

VSA Assignment Description

Assignment title	Food Technologist
Country	Autonomous Region of Bougainville, Papua New Guinea
Location	Arawa
Partner organisation	Arawa Fresh Produce Ltd
Duration	12 months ¹



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1. Assignment goal

Arawa Fresh Produce Ltd (AFP) is able to more effectively identify agricultural products, and understand processing, equipment and training requirements for sale in local and external markets.

2. Assignment outcomes

Outcome 1

AFP is better able to supply the local market, visitors² and external markets with coffee, black pepper and vanilla.

Outputs

- Advise on equipment, training and procedures to select and assess the quality of coffee, pepper and vanilla currently grown in the AROB
- Provide guidance on initial supplier-side processing of coffee, pepper and vanilla and supervise setup of these operations
- Advise on the purchasing of equipment and provide training to manufacture coffee, black pepper and vanilla for local and/or external markets
- Advise on the quality control and health and safety processes involved in manufacturing products
- Advise on the adherence to the prescribed quality standards (national /international)
- Provide guidance on low-cost and high quality packaging

¹ Arawa Fresh Produce Ltd is flexible in relation to assignment duration. For the right person, the assignment could consist of two short-term visits with an e-volunteering component (e.g. two 3-month visits over 12 months) or a longer 18-month assignment.

² Including cruise ships, guesthouses, adventure tourists and the growing expatriate market.

Outcome 2

AFP has identified produce that is grown in the ARoB which could be processed, packaged and sold locally or shipped to locations in Papua New Guinea (PNG).

Outputs

- Advise AFP on the equipment, processes and resources needed to assess locally grown produce
- Alongside trainees, assess quality of locally available crops, including: turmeric, lemon grass, canarium nut³ and other 'unidentified products'
- Provide input on which crops could be sold locally and in other locations in PNG
- Advise on equipment, quality control, health/safety and other resources needed to process locally available crops and scale-up production
- Advise on adherence to prescribed quality standards (national /international)
- Advise on appropriate packaging for local and external markets

Outcome 3

AFP understand the processing, equipment and training required to initiate and sustain value-added production of cocoa and coconut.

Outputs

- Review current and/or proposed selection and processing of cocoa and coconut
- Advise on the steps involved in producing and packaging raw beans and roasted cocoa beans
- Alongside the General Manager, advise on equipment, training and other resources needed to produce chocolate, coconut oil and other products derived from coconut
- Advise on the steps, health/safety, quality control processes and costs involved in manufacturing chocolate and coconut oil
- Provide input on the feasibility of scaling up production of chocolate, coconut oil and other coconut products

As needs on the ground may change over time, the volunteer is encouraged to review and update the assignment description on arrival in consultation with the partner organisation and VSA programme manager.

3. Reporting and working relationships

Initially the volunteer will work alongside and report to the AFP Director, General Manager and Operations Manager in order to access current operations and opportunities. Thereafter the volunteer will begin training and mentoring the trainees, quality assessors and farmers.

The volunteer may also consult with, and provide guidance to, other actors in the primary industries space, including staff from the Commodity Support Facility (CSF), World Vision, the Productive Partnership in Agriculture Project (PPAP) and the ABG Department of Primary Industries.

The volunteer and AFP will have an ongoing relationship with the VSA programme manager in terms of assignment monitoring, reporting, professional advice and personal support.

³ Commonly known as "galip nut".



4. Capacity building

The volunteer will provide direct mentoring and training to a number of identified food technologist trainees, who already have qualifications in related disciplines (including nutrition and chemistry).

It is envisioned that the volunteer will provide training to the five licensed quality assessors at the company and will have some interaction with farmers.

Much of the assignment will involve institutional strengthening as the volunteer will conduct assessments and provide the company with recommendations on a wide range of matters.

5. Person specifications (professional)

Essential

- Relevant tertiary qualification in food science/technology, nutrition, chemistry or related discipline
- Experience working as a food technician or nutritionist (in a manufacturing /quality assurance environment)
- Ability to assess what new food products will fill gaps in local markets
- Ability to compile instruction sheets or recipes (production, quality control, health & safety)
- Understanding of how to abide by prescribed quality standards (national or international)
- Experience in providing training and/or practical demonstrations to groups

Desirable

- Experience working with small businesses
- Experience working with cocoa (chocolate) and coconut
- Experience working with farmer groups and assessing produce at various stages of the production and supply chain
- Experience selling home-made processed food products at local markets
- Ability to assess what may be economically viable to sell locally and further abroad

6. Person specifications (personal)

Essential

- A good problem solver with the ability to think innovatively
- Ability to work with limited resources and with limited monetary support
- Ability to communicate ideas simply and effectively

Desirable

- Flexibility and ability to adapt and work at a pace set by local people
- Passionate about small business and working with farmers
- Experience working in a cross cultural environment
- Understanding and experience living in PNG or Melanesia



Additional information

Residency status

VSA volunteers must be New Zealand citizens or have New Zealand permanent residency status, and currently living in NZ.

Partner organisation

The volunteer's primary partner organisation will be Arawa Fresh Produce Ltd.

Pre-departure briefing

As part of the volunteer's contract, successful candidates will be required to take part in a pre-departure briefing course run by VSA in Wellington and complete all required pre-reading.

Final appointment

Final appointment will be subject to satisfactory medical and immigration clearances (costs covered by VSA), partner organisation acceptance, and successful completion of the pre-departure briefing course.

Family status

VSA supports partners to accompany volunteers on assignments of six months or longer.

Fundraising

Volunteers are encouraged to fundraise at least \$1000 with the support of VSA's fundraising team. Accompanying partners are encouraged to raise the same amount. All funds raised will help VSA keep its programmes in action and support future volunteers.

Vaccination requirements

Potential volunteers are advised that VSA's insurers require volunteers to be inoculated, prior to departure, in accordance with the instructions of VSA's medical adviser. VSA covers the cost of any required vaccinations.

Volunteer package

The volunteer's package includes the following:

- **Reimbursements and grants**

1. Volunteers will receive an establishment grant of NZ\$1000 to help them set up in their country of assignment. For volunteers with an accompanying partner (whether or not that partner is also a VSA volunteer), VSA will pay an establishment grant of NZ\$1,500 per couple.
2. A resettlement grant of NZ\$250 will be paid for each month the volunteer is on assignment. This is payable on completion of the assignment.
3. The volunteer will receive a monthly living allowance of K1725.
4. The volunteer will receive a remote location grant of NZ\$2000 after six months on assignment.

- **Accommodation**

Basic, comfortable furnished accommodation will be sourced by VSA.

- **Airfares and baggage allowance**

VSA will provide the volunteer with economy airfares to and from New Zealand for their assignment plus a baggage allowance.

- **Insurance**

VSA will provide travel insurance to cover baggage and personal property, and non-routine medical expenses for the duration of the assignment. Further details of the insurance cover will be provided during the volunteer pre-departure briefing.

- **Utilities**

VSA will reimburse volunteers reasonable expenses for household utilities while on assignment.



Final terms and conditions relating to the specific volunteer assignment will be confirmed in a personalised volunteer contract prior to departure.

Attachments

Appendix 1: Background to the assignment

Appendix 2: Living situation

Appendix 3: Autonomous Region of Bougainville, Papua New Guinea

Appendix 1: Background to the Assignment

Arawa Fresh Produce Ltd

Arawa Fresh Produce Ltd (AFP) is a locally owned and operated company which grows, buys, processes and sells agricultural produce. The company, which was registered in 2014 and started trading in 2016, currently employs 18 staff and this is expected to increase.

At present the core business of AFP is buying cocoa, paying premium prices for premium quality, and selling this into markets the company has developed over past year. To improve quality of cocoa, the AFP offers training and superior prices to enable access to premium markets. The company has 5 licensed quality assessors and receives cocoa from 30 approved fermentaries who have passed strict quality assessment, the aim is to reach 500 premium growers over the next 5 years.

While cocoa buying is currently the primary operation, AFP also buys pepper and coffee from growers. These growers, who previously had no market access, are now able to sell their produce to buyers in Port Moresby. Vanilla growers have also approached the company with requests to sell their produce and samples have been sent for testing.

The company is benefiting by working with farmers who are being supported through the World Bank-funded Productive Partnership in Agriculture Project (PPAP), which provides an opportunity to boost production and productivity in the cocoa industry through improved growing techniques, distributing new hybrids and clones, and improved quality through maintenance of cocoa dryers and fermenters.

The company is also working with the Australian and New Zealand Aid-funded Commodity Support Facility (CSF), which aims to foster economic development and good governance through a grants facility that targets the primary industry sector.

AFP has plans to scale up their cocoa buying operation, including:

- Supply of graded beans using winnower/sorter.
- Sourcing of economical basic equipment including tools, bags, twine, needles, fertilizer, scales and moisture meters for resale to growers and small buyers/processors.
- Setup of additional sub-depot buying points from which cocoa can be collected more economically in larger vehicles.
- Investigation of potential sea transport for collecting cocoa from more remote areas in west and south Bougainville.
- Increase in number of approved premium quality suppliers to 100 by end of 2017 and 200 by end of 2018.
- Provision of an extension/advice service for cocoa growers to support premium growers and assist those who wish to become premium growers.
- Development of export market for premium cocoa to small-scale boutique chocolate makers.

There have been no previous VSA volunteers working with AFP.

Assignment focus

AFP has built good relationships with farmers who are very interested in possibility of premium prices and respond well to advice from quality assessors. The company has set realistic goals and managed operations to achieve these goals. After commencing operations in first half of 2016, the company is well placed to continue growth and extend operations in 2017.

AFP is now interested in understanding the feasibility of initiating and sustaining value-added production of some of the products they already purchase and the practicality of buying and selling other products currently grown in the ARoB. While AFP has provided market access for pepper and coffee growers, they have also been approached by farmers selling vanilla and other products (such as turmeric, lemon grass and canarium nuts). AFP would also like to investigate how to process saleable products from cocoa (chocolate) coffee, pepper and coconuts (coconut oil etc.).



However, AFP, like other organisations operating in Papua New Guinea, experiences specific challenges with high operational costs, difficult logistics, limited suppliers, and sub-optimal national capacities (i.e. human capital).

AFP does not have access to the technical knowledge required to advise growers regarding production and processing of crops (other than cocoa) or the technical knowledge to develop processed, saleable products from cocoa, coconut and other produce.

With the assistance of an experienced Food Technologist, AFP will research the feasibility of conducting greater processing of agricultural produce in the ARoB. If initial investigations prove positive, the volunteer will provide advice in relation to how to scale-up production over a specified timeframe. The volunteer will provide guidance in relation to:

- Produce quality requirements,
- Equipment and facilities required
- Processing methods and guidelines
- Processing quality assurance and health and safety standards
- Staff training requirements
- Training for farmers

In the first instance AFP would like to investigate the feasibility trading locally grown products, including turmeric, pepper, coffee, vanilla and lemon grass. Thereafter the company will examine the feasibility of manufacturing chocolate, coconut oil and other coconut by-products to supply local markets.

Working Situation

Arawa Fresh Produce is located in Section 25, which is the old industrial area of Arawa town. There is sporadic PMV transport from Arawa town to section 25, although most volunteers bike the 1-2 km to work.

There are trucks regularly dropping off cocoa to AFP and there is some construction taking place onsite, although there are no other major safety concerns. A basic kitchen/lab is under construction and the office area has ceiling fans and a toilet.

AFP is committed to constructing a kitchen/lab where the food technologist will operate and upon selection it is envisioned that the applicant will advise AFP of the basic workspace requirements necessary to conduct basic assessments and training.

The volunteer will be able to work from a shared desk and will be required to bring their own laptop computer.



Appendix 2: Living Situation

Arawa

Arawa, once a prosperous coastal town, is in a dilapidated state due to destruction during the conflict and lack of maintenance for 25 years since then. Arawa was originally developed in the 1970s as a major service centre and to house mine workers and their families. The population, once 15,000, has stabilised at about 3,000 to 5,000 since the conflict.

There are many trade stores with a few having a surprising range of groceries (including milk and frozen foods), meats, hardware and clothing. Fresh and smoked fish is plentiful. Fresh vegetables and fruit are constantly available and of a reasonable variety. Arawa has several guesthouses, new and second-hand clothing stores, a number of takeaway food stores, ice-cream shops, two wholesalers, retail beer outlets and a small "pharmacy" (with basic supplies). There are two supermarkets and the BSP Bank has a branch with ATMs in town. Current volunteers enjoy showing newcomers where to find most things.

Swimming in the rivers and the sea away from the town area is a popular activity. With the sorts of sensible precautions applicable to any town almost world-wide, Arawa is a safe community.

Buka is 177 km to the north from Arawa and is where the main airport is situated. At the end of 2014 Aropa airport, 25 kms south of Arawa, was reopened after 25 years of closure. Public Motor Vehicles (PMVs) ply the coastal highway to and from Buka every day except Sunday and costs fifty kina each way. The trip takes three to four hours or longer depending on the state of the road.

PNG Power provides electricity to Arawa. Since a new generator was installed towards the end of 2015 the service has been generally good although there are still the occasional short blackouts.

Digicel and Telikom offer mobile phone and 3G (mostly) internet services. Telikom has recently introduced very competitive internet and rates and a 4G Lite internet service, however, Digicel has the most extensive coverage in the ARoB. Recently though, Digicel has suffered a number of outages and reductions in service.

The Arawa Town Council provides a weekly rubbish collection, an untreated water supply and a reticulated sewage collection (with untreated discharges into the lower reaches of the two rivers in Arawa).

Arawa has a number of churches of Catholic, Seventh Day Adventist, Methodist and Evangelical faiths and these are well attended.

The Arawa Health Centre is currently undergoing a major upgrade (funded by Australian Aid) and at the time of writing is offering limited services. The current upgrade is expected to be completed by mid-2017 and will include a new maternity ward, operating theatre and a school for nurses. While the upgrade is taking place most incoming patients are being referred to Buka Hospital.

On the whole, Arawa is a quiet town although there are a couple of "nightclubs" but these are hardly ever frequented by volunteers. Regular Friday evening get-togethers are a feature of expat life in Arawa.



Appendix 3: Autonomous Region of Bougainville (ARoB)

The ARoB emerged from nine years of civil conflict in 1998, suffering social trauma and with much of the island's infrastructure in tatters. The process of re-building and determining the region's political future follow a difficult and uncertain path. It will continue to take a combined effort, supported where appropriate by funding and technical assistance from international sources, to emerge as a fully functioning society. The ongoing desire of some for independence and the scarcity of development funding from Papua New Guinea create a challenging political and developmental environment.

While the autonomous region has had a particularly difficult colonial and post-colonial history, the people of Bougainville continue to demonstrate tremendous resilience in the face of these challenges. Bougainvilleans are a hardworking, proud and happy people, and continue to display innovation and strength in spite of complex political and social challenges.



For more information on ARoB, see:

- ABG Website: www.abg.gov.pg
- Bougainville Travel: www.bougainville.travel
- Bougainville News: www.bougainvilnews.com
- Radio Broadcasting Service: <http://www.bougainville.typepad.com>
- New Zealand Aid Programme in PNG: <https://www.mfat.govt.nz/en/aid-and-development/our-work-in-the-pacific/aid-partnership-with-papua-new-guinea/>

VSA in the ARoB

New Zealand, from the signing of the cease-fire in April 1998, has indicated a willingness to help the people of the ARoB help themselves. VSA, with funding from the Ministry of Foreign Affairs and Trade (MFAT) New Zealand Aid Programme, has been involved in the rehabilitation and reconstruction phase of the ARoB's recovery since May 1998.

Since 1998, VSA has built up a programme involving project management and volunteer placement in sectors including health, construction, education and governance. VSA volunteers are currently based in Buka, Chabai, Wakunai and Arawa and they are supported by a field office in Arawa and a sub-office in Buka. The Programme Manager is based between Arawa and Buka and a full time Programme Officer assists from the Buka sub-office.

General security

The physical, psychological, and cultural damage resulting from a decade of civil strife will take many years to heal. The peace process is still fragile and it will take time before people gain confidence and build trust within their communities and with outsiders.

Volunteers must be aware of, and accept the heightened risk, and adopt behaviour that reflects due caution. This includes taking precautions such as not moving around after dark alone, keeping the house secure and keeping items of value out of sight. All VSA volunteers to the ARoB must sign a set of security protocols that set out behaviour, designed to minimise risk.

VSA has confidence in the peace process and a commitment to the people of the ARoB. The Programme Manager is constantly monitoring the security situation. VSA has found the people of Bougainville to be incredibly hospitable, friendly and keen to watch over VSA volunteers as needed.