## Community-driven Development

The Treaty Village Resilience Program has always aimed to deliver greater self-reliance and effective governance at the local level. All Rangers trained in Stage 1 have developed skills in a range of fields, including health, water infrastructure and marine transport, as well as critical leadership and governance capacity. During the transition phase in 2016-17 a great focus was placed on leadership and mentoring, and promoting engagement and ownership of Ranger activities within their respective communities.

In Buzi, Rangers have worked closely with their community to identify priority activities and map their resources and Ranger projects (see below). Importantly, the leadership and mentoring has supported female Rangers in their roles, creating a 'Ranger culture' whereby women can also lead teams and instruct the delivery of project activities. This has been a key step in self-governance and local delivery of community infrastructure, WaSH and health activities.





Governance affects virtually all aspects of a country's prosperity. Good governance is critical for improving aid effectiveness because it influences the extent to which governments develop and implement effective policy, citizens have access to basic services and hold leaders to account, and businesses flourish. Good governance underpins programs in all sectors, including education, health, food security and income, and determines the extent to which objectives are achieved.

There has been an evolution of governance in the TVRP from external agenda setting to Rangers setting priorities, and engaging with Elders and communities to deliver agreed task and negotiate funds. The pilot (Stage 1) Treaty Villages are moving to greater self-sufficiency, with Rangers leading the delivery of local services in consultation with villages. Rangers photograph activities before, during and after to track progress, and are responsible for costing, engaging and delivering the service. Recent leadership and governance training provided Rangers with the skills to accurately cost activities, and maximise efficiency so they can secure higher returns. This phase of the project is building leadership and responsibility in governance for Treaty Villages.

This evolution in governance is operationalising DFAT governance policy at a local level. The DFAT Effective Governance Strategy identifies a series of guiding principles for enhancing governance and emphasises the fundamental importance of understanding and responding to the specific context of recipient communities. The TVRP is delivering on these specific DFAT areas in relation to effective governance:

- Requires capacity, legitimacy and authority to deliver public services, [regulate the economy, maintain order and the rule of law, collect and use revenue,] and act in the public good
- Representative, accountable and transparent governance
- Gender equality
- Promoting local leadership and working on issues that are important locally

The governance outcomes of the project are consistent with DFAT's approach of supporting decentralised governance in PNG and downscaling organisational capacity and leadership from national to Provincial levels, to give PNG responsibility for delivery of services. The TVRP project downscales to a village level to give village communities responsibility for their service delivery and subsequent development.

## 3 Project Implementation

The introduction of Community Action Days has worked well in the transition phase. After consultation with community leaders and all interested parties at community meetings, the Rangers lead the community on monthly Community Action Days in support of TVRP-initiated community projects. The Rangers provide the expertise, equipment and key materials, and the community provides their labour and local bush materials (e.g. sand and aggregate for making concrete). This approach has relieved the expense of using Rangers for unskilled labour tasks in support of TVRP projects, and has engaged the community in investing themselves directly into community outcomes – which is aimed at gradually changing the culture towards one of more communal ownership of shared resources and infrastructure. The Community Action Days are expected to be a permanent part of the TVRP as it continues into the 3-year Stage 2 from July 2017.

### 3.1 Physical environment – water and sanitation infrastructure

Since the start of Stage 1, the Community Rangers trained under TVRP have delivered greater than 1.25 million litres of water holding capacity to the four pilot villages and a further 90,000 L in an adjacent Treaty Village (Katatai) not included in the pilot. In addition, eight new wells have been dug, each with a life span of 80-100 years (subject to sea level rise and damage from natural disasters) and infrastructure has been enhanced in three natural springs. Manual water-lift pumps have been fitted by Community Rangers to five wells to date.

New infrastructure installed in Mabaduan school – two new rain tanks with associated water harvesting system and one latrine – has had additional benefits for student attendance and teacher availability. Noting that students no longer leave early to source drinking water, and teachers from outside the villages who don't have access to clean water facilities no longer leave early to source ground water. Trials of innovative roofing fabrics at Mabaduan school have the dual benefit of rain water capture and weather-proofing classrooms.

In Stage 1, Rangers also received training in the construction of concrete tanks, using modular concrete rings made with the ring moulds developed for lining of hand-dug water wells. This technique reduces the need for the purchase and transport of large poly tanks of similar capacity, and therefore reduces cost. It also makes villages less reliant on products from outside that have to be shipped in. Using the techniques taught, Rangers have been mentored through the installation of an innovative water management system at Mabaduan. To improve water management capability in support of village-determined water governance protocols, four concrete tanks have been constructed. These tanks are fed from the main water reserve, an 80,000 L metal tank, and are designed to self-level so that all four village clan groups receive exactly the same amount of water. Village leaders believe this system, which replaces one where all four groups consumed an ungoverned amount of water directly from the main tank via four separate taps, will greatly reduce inter-group conflict on water usage and the consequent frustration-fuelled damage of communal water infrastructure.

During the transition phase, different sanitation (toilet) designs were trialled and then assessed by Rangers and communities. The Rangers have constructed nine toilet facilities in 4 villages (2 in Buzi/Berr; 2 in Sui, 3 in Mabaduan, and 2 on Paho Island) that have been used by the communities. Village-based discussions and a documented survey about the different toilet designs have identified a clear preference for the Above-ground Urinary Diversion (AGUD) toilet. This design is suited to the extreme rainfall/flood conditions often experienced in Treaty Villages, with minimal flooding of streets or houses during extreme wet periods or high tides. Any future sanitation facilities in the Treaty Villages will use the AGUD design.



The Resilience Project recognises that good community health is a pre-requisite to participation in economic, political, and social development. It is therefore important that community health be integrated into project activities. This is of particular importance with regards to women's health and the very high rates of communicable disease, including multi drug resistant TB, HIV/Aids, leprosy, cholera, filarial elephantiasis, gastro-based diseases and malnutrition. Some of the communicable diseases are selectively impacting women and children.

## Community Rangers as First Responders

# First Aid Report

Ranger Group: <u>Matbudawan</u>	Date: <u>24-03-2017</u>
First Aid Incident:	

~~To~~ I Ranger Sibaio Gorama assisted a woman from Matbudawan for child birthing. It was ~~Series~~ Series so we took her over to Saibah health center. And they check her and said to me that it was Series will refer her of Thursday Island. So I took her to Thursday Island and they found out that she was having twins and she gave birth there and we stayed there for two days and came back.

First Aid Stores Used		In Stock	Used
1	Roller Bandage		
2	Triangular Bandage		
3	Combine Dressing		
4	Non stick Dressing		
5	Bandaid		
6			
7			
8			
9			
10			
11			
12			
13			

Names of Rangers Involved	Signed
1 Sibaio Gorama	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Ranger Group: <u>MASUDAWAN</u>		[Date: <u>5/10/2017</u> ]	
First Aid Incident:			
<p>WHILE DOING OUR RANGER JOB IN MASUDAWAN DELONG WE HAD AN EMERGENCY CASE A SMALL BOY WERE BITTEN BY A SNAKE AT ABOUT 7 AM. THE FOREMAN'S HELL THE CASUALTY FOR ABOUT 3 HOURS AND WAS BROUGHT TO RANGER NIMEI. RANUMI TO BE DRESSED AFRIC THE WAS THEN TAKEN ACCESS TO SORAI HEALTH CENTRE ON A OUTBORED MOTOR <del>TO</del> FOR MEDICATION AND WAS BROOD BACK BECAUSE SHE WAS STUP THE VENDOR FROM GET TO THE HOSPITAL THE BOY IS ABOUT 15 YEARS OLD SO FOR FURTHER REPORT YOU CAN ONLY SORAI HEALTH CENTRE THAT'S ALL THANK YOU</p>			
<b>First Aid Stores Used</b>			
1	Roller Bandage ✓	In Stock	Used
2	Triangular Bandage	NIL	NIL
3	Combine Dressing ✓	1	1
4	Non stick Dressing	NIL	NIL
5	Bandaid ✓	1	1
6			
7			
8			
9			
10			
11			
12			
13			
<b>Names of Rangers Involved</b>		<b>Signed</b>	
1	NIMEI. KANUMI.	NANUMI.	
2			
3			
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The Project has attracted further activities in the community health area by distributing donated linen to the Treaty Villages, coordinated by village women's groups and supported by the Rangers. The villagers expressed their gratitude to the donors and the Rangers. A number of village women expressed similar sentiments to the effect that they regarded this type of aid as being particularly appreciated because it was not part of other government-initiated health programs (such as distribution of mosquito nets), but is a gift of important hygiene materials from average Australians who care about what is happening in PNG. It was interesting to hear how they characterised linen as a hygiene necessity (where Australians look at it more as a comfort item), because they can now change their linen more frequently, and can wash it properly to reduce the incidence of insect infestation and skin ailments that are prevalent in the villages. The communities will also use linen as other essential items difficult to find in the Treaty Villages, such as bandages, shade for the elderly, and birthing bedding.

### 3.3 Food Security

Food security is a major issue facing community in the Treaty Villages, with limited access to protein as well as poor soil and climate conditions for growing crops. This component of the Project has focused on two key areas; improved agronomy using drought-resistant cultivars and increased access to fisheries resources. Training and demonstration garden plots began in March 2017, with the trial of new drought-resistant seeds. All Rangers have been trained in basic agronomy skills and an assessment of crop condition in June 2017 with Rangers identified pest and rain issues that will be addressed in Stage 2. All Rangers have been trained in basic agronomy skills and have been passing on their knowledge and skills in all 4 villages.

A survey of fisheries practices with both male and female fishers from all 4 pilot Treaty Villages identified the main fishing practices and key issues and opportunities. The fisheries surveys for Sui, Mabaduan, Sigabaduru, Buzi/Berr identified knowledge gaps and key areas for training and capacity building. For example, fish preservation used to occur in Treaty Villages but as catches declined the practice stopped and there is now limited knowledge on the best preservation methods for local conditions. A review also identified areas for future opportunities to access alternative species, practices and locations for possible artificial reefs to support this.

As part of the food security activities, Rangers were divided into two groups so there are 26 agronomy and 26 fisheries mentors who provide leadership and knowledge to other Rangers and their communities. An evaluation of new cultivars and fisheries needs and practices in March and June 2017 identified successes in terms of learning new techniques, as well as some key challenges, such as garden pests and loss of cultural knowledge about fish preservation over one generation. These challenges will be addressed in Stage 2 with the existing as well as new Rangers.



Initial project scoping identified Fish Aggregating Devices (FADs) and/or artificial reefs as potentially providing greater access to existing marine resources. However, these options are expected to be either ineffective due to the local bathymetry and habitats (FADs), or cost-prohibitive (artificial reefs). The project surveyed communities to identify alternative opportunities for improving access to important protein and to provide capacity in areas that would be most beneficial. These areas will be the focus of Stage 2 and include: better post-harvest handling and storage, targeting alternative species, increasing catches of pelagic fish (e.g. mackerel), targeting freshwater/estuarine fish, aquaculture, more efficient fishing practices, and infrastructure support for livelihoods (e.g. ice machines).

### 3.4 Women empowerment and equitable participation

While there remain significant barriers to active and equal participation by women and minority groups in decision-making in the Treaty Villages, the Resilience Project has trained 12 female Community Rangers who now take on leadership roles in their communities. The project also engages two female chaperones to enable the women to attend the training sessions and two local female medical staff to assist with training and mentoring. Low levels of literacy, obligations to the family and cultural issues were placed as initial barrier to female inclusion. However, after much negotiation female candidates for Stage 1 were selected by clan elders and inducted into the training program. With these barriers now removed, the same process will be used in Stage 2 to select 25% female candidates.

Female candidates undertake the same training as the men including boat handling, first aid, building, communications, small motor maintenance and plumbing. They also undertake additional training in women's health, nutrition and birthing assistance. Their inclusion in the Project to date has brought considerable benefit to the communities. For example, the female community rangers assisted during the water crisis by attending water collection points and training local women in water purification and gastroenteritis control. This in turn significantly reduced the reliance on the Torres Strait medical facilities during this period. The female rangers also play a significant support role for the health workers in each of the communities.

Ranger training in March 2017 covered basic leadership skills, and Ranger groups now undertake all activities with a rotational leader each day. This includes leadership by the female rangers, sometimes supported by a mentor, and there has been an obvious increase in confidence and equity in the Ranger group. The success of the female rangers and the appreciation by community members has resulted in the female rangers having greater participation in village meetings and decision-making.



Three disabled villagers have also joined the Resilience Project as Ranger Support Officers. The three include two amputees and one with limited lower body mobility due to a severe spinal injury in childhood. The three officers participated in part-time training in logistic management, maintenance programming and supplies administration over a three-month period of paid instruction, and commenced full duties in May 2017. The Ranger Support Officers are paid at the same rate and have the same status as their fully trained and able-bodied fellow Community Rangers in the Project.

Community Rangers are speaking out about gender and disability equality and family violence, which is an important factor in influencing broader community attitudes towards these issues. The Project is providing strong female role models and positions for disabled community members, promoting information to counter cultural norms about gender roles and community domains.

The female Community Rangers have developed an anti-family violence narrative based on the reality that if a woman is beaten then she is unable to look after the children or undertake village work. *Therefore beating your wife is an act against the whole village and pulls the village down.* The male Community Rangers have adopted this narrative and represent a serious gender-enabling group. The male Community Rangers are held to the highest standards as community mentors. If a Community Ranger commits family violence or other unsavoury conduct, he loses his job, which will bring shame to his Clan and reduce his family's income. Male rangers are also called upon to ensure that the female Community Rangers are safe at all times when visiting other villages or Daru.

### 3.5 Disaster Risk Reduction

The Torres Strait and South Fly District are recognised internationally as a hot spot for climate change and increased natural disasters. There has been significant sea level rise (highest astronomical tide increase estimated at 52 cm since 1920's), and more frequent extreme rainfall events – drought and flooding. These natural disasters are predicted to increase in intensity over the next 50 years. Natural disaster impacts combined with communicable disease outbreaks (e.g. cholera, multi-drug resistant TB) are a significant driver of cross border instability.

Disaster risk reduction plans and response training are a significant component of the Resilience Project. The four safety vessels and equipment such as shovels and chainsaws make up part of the village disaster response facility. Early warning and prior preparation are the key to building community resilience. Baseline studies conducted in the Torres Strait on traditional coping mechanisms are being utilised along with focused planning and broader community training.

Disaster Preparedness Plans have been developed as part of the Community Plans for each pilot village, and Community Rangers are trained to implement the plans. While the Treaty Villages will respond as a unit to a natural disaster, coordination with District, Provincial and National Disaster Response frameworks has been limited to date and will be the focus of discussions in Stage 2.

### Passing of a Community Ranger

In May 2017, the Community Ranger team experienced the loss of one of their own, with the passing of Denis Barg, one of the four rangers from Parama. Denis passed suddenly while undertaking household jobs in the village. The bearer party at his funeral comprised rangers from Parama and Sui, and he was buried with his ranger uniform, a source of great pride in the village. Denis will be sadly missed by his family, community, fellow rangers and instructors. Coincidentally, during the trial phase, Parama Ranger Group was paired with Sui Rangers and was therefore not a full Ranger Group. It was already intended that during Stage 2, two more female rangers would be trained from Parama, bringing their group to full strength. The intention is to now increase the new intake to three rangers, so that Denis' position is filled once more, allowing his clan to be represented once again in the distribution of village ranger positions.





## 4 Monitoring and Evaluation

The Project has established a robust Monitoring and Evaluation (M&E) approach that provides both quantitative and qualitative metrics. The initial baseline infrastructure surveys provide the evidence for practical progress by the Resilience Project and Community Ranger progress is also mapped against the work plans in each Community Plan. This evaluation approach allows for a comparative analysis of the effectiveness of different leadership approaches in tangible outcomes for the community. Qualitative and observational analysis can be made between pilot villages and others that have not received intervention from the Project.

As part of the administrative training for the Community Rangers and as a measure of progress, the Rangers are required to report on their activities. This reporting is comprehensive, and includes:

- Detailed reports on each first aid/medical emergency they attend.
- Detailed reports and photographs of the crowd of people attending the community training session that they conduct. This also provides a 'head count' of community members receiving training from the Rangers.
- Detail reports of infrastructure work (installing tanks, digging wells) achieved independently of project mentors with supporting photographs for verification.
- Written report on issues and impediments and suggestions improvements in the future.

These reports are collated and included in the general project reporting. The responsibility of reporting and evaluating performance is embedded as part of the overall leadership training. Accuracy and integrity in reporting is an essential element for each of the villages. The Community Rangers also verbally report to the Council of Elders in each village on their achievements against the work plan. Where the village leadership is weak, achievements against the work plan is poor, and this outcome is transparent.

The RRRC utilises the Australian Government M&E system and holds appropriate data in a number of formats. RRRC also holds relevant data from other Australian Government program relevant to the South Fly District. In terms of information sharing, review and learning activities, the Community Rangers regularly meeting with mentor/trainers and analyse progress and challenges.



## 5 Communications

The Project has a structured communication protocol with Treaty Villages and the District Administration and associated agencies. Regular briefings are given to update the District Administrator, District Treasurer, Police, Customs, Border Development Authority and Daru Hospital.

The sharing of information has helped the Project overcome considerable scepticism about the project objectives. Many community members believed that the intent of the project was to prevent the harvesting of dugong and fisheries resources by Treaty Villages, or some other policing exercise. These misconceptions have been addressed and the work of the Community Rangers now receives community support and regular coverage in the local and national newspapers. The District Administrator saves these articles about the activities of the Community Rangers on his wall, which are regularly updated by his staff.

Collaboration with other institutions and potential partners is principally through the annual Traditional Inhabitants meeting of the Joint Advisory Committee of the PNG and Australian Torres Strait Treaty. Updates are presented to the attending PNG and Australian government agencies. Given the rapid progress of the Resilience Project, the information supplied has been well received and opportunities to integrate with other Australian Aid funded projects are being identified.

## 6 Innovation

The entire Resilience Project approach reflects classic 'participatory action research', with an emphasis on **community-driven action**. The approach utilises community-based collective knowledge and learnings grounded in experience and social history. In addition, there is scope to facilitate other types of innovation in the delivery of Stage 2 of the project. It is clear that innovation opportunities exist for: more functional water capture and storage, sanitation, alternative energy supply, food production and storage, fish attractant structures and low input aquaculture. The innovative sanitation and food security areas started in the transition phase, with improved agronomy and fisheries planned to continue in Stage 2.

The trialling of innovative water capture, storage products and sanitation systems is well advanced in the pilot villages with the trialling and selected of a preferred latrine design. These innovations will revolutionise water systems in remote rural communities that are difficult to access.



## 7 Value for Money

To date, an analysis of actual expenditure highlights the substantial investment in the initial ranger training and platform for implementation. The higher expenditure on trainers has given way to implementation costs, and are detailed as follows:

- Personnel costs (52 rangers + 2 female chaperones + 8 Australian mentors/trainers + 2 PNG mentor/trainers + PNG support staff + science support): 51.3% of the total budget (this includes community development officer wages, trainer and specialist costs, all meetings, food garden sustainability – enhance cultivars, sustainable fisheries).
- Operational costs (fuel, materials, travel, supplies, safety equipment, vessels, freight): 47.4% of the overall budget (this includes community development officer equipment, operational costs – maintenance/freight, fuel, travel – international, travel – domestic, sanitation and WASH infrastructure).
- Administration costs: 1.3% of the overall budget (includes administration, financial reporting and auditing, community communications and materials, in-country coordination – excludes the RRRC contribution).

Given the high costs of staffing in-country, it is not unreasonable that personnel costs constitute the largest single component of expenditure. There are now 51 Community Ranger, 2 chaperones, 10 trainers/mentors/experts (8 expat, 2 female nationals), 4 cooks/kitchen staff, and 2 guards.

The high expenditure on materials for repair, maintenance and new infrastructure, raises the question of PNG government investment. Through an MOU, the Project has been able to leverage nine new water tanks and two birthing beds from the PNG Border Development Agency. In addition, the RRRC Connect philanthropic initiative has received 25 donated hospital beds that will be distributed to the Mabaduan Hospital and other suitable aid posts for use as emergency beds.



## 8 Impact and Sustainability

In summary, the most significant improvements in community well-being and resilience to date include:

- Significant increased water capture and storage capacity (1.2 million L in pilot villages and 90,000L in non-pilot villages) and long-term increased access to water supply (water wells).
- Construction of nine new latrines with the trial of different designs selecting the AGUD as preferred for future sanitation infrastructure.
- Building a critical mass of 52 trained Community Rangers with capacity to deliver services into the Treaty Village communities. These are the leaders of the future and with leadership and governance training present a pathway to strengthen the social and economic fabric of the Treaty Villages.
- Addition of three Ranger Support Officers from the pilot Treaty Villages who are disabled and would otherwise have limited job prospects.
- Four Community Plans and work programs, which reflect the agreed priorities of all clan groups in the Treaty Villages and are less vulnerable to political changes.
- A culture of safety and maintenance has been introduced into the pilot villages.
- Transitioning to a more self-driven leadership and governance systems lead by Community Rangers to deliver community services.
- Reduced family violence and improved gender equity that are openly supported by both male and female Community Rangers, resulting in a greater empowerment for women and opportunities to participate in decision-making and service delivery at the village level.
- Improvements in community health understanding and reduction in water-borne diseases.
- Increased disaster/emergency response capacity in pilot villages and assistance to marine disasters (more than six rescues at sea performed to date).
- Establishment of a safe and reliable platform of service delivery enabling future 'fee for service' businesses to be developed (e.g. for Treaty Awareness visits, biosecurity, research and health services).
- Distribution of eight containers of donated linen to the pilot Treaty Villages to be used for a variety of purposes.
- Livelihood training for Community Rangers who are competent in preparation and costing of service tenders. There is also an audit of village skills and equipment to identify opportunities for the villages to compete against external tenderers for the delivery of service contracts that have been let by the District Administration or donor agencies.
- Improved 'work readiness' of Community Rangers through the skills training and qualifications acquired, to enable access to employment opportunities in PNG or internationally.
- New knowledge and skills in food security through nutrition and agronomy training, delivery of drought-resistant cultivars, and identification of improved fisheries practices.

### Further Reading

Treaty Village Rangers, South Fly District, PNG: <http://rrrc.org.au/programs/png/>

Djunbunji Ranger Program: <http://www.djunbunji.com.au/ranger-program/>

Gunggandji Rangers: <http://statements.qld.gov.au/Statement/2016/2/23/gunggandji-rangers-bring-traditional-expertise-to-caring-for-country>

Torres Strait Land & Sea Ranger Program: <http://www.tsra.gov.au/the-tsra/programmes/env-mgt-program/managing-our-islands-and-sea-country/land-and-sea-rangers>







