

ANNUAL REPORT

South Fly Resilience Plan



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The community ranger program has grown since its inception almost a decade ago to compose 178 rangers today, of which 38% are women.





Foreword

RRRC has been a pioneer in building sustainable livelihoods in Papua New Guinea's South Fly District for the past decade. We take great pride in this legacy, both in our strong relationships with local communities and in the progress that has been achieved during this time.

I first visited this remote part of PNG in 2009 to investigate the potential for turtle and dugong management, looking for linkages to RRRC's work in the Torres Strait of Australia.

South Fly District, just a couple of kilometres from Australia, is a world away in so many respects. It is an extremely difficult environment in which to operate, due to lack of infrastructure, roads, transport and security, and there are multiple serious challenges for sustainable development. There was a quick realisation that any kind of nature conservation work would depend on building the capacity of local people to manage their own natural resources, and that developing sustainable livelihoods would be key to this.

The RRRC partnered with INLOC, whose hand-on, practical team focused on building local capacity and governance. We decided to trial the same community-led approach that had been successfully applied in Northern Australia, leading to the first community ranger program in South Fly District. What started as a small trial in the Treaty Villages has grown to a ranger program with 180 trained rangers across the District, of which 38% are now female today. In stark contrast to the customary norm, gender equality flows through the program, both in training and responsibilities of rangers, and it is not uncommon to see a male ranger learning how to sew and a female ranger fixing a boat.



The past year has seen great strides being made in the area of food security, with our team developing a discussion paper towards the development of a food security plan for South Fly District in partnership with local government and development organisations such as the Ok Tedi Development Foundation and Anglican Disaster Response Association. The foundation of this work was the Tok Save surveys, a huge logistical effort undertaken by the INLOC advisors and rangers in 2021, to determine community aspirations for food security and livelihoods. We listened to community members to ensure that future program design is led by local people, with practical support and skills development for their aspirations being our priority.

I am delighted to share that trials in poultry, mud crabs and horticulture which are rolling out across several villages, with significant learnings from each being recorded in order to determine the most sustainable options for communities going forward. This year we also developed a Memorandum of Understanding with the PNG National Agricultural Research Association as a basis for the introduction of improved varieties of food security vegetables to forty priority wards, and built an agriculture hub at Kibuli with the community, along with a training room. The trainings in governance and business literacy that we have been able to provide with local partners this year have been vital to ensure sustainability of this work in the long term.

The South Fly Resilience Plan is fully funded by the Australian government through the PNG-Aus Partnership and jointly implemented by the governments of Australia and Papua New Guinea and their implementing partners and agencies. We look forward to continuing to our productive partnership with the Australian Government's Department of Foreign Affairs and Trade in the coming year, as we move beyond the challenges of the Covid-19 pandemic, and continue to support communities in South Fly District to adapt to climate change towards a more food secure and equitable future.

Sheriden Morris
Managing Director
RRRC Ltd



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The ranger program has given me the opportunity to learn new skills that I didn't learn in school. Important skills like working on outboard engines, carpentry and basic first aid. Another ranger, Willie Baira, has been teaching me about outboard engines. It's my first time to learn and it makes me feel good. Learning about outboards is important as we travel all the time in boats for the ranger program and back in the village.

BADAL JEIBI
Female Ranger

Background

Since 2014, the Reef and Rainforest Research Centre (RRRC) and INLOC team has been commissioned by the Australian Government's Department of Foreign Affairs and Trade (DFAT) to assist the South Fly District in the Western Province of Papua New Guinea to develop resilient, sustainable livelihoods and inclusive governance under the PNG-Australia Governance Partnership.

The program has grown from a pilot that started the region's first Indigenous ranger program across four Treaty Villages, to one that encompasses forty villages across the South Fly District, including thirteen Treaty Villages.

Over the past eight years the South Fly Resilience Project has built strong foundations and working relationships on the ground with local communities. The current focus is on building governance and skills capacity, improving food security and enabling sustainable livelihoods.

RRRC/INLOC have a long history of work in the South Fly District and a strong reputation among the local community as being there for them in times of need.

Implementation of food security and sustainable livelihoods with these communities is extremely challenging in this very remote part of Papua New Guinea. Compounding this, the region is now battling with the increasing impacts of climate change and associated droughts, floods and increasingly high king tides.

Three-quarters of the population of South Fly District live in rural villages outside the capital of Daru, with scant road connectivity, limited education and few income generation opportunities other than subsistence agriculture, fishing and hunting.

Investing in People for Sustainable Development in the face of Climate Change

In the past year, in spite of the ongoing Covid-19 pandemic, the South Fly Resilience Project has achieved a number of significant milestones through the ranger program, while continuing to build the core foundations and partnerships for sustainable livelihoods and improved income across South Fly District. The focus has been on targeted investments in the capacity of communities, building a strong base for implementation of food security, and supporting good governance with local government and development partners. Enabling communities to adapt to the impacts of climate change through changes to their gardening practices is a core part of this work. The food and water security surveys collected by rangers on a monthly basis provide a useful indication of the state of communities' food and water supplies and the environmental impacts, and have provided important information for program design.

This year saw a significant leap in stakeholder engagement and partnerships for the project. This was achieved through a number of strategic processes intended to better understand community and local government aspirations and to ensure that SFRP outcomes are driven by local communities, notably the *Tok Save* and food security planning consultations. This community-based, 'ground up' approach will ensure that the implementation of food security initiatives is closely aligned with local government policies and development plans, and genuinely reflects the needs and wishes of local communities.



ABOVE: The foreshore at Old Mawatta village, where extremely high king tides linked to climate change are an increasing problem for the community's gardens and well water quality.

While there are existing and successful traditional forms of governance and trade, the skills required to engage in a modern economy are limited. Additionally, some cultural practices, such as *wantok* systems, can provide considerable challenges when it comes to the execution of microbusinesses and agricultural trials. Understanding the cultural context is essential and engendering a strong sense of community ownership through ongoing consultation is vital for any kind of sustainable development in South Fly. The assistance that the RRRC/INLOC team provides, with the support of the Australian government, makes a huge difference for local communities. In the past year, efforts have been made to work more closely with local government and development partners, such as the Ok Tedi Development Foundation and Anglican Development Relief Association, to magnify collective impacts towards improving peoples' livelihoods.



ABOVE: Rangers Melinta and Barbara inspect a fruiting guava tree at Masingara village during a DFAT mission in March 2022



Tok Save Community Consultation and Report

The *Tok Save* process involved a huge logistical exercise by INLOC advisors and rangers who undertook an extensive community consultation process across forty wards from June to August 2021. The aim was to determine community aspirations for food security and sustainable livelihoods and communities were very enthusiastic about participating.

Over 3500 men, women and children participated in the *Tok Save*, and 56 people identifying as disabled. The overwhelming issue of concern for communities was water insecurity and a lack of water infrastructure, followed by food insecurity. The discussions identified other major concerns among communities including climate change impacts (flooding, drought, king tides), lack of garden infrastructure, lack of clean water and infrastructure, impacts of animals and disease on food crops, a lack of technical advice and limited access to markets.

A number of potential agricultural opportunities suggested by communities during the *Tok Save* were explored in three pre-trial feasibility assessments in late 2021 to determine those with the most potential for success. Based on these considerations, and moving forward with the community's wishes at front of mind, income generation trials in poultry, horticulture and mud crab grow out have been in development in the first half of 2022. A number of experts in fisheries, poultry and horticulture provided specialist advice on how to progress these trials to give them the best chance of success between March and June 2022.



OPPOSITE: Ranger Sereu cutting pipe to length prior to installation. ABOVE: Tok Save at Wando Village. NEXT PAGE: Tok Save roadshow – Ranger Elda David addressing the Kadawa community.



Making Water More Accessible

Recognising local concerns around water insecurity among many of the communities that participated in the *Tok Save* consultation, in the past year over 300 water wheels were distributed across 29 villages to provide easier collection of water for domestic use and garden irrigation.

The water wheels have been very well received by communities, who use them to gather drinking water from tanks and other water sources. The water wheels allow community members to spend less time collecting water as they increase the amount of water that can be collected at any one time from 15/20 Litres to up to 45 Litres. They also make collection of water much easier for elderly and disabled people.

BELOW: Water wheels being distributed to remote villages by rangers in boats

LEFT: Water wheels distributed to Wamerong village, one of 29 villages that received them



Improving Crops for Food Security

Food insecurity is an important concern that was highlighted by communities in the *Tok Save*. Parts of the South Fly District have been recognised as having high levels of multi-dimensional poverty and there is a need for a higher quality and more diverse dietary intake.

A key achievement of the program in 2022 has been the development and approval of a strategic Memorandum of Understanding between RRRC/INLOC and the National Agricultural Research Institute (NARI) in order to bring in varieties of food plants with higher nutritional value, greater yield and disease resistance than those currently being grown by communities. Improved plant varieties have been ordered from NARI and are expected to be distributed from the first hub to the five satellite villages in the latter half of 2022, alongside a training program in basic gardening led by experienced local practitioners. RRRC/INLOC is working closely with the Anglican Disaster Response Association (ADRA) to deliver this training, capitalising on their existing experience in gardening for food security in South Fly District. The improved varieties of vegetables from NARI that will be trialled in villages include a range of sweet potatoes, cassava, taro, African yam and Abika.



ABOVE: NARI's improved cultivars planted out as part of the Morobe School Gardens project, Lae, PNG.
OPPOSITE PAGE: Improved varieties of sweet potatoes were ordered from NARI for distribution through Hub #1 at Kibu



*Melissa Poang and Bridgith Suruweng at Morobe
School Gardens project, Lae, PNG.*





ABOVE: Completed Kibuli Shade House. BELOW: INLOC Advisor Artie Jacobson checks one of the greenhouses at Kibuli for fit with the local community



Construction of First Hub for Food Security and Training

Three large 15m x 6m greenhouses were constructed with the community at Kibuli (Hub #1) as well as a multi-purpose classroom/teaching area and four satellite nurseries at Kurunti, Sebe, Wamarong, Ngao and Kulalae.

Two of the greenhouses are fitted out with internal irrigation. Water is pumped from the Pahoturi River, 300m away. This is the first of three planned hubs in South Fly District that will be linked to the District's Growth Centres and are intended to become important distribution centres for food security and training.

In the coming months the operational model for these hubs will be discussed with local government in order to ensure sustainability and a sense of local ownership going forward.

ABOVE: The completed three green houses at Kibuli Hub #1, prior to construction of the training centre.



Planning for Improved Food Security

RRRC/INLOC co-ordinated the development of a food security plan for South Fly District this year, working closely with the District Administration and local stakeholders during an extensive consultation period. The food security planning process involved two workshops in March and May 2022, a field visit in March 2022 as part of a DFAT Mission, and several interviews of key stakeholders. Institutional arrangements and capacity deficits were discussed in the context of food security, with a view to informing how the project could provide institutional strengthening at the local level. The discussions so far have been very productive and engaged a variety of local stakeholders across government and development partners working in the food security space, including Ok Tedi Development Foundation (OTDF) and the Anglican Disaster Relief Association (ADRA).

The next stage will involve discussions with smaller working groups, focusing on the District Administration and local government Agriculture and Livestock teams, to work through priorities for actions, roles and responsibilities. It is anticipated that these discussions will go into more depth around how the program can better support extension services to lead on food security in the District, using the food security plan for direction. The stakeholder consultation and resultant discussion paper towards the South Fly food security plan has strengthened relationships with local government and development partners and this process is intended to create sustainability through a strong sense of local ownership.



ABOVE: The first of two food security workshops in Daru in March 2022. BELOW: The second food security planning workshop held in May 2022 in Daru was well attended by local representatives, who welcomed the opportunity to share learnings, ideas and opportunities in this space.



ABOVE: Womens' meeting to discuss their concerns and ideas about food security at Kibuli



Building Skills in Business and Financial Management

Training in business and financial literacy is absolutely necessary to underpin sustainability of microbusiness development in South Fly, due to the considerable capacity deficits in this area.

This year an MoU was developed with the Papua New Guinean Centre for Excellence in Financial Inclusion (CEFI) for the delivery of business and financial literacy training with INLOC advisors and rangers. Two workshops were delivered by CEFI trainers at Paho Island in May 2022. A total of 41 participants completed the Financial Literacy Training, including 19 women.

More of these training workshops are planned in the coming year to provide a foundation for the success of emerging microbusinesses.

BELOW: One of the groups who completed business and financial literacy workshops hosted by CEFI in 2022



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I am the Senior Ranger from Kunini. I joined the ranger program last year through the expansion. I was overly excited to be part of the program. The program has boosted me up, especially with my confidence. I can now stand up and do public speaking. It's given me good leadership skills. I have also learnt carpentry, plumbing and boat driving. I'm especially excited about learning to become a skipper. My aim for the future is to continue learning skills from the Ranger Program to become a good strong leader for my community.

DANIEL GIALI
KUNINI SENIOR RANGER

Implementation of Poultry Trials

One of the agribusiness opportunities that several communities expressed a desire to trial through the SFRP in the Tok Save was poultry. In 2022, poultry expert and businessman David Drummond worked with the INLOC team, rangers and local community at Paho Island and Giringarede village to establish the first poultry trials and provide basic skills for coop maintenance and stock growth. Since then, two other coops have been established at Ngao and Abam.

Local community members and rangers have been trained in poultry husbandry and the trials are being monitored on a regular basis. The early indications are that the first poultry trial at Giringarede is likely to be productive, given the high rate of chickens reaching maturity for sale, with business operations yet to commence. INLOC advisors are working closely with this community to enable steps to be taken to get chickens to market at good prices and for the profits to be reinvested wisely to ensure ongoing success.

BELOW: Delma Dabu, a local community member at Giringarede village involved in the poultry trial.



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I'm Delma. I'm from Giringarede. I have been involved with the chicken project from the start. This is my first time working with the chickens. We have learnt how to feed them, how to give them water, and how to look after them. The chickens have grown fast. I'm excited to eat one when they are ready. We will use the money from selling the chickens to buy more chicks.

DELMA DABU

Community member responsible for Giringarede Chicken Project





ABOVE: The first chicken trial at Giringarede Village is showing early signs of success, with many learnings along the way for other villages' trials in the months ahead. BELOW: Construction of the chicken coop at Giringarede, May 2022. OPPOSITE: Male Ranger with chickens



Implementation of Mudcrab Grow-out Trials

Although the export market for mud crabs in Papua New Guinea is currently closed, there is strong interest locally in exploring the potential for income generation through mud-crab grow out trials. This involves sourcing crabs of legal size from the wild and growing them out in specially designed boxes. Approximately (200?) crab grow-out boxes were sourced and during July 2022 Grankle Seafoods trained 22 community members and rangers from four villages, including twelve women, in mud crab husbandry, grow out and product quality maintenance. Crab farm trial sites have been identified at Buzi, Sibidiri, Masingara and Katatai and trials are due to commence in August 2022.

The mud crab grow-out trial is considered to be the highest risk of the feasibility trials being rolled out by the program. Given the security concerns around mud crabs due to their high financial value, the potential for toxicity to affect product quality linked to the possible impacts of mining contaminants from run-off, and potential clashes with interests in the Torres Strait, these trials will be monitored closely to determine whether they are viable for scaling up and whether the benefits outweigh the risks.

BELOW: Senior Ranger Talia Penia and fellow community members learning how to measure if a mud crab is legal size as part of training co-facilitated by Grankle Seafoods. OPPOSITE: Ranger Ziru holding a mud crab in one of the boxes being used for crab grow-out.





Following the pre-feasibility assessments, it was decided to attempt a mud crab grow-out trial, even though this is a high risk operation. In this photo INLOC advisor Artie Jacobson (right) and rangers Martin Atu from Tais (left) and Mareta Gibuma from Buzi (centre) ensure crab grow out boxes are ready to float.



Ranger Nemei from Madbuduan giving out a birthing kit.

Improving Gender Equality

A recent review of SFRP found that gender norms regarding women in leadership are being challenged and that the engagement of female rangers is building leadership skills and experience among women in South Fly District. Gender equality, disability support and inclusion is enabled on an ongoing basis through the ranger program in the normalisation of participation of both genders in all activities. This is not a simple or fast process to achieve, and the stage that the ranger program is at now is a significant achievement, resulting from targeted investment of staff time and prioritisation of gender equality. Considerable progress made through the ranger program towards gender equality is setting a standard in the district that is far from the norm.

The approach enables men and women to participate equally in daily ranger activities and creates role models for gender equality through the ranger program. Many of the microbusiness initiatives focus on women, which requires a delicate balance within the cultural architecture of the community. Today 38% of the Rangers are female, a proportion that has increased over time, and gender equality is being normalised through the day-to-day activities, ensuring that both men and women participate in everything from boat bowmanship and carpentry to sewing. The female rangers continue to take a leading role in the distribution of 1000 birthing kits annually and provision of first aid for births. The project also mandated womens' participation and representation in all training activities, aiming for equal representation of both sexes.

BELOW: Female rangers breaking gender barriers by undertaking construction work as part of their roles





Gender equality is normalised in all aspects of ranger work, with both male and female rangers encouraged to undertake tasks ranging from sewing to construction.

Building Good Governance

Supporting leadership development and good governance in South Fly communities is one of the most important deliverables of the SFRP.

In the past year, the program delivered a series of Ward Profile Development workshops on Paho Island to a total of 106 participants from across the 40 target Wards, including 25 female rangers. As a result, 23 wards have now completed their Ward Profiles and are working towards their 5-year Ward Development Plans.

In collaboration with Department of Provincial and Local Government Authority (DPLGA), four Ward 5-Year Development Plan Training sessions were delivered at Daru and Paho, reaching 21 Wards so far.

As a result of these workshops, all wards that participated have now completed their Ward Profiles and are in the process of working on their 5-year Ward Development Plans.

The Ward Profiles contain all relevant information about the population, Ward Development Committee, community projects, various sectors including health, education, transport and communication, business, law and order, religion and the state of infrastructure.

Participants were made aware that in the absence of a 5-year Ward Development Plan a ward is unlikely to benefit from government services provided through LLGs, underpinning their importance for their communities.

The responsibilities of Ward Development Committees, legal requirements around committees, and importance of upkeep of ward records were also reinforced.



Ward Profile Training Paho Oriomo-Bituri President Stanley Iakabo Gurel

5-year Ward Development Plan workshop held in Daru on 15 May 2022 with representatives of the Provincial and District Administration, Department of Provincial and Local-level Government Authority (DPLGA), INLOC and AbT Associates



The Future

With the continuation of the partnership with the Australian Government's Department of Foreign Affairs and Trade in mid-2022, the food security plan will continue to be co-developed with the District Administration as a basis for long term implementation, starting with several agricultural trials over the next year.

Support will be provided for income growth through microbusinesses, delivering ongoing training in governance, basic gardening, agricultural principles, and financial and business principles, working closely with government and development partners wherever possible.

Assistance will continue to be provided to local leaders through the Ward Development Committees, focusing on building internal capacity to complete their Ward Profiles and Five-year Ward Development Plans across South Fly District. This is an essential step towards self-sufficiency and long term, sustainable leadership for development.

Building on the partnership with the National Agricultural Research Institute (NARI), improved plant varieties will be trialled as part of the nursery hubs and linked to training.

Implementation and monitoring of the trials in poultry, mud crab grow-out and improved cultivars will be a strong focus of the coming year. The mud crab grow-out trial has commenced with initial training; however, it remains a high-risk activity and will be monitored closely.

The poultry trials are demonstrating early signs of success in terms of production of chickens, with the sales and business management elements to be tested in the months ahead. In the context of increasing impacts of climate change in the region, facilitating adaptation to climate-related environmental impacts as they pertain to food security and agricultural trials will be a high priority.



I'm Goidani. I'm from Mabaduan. I have been involved with the ranger program from the start. I already knew how to construct buildings but through the program trainings, basic building techniques and operations got clear for me, so now I have a much better understanding. I learnt a lot about how to perform construction in a safe manner using proper protection equipment and safety measures. As the program is getting bigger I would like to get out to the villages to share my knowledge with the people and rangers in the communities as much as I can.

GOIDANI WURUKI
Senior Male Ranger





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