



Transformative Agriculture and Enterprise Development Program

TADEP+ Update

May + June 2021

Key program activities

Family Farm Teams Masterclass

After being postponed twice earlier in the year due to COVID-19, the Family Farm Teams (FFT) Masterclasses have been rescheduled to be held in July and August. Whilst new COVID-19 guidelines recently released by the PNG Government enable larger groups and domestic travel, we have opted to continue with a more risk averse model of delivery. To minimise risk, the facilitators will work with smaller groups across more regions.

The Masterclass dates are as follows:

- **Buka:** 13-15 July (Bougainville Cocoa, ABG DPI)
- **Goroka:** 20-22 July (PNG Cocoa, FPDA, DPI EHP, NARI)
- **ENB:** 20-22 July (Galip Nut, PNG Cocoa, NARI, Cocoa Board, UNRE)
- **Lae:** 27-29 July (NARI)
- **Madang:** 3-5 August (Sweetpotato, PNG Cocoa, Cocoa Board, FPDA)

Project Leaders have nominated participants for the Masterclass and their respective employers will be contacted to seek permission for their attendance. Key partners in each region will also be invited to nominate participants to fill remaining places up to a maximum of 15. For more information, please email tadep.png@gmail.com and Sheerah.Ephraim@aciarcg.gov.au.

Evaluating ACIAR's programmatic approaches

Over the past year, each of the five TADEP projects and the program staff have been contributing to an evaluation of the program, as part of a broader evaluation of ACIAR programs (TADEP, SDIP, Aik Saath). The project evaluations have been complete and have fed into the program evaluation, which is in draft form. A feedback session with key TADEP project and program contributors was conducted recently to discuss and validate the

ACIAR blog: Cocoa in PNG climbing to new heights

Since the introduction of cocoa to Papua New Guinea in the 1800s, the ideal conditions for the crop to thrive have been fairly explicit. These conditions include high humidity, abundant rainfall and at altitudes of up to 800 metres. But in what might be a first, Australia and PNG researchers have introduced the historically coastal crop to the Highlands of PNG. What's more, trials to date are proving to be quite successful.

Plant Pathologist and cocoa expert, Dr John Konam says their figures need to be updated, but they estimated there could be up to 3 million cocoa trees planted in Karimui, Chimbu Province. Karimui was the site selected to conduct trials in the Highlands region as part of an **ACIAR and DFAT funded project** to increase production and improve cocoa quality in PNG.

Click here to read the blog entry.

Family Farm Teams continues in PNG

Although the FFT project as part of TADEP has concluded, the the Family Farm Teams work in PNG is continuing through another ACIAR project, SSS/2018/137 *Gender equitable agricultural extension through institutions and youth engagement in Papua New Guinea*, which began in late 2019. The project is moving forward with positive outcomes after a year of COVID-19 uncertainty, interruptions and restrictions. See Family Farm Teams section below for the full update.

Making vegan cheese from Galip Nuts

In a world first, an Italian food scientist travelled to Indonesia and became fascinated by Galip Nut (called Kenari Nut in Indonesia) and worked with a fellow food scientist to develop non-dairy cheeses, gelato and desserts. The two scientists said it was a "no brainer" to work with Galip Nuts as they are "packed with protein and essential amino acids, loaded with fibre, vitamins and minerals".

Describing their fermentation method as "revolutionary", the food scientist co-founder said that the end product is able to deliver the "unique creamy taste and texture" that consumers desire when it comes to dairy products – often the most difficult category to quit for those striving towards a plant-based diet. "Our proprietary technology enhances texturisation and produces that bouquet of flavours that you can only achieve through fermentation."

Click here to read the article.

Key project activities



- Several positive stories on the success of the project have been covered in the media in PNG in recent months. See details in the Update.
- Renovation of the screenhouses used for multiplication of clean vines has been undertaken, ensuring the structures are well maintained to ensure risk of virus vectors (insects that transfer viruses between plants) entering the structures in low.
- The FPDA team has designed and installed irrigation systems that provide coverage over 1/10th of a hectare for each of seven growers in EHP, Jiwaka and WHP. These systems have been well received by the growers and early results have demonstrated the value of the systems.

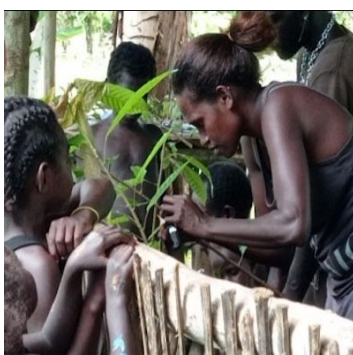
[Click here](#) for the full Sweetpotato project update

PNG Cocoa

- Work continues in the Cocoa Project at the Boram Correctional Institution, Wewak, led by the agriculture staff and supported by Cocoa Board Senior Extension Officer and ACIAR Project Coordinator, Timothy Sam.
- Ploughing of kunai grassland has begun in preparation for planting Gliricidia and cocoa at Yekimbole Village, East Sepik, using the tractor repaired under the ACIAR cocoa project.
- A collaborative trial site between HORT/2014/096 PNG Cocoa project and SMCN/2014/048 Optimising Soil Management project has been established in Yekimbole, East Sepik.



[Click here](#) for the full PNG Cocoa project update



Bougainville Cocoa

- Visits to Village Extension Workers (VEWs) have continued across Central and North Bougainville. Family Farm Teams (FFT) training has been carried out in six sites in North Bougainville, with nine planned for Central and six planned for South in the coming months.
- Various training workshops have been delivered in nursery management, seedling grafting, composting and vegetable cultivation. The monthly monitoring and mentoring with the households in the selected villages participating in the vegetable and nutrition program is back on track after delays.
- Schools have been visited by PNG Cocoa Board and ABG Department of Education for the possible implementation of the teaching of Cocoa Curriculum. 36 learning institutions

- Mini Lab construction in Kieta, Central Bougainville is 70% complete and looks certain to be fully completed by end of July. Equipment for bean roasting, winnowing, and deshelling, grinding and others will be commissioned for testing bean quality and some training on cocoa quality including processing of cocoa products will be conducted.

[Click here](#) for the full Bougainville Cocoa project update

The Transformative Agriculture and Enterprise Development Program (TADEP) is a multidisciplinary research program that aims to improve the livelihoods of rural men and women in Papua New Guinea. The program initially had five component projects, of which two have concluded. The program now comprises of the following:

- **Bougainville Cocoa** - HORT/2014/094 Developing the Cocoa value chain in Bougainville
- **PNG Cocoa** - HORT/2014/096 Enterprise-driven transformation of family Cocoa production in East Sepik, Madang, New Ireland and Chimbu Provinces of Papua New Guinea
- **Sweetpotato** - HORT/2014/097 Supporting commercial Sweetpotato production and marketing in the Papua New Guinea highlands

TADEP is co-funded by the Australian Centre for International Agricultural Research (ACIAR) and the Department of Foreign Affairs and Trade (DFAT).



Australian Government
Australian Centre for
International Agricultural Research



Whilst two of the initial five TADEP projects have concluded, they have evolved into three new ACIAR projects and both have keenly agreed to continue to contribute to TADEP. The following updates demonstrate this continued collaboration across research disciplines, sharing useful and relevant insights.

Family Farm Teams

The Family Farm Teams work in PNG is continuing through the ACIAR project: SSS/2018/137 *Gender equitable agricultural extension through institutions and youth engagement in Papua New Guinea* which began in late 2019. The project is moving forward with positive outcomes after a year of COVID-19 uncertainty, interruptions, and restrictions.

[Click here](#) for the full Family Farm Teams project update





Papua New Guinea and Australian researchers have redoubled their efforts to ensure a steady supply of the popular galip nut products, with new stocks now back on supermarket shelves in Port Moresby.

The city's biggest retail company, **City Pharmacy Limited** (CPL) took delivery of new stocks over the Christmas holidays, with ongoing monthly supplies planned over the coming year.

NARI Commercialisation Manager Scott Needham said there had been some challenges with production of galip in 2020, but efforts are now underway to use this research to increase production and provide insights to benefit the development of this new industry.

'In the last five months, new strategies have been put in place to increase purchase and production of galip nut. The recovery of dried nut has been very low after all the processing and food safety steps have been undertaken and this is a challenge we are working to overcome.'

[Click here](#) to read the article on the ACIAR website.



view this email in your browser

Copyright © 2021 Transformative Agriculture and Enterprise Development Program, All rights reserved.

Want to change how you receive these emails?
You can **update your preferences** or **unsubscribe from this list**.



Sweetpotato

HORT/2014/097

- Several positive stories on the success of the project have been covered in the media in PNG in recent months. See below.
- Renovation of the screenhouses used for multiplication of clean vines has been undertaken, ensuring the structures are well maintained to ensure risk of virus vectors (insects that transfer viruses between plants) entering the structures is low.
- The FPDA team has designed and installed irrigation systems that provide coverage over 1/10th of a hectare for each of seven growers in EHP, Jiwaka and WHP. These systems have been well received by the growers and early results have demonstrated the value of the systems.

A SEED multiplication scheme (tissue culture technology) is improving crop production, especially sweet potato (*kaukau*) and potato in the highlands of Papua New Guinea.

This programme was done jointly by the Australian Centre for International Agriculture Research (Aciar) Sweet Potato Commercialisation Project and Fresh Produce Development Agency (FPDA) Value Chain Innovation (VCI) Programme.

Aciar had funded the tissue culture technology four years ago so *kaukau* varieties can be pathogen tested or diagnosed to derive a clean and commercially viable variety out of it.

The only seeds of commercial value that are being developed and supplied locally are *kaukau* and English potato which were bred and supplied at the Aiyura laboratory leased to FPDA by National Agriculture Research Institute (Nari). Seed supply for all other foods and vegetables promoted by FPDA for farmers in PNG are mostly imported.

The newly laboratory tested *kaukau* varieties are now known as pathogen tested (PT *kaukau*).

FPDA's Aciar acting programme manager Chris Bugajim thanked the Australian government through Aciar for making this technology available to FPDA who rolled out the project with remarkable outcomes.

"This is a biggest breakthrough with Aciar project with PT *kaukau* as it improve quality, quantity and market size production output among others. However, the grim reality is that Aciar project funding ends at the end of this year and if there are no plans for its continuity or additional support, this precious seed multiplication scheme may cease to function," he said.

Nari's Aiyura scientist and lab manager Winnie Maso said expressed similar gratitude.

"The laboratory so far has developed or cleaned nine commercial *kaukau* planting materials with reduced maturity duration such as from six months previously to only four months.

"It was a huge increase in quality and yield or quantity only for the highland varieties adding they were also considering cleaning lowland varieties," she said.

Maso said they would continue to maintain the tissue culture lab as long as FPDA leased it to produce clean seeds for *kaukau* and potato to their farmers.

Most farmers in the highlands were reluctant at first but once others tried out the newly tested varieties, a good number of farmers have shifted to PT *kaukau* cultivation now.

PT *kaukau* has produced high yield and delivers marketable sizes in high quantities as confirmed by long time farmers Aku Kulo of Hagereto Farmers Association in Asaro EHP and Rachael Suak Mok of Minj, Jiwaka.

These two farmers who represented other PT *kaukau* farmers have confirmed that the clean varieties they have been growing have done wonders for them.

Figures 1 and 2 (left and above): ACIAR project progressing seed multiplication scheme and improving crop production – The National, pg. 18

Figure 3 (below): CPL Group investing to promote local produce – The National, pg. 18

Private company (CPL Group) completes week-long tour of Highlands in a bid to ensure farmers can consistently supply fresh produce

PL Group investing to promote local produce

Pharmacy Ltd (CPL) Group is investing heavily in promoting local produce in anticipation of empowering local farmers to consistently supply the markets and usually replace imports of fruits and vegetables.

The week-long tour of the Highlands last week accompanied by officers from the Fresh Produce Development Agency (FPDA) was an opener for CPL Group who were buying local sweet potato (*kaukau*) and potato from the Highlands.

The team travelled from Port Moresby to Goroka and visited the Tissue Culture Laboratory followed all the way to Asaro, Tambul and back to Goroka.

Only seeds of commercial varieties that are being developed and sold locally are *kaukau* and potato which were bred and supplied at the Aiyura laboratory to FPDA by National Agriculture Research Institute (NARI). Supply for all other foods and

vegetables promoted by FPDA for farmers in PNG are mostly imported.

This programme was done jointly by the Australian Centre for International Agriculture Research (ACIAR) Sweet Potato Commercialisation Project and FPDA Value Chain Innovation (VCI) Programme with CPL linking farmers to the top end market in Port Moresby.

CPL's agro officers were brought back to the farm gate to understand constraint farmers were facing to get produce to the top market.

The fresh produce supply chain was fragmented and it's now up to the people who are in the business to understand the different roles and responsibilities they play from farm gate to the market.

FPDA's ACIAR acting programme manager Chris Bugajim led the delegation throughout the week-long trip.

Bugajim told CPL representatives Christabella Amona, farmer liaison and supply officer, Pierre Dobunaba, agriculture technical advisor

that the biggest breakthrough with ACIAR project with PT *kaukau* was quality improvement, quantity and market size production output among others.

Having seen and visited the entire circle of *kaukau* and potato production chain, CPL officers were impressed with the visit.

CPL agriculture advisor Dobunaba said it was an amazing experience to see the work FPDA and partners have been doing over the years without much exposure to supply the markets.

"We at the market end were only interested in the produce coming to us in good shape but after having travelled out to see firsthand the processes and struggles farmers go through, we can now understand and appreciate more the realities of the value chain system.

"FPDA has done a wonderful job in transforming rural farmers into semi commercial level and that was highly commendable.

"The only obstacle for farmers would be reliable transport access-

sibility into the markets for the perishable goods," he said.

Dobunaba said the quality of *kaukau* and potato has really improved in the past few years to drastic interventions made by FPDA and partners such as ACIAR.

"CPL will not buy everything they would now have a choice in quality produce supplied by farmers who know what they are doing."

"CPL has invested in training farmers as well as buying local produce by empowering farmers in Central where vegetables such as watermelon, taro, banana, and other vegetables that can grow well in the lowlands.

"We also buy other vegetables from the highlands such as *kaukau*, potato, bulb onion, cabbage, tomato, chili, carrot, oranges etc that grow well in the highlands," he said.

Dobunaba said the aim for the group was to one day replace vegetable imports from overseas and empower locals to supply markets with high quality fruits and vegetables produced locally.

Figure 4 (below): Meet Aku, the *kaukau* man – Post Courier, pg. 12

From street seller to major sweetpotato farmer – feature on Aku Kulo

Meet Aku, the *kaukau* man

■ This is the story of sheer determination and persistence by a street vendor who made his way to become one of the major *kaukau* farmers in Eastern Highlands and PNG.

Aku Kulo is a no-nonsense *kaukau* farmer from Asaro Valley in the Eastern Highlands Province.

Ask anyone for the 'Kaukau Man' along the stretch of the Asaro Valley and one would hardly miss this dark, 160cm stocky-built farmer – always on his modernised farm only a minute's drive from the Highlands Highway.

Before planting his own *kaukau* plots, he was a street vendor-buyer in Goroka market supplying to an aggregator based in Port Moresby.

He was working for Western Highlander John Yap, who had been supplying fresh vegetables to formal and informal markets in Port Moresby.

Aku recalls the days when he would fight with street vendors trying to buy vegetables to ship to Port Moresby out of Goroka and Lae.

"John Yap was like a father to me and he taught me a lot of skills which I have adopted to see my own success in life," he said while acknowledging his former boss.

He said life was a struggle for him every day trying to buy the right crops to ship to Port Moresby, especially *kaukau*, as his earnings were commission-based and if he delivered bad ones he would miss out on his own income.

"It was work done based on trust and respect for each other and as orders increased, so was my commitment and sacrifice finding the right type of crops," he said.

After working for a few years, Aku said he realised he made a savings of almost K50,000 for himself through



Aku Kulo standing in his *kaukau* patch.

the commissions he collected without spending much.

"I told John that I wanted to quit and start my own thing. It was a tough decision to make for me as well as John, who was a mentor all through my youth years," he recalls.

Mr Yap seeing a faithful and hard-working man in Aku, flew him and his family down to Port Moresby for a tour around the city and gave him enough money to bid his family farewell back to Goroka.

"With the money John gave me

added onto my savings and words of blessings and encouragement, I started planning to do my own *kaukau* business," he said.

"While working on my farm for a few years, I was introduced to the Fresh Produce Development Agency (FPDA) and that was my turning point."

Aku has been planting the local varieties before he was introduced to PT *kaukau* by FPDA and NARI.

He was one of the first farmers who responded positively to trialling PT *kaukau* in the Asaro Valley and

EHP when the Australian Centre for International Agriculture Research (ACIAR) funded project rolled out the PT *kaukau* trials.

A nursery for PT *kaukau* plantlets was stationed at Aku's farm as a model farm for others to receive training, followed by other farm inputs that enabled him to improve his farm.

Aku was also among other selected farmers in PNG that travelled to Bundaberg, Australia, to visit how PT *kaukau* was grown commercially and distributed to markets around

the world.

Farm inputs, quality control, post-harvest methods and curing processes were very new concepts he picked up just by watching, and upon his return he wanted to do exactly that.

Yes, he did just that and today Aku operates a fully mechanised farm registered as Hagereto Farmers Association with IPA and is the proud owner of a Kina Bank cheque book under the association.

He has distributed PT *kaukau* cuttings far and wide and then buys back from his contact farmers and supplies 2 to 3 containers every week. He has also supplied more than 15,000 cuttings at K2 per cutting to Hela Province under the tax credit schemes.

Backed by his own mechanised farm with a modern irrigation system, he aims to cultivate as much as possible to meet market demands, adding he would do even 4 to 5 containers to Port Moresby and Lae if there was less competition.

Aku spends 95 per cent of his time on the farm while his sister does the distribution in Port Moresby and is now building a warehouse for his *kaukau* bags at Nine Mile outside Port Moresby. His mobile phone has become very handy lately as he engages and monitors workers at the Nine Mile warehouse from Hagereto farm back in Asaro.

He said he could only travel as far as Lae on one or two occasions to deliver his containers at the wharf and most of the time was spent on the farm.

Aku has thanked FPDA for the wealth of knowledge and experience he gained through FPDA's extension services and also ACIAR projects and NARI for their continued support.

- Work continues in the Cocoa Project at the Boram Correctional Institution, Wewak, led by the agriculture staff, Inspector Zacharias Hausimbi and Corporal Bonawi Dalu, supported by Cocoa Board Senior Extension Officer and ACIAR Project Coordinator, Timothy Sam. Posted on Facebook.



Figure 5 (above): Demonstrations of cocoa pruning by Cocoa Board and PNG Cocoa project staff at the Boram Correctional Institution, Wewak.

- Ploughing of kunai grassland in preparation for planting Gliricidia and cocoa at Yekimbole Village, East Sepik, led by Cocoa Model Farmer-Trainers (CMFTs), Nola and Chris Sasingian, supported by Timothy Sam, using the tractor repaired under the ACIAR cocoa project. Solar cocoa driers for the successful cocoa business at Yekimbole are visible in the far distance left.



Figure 6 (above): Ploughing kunai grassland to prepare for planting of cocoa and shade tree, Gliricidia.

- Trial site at Yekimbole Village, East Sepik, with Gliricidia growing in preparation for planting a cocoa manuring trial in collaboration with the ACIAR Soil Fertility Project led by Damien Field and Kanika Singh of the University of Sydney.



Figure 7 (above): Collaborative trial site between HORT/2014/096 PNG Cocoa project and SMCN/2014/048 Optimising Soil Management project in Yekimbole, East Sepik.

Upcoming or recent activities

Village Extension Workers (VEWs)

- **Central Team:** Routine monitoring and follow up by Central team to Inus, Wakunai and Manetai and visited VEWs Simon Sinepu, Issach Kopana and George Tonai. Similar monitoring was conducted to other VEWs to see how they are applying their skills learnt for the various trainings on cocoa, nursery construction and operation, vegetable seedling production and compost making and application.
- **North Team:** Family Farm Teams (FFT) training in North (six sites) have been completed in June of four Project staff assisting Dr Josephine Saul, the lead trainer. We are now planning the training for nine sites for Central Bougainville and six sites in South Bougainville for August. Apart from the FFT training, Borgia Sinato and Eugene Hareke Bali used this opportunity to explain community engagement using the Village Resource Centres (VRCs) which is also in line with the ABG to roll out its Independence ready mission in the constituencies throughout Bougainville.



Figures 8 (left) and 9 (below): Family Farm Teams training in Sorom Ward, Selau Constituency.



- A combined training was conducted by VEW Martin from Malassang 1, Buka island under guidance from ACIAR project officers and successfully delivered a training to a farmer cooperative group in Malassang 3. The training covered nursery and seedling grafting.



Figure 10: VEW Martin at Malasang 3 showing the correct bud-sticks to collect to his farmers for budding.



Figure 11: Women farmers practicing on how to bud-graft seedlings

Photos by Bradley Nelson.

Vegetables and food crops

- Vegetable cultivation training was conducted at Tohatsi VA. VEW Rodney organised his farmers and we conducted training on seed sowing, thinning and general information session on crop integration and livestock. Also other training on cocoa was also conducted successfully.



Figures 12 and 13: The vegetable nursery with seedling ready to be thinned.

Photos by Bradley Nelson.



Figure 14: VEW Rodney giving instruction to his farmers on cocoa seed preparation before pre-Germination.

- The monthly monitoring and mentoring with the households in the selected villages participating in the vegetable and nutrition program is back on track after some delays.
- Distributed seeds and materials for vegetable nursery and cultivation to the VEW's and their farmers.



Figure 15: VEW Rodney with his materials.



Figure 16: Farmers planting cabbages on newly formed planting beds.

Construction of a vegetable nursery and planting bed as demonstration plot was constructed at Tsunpetz Village Assembly (VA). The model farmer there has already cultivated vegetables and doing sales from the first planting and now he is on the second round of planting.



Figures 17 to 20 (above): Vegetable farm demo plot construction at Banio, Tsunpets Village Assembly.

- VEW's field visit and monitoring to their farm and encouraging them to continue on with vegetable cultivation in their VA's and diversify their farms with introduced and local vegetables in terms of food security and also another source of income.



Figure 21: Vegetable nursery with seedlings at Hahon, Nembaka.



Figure 22: Young hybrid clones cocoa intercrop with rice at Kunua, Siato Ward.



Figure 23: Taro germplasm collection at Siato.

- An organic compost application training was conducted at Hahon, Nembaka VA on a demo block from the training conducted recently on compost making using cocoa pod husk, chicken manure, topsoil and sawdust. Rows of 5 old cocoa trees were treated with either NPK, Urea, Control and Cocoa pod husk compost (organic fertiliser).



Figures 24 to 26 (above): Compost application training in Hahon, Nembaka Village Assembly.



Figure 27 (above): Budwood garden Identification and certification for Northern Region

- Jessica Hall (Project Admin Officer) who has been on maternity leave is due back in early July.
- Schools were visited in June by PNG Cocoa Board and ABG Department of Education for the possible implementation of the teaching of Cocoa Curriculum in 36 schools selected. If Planning goes well an in-service training for teachers will be held in Arawa from 5th-10th July. The schools are in the levels of primary, high schools, upper Secondary, and TVET and were selected equally from all the three regions. Presentations were also made on the proposed plan resources and budget in implementing the cocoa curriculum.



Figure 28 (left): Workshop on cocoa curriculum.

- VEWs budwood garden inspection and certification was done by PNG Cocoa officers Joe Yabom and Benjamin Siloi from the Plant Breeding Section in June. Out of the inspected 17 that met the requirements they are now certified for registration which means they can operate commercially in distributing clones and bud woods to other farmers.
- Work to Conserve and utilise of some important cocoa clones from Kubu station, North Bougainville was initiated when the Government recently announced the takeover of Kubu land for construction of offices and residential houses. We also went to the previous Duncan station (formerly PNGCCRI) and collected some of the Parental materials (KA2-106, KEE 12, KEE 42, KEE 47 and KA2-101) for establishing a SG2 Seed Garden for Bougainville. Others that were not found will be searched and collected in July/August and hopefully do the establishment by November/ December. DPI/BACRA will take ownership of the operation and/management of the seed garden when established.
- Mini Lab construction in Kieta (Toniva), Central Bougainville is 70% complete in June and looks certain to be fully completed by end of July. Equipment for bean roasting, winnowing, and deshelling, grinding and others will be commissioned for testing bean quality and some training on cocoa quality including processing of cocoa products will be conducted. It will also assist DPI/BACRA operation in terms of quality testing for export samples, compliance monitoring as well as certification of cocoa exports from Bougainville. Launching of the Mini lab is schedule for September.



Figures 29 and 30 (left): Two rooms for the Mini-lab under construction.

Photos by Amos Lepasa.

Village Resource Centre (VRC) updates

- The Village Extension Workers (VEWs) from Northern Region have expanded their work to other Ward Assemblies. They are training other farmers in good cocoa management, livestock and crop diversification. The table below shows the data of the work expansion to other VAs and the current number of member farmers working under the VEWs. Gender disaggregated farmer numbers will be added.

#	Name of VEW	Name of Ward Assembly (ACIAR Project Location)	Name of Ward Assembly (Extension work)	Number of member farmers	Female	Male
1	Rodney Panaki	Tohatsi	Tohatsi 02, Kotopan	40	20	20
2	Martin Masen	Malasang 02	Malasang 04 and 05	12	3	9
3	Jock Taviur	Novah 02	Kahule, Naboanek	61	25	36
4	Benjamin Tatou	Singh 01		25	5	20
5	Iranious Simon	Sorom		25	6	19
6	Vanessa Siri	Tsunpets (Baneo)	Ene, Batan	40	20	20
7	Jeffery Tavian	Kovanis	Teonena, Uris	66	32	34
8	Rodney Tarosi	Kosina Mohina (Teopasuna)	Taonita, Tinputz	17	4	13
9	Edward Gaorom	Hahon (Nembaka)	Savon, Anatova, Rapoma	205	20	185
10	Peter Seksek	Ratsua		25	10	15
11	Tony Tamuna	Tomasi	Makekoa, Siato, Keabosi	60	25	35
TOTAL NUMBER OF FARMERS				576	170	406

- Iranious Simon has replaced VEW Alex Bialik in the Sorom VA. Alex has stepped down due to other work commitments in the community to allow his farmer to take the job. The community, chiefs and VA member were happy to select him to replace Alex.
- The Tomasi VA VEW Tony Tamuna has extended his work to Keabosi, Makekoa and Siato Wards. As the table indicates above he has now 60 member farmers. The Siato WA Lead Farmer, Raymond Naeasi has already set up his VRCs after being inspired by the project. He has a budwood garden, cocoa and vegetable nursery, cocoa dryer, an old hybrid block planted before the crisis which has been rehabilitated by one of his farmers. With the support of VEW Tony and the project he is planning next month (July 2021) to train his farmers in methods of pruning and compost making.

Figure 31 (right): The Lead Farmer of Siato WA, Raymond Naeasi standing on the right with Eugene Bali, the Northern Region Hub Coordinator in the middle and Leonard Basi the owner of old hybrid cocoa block rehabilitated. They are standing in front of the cocoa block.



- Work is continuing in the other two regions Central and South and the VRC Coordinator (Borgia Sinato) will do three monitoring visits before the year ends to collect data and get feedback from the community and VEWs on the progress of the setup of the VRCs in both the three regions.

Marketing

- There were two suites of marketing activities since the previous TADEP report. One was the continuation of the usual activity of compiling the Cocoa Marketing Report. Six were compiled. There has been an effort within the reports not to unduly emphasise the minutiae of prices. Instead, the reports seek to explain what are factors that result in prices being what they are. In this way some form of forecasting is presented. Further, greater emphasis has been placed on factors affecting demand. Finally, since the previous TADEP

report effort has been made to identify someone within the DPI who could take over the production of the Report.

- The second suite of activities related to the estimate of cocoa production during COVID. In the previous TADEP report that estimate was 36,200 tonnes. This figure is significantly below that subsequently estimated by the Cocoa Board. It is also at odds with the perceived view that COVID has had a negative impact of cocoa production. Finally, the data for 2020 reverses a three-year decline in production.
- The data have resulted in considerable correspondence around two streams of thought. One is what has been possible explanations for the reversal. Anecdotal evidence is that with COVID causing the closure of many businesses, many of the affected workers have moved back to the home villages where accommodation is free and food more readily available. In moving back to their home communities, the displaced workers, who were essentially young and well educated, brought back new skills and energy. Also, they appear to be more willing to take risks and try new approaches. Because of greater labour availability and new skills, cocoa production lifted. Discussion centred on how to maintain this momentum.
- The second stream related to policy. The PNG Government gave considerable money to the various rural industries to buffet the impact of COVID. Nearly all the money went to growers. Yet the data suggest that cocoa growers appeared not to have suffered a decline in income. The question then became where should the money have gone? One line of thought was that the money should have gone to improving the infrastructure needed to promote the long-term competitiveness of PNG cocoa growers on the international market. Possible targets for development were improving roads, port facilities and storage. Another area of potential investment would be the development of quality testing facilities throughout the cocoa producing regions. Yet another was the possibility of developing a warehousing system in either or Asia, Europe, or North America to address the issue of diseconomies of scale for small exporters as well as the quite debilitating logistic costs of moving less than Fully Loaded Containers from Papua New Guinea to off-shore markets.
- [Loving Earth](#) is a company in Melbourne that makes raw chocolate. Currently their beans are imported from Peru but since Thibault Frigoni, formerly with Cocoa Australia, joined the company they are looking to source beans from the Pacific. As an ethical company they want to tell the story of their beans and the communities that produce them. David Guest visited Loving Earth to discuss potential supplies of beans from Bougainville as there is a good match with their requirements. The biggest constraint remains the cost of transporting small shipments of beans, as outlined above.

Project or Program achievements

- All project officers and selected VEWs from North, Central and South have participated constructively to the ABG (BACRA) draft cocoa regulation sharing their experiences, knowledge and skills in Cocoa technologies transfer and trainings during the DPI internal works and stakeholder consultation held in Buka and Arawa. In fact, most of the inputs and/or contributions were taken from the lessons and experiences learnt during the implementation of the Bougainville Cocoa project (HORT/2014/094) in terms of nursery operations and registration, budwood garden setup and registration, quality standard and attribute testing, procedures for testing, quality monitoring and compliance.
- The Bougainville Cocoa app is taking shape, with most components complete, including welcomes from the ABG President and Minister for DPI. We plan to launch the app during the Field Days and BACRA Kieta Mini-lab opening in September.

Planned activities

- The rollout of the Family Farm Teams training continues and is scheduled to be completed in August.
- The September Field Day and BACRA Mini-lab opening in Kieta will be linked to the annual VEW meeting, launch of the Bougainville Cocoa app and training.