



# Revised Project annual report

*Project*

## **Developing the Cocoa Value Chain in Bougainville**

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*project number*      HORT/2014/094

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*period of report*      2021-2022

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The purpose of the Project Annual Report is to reflect on project design assumptions, report on project delivery and communicate emerging research and development outcomes. It is also an opportunity to identify design and implementation issues and highlight necessary project adaptations.

Annual reports are required for project monitoring by ACIAR. Annual reports will also be used by ACIAR to capture information for whole of government reporting on Australia’s aid program and are documents of record for post-project evaluations. Reports should focus on progress against the agreed project activities and early outcomes as per the project document approved by ACIAR, and include reflections on the projects capacity building and gender strategies.

**Project Annual Reports are due 14 July each year (note: the Research Program Manager may request they be submitted earlier)** for all projects that were active before 1 January of that year, until the final year of the project when a Final Report is required. An electronic copy should be submitted to the relevant ACIAR Research Program Manager by the commissioned organisation / International Agricultural Research Centre (IARC). It is expected that the report is produced collaboratively with the input of all partners and with reference to your project monitoring plans.

**File naming guidelines:**

The Annual Report should be named *XXX-20XX-XXX Annual Report 21-22* (e.g. FST-2017-014 Annual Report 21-22).

The Excel project Publication list should be named *XXX-20XX-XXX Publications List 21-22* (e.g. FST-2017-014 Publications List 21-22).

Please consider the following in completing this template:

**Summary of contents and number of pages in the annual report**

Section	Heading	Number of pages
1	Executive Summary	max 1 page
2	Reflection on Project Design	max 5 pages
3	Delivery on Activities, Outputs, and Intermediate Outcomes	max 5 pages, plus activity table
4	Partnerships	max 2 pages
5	Risk Management	max 1 page

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## 1 Executive Summary

After the Crisis that ended in 1998 Bougainville was left with fractured communities, burnt infrastructure, few services and a disorganised cocoa economy. We designed a transdisciplinary One Health project that recognised these complex and volatile challenges to the development the cocoa value chain. We began by engaging the Autonomous Bougainville Government Departments of Primary Industries, Health and Local Government to identify shared priorities and resources. We established a network of stakeholders from cocoa farming communities to chocolate makers in Australia and globally. Thirty-three cocoa farming communities agreed to participate in the project, and volunteer Village Extension Workers from each community were trained by CB officers in cocoa farming and processing, UNRE in food crop production and livestock husbandry, and Dr Saul-Maora in Family Farm Teams. VEWs were supported by three Regional Hub Managers in Southern, Central and Northern Bougainville. Many communities established Village Resource Centres, others used existing spaces for activities and meetings.

Many VEWs were involved in collecting data from 2,346 cocoa farming families (including data for 12,397 people) that showed that successful smallholder cocoa farming in Bougainville is constrained by poor education, poor family health and limited income diversification, rather than access to technology or extension training. Without productive labour farming families cannot implement the conventional training they receive. These data have been published and used by communities and ABG Departments to identify priorities and inform policy.

Eleven villages with the highest levels of malnutrition were included in the CRG Health and nutrition sub-project. After consultation, these villages received further training from ABG DPI and Health officers to support food crop production, sanitation and clean water, maternal and infant health and Family Farm Teams training.

Many VEWs have now started successful local businesses evolving from their roles as VEWs, including service provision, downstream processing and food crop production. Communities and stakeholders are actively involved through the [Bougainville Cocoa and Health](#) project Facebook page that has almost 1,000 members. The free Bougainville cocoa farmer's mobile app, launched in July 2022, provides an online resource of information on cocoa farming, cocoa processing and marketing, food crops, soil management, nutrition, health and sanitation.

The three Regional Hub Managers, embedded within the DPI, are coordinated by the Bougainville Project Manager, James Butubu and the VEW Coordinator, Sylvia Kungkei. The Australian and Bougainville teams held weekly Whatsapp meetings and visited in July 2022. Training activities involved the Cocoa Board and UNRE. The CB Cocoa Curriculum was rolled out in high schools. Project members learned from study tours to Australia (multiple visits), Indonesia, Malaysia and Singapore (2017), Thailand (2018), Solomon Islands (2019) and Europe (late 2022). James Butubu completed ARSF project, Kenneth Dovaro and Wendy Pihau completed John Dillon Fellowships. We have worked closely with the Bougainville Partnership to run successful Bougainville Chocolate Festivals, and establish and improve infrastructure, laboratory and field facilities for the DPI. Using these facilities, equipment and capacity built during our project, the ABG recently established the Bougainville Agricultural Commodities Regulatory Authority (BACRA) to develop and manage cocoa exports.

The Chocolate Festivals have provided opportunities for community building and information exchange and have developed links with Australian chocolate makers who were Festival judges. Judges provided feedback to cocoa farmers, and we know from farmers who entered in subsequent years that this feedback significantly improved their cocoa quality. It also gave many cocoa farmers the opportunity to taste chocolate for the first time, and to inspire local cocoa processing. Beans produced in the project by James Butubu were awarded gold in the 2021 Cocoa of Excellence competition in Paris. The proposal to warehouse small shipments of cocoa beans for distribution to chocolate makers in Australia has recently been implemented by [The Cocoa Provider](#).

Income diversification focussed on food crop production because of the levels of malnutrition identified and because of the supplementary income provided to the family. We noticed significant increases in food crop production and local market sales during the COVID lockdowns of 2020-2021 resulting from the return of young, healthy and educated people from towns and cities. Our attempts to establish goat farming have faced challenges beyond our capacity, and while there is a demand, goat health problems have restricted breeding activities.

The Family Farm Teams program directly addresses the high levels of domestic violence identified in our survey and aims to build gender equity, family and community capacity. Our One Health approach has improved lives for the members of participating communities and requests from other villages indicate the popularity of the VEW model. Cocoa productivity and production is increasing and food security has improved. New service enterprises have been established and Bougainville is on the threshold of assuming regulatory authority of its cocoa industry.

The One Health approach increased the range of choices and opportunities for individuals and groups by improving human and social capital while not challenging traditional power structures in villages. These are respected within the One Health approach using a hub and spoke administrative framework to ensure that project activities are local. (There was no top-down authority that threatened or confronted village power structures). However individuals, particularly women, were empowered with training, better health and by being enabled to work more effectively in groups. This makes them more effective members of their villages.

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## 2 Reflection on Project Design

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### 2.1 Project research strategy

#### 2.1.1 Responsiveness of research strategy:

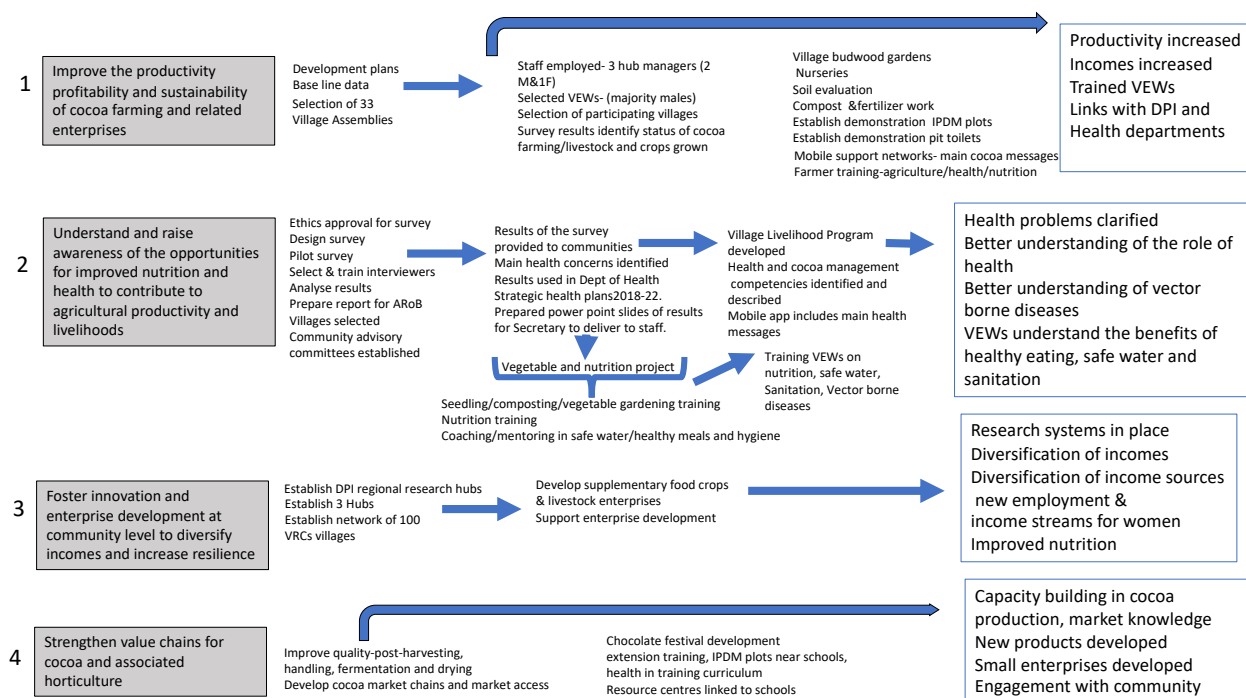
The research strategy outlined in the 2014 Concept note reads:

“This proposal aims to scale-out training and services to support the rehabilitation of smallholder cocoa farming in Bougainville. Our current project (HORT/2012/026) will establish budwood gardens and nurseries at 3 or 4 sites in Bougainville that can be used as central training facilities and resource centres. In past work we have identified the potential to use these sites as resource and training centres for men and women farmers from remote villages who undertake short-term residential training in budwood garden and nursery establishment, grafting methods, planting, soil, crop health and shade management, harvesting, fermentation and drying. Additional training will be offered in business management, service provision (for example, in pruning, composting and fermentation technologies), small loan facilitation and public health education to alleviate health constraints to productivity. Experts in these areas will be drawn from PNG and Australia.

Trained graduates, “Village Cocoa Specialists”, would establish similar demonstration and training sites in their own villages. We would monitor their impact on cocoa yields and income as part of our existing ACIAR project, as the idea behind this project is that the training should spread organically, driven by market incentives. This proposal aims to facilitate and amplify this organic spread.”

Our strategy was informed by the failure of past smallholder farmer training programs, not just in PNG but globally. Despite extensive efforts to improve farming productivity, average cocoa yields have not changed over the past 50 years. This suggested to us that awareness of good farming practices – the focus of most farmer training programs - was not the primary constraint to productivity improvements. As pointed out by Martyn (2015), labour is 50% of the cost of smallholder cocoa production, so our focus was on investigating if labour productivity was a primary constraint to implementing good farming practices. A parallel focus was on building capacity in the ABG, across the Departments of Primary Industries, Health and Local Government.

Our strategy had 4 linked objectives:



While our understanding of the problems have developed since 2014, our proposition has been supported by our approach. Establishing a “hub and spoke” network ([Hati and McKenzie 2012](#)) to support cocoa farming communities has built capacity at all levels. The Village Extension Worker (VEW; referred to as “Village Cocoa Specialists” in the concept note but broadened to include food crops and livestock) network, supported by the Bougainville Cocoa and Health Facebook page and Bougainville Cocoa Farmer’s Mobile App has extended the reach of the ABG into remote areas of Bougainville. Our insistence that VEWs be trained but not be salaried project staff met scepticism, both initially and in the ACIAR mid-term review, has led to the emergence of a cadre of professional trained consultants who are available to their own, and other villages in Bougainville.

Our comprehensive survey of cocoa farming villages, including data on 12,397 people identifying as members of cocoa farming families, provided an unparalleled snapshot of the lives of those families. Very high rates of childhood stunting were confirmed and linked to diet and poor sanitation. A consequence is that malnourished children perform badly at school and become a poorly educated workforce vulnerable to chronic adult diseases. When this level of malnutrition was identified we developed a small research project with additional funding from DFAT to inform communities of nutrition and health risks. These interventions were a partnership between the project team, and the ABG Departments of Primary Industries, Health and Local Government. Information on improving health and nutrition became an important component of the Bougainville Cocoa Farmer’s mobile app. Food crop production became an important source of income for farming families, particularly for women.

Our observations of the response to COVID-19 lockdowns also support our proposition that labour limits productivity. Some commentators predicted food shortages as villages welcomed people returning from former jobs in towns and cities. However, our observation has been that this young, healthy and better educated workforce was more productive and increased food crop production, reducing reliance on imported (usually processed and low value) foods. Cocoa production appears to have increased following block maintenance during COVID lockdowns. Interestingly, our analysis of family income showed that reliance on remittance income had increased pre-COVID but this income source vanished. With an influx of productive labour and the disappearance of remittance income, farming families had new incentives to invest in food and cash crops.

We sponsored and organised annual Chocolate Festivals that are now a model for others in PNG and the Pacific region. The festivals celebrate cocoa farming and promote understanding of cocoa farming and processing, as well as promoting healthy livelihoods and prosperous villages. The judging system, including feedback from judges, is aligned with the Cocoa of Excellence judging and can be directly credited with the gold awarded to Bougainville's 2021 entry in the Cocoa of Excellence competition held in Paris. The mid-term review recommended improving cocoa quality by donating improved cocoa driers to villages, however, we believe our strategy of educating growers about the benefits of investing in better processing provides a more sustainable legacy. The establishment of BACRA will enable direct incentives to be paid to growers for quality, an incentive that has not been available under the previous marketing system.

Gender awareness has underpinned every aspect of our project. Our research team is gender balanced, as are our Hub Managers and VEWs. The Family Teams program illustrates that when men, women and youth work together as a family unit, more gender-equitable and effective farming practices lead to improved family livelihoods. Family Farm teams training has been a core element of village training programs in this project.

We formally varied the project in 2019 to reflect staffing changes in our project partners with a consequent adjustment to the project budget, and in 2020 in response to the mid-term review, a 12 month no-cost extension due to local circumstances, staffing changes and COVID was permitted.

Understanding the reasons for low smallholder productivity required a transdisciplinary, One Health, approach adopted by the project team. Having expertise in cocoa farming, public health, nutrition, economics and marketing has underpinned our success.

In hindsight we may have overestimated the capacity of our partners UNRE and PNG CCI/CB as both have undergone significant and destabilizing disruptions over the course of the project. For example, the incorporation of goats into the Bougainville cocoa farming system has not eventuated. Veterinary expertise was to be provided by UNRE, but on reflection our project team could have included leadership in this area with the addition of a veterinary scientist. We have noted this gap in past reports and proposed a separate ACIAR project along the lines of the complementary soils project supported by ACIAR (SMCN/2014/048).

On the other hand, the contributions from ABG Departments have far exceeded our expectations. This was best demonstrated by their successful management of the project from 2020-22 when international travel was impossible. The project team continued close collaboration using email and weekly Whatsapp meetings and used the challenge posed by lockdowns to transfer responsibility and leadership to the SBG. We appreciate the value of this transition period to fostering sustainability of the project initiatives.

### **2.1.2 Activities & outputs:**

We do not suggest any changes to our activities, methodologies or budgets as the project finishes on 31 December 2022.

### **2.1.3 Intermediate Outcomes:**

We believe the proposed intermediate outcomes were useful tools for reviewing progress of the project.

### **2.1.4 Project Monitoring and Reviews:**

The reports, presentations and peer-reviewed publications from the project provide robust evidence supporting our approach. We also have case studies and personal stories



providing qualitative evidence of project impacts that have been published in a “Reader” located on the [project website](#).

“End of project outcomes” are not explicitly included the project documents, however they include:

#### Scientific impacts

- Research publications
- Conference presentations
- Survey of livelihoods and health

#### Capacity building

- Training (DPI, CB, UNRE – Sulawesi, WVC, ACIAR)
- Study visits
- Hub and spoke model of support for VEWs and farmers
- Support for establishment of BACRA
- Construction of DPI cocoa quality labs and Model Farm
- Gold award for Bougainville entry to Cocoa of Excellence

#### Community impacts

- Chocolate Festivals, now a model for multiple regional Festivals
- Family Farm Teams training, including training of DPI/Health trainers
- [Project Facebook](#) page
- Community resilience during Covid lockdowns
- Establishment of budwood gardens and nurseries to provide local access to improved planting materials
- Training in cocoa management, introduction of the CB Cocoa Curriculum to schools
- Income diversification (food crops, livestock, service provision, processing etc.)
- Improved village sanitation and diets

#### Economic impacts

- Increasing cocoa production and quality
- Income diversification
- Cocoa market reports
- Network of cocoa buyers

#### Communication and dissemination

- TADEP reports for ACIAR, DFAT and stakeholders
- DFAT briefings and PD materials
- [Bougainville cocoa and health Facebook](#) page
- Bougainville cocoa farmers mobile app (available through the Google Play store for Android devices)

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## 2.2 Reflection on gender strategy

Cocoa farming is a family business that involves all family members. Gender targets were part of the original design of the project and are referenced throughout the project document.

For example:

1. A gender balanced target (>40%) of Regional Managers, VEWs and project staff

2. Gender balanced target (>40%) for staff and farmer training activities
3. Surveys are gender segregated to facilitate intersectional analysis
4. The survey results focused on women showed (a) they had low levels of education, (b) they had key responsibilities were cocoa, livestock and food crops with their income sources being cocoa, copra and selling food crops. Their main health issues were chronic backpain (58.2%), arthritis (36.8%), angina (21.3%), and depression (7.4%). Over half of women justified intimate partner violence. Bougainville has poor health infrastructure. Under half had received the recommended antenatal visits. Several women reported unplanned/unwanted pregnancies, highlighting the lack of reproductive choice.
5. FFT addressed some of these challenges by actively engaging men and women in goal setting, sharing of responsibilities, activities and benefits. FFT training has been delivered to all 33 participating villages, and DPI staff have been trained as FFT trainers.
6. ABG DPI has a “Women in Agriculture” program that we actively support, for example by appointing a female Hub Manager (Elizabeth Pisiai), Chocolate Lab Manager (Julie Rereve) and VEWs.

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## 2.3 Reflection on capacity building strategy

### Individual:

Training visits to Sulawesi (12 staff of DPI, CB and UNRE)  
World Vegetable Centre (Elizabeth Pisiai and Inia Bunsu)  
John Dillon Fellowships (Wendy Pihau and Kenneth Dovaró)  
ARSF (James Butubu)

### Organisational:

Hub and spoke model to extend DPI capacity ([Hafid and McKenzie 2012](#))  
BACRA Laboratories in Toniva and Kubu  
DPI Field station in Buin

### Institutional:

ABG-DPI, Health, Local Government  
CCI/CB  
UNRE

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## 2.4 Recommended adaptations to the research strategy

Our priorities for the remainder of 2022 are to:

1. Run the 2022 Chocolate Festival and judging (12-13 October 2022)
2. Undertake follow-up surveys of participating villages to monitor changes
3. Continue training project staff through Julie Rereve training with Jasper & Myrtle in Canberra, and Solomon for IT training at NGNY (Sydney) in November 2022
4. Survey VEWs to compare with the PNG Cocoa Project (HORT/2014/096), aiming to discover why some VEWs were more successful than others
5. Present at the International Symposium on Cocoa Research in December 2022, with visits to chocolate buyers, makers and researchers in the Netherlands, France, Germany and UK.
6. Continue preparing manuscripts for publication
7. Working with DPI partners to identify future research priorities



## 3 Delivery on project activities, outputs and intermediate outcomes

### 3.1 Activities and outputs

Table 1: Project activity table

<b>Objective 1: To improve the productivity, profitability and sustainability of cocoa farming and related enterprises</b>			
<b>No.</b>	<b>Activity</b>	<b>Outputs/ milestones</b>	<b>Completion date</b>
1.1	ABG, District, CoE and village consultations	Coordinated plans for development at each level, with priorities	Ongoing
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>	<ul style="list-style-type: none"> <li>- While the lockdowns of 2020 to mid 2022 prevented project travel weekly Whatsapp calls with the project team maintained regular discussion. The in-country team led by James Butubu thrived on the extra responsibility and support available.</li> <li>- Sylvia Kungkei replaced Borgia Sinato as the VEW Coordinator and continued to monitor and develop the network of VEWs</li> <li>- July 12<sup>th</sup>-17<sup>th</sup> 2022 the Australian team members made their first visit to Bougainville since the covid pandemic commenced.</li> <li>- Meetings held with Minister for Agriculture and Secretary for DPIMR and Secretary for Health to update on project activities and develop future research priorities.</li> <li>- Meeting with DPI senior management, trade and commerce.</li> </ul>		
1.2	Baseline information collection and analysis	Monitoring livelihoods  Work with TADEP to develop M&E	Completed
<b>Comments from previous reporting periods (if relevant)</b>	Baseline data was collected in 2017. A report on the survey results was provided to the ABG Government in 2018. Two peer-reviewed journal articles have been published in One Health and BMJ Global Health. The results were also used to inform the CRG pilot study.		
<b>Comments for this reporting period</b>	The livelihood survey report provided to the ABG remains an invaluable resource that continues to influence planning and policy decisions.		
1.3	Selection of participating villages	33 Village Assemblies selected across Bougainville-11 in each region. Selection process assisted by advice from ABG Ministry of Community Governance.	Completed
<b>Comments from previous reporting periods (if relevant)</b>	33 villages selected 11 in each region (North, South, Central).		

<b>Comments for this reporting period</b>	VEWs met to discuss successes and failures in September 2021. Feedback was positive.		
1.4	Training of DPI Senior Facilitators, District Officers and selected VEWs	Train 12 Senior DPI Facilitators (at MCA) then 52 District Officers and 33 village -level specialists in cocoa, food crops, livestock and health (nutrition, causes of stunting, overview of importance of clean water and sanitation)	Completed
<b>Comments from previous reporting periods (if relevant)</b>	<ul style="list-style-type: none"> <li>- 1 x CCI officer trained at MARS Indonesia including a UNRE staff funded under CCIs allocation.</li> <li>- 33 VEWs, 3 Hub coordinators and 3 CCI Project staff with some DPI officers trained on Sustainable Livelihood, IPDM, CPBM, Clones, BWG and Nursery set up, Family Farm Teams, including business modules on small enterprises, record keeping and decision making.</li> </ul> <p>Health and DPIMR staff upskilled in nutrition and vegetable garden cultivation as part of CRG Nutrition project</p>		
<b>Comments for this reporting period</b>	FFT training completed. Training of DPI and Health staff as FFT trainers.		
1.5	Establish village budwood gardens and nurseries	Establish 33 village budwood gardens and nurseries in 33 VAs	Completed
<b>Comments from previous reporting periods (if relevant)</b>	This activity has been achieved and are monitored by the VEW. Some have become commercial operations..		
<b>Comments for this reporting period</b>	Village budwood gardens and nurseries have been established in 33 villages, with neighbouring villages requesting, and being given, training by VEWs. Trained VEWs now run successful training, nursery and processing businesses.		
1.6	Evaluate soils and compost and fertiliser requirements	Sample soils and establish composting trials linked to resource centres	Completed
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>	Soils and composting information have been included in the Bougainville Cocoa Farmers app.		
1.7	Establish IPDM demonstration plots	Establish 33 IPDM demonstration plots	Completed
<b>Comments from previous reporting periods (if relevant)</b>	- 33 plots established		
<b>Comments for this reporting period</b>	IPDM plots are used for farmer training. Plots have also been established in schools as part of the CB Cocoa Curriculum rollout under the project.		

1.8	Establish mobile support networks	Develop, test and commission mobile and web-based apps for extension and health (nutrition, clean water, sanitation, garbage removal).  Provide smart phones / tablets to village specialists	Completed
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>	<ul style="list-style-type: none"> <li>- The Bougainville Cocoa App was launched on July 14<sup>th</sup> 2022 alongside the launch of the Bougainville Food Security Policy. The app requires some updates which will be finalised over the coming months. The app was well received and generated a lot of interest and excitement amongst the community.</li> <li>- The app was promoted via the project Facebook page which now has almost 1,000 members</li> </ul>		
1.9	Farmer training	Training established in 33 village assemblies.  Communication and outreach (radio, social media, Bougainville Bulletin, Newsletter etc)	Ongoing
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>	<ul style="list-style-type: none"> <li>- FFT training conducted in remaining project villages in North- Teopasuna, Tinputz, Baneo, Tinputz, Ratsua, Selau, Nehan, Novah, Malasang, Sorom (June 2021),</li> <li>- FFT Training Central- Bava Pirung, Toboira, Sivuna, Onkosira, Vito, Manetai, Dantanai, Lower Aropanari, Onoring, Koianu, Rauvira, Wakuna (September 2021)</li> <li>- FFT training South- Nakorei, Buin, Aku, Buin, Tarapa, Siwai, Kutin, Siwai, Mihero, Siwai, Kooru, Bana, Karato/Lautan, Torokina (February 2022).</li> </ul>		
<b><i>Objective 2: To understand and raise awareness of the opportunities for improved nutrition and health to contribute to agricultural productivity and livelihoods</i></b>			
<b>No.</b>	<b>Activity</b>	<b>Outputs/ milestones</b>	<b>Completion date</b>

<p><b>2.1</b></p>	<p>Establish the extent to which health and disease impacts on farming activities</p>	<p>Apply for Ethics approval from the relevant institutions.</p> <p>Establish base line data about the health of cocoa farming families</p> <p>Review the WHO health status survey tool for low resource countries</p> <p>Design tool for recording days lost work to sickness or illness</p> <p>Design mixed methods study to measure both health status, farming activities and days lost to illness.</p> <p>Develop qualitative and quantitative and tools for collecting data (surveys, semi-structured interview schedules, number counting, activity counting)</p>	<p>Completed except for a tool for recording days lost to sickness. See note below.</p> <p>The tool for measuring lost days to sickness was not feasible as many health conditions remain undiagnosed and people continued to do some work when sick. The survey showed that families with the fewest reported health issues tended to produce more bags of dry cocoa beans than those with multiple health problems. Over two-thirds of cocoa growers did not sell any cocoa bags in 2014-2016 resulting in low incomes and greater food insecurity compared to families selling cocoa. Families that produced no saleable cocoa were more likely to have rudimentary housing, unimproved toilet facilities and unsafe water, factors that increase the likelihood of chronic disease and exacerbate malnutrition and poor labour productivity.</p>
<p><b>Comments from previous reporting periods (if relevant)</b></p>			
<p><b>Comments for this reporting period</b></p>	<ul style="list-style-type: none"> <li>- CRG Endline surveys completed, data currently being analysed.</li> <li>- CRG hub coordinator surveys completed. Data entry currently being completed.</li> </ul>		
<p><b>2.2</b></p>	<p>Establish Community Advisory Committees</p>	<p>In each participating village, the Committees will coordinate and oversee the project.</p> <p>Membership to include local leader to chair the meetings and women, youth, cocoa farmers, project team</p>	<p>completed</p>
<p><b>Comments from previous reporting periods (if relevant)</b></p>			
<p><b>Comments for this reporting period</b></p>	<p>Few formal community advisory committees have been established because of the COVID lockdowns. However, VEWs consult closely with their communities.</p>		

2.3	ABG, district CoE (?) and village-level consultations	1. Identify main health concerns for the community 2. Understand how the initial health needs of the community are currently met 3. Develop support applications for basic mobile phones 4. Develop a Cocoa Farming Health Framework (CFHF)	Completed
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>	Health and nutrition is being addressed in detail under the CRG Nutrition sub-project. Close collaboration continues with the DoH. Relevant information has been included on the Bougainville Cocoa Farmers app.		
2.4	Link health information to roll out of satellite farmer training	Link DoH health programs to the roll out of satellite farmer training centres	Complete
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>	Relevant health information is part of the FFT program, and has been included on the Bougainville Cocoa Farmers app.		
<b>Objective 3: To foster innovation and enterprise development at community level</b>			
<b>No.</b>	<b>Activity</b>	<b>Outputs/ milestones</b>	<b>Completion date</b>
3.1	Support the establishment of DPI Regional research hubs in Bougainville	Selected facilitators trained at the Mars Cocoa Academy, so DPI has a network of well-supported research hubs staffed by trained scientists and technicians	2022 Research labs established in Buka, Toniva and Buin.
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>	Hubs have been established in Buka (Cocoa Quality lab), Toniva (BACRA mini-lab) and Buin (model farm). The former Duncan Plantation is planned to become the 3 <sup>rd</sup> research hub for field experiments when land negotiations are complete.		
3.2	Establish Village Resource Centres linking CCI, UNRE, AVRDC with DPI and DoH	Network of 33 Village Resource Centres	Completed
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>	Village Resources Centres have been established. Some are physical structures used for meetings and training, others are virtual and less formal networks. Often VRCs are linked to community farming groups and cooperatives. Each is distinct in its operations and a VEW meeting in 2021 enabled exchanges of ideas and initiatives.		

3.3	Develop supplementary food crop and livestock enterprises	Recommendations for cocoa crop rotations that include food and supplementary crops	Completed
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>	Food crop production and income diversification, including livestock, was promoted in our training of VEWs. COVID lockdowns promoted the local production of food crops that provided nutrition as well as income when surplus production was sold at booming roadside markets.		
3.4	Support economic development through enterprise development	Village communities establish diverse enterprises based around cocoa farming– nurseries, fermentation and drying, marketing, compost, block sanitation...	Completed
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>	VEWs report that they now have successful businesses arising from the training and opportunities offered through the project. Specialisation is a key to engaging youth in cocoa farming enterprises.		
3.5	Monitor farming systems	Regular surveys	Ongoing
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>	Farming systems were recorded in the 2017 survey and changes will be monitored after the 2022 survey. Intermediate surveys were not possible because of COVID travel restrictions.		
<b>Objective 4: To strengthen value chains for cocoa and associated horticultural products</b>			
<b>No.</b>	<b>Activity</b>	<b>Outputs/ milestones</b>	<b>Completion date</b>
4.1	Improve quality through better postharvest handling, fermentation and drying	Establish and evaluate cocoa drying and fermenting equipment Guidelines for cocoa fermentation and drying Communities adapt, build and maintain new fermenteries and dryers Cocoa quality monitoring becomes routine	Ongoing
<b>Comments from previous reporting periods (if relevant)</b>			



<b>Comments for this reporting period</b>	Identified then sourced several lots of equipment for the Chocolate Laboratory Provided a large number of samples of different packaging for final product Have identified and sourced simple equipment for growers to undertake their own quality assessment		
4.2	Develop cocoa value chains and market access	Key constraints analysis Market opportunities identified	Ongoing
<b>Comments from previous reporting periods (if relevant)</b>			

<p><b>Comments for this reporting period</b></p>	<p>The overall approach taken was to address the lack of knowledge that growers had about cocoa marketing. Documents referred to can be read on the <a href="#">Project Website</a>.</p> <p>One approach was to produce an irregular cocoa marketing newsletter. Eventually 170 cocoa market newsletters were circulated by the end of July 2022. <b>Cocoa Marketing Newsletter</b> shows three of the most recent Newsletters as at the end of the July 2022.</p> <p>A blogsite hosted by the DPI was established. <a href="https://dpimrabg.blogspot.com/">https://dpimrabg.blogspot.com/</a></p> <p>The project subscribes to an international data source. This will become the sole property of the Bougainville DPI when the project finishes. In the process of compiling the graphs in the Newsletters over 1,000 observations have been recorded. This will be given to the project.</p> <p>Conscious that connectivity was not universal throughout Bougainville, the Newsletters were collected into an annual document and circulated in photobook hard copy format. Attachment #1 shows the 2016 edition. By 2020, the annual collation has expanded to include a number of other reports, extended emails, and photos. See 2020 in Attachment #1</p> <p>As part of increasing market awareness, a number of studies of world trade in whole beans and cocoa derivatives were circulated. <b>International Trade</b> contains examples of the type of studies undertaken. These were updated when the international data became available.</p> <p>Presentations were made on how the world prices come about and what this means for Bougainville cocoa producers. <b>World prices</b> contains an early and a most recent presentation on the subject. More recently, presentations on the challenges micro lot marketing have been made. Variations of the same format were used to brief officials in Port Moresby from Australian High Commission, MDF, PHAMA Plus, and Bougainville Partners</p> <p>Many presentations were made to increase growers understanding of how their cocoa becomes chocolate. <b>Chocolate</b>.</p> <p>The efforts noted above have resulted in growers on Bougainville being more aware of world cocoa prices and the working of the world cocoa market. These have been used as a pricing guide for those undertaking and contemplating undertaking the development of cocoa derivatives for export.</p> <p>Visits were made to a number of international fora partially and fully funded by the project. These included attendance at the Cocoa of Excellence Program in Paris in 2017 and 2019, and the cocoa associations of Europe and Asia. Reports on these were provided back to the project, see <b>International Fora</b>.</p> <p>International trade data was used to measure the impact of covid on PNG and by extension Bougainville, cocoa production. Unlike nearly all other analyses, the project used data from importing countries rather than export data from PNG. The results showed that contrary to expectation overall exports from PNG in covid-impacted 2020 were 40 percent higher compared with non-covid 2019. See <b>Covid</b>. The attached has been updated for 2021 data. The data has been shared with a number of agencies in Bougainville, Papua New Guinea, and Australia as a basis for policy making should something similar occur in the future.</p> <p>The project was able to gain international recognition of Bougainville as a separate cocoa producer rather than part of Papua New Guinea. This was cemented by the 2021 Cocoa of</p>
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	<p>Excellence where Bougainville was awarded a Gold Medal. It was also recognised as a separate entity in the Pacific Cup by the Pacific Cacao and Chocolate 2022. This follows visits to the Cocoa of Excellence in 2017 and 2019. Brochures were developed for market exploration associated with attending the program. Brochures were developed for both missions, <b>Cocoa of Excellence</b>. The brochures have been used in other efforts to promote Bougainville cocoa.</p> <p>Managed the visit to cocoa grinders in Malaysia and Singapore for a small team of Bougainville cocoa growers.</p> <p>Managed the visit to Solomon Islands of officials from the project, DPI and, Department of law and Justice in order to observe SOLCHOC, the Solomon Islands chocolate festival. Discussions based on commissioned papers were held with experts on grower-based based marketing organisations. See <b>Solomon Islands</b>.</p> <p>The project involves vegetables. There are two facets to this: on-farm health and income diversification. The latter involves marketing. Preliminary studies were made of the marketing of vegetables at the Buka market as a means of understanding the dynamics of the market and this suggest interventions to improve the process, see <b>Vegetables</b>.</p>		
4.3	Extension, education and capacity building	DPI Officers trained in cocoa management VEWs established and supported in 33 participating villages	Completed, ongoing
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>			
4.4	Link resource centres with schools/technical colleges to facilitate technology/skills training and transfer	IPDM plots located near schools/colleges Cocoa management, food crops, livestock, business and health included in, and enriches, curriculum	Completed
<b>Comments from previous reporting periods (if relevant)</b>			
<b>Comments for this reporting period</b>			
	<ul style="list-style-type: none"> <li>- 40 teachers from primary, secondary and technical schools participated in one-week in-service Cocoa curriculum training run by the Cocoa Board team at Tunuru Catholic mission. Participants were presented with a certificate of participation at the end of the training.</li> </ul>		
4.5	Chocolate Festivals and field days	Annual events including chocolate judging, farming and health training	Ongoing
<b>Comments from previous reporting periods (if relevant)</b>			

<b>Comments for this reporting period</b>	<p>The Bougainville Festival was the template Pacific Cacao and Chocolate 2022 in Auckland July 2022.</p> <p>Have used the Bougainville Festival to develop local expertise in cocoa and chocolate assessment.</p> <p>Australia needs to have a cocoa / chocolate association comparable with the European and Asian cocoa associations to act as a conduit for the industry’s opinion to move up to and down from government. Such an industry association could have prevented the introduce the restrictive and highly unusual trade marking of the term “bean-to-bar”. Taste and Tell started the development of such an industry body. It should be continued.</p>
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## 3.2 Summary of progress towards anticipated outcomes

**Table 2: Summary of project outcome information**

Intermediate outcomes	Results Summary	Evidence
End of project outcomes	Results Summary	Evidence
<p>Improvements in drinking water storage</p> <p>Improvements in food preparation and storage</p> <p>Increased diversity in diets and vegetable crops</p>		<p>Following the initial nutrition and vegetable garden information and demonstration sessions, we have observed several changes being implemented in these communities including improvements in the way they prepare and store food, providing gates on kitchens to keep animals out, improving the way they collect and store drinking water as well as increasing diversity in their daily diets. All these changes can improve the nutrition and health of these farming communities, which in turn may improve health- particularly of children, improve schooling performance and overall farming productivity. This evidence was captured using CommCare during the monthly monitoring visits.</p>
Upskilling DPI and Health staff on cocoa farming and health and nutrition and FFT.		Multi-disciplinary training was provided to Health and DPI staff members in nutrition, safe water, gardening cultivation, family farm Teams training and the use of CommCare on tablet devices.
The Bougainville Chocolate festival has continued as an annual event generating interest amongst the farmers and promoting Bougainville cocoa internationally.		Bougainville cocoa was awarded a gold medal out of 50 samples at the Cocoa of Excellence in Paris in 2021. Cocoa beans entered by James Butubu, ACIAR Bougainville Cocoa Project.
The Cocoa Curriculum has been rolled out in 19 schools instilling knowledge and skills to the next generation of cocoa farmers		The cocoa curriculum pilot commenced in April 2022.

<p>Bougainville has started producing small amounts of chocolate and cocoa products for the first time in the Mini lab which opened in February 2022. The mini lab helps farmers to assess quality of their beans</p>		<p>These products have been sold, generating revenue, and promoting Bougainville Cocoa during events such as the launch of the Food Security Policy and Bougainville Cocoa App.</p>
<p><b>Unanticipated outcomes</b></p>	<p><b>Results Summary</b></p>	<p><b>Evidence</b></p>
<p>Ripple effect of the training sessions on vegetable cultivation and diversification, cocoa farming, nutrition, and Family Farm Teams</p> <p>Children are also learning from their parents as they adapt their farming practices and behaviours.</p>		<p>Villages who have not received the trainings as part of the project are requesting it and learning from the farmers who have started adapting the way in which they farm. VEWs and hub coordinators have provided additional training to those requesting these trainings.</p> <p>For example, 25 youths from Tinputz were brought to Malassang village to observe changes had been made in the village as a result of the VEW and FFT training sessions.</p> <p>Elizabeth Pisai hub coordinator for the South region also provided training to a farmer in Koro who was external to the project. After receiving training the farmer rehabilitated his cocoa and produced 9 bags, selling for 450K/bag. With the income generated he bought building materials to build a house. Other farmers saw this and followed his example.</p> <p>Elizabeth Pisai received a request to provide training to a remote village in the mountains (Name?) that was not originally part of the project. They were given seeds for cabbages and have been able to sell their cabbages at the market and generate additional income for the household.</p> <p>VEWs from Malassang village have observed children within the village learning from their parents as they adapt their farming practices and behaviours.</p>
<p>ABG leadership and successful management of the project during and after the Covid lockdown period</p>		<p>This was best demonstrated by their successful management of the project from 2020-22 when international travel was impossible. The project team continued close collaboration using email and weekly Whatsapp meetings and used the challenge posed by lockdowns to transfer responsibility and leadership to the SBG. We appreciate the value of this transition period to fostering sustainability of the project initiatives.</p>

<p>While not a direct outcome of the project, during the Covid lockdown period, youth returned to their villages to work on the family farm which led to increased food production</p>		<p>We will attempt to capture objective evidence during the follow-up surveys in late 2022</p>
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### 3.2.1 Gender outcomes

The Family Farm Teams training has provided the knowledge and tools for cocoa farming families to work toward a more equitable and planned approach to running the family farm as a small business. This is encouraged through joint decision-making and equitable distribution of workloads. The training encourages women’s participation and voice within households and the community. The trainings that have been conducted through this project have received positive feedback from women and men within these communities and villages external to the project have requested to receive training in their villages.

Training on vegetable cultivation and diversification has also provided farming households with an alternative source of income, This activity has predominantly been undertaken by women in the villages.

The project has supported several female team members to take-on leadership roles and training.

### 3.2.2 Capacity building outcomes

Training linked to the project includes:

- DPI, CB, UNRE undertook a study tour to Sulawesi and Singapore, including training at the Mars Cocoa Academy in Tarengge, Sulawesi, and meetings with cocoa buyers in Singapore. Sulawesi,
- Elizabeth Pisiai (DPI Southern Hub Coordinator) and Inia Bunsu (UNRE) undertook training in food crop production at the WVC in Thailand.
- Kenneth Dovaro and Wendy Pihau participated in the John Dillon Fellowship program. Both are now in senior leadership positions in DPI.
- Kenneth Dovaro and James Butubu visited the Solomon Islands to learn their system of cocoa marketing, a model for BACRA.
- James Butubu participated in the ARSF program to investigate intercropping of cocoa with food crops.
- VEWs and farmers were trained in FFT, cocoa and food crop production. The Village Livelihood Program, supported by the CRG Nutrition and Health project and the Bougainville Cocoa Farmer’s Mobile app, developed capacity in identifying community goals and actions.
- Supported the establishment of BACRA
- Construction of DPI cocoa quality labs and Model Farm
- Gold award for Bougainville entry to Cocoa of Excellence

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## 3.3 Key Findings/Knowledge generation



The Bougainville Cocoa and Health survey provided a comprehensive snapshot of the opportunities and challenges facing smallholder cocoa farmers. It generated vast amounts of data that have been presented back to communities, Government and have been published.

A key finding has been that conventional farmer training schemes fail to engage smallholder farming communities because they do not address the most compelling problems faced – in our study these were identified as low labour productivity caused by aging farmers, poor education and poor family health, and poverty compounded by a lack of income diversity, particularly for women. This significantly improves our understanding of the dominant constraints faced by smallholder farming communities, and the refocussing of development agriculture interventions.

### [Most Significant Change | Better Evaluation](#)

The COVID-19 pandemic highlighted the vulnerability of urban and rural communities on remote Pacific Islands to food security disruptions ([Diao et al. 2021](#); [Iese et al. 2021](#); [Robins et al. 2020](#)). However our observations of cocoa farming communities in Bougainville shows the local response to the pandemic appears to have had a positive effect on food security.

The rapid lockdown of the island of Bougainville in 2020 helped limit viral spread. The lockdown also closed regional food markets. However the 80% of the population who identify as cocoa farmers also produce food crops, and are insulated from disruptions to the supply of imported foods. Sales at local roadside markets and informal exchanges of surplus domestic food crop production supplemented incomes and home grown supplies of food.

We have shown previously that labour is a significant constraint to improving crop production, with poor education and health the biggest constraints to labour productivity ([Walton et al. 2020 One Health 10, 100142](#); [Walton et al. 2020 One Health 10, 100143](#)). Significantly while the predicted return of migrant labour from urban centres increased the demand for food, this relatively young and healthy workforce can potentially introduce new skills, innovations and labour, all of which contribute to increasing local food supplies ([MIJARC/IFAD/FAO 2012](#)). Increased attention to food gardens can also decrease the reliance on imported foods. Returning family members bring new experiences and skills and are less risk averse to the adoption of new technologies.

The influx of labour has also helped commodity crop production, in defiance of the anticipated slump in markets. Commodity crops provide cash income in rural villages that is essential for local transport, medical care, school fees, clothing and food. Spending this cash stimulates town and Provincial economies. Once again, the returning young farmers have rehabilitated farms and increased production. By and large, export markets remain robust and prices attractive.

In many ways the local response to COVID-19 pandemic has demonstrated a resilience not seen in the globalised economy. This supports our One Health proposition that the poor education and health of rural smallholder farming communities limits their adoption of good farming practices and thus productivity. Investment in improved access to education and health services should be a priority that results in more productive, healthier and more food secure communities, particularly in remote Pacific Islands.

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## 4 Partnerships

### *Purpose, values and culture*

Project partners have clear goals and agreed expectations and are working together towards common goals. The lead partner, ABG-DPI, is supported by the CB, UNRE, Dr Saul-Maora and The University of Sydney.

We remain unaware of any evidence of “mounting tensions” between project partners referred to in the mid-term review report?

Since the start of this project one of the project partners was dissolved, our project leadership changed, the Bougainville Referendum voted overwhelmingly for independence, the ABG established BACRA to assume responsibility for cocoa exports and lockdowns prevented travel for two and a half years. Funding shortages meant that the ACIAR project supported much of the research undertaken by each of the project partners.

Physical meetings have not been possible until recently, but we were fortunate to establish a healthy, transparent and robust culture in the first half of the project. Preparing 2-monthly TADEP reports gave team members regular opportunities to contribute updates, stories and perspectives. The project Facebook page (>950 members) has been a useful platform for sharing ideas and reflections within the team, and with external stakeholders.

The mid-term review report also recommended annual meetings with project partners and the first meeting was held in February 2020. Lockdowns have prevented further physical planning meetings.

An annual meeting for VEWs, Hub Managers and Bougainville project team was held in September 2021. Feedback, through Sylvia Kungkei and James Butubu, was positive.

### *Working relationships*

DPI has taken more responsibility for managing project activities since lockdowns started in March 2020. This has also increased their ownership of the project and leadership. This is a good sign for the continuation of successful project initiatives.

COVID restrictions challenged the research partnership in many ways, including logistics, budgets and workloads. Weekly discussions between the Bougainville and Australian teams, with less frequent discussions with other partners, supported the already well-defined consensus within the team.

### *Monitoring*

Structured and unstructured team meetings and discussions. Diverse perspectives are welcomed.

Leadership remains part of the regular discussions referred to above.

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## 5 Risk Management

### *Project implementation*

Travel restrictions due to COVID presented a risk to the safety of participants, and field work and farmer training activities were postponed to comply with local regulations. Care was also taken during elections and the referendum.

### **Next user risks**

Nothing to note

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## **6 Appendices**

Appendices offer an opportunity to provide additional information that otherwise might not be reported elsewhere. A good example is tabulating unpublished data in a way that others can use in the future, or providing more detailed descriptions of methodologies (e.g., a survey form).

Appendix 1: [Publications list](#)

Appendix 2: Personnel table

List of active project members.

Optional to also provide details of any significant project personnel changes during the reporting period (maximum ½ page).

Appendix 3: Annual Budget

Provide a summary of expenditure and discuss any significant variations from approved budget during the reporting period (maximum ½ page).

Appendix 4: Intellectual Property

Note any significant IP issues that may have arisen in the reporting period (maximum ½ page).

## Appendix 1: Publications

[Black, K., Guest, D., Bagnol, B., Braaten, Y. B., & Laven, A. Gender, health and smallholder farming. In: Walton M, ed. One planet one health. Sydney University Press, 2019: 105-126](#)

[Walton M, Guest D, Vinning G. Improving the Livelihood of farmers in Bougainville. In: Walton M, ed. One planet one health. Sydney University Press, 2019: 127–41.](#)

[Hall J, Walton M, Van Ogtrop F, et al. Factors influencing undernutrition among children under 5 years from cocoa-growing communities in Bougainville. BMJ Global Health 2020;5:e002478. doi:10.1136/ bmjgh-2020-002478](#)

[Walton, M., Hall, J., Guest, D., Butubu, J., Vinning, G., Black, K., & Beardsley, J. \(2020\). Applying one health methods to improve cocoa production in Bougainville: a case study. \*One Health\*, 10, 100143.](#)

[Walton, M., Hall, J., Van Ogtrop, F., Guest, D., Black, K., Beardsley, J., ... & Hill-Cawthorne, G. \(2020\). The extent to which the domestic conditions of cocoa farmers in Bougainville impede livelihoods. \*One Health\*, 10, 100142.](#)



[Walton, M. \(2017\). \*One Planet, One Health\*. Sydney University Press.](#)

Appendix 2: List of active project staff

Professor David Guest AM	The University of Sydney	Project Leader
Professor Merrilyn Walton AM	The University of Sydney	Co-Leader
Mr James Butubu	ABG-DPI	Bougainville Project Manager
Mr Grant Vinning	Consultant	Marketing Advisor
Dr Jessica Hall	The University of Sydney	Nutrition and administrative support
Professor Kirsten Black	The University of Sydney	Women's health
Dr Josephine Saul-Maora	Consultant	Family Farms Training
Assoc. Professor Phillip Simmons	University of New England	Economic Advisor
Ms Sylvia Kungkei	ABG-DPI	VEW Manager
Julie Rereve	ABG-DPI/CB	Chocolate Lab Manager (North)
Elizabeth Pisiai	ABG-DPI	Southern Hub Manager
Bruno Batari	ABG-DPI/CB	Field Officer (Central)
Theo Kisu	ABG-DPI	Central Hub Manager
Eugene Bali	ABG-DPI	Northern Hub Manager
Silas Paisi	ABG-DPI/CB	Field Officer (South)



**ACIAR Acquittal**

[please complete all cells highlighted in orange only, then sign as directed at the bottom of the form]

**Reporting Period:** (1 Jan 20XX to 30 June 20XX or 1 July 20XX to 31 Dec 20XX)

**01 Jan - 30 June 2022**

**Commissioned Organisation:**

University of Sydney

**Project Number:**

HORT2014/094

Set out below is a statement of available funds and expenditure: (prepared on a Cash Basis)

A\$

**A. Available Funds:**

Carried Forward (Funds Unspent/Overspent) from previous period<sup>^</sup>

\$281,082.17

Total Project Payment received for this period

Payment No.<sup>^^</sup> 12 \$488,500.00

<sup>^</sup> previous period = the six-month period immediately preceding the payment period

<sup>^^</sup> payment no. = the scheduled payment number in the Project Budget

**TOTAL A** \$769,582.17

**B. Less Expenditure:**

**Commissioned Organisation Expenditure**

Personnel	\$32,422.93
Research Operating Expenses	\$39,180.34
Travel	\$19,779.88
Capital	\$0.00
Infrastructure	\$0.00
<b>Sub-Total</b>	<b>\$91,383.15</b>

**Payments to Project Collaborators\* (hide/unhide rows as required)**

This section is optional for Small Research Activities (SRAs)

	Payment Number <sup>^^</sup>	Collaborator Acquittal received for <u>previous</u> period <sup>^</sup>	
AUTONOMOUS BOUGAINVILLE GOVERNMENT	Payment 13	NO	\$69,392.65
PNG COCOA & COCONUT INSTITUTE	Payment 13	NO	\$36,094.00
PNG UNI OF NATURAL RESOURCES & ENVIRONME	Payment 12 & 13	NO	\$0.00
[insert Collaborator 4 name]	[insert pay#]		\$0.00
[insert Collaborator 5 name]	[insert pay#]		\$0.00

\*List ALL project collaborators in the table above along with the relevant payment number and amount paid to them during the reporting period. If no payments were made insert \$0. Include an explanation in Part F: Other Comments below if payment amounts differ to the budget schedule. Indicate (Y/N) whether the Collaborator submitted an acquittal for the ^previous reporting period. If no acquittal was received, please provide a reason in Part F: Other Comments.

**Sub-Total** \$105,486.65

**TOTAL B** \$196,869.80

**C. Funds Unspent/(Funds Overspent):**

**TOTAL C** **\$572,712.37**

FUNDS UNSPENT - complete Parts D & E regarding Committed & Uncommitted Funds below

<b>Funds Unspent must be categorised into Committed (Part D) and Uncommitted (Part E)</b>	
<i>Committed Funds</i> are funds for goods, services & personnel costs that have <b>already been delivered in the reporting period</b> , but invoices have not yet been paid or received.	
<i>Uncommitted Funds</i> = Funds Unspent less Committed Funds	

**Committed Funds (complete Part D)**

\$327,065.01

**Uncommitted Funds (provide explanation in Part E)**

\$245,647.36

These totals will update as Parts D & E are completed



**D. Committed funds:**

Committed Funds are funds for goods, services and personnel costs that have already been delivered in the reporting period, but invoices have not yet been paid or received.  
Do not include funds for activities budgeted for in the next payment period.

<b>Committed Funds for Commissioned Organisation</b>		
Personnel		\$27,257.54
Research Operating Expenses		\$72,380.62
Travel		\$30,000.00
Capital		\$0.00
Infrastructure		\$0.00
<b>Committed Funds for Collaborator Payments (hide/unhide rows as required)</b>		
AUTONOMOUS BOUGAINVILLE GOVERNMENT	[insert pay#]	\$117,262.50
PNG COCOA & COCONUT INSTITUTE	[insert pay#]	\$46,803.75
PNG UNI OF NATURAL RESOURCES & ENVIRONME	[insert pay#]	\$33,360.60
Payment to Collaborator [insert Collaborator Name]	[insert pay#]	\$0.00
Payment to Collaborator [insert Collaborator Name]	[insert pay#]	\$0.00
<b>TOTAL D</b>		<b>\$327,065.01</b>

**E. Explanation for Uncommitted Funds:**

Provide comments regarding Uncommitted Funds below		<b>TOTAL E</b>
<p>Now that project travel is possible we are rescheduling project related travel that was deferred during lockdowns. The Australian team is travelling to Bougainville in July, September and October 2022. Some budget is put aside for the end-of-project review that will take place in September.</p> <p>The Bougainville team members will be travelling to Australia for training in IT and chocolate making, and to present at TropAg in November.</p> <p>Butubu, Guest and Vinning are attending the International Symposium on Cocoa Research, the International Cocoa Genome, Cocoa Collection and chocolate makers in Europe in later 2022.</p>		<b>\$245,647.36</b>
1		\$0.00
2		\$0.00
3		\$0.00
4		\$0.00
5		\$0.00
<b>Total</b>		<b>\$0.00</b>

Contact the relevant Research Program Manager to discuss any plans to reallocate Uncommitted Funds to new project activities.

**F. Other Comments:**

Provide details regarding: (i) Reasons for Funds Overspent greater than 20% of Available Funds  
(ii) Collaborator payment not made and/or collaborator acquittals not received; or (iii) Any other relevant information.

**G. Certification**

**I certify that the expenditure shown above is correct and has only been spent on the specified project:**

Signed and dated by Project Leader:		Signature: _____ Print name: David Guest Date: 9 August 2022
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Signed and dated by Authorised Officer preparing this acquittal:		Signature: _____ Print name: Stephen Conaghan Date: _____
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Project Acquittals without signatures can not be accepted

Please email a PDF of completed acquittal to [researchPSO@aci.gov.au](mailto:researchPSO@aci.gov.au)  
Acquittals are due no later than 30 days after the expiration of each Payment Period.  
Commissioned Organisations will be contacted if additional information is required.