

Staff news

- We welcome Lucy Siki and Robert Taula to our New Ireland team, as Family Farm Team (FFT) trainers and researchers. Robert and Lucy completed the 1-week FFT training funded by Pacific Women in late 2017 . Both have extensive experience working as trainers in New Ireland.
- We sadly farewell Sanna Harri, our wonderful Research Network Coordinator. We wish her the very best in her new position with Abt as the coordinator for the Investing in Women project <http://investinginwomen.asia/about/#who-we-are>

New Ireland (NI)

- Barbara Pamphilon (UC), Josie Saul (TADEP cocoa projects) and Robert Taula conducted a range of activities in our core sites in Tikana Local Level Government (ward 7 and 11)—a review and training day for our advanced village community educators (VCEs) and leaders; research and training for Module 3 (Feeding your family team) for all VCEs and a women’s leadership training workshop for 46 emerging leaders.
- In the second week, Barbara, Josie and Robert were joined by Kiteni Kurika (former VCE leader, East New Britain) to trial an intensive delivery of the FFT for farmers. This was conducted in the Namatanai district as there have been many request for training in this more remote area of NI. The initial plan was to select 20 couples, however despite this request over 100 farmers attended. This ‘problem cloud’ turned out to have a silver lining as we were able to adapt the participatory activities in an effective way for such a large group.
- We did this by choosing small groups to do the activity and then report back to larger group where everyone could join in the discussions and analysis. For example in the “Typical Day in the Life of a New Ireland farmer” (see <http://aci.gov.au/publication/mn199> page 30-31) we had a group of young women, a group of young men, a group of fathers, a group of mothers, a group of older women and a group of older men. This enabled the important gender equity issues to be seen and considered by all . A program and workbook for the intensive delivery model will now be developed

Bougainville

- Katja Mikhailovich (UC), Pauline Gwatarisa (UC), Jeromy Kavi (NARI) and Doreen Tunama (IATP/NARI) travelled to Buka to conduct leadership training and deliver FFT Module 3 to the VCEs. Pauline conducted a research focus group with 6 female and 5 male village community educators to explore the synergies of the FFT approach with Christian principles. Jeromy Kavi piloted the endline survey and conducted farm observations using the newly developed farm observation Commcare application. Katja had meetings with the Bougainville Women’s Federation president, executive officer, finance officer and project officers to review progress and plan the remaining project activities.

Western Highlands

- Katja travelled to the Baiyer valley to conduct a reflective review with Baptist Union (BU). The BU small extension mini-project involved the project leader Susan Trapu and a team of VCEs that had received training 2 years ago independently implemented the FFT training and agricultural training in crop production for new farmers from Kwinkya and Kumbareta. Interviews were conducted with Susan Trapu, Cathy Yalga (BU finance officer) and John Kaewa (Executive officer). Two days of participatory evaluation workshops were conducted with VCEs and farmers. Dissemination of Maria books was facilitated to the local Kwinkya elementary school.
- Katja and Veronica Bue (UniTech) travelled to Jiwaka to observe VCEs from Voice for Change (VfC) conduct training in the community of Kosaka. This is a small extension mini-project in which VfC selected four VCEs who had completed the FFT training in 2016 to deliver the training to 12 new communities in Jiwaka. This is part of VfC’s new model that is developing Community Based Extension Workers. The four VCEs have rolled out training to 8 communities to date with an average of 40 participants per community (approximately 380 farmers).
- Veronica conducted evaluation activities with VfC over the course of the week with an emphasis on agency and community benefits. Interviews were conducted with Lilly Be’Soer (Executive officer) and a reflective

review was conducted with four VCEs. VFC received the new Maria books which are actively being integrated into training.

Other activities

- Barbara conducted an evaluation focus group with Oxfam lead trainers and interviews with FPDA and Oxfam senior management whose staff had participated in the FFT Training of Trainers in 2017. Both agencies plan to integrate the FFT modules into their programs (FPDA – Village Extension Worker program; Oxfam – Sustainable Livelihoods program). Oxfam will also be trialling adaptations in their Gender Justice program.
- The 4th book in the Maria series ‘Maria’s Family Team’ was piloted in New Ireland. This book should be available mid-year. For other Maria books please see
 - <http://aciar.gov.au/publication/mn161>
 - <http://aciar.gov.au/node/25212>
 - <http://aciar.gov.au/publication/mn160a>
 - <http://aciar.gov.au/publication/mn160b>
- Please note that print ready copies of these books are available free of charge – approved donors who cover the costs of printing are welcome to add their logos to the books. Contact: Barbara.pamphilon@canberra.edu.au

Progress towards objectives

Objective 2: Develop and undertake research-based interventions that address the needs of the private sector including smallholders, small scale entrepreneurs (especially women) SMEs, and large scale processors.

- Experimental work to understand the galip cocoa cropping system has been set up at NARI. A Galip cocoa experiment was established in the galip plantation at NARI to estimate to what extent cacao, galip and



glicrida litter return nutrients to soil. Godfrey will be collecting samples both soil under litter and litter at months 1, 4, 8, 12 and 16 following the experiment establishment. He will process soil and litter samples. He will also record the weight of remaining litter at each sampling month. Samples will be returned to Australia for further nutrient analyses.

Figure 1: Litter decomposition experiment.

Objective 3: Develop an appropriate commercial model for a medium scale value adding factory for the canarium industry

- The cracker processing line has been installed at the NARI factory and has increased processing capacity from 250kg of size graded nut-in-shell (NIS) per day, with 6 operators to about 1 tonne/day with 9 operators. Optimum processing rate seems to be about 150kg NIS per hour producing a total kernel recovery (TKR) of 16% and about 50% whole kernel. It takes 9 people to operate the plant. The processed product from the mechanised line is very different from the hand cracked product.
- Processing rate has increased fourfold, however whole kernel % has been reduced. Some improvements in productivity and quality will occur as staff get used to operating the plant and fine tune the cracker and speed settings. The economics of the new processing line needs to be developed in light of the different kernel styles that are now produced.



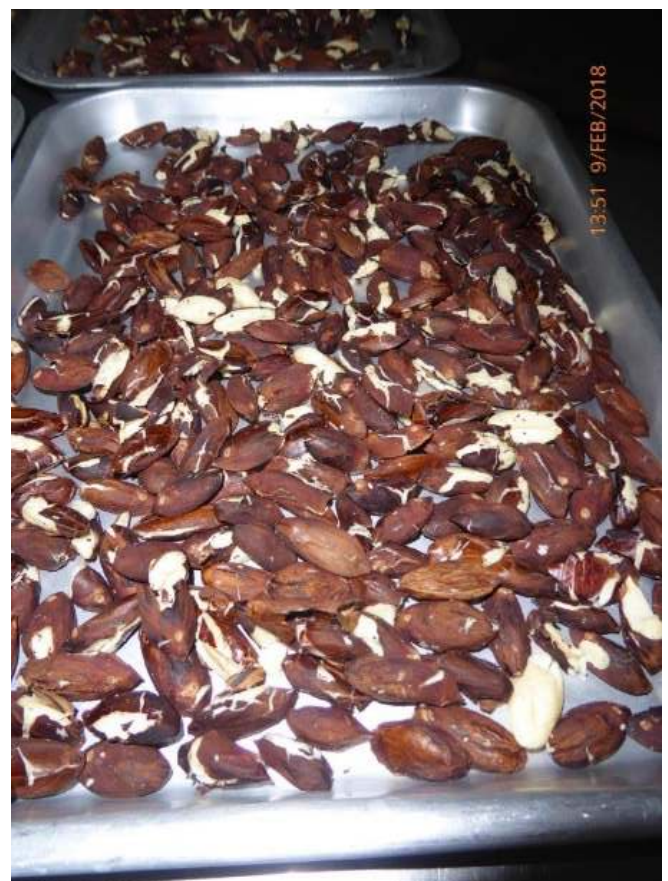
Figure 2: Helen Ronnie tests the new processing line (above).



Figures 3 and 4: Finalised cracker processing line (top right and right)



Figures 5 and 6: Broken roasted kernel, chips and pieces make up approximately 50% of finished product (bottom left) and whole kernel has some testa scraped off during processing (bottom right).



Objective 4: Create a model for public-private partnerships in the canarium industry in PNG

Partnership with MFAT project and private processor

- The NARI team has met with the private processor on the MFAT project to explore ways we can work as a public-private partnership. MFAT is hoping to process approximately 100 tonnes nut in pulp this year. We have in-principle agreement from both NARI and ACIAR to explore opportunities for facility and data sharing arrangements. Details to be discussed include staffing arrangements, how to share equipment, production targets and other issues that may arise. Plans are for this to occur in the 2018 season.



East New Britain Women and Galip Club

- This group has been established from East New Britain from interested galip enthusiast Ms Dorothy Luana. It started as a bake club with 120 galip cakes sold at PGK50 each over Christmas and the family had been drying and shipping galip to Port Moresby as a trial test.
- As more people were interested in the activities of the family, a Galip Club was formed. The objective of the club is to raise awareness on the versatility of the galip nut and to support where possible the expansion of farming of galip nut. They are currently negotiating a fulltime volunteer to manage their communications and activities.

Figure 7: Galip nut Christmas cakes

Training workshops:

- A training workshop for the Galip Club was delivered on the 2 February, Brett Hodges and Shahla Hosseini Bai both presented at this event, with Shahla introducing galip as a potential industry and food safety and hygiene. A farm tour was held at Dorothy's property, Rum Jungle Warangoi, with around 20 participants. Godfrey and Shahla discussed the importance of spacing regimes to decrease competition among trees for soil nutrients and about sustainable farm management to ensure soil nutrients are not limited over time. Shahla, Emma and Siamima talked about food safety, food hygiene and drying processes with participants, and Dorothy shared her story of diversifying incomes with farmers.
- A baking workshop was delivered at Takubar in Kokopo by Emma Kill, Caroline Misiel and Siamimi Kapi with 5 participants. The goal of the workshop was to further develop a commercially viable biscuit to add to the already successful galip cake business (last Christmas 120 galip cakes sold at PGK50 each). Two biscuits recipes were established: ginger, galip, honey and chocolate galip. Over 70% of ingredients were sourced from PNG.



Figure 8: Dorothy Luana of the East New Britain Galip Club participating in a recent baking demonstration held in Takubar developing and sharing recipes for commercial sales.

Good news/impact stories

- The Commcare data collection system was implemented for the last part of 2017 season and has provided a profile of areas that galip is coming from along with gender and number of dependents of farmers. The system has been proven to be a suitable and successful system to collect important social and economic data from the farmers selling to the factory. There are still some minor areas that need revision to streamline both the process of collection and of presenting the data in an easily readable format. Emma and Brett are working on these changes with the team to implement a new and improved survey for the 2018 seasons, a big thanks to Godfrey for his input and support in designing this and assisting with the implementation.
- There has been positive feedback from the Galip expo held at the end of 2017 in Buka with the Bougainville Women's Federation. Reports from the group suggest that there has been an uptake of the technologies that were demonstrated at the expo, including interest in the making of jams and cordials, the purchase of an oil press for consumption, sales and incorporation into baked goods, the drying of galip in a pan over fire and the addition of galip to baked products rather than just as a flour substitute. These early indications of interest and uptake in new technologies around galip suggest the potential long term benefits that these training days can yield for community groups. The project is currently working on how the group can access this style of oil press and the logistics of delivery, and is encouraged to see this level of interest and how this will translate into future economic improvements for the group.
- The Galip project team are continuing to work with the Women and Youth in Agriculture Co-operative Society Association (WYIACSA) providing assistance and support to build their capacity to provide opportunities to its smallholder members. In the last season the WYiA truck was transporting consistent volumes of galip to the factory from the Baining region. The co-operatives whom were participating in this paid a 10% levy on their sales with 5% going to WYiA and 5% going to the co-operative itself with the remainder 90% going to the farmer. Farmers are reporting that they are happy with this and have similar arrangements for the sales of cocoa and copra.

Progress towards objectives

Objective 1: To improve the productivity, profitability and sustainability of cocoa and related enterprises.

- Seven budwood gardens have been established in village extension worker (VEW) blocks in Central, with the remaining four completed by April. The team is also establishing budwood gardens in North Bougainville after checking the seedlings in the VEW's nursery, and in South Bougainville. Elizabeth and her South Bougainville team, including CCI, established a nursery and conducted training on nursery management and grafting in remote Karato, Torokina (South Bougainville). This requires a three hour boat trip, but is an important location considering its isolation (remoteness) from many government services. The whole village were very happy and commented that this is their first time they received such trainings.



Figure 10 (above): Permanent nursery constructed at Torokina.



Figure 11 (right): Training on village nursery constructions at Torokina

- North Bougainville region will temporarily use the Kubu station as a regional hub centre. We have Completed a 4,000-5,000 capacity nursery in Kubu station and have initiated maintenance on the old bud wood garden.

Figure 12 (right): Kubu Station nursery.



- We Initiated IPDM on 20 year old cocoa clones planted in 1997 at Kubu station. It may be necessary to collect some data on yield, quality and other vegetative traits when the trees start bearing after rehabilitation exercise because not much work is being done on clone rehabilitation.
- Everywhere else there is more demand for cocoa technology training which the project may not have resource to cover all.

Figure 13 (right): IPDM on cocoa clones at Kubu Station.



Objective 2: To understand and raise awareness of the opportunities for improved nutrition and health to contribute to agricultural productivity and livelihoods.

- We have completed the surveys of over 6,000 individuals in cocoa farming villages. We are now collating and analysing the data to provide feedback to the participating villages, and to relevant ABG departments including DPI, Health and Local Governance.

Objective 3: To foster innovation and enterprise development at community level

- The UNRE team travelled to Morobe and Goroka to establish networks with local Department of Agriculture and Livestock (DAL) and quarantine officers, and to identify and purchase initial breeding stocks for Bougainville. Goats were purchased from a variety of locations, and six males and 15 females are currently in Vudal awaiting shipment to Bougainville.

- Goat house in Konga is completed and look very impressive and at this awaiting the goats to arrive from UNRE, Vudal.



Figures 14 and 15: Front and side views of the completed Konga Goat House.

- We constructed a mini nursery alongside the DPI main office (Buka) where small observation experiments on propagation of fruit crops such as citrus, mangosteen, mango and cocoa using protocol for producing rooted cuttings in container propagators were conducted. If successful, rooted cuttings of fruit trees can be produced at the regional hubs and given to farmers to plant them in a cocoa and fruit integrated farming system. First seedlings produced will be tested in the field first for observation/research purposes.

Objective 4: To strengthen Value chains for cocoa and associated horticultural products.

- Grant Vinning produced a total of nine Market reports including February 2018.
- Effort of the marketing company operation is stalled while awaiting TIN number for IRC, TIN number is required for opening a bank Account. As soon as this is done we write to cocoa board for an export license.
- Sam Rangai is been engaged and paid to produce an information paper to be presented to Bougainville Executive Council (BEC) by the DPIMR minister for the establishment and operation of the Marketing company (Bougainville Marketing Company Ltd). This is intended to gain support politically and financially.
- Training from Andrew Sale on cocoa marketing and export shipments have continued.
- Julie Rereve of CCI in North was selected and attended a Sensory Evaluation of cocoa chocolates and liquor conducted by PHAMA in collaboration with cocoa board PNG

Special notes

- We have produced a 2017 annual summary report on the progress Project activity in Bougainville as requested by the Chief Secretary of ABG. The will be compiled together with DPIMR report.
- TADEP team (Elizabeth, Conor, and Sheerah) completed filming Ishmael, Grace and George in Central. Hopefully some good stories will come out from this activity.
- The Bougainville Cocoa project was specifically highlighted by the Australian Foreign Minister as a model of how research partnerships benefit smallholder farmers in her launch of the ACIAR 10-year plan at Parliament House in Canberra on 26 February.
- We held an annual project planning meeting in Sydney on 8 March. Unfortunately our plans to bring our colleagues from Bougainville to the meeting were unsuccessful due to unforeseen events.

Challenges

- Delays in transferring funds to project Partners (CCI and UNRE) over the Christmas break. This is affecting work progress for planned activities.
- VEWs need to be supported logistically with transport, such as bicycles.
- Monitoring and getting accurate reports from VEWs is important. From the report allowances will be paid accordingly.

- Getting the VEWs to accept allowances much lower than the previous payment to survey interview team is a big challenge we will tackle.
- Issues relating to employment arrangements of Hub Managers being equal to DPI employees has been raised and is being discussed and resolved.
- Communication between HQ and regional hubs via mobile and email constantly require data/TopUp. Can be sorted with monthly allocation of mobile phone units e.g PGK50 for each Hub.

East New Britain

- Trevor has continued personal discussions with CCI staff at Tavilo and has received on-going support for our project. He has also held discussions with staff at the University of Natural Resources, Vudal, to clarify their role in our program, especially to support the work with goats in Madang and East Sepik linked to particular Cocoa Model Farmer Trainers (CMFTs). Trevor finished the reviewing and correction of the Pidgin English version of the PNG Cocoa Farmers Handbook and has arranged for the purchase and shipping of 2,000 extra copies for our project on top of the print run for PPAP.
- Liz Brennan and Conor interviewed Trevor, Alfred and Kula in cocoa plantings in East New Britain about the project, including Kula's training program, progress on smallholder processing and solar drying. Kula demonstrated cocoa husbandry.

Madang

Training of CMFTs at Erima, Madang Province (15 January – 19 January)

- Erima is one of the 22 Cocoa Model Farmer Project sites in Madang province in Astrolabe LLG area of Raikos District. The Erima site has 25 selected farmer households including the CMFT, Daniel Sioba. The site is located near Erima village along the Madang/Saidor road about 30 minute drive from the Main Madang/Ramu highway and 60 minute drive from Madang. The area is very conducive for cocoa production as one can see from a number of good cocoa blocks from Erima leading towards Bom and Lalok and all the way to Basamuk. There is a very high interest in the project in the surrounding villages including Bom, Lalok, and Buram and the project will assist these villages where possible.
- The training of the CMFTs is one of the requirements of the ACIAR project. The CMFTs have to be equipped with skills in cocoa budding and grafting, cocoa management and knowledge of the new cocoa clones so that they can train their farmer disciples. Four CMFTs came without their spouses, which was disappointing. The facilitators running the training were Yak Namaliu (former PNGCCIL Research officer), Alex William & Benedict Pue (CCIL Cocoa Breeding, Murnass), Joe Meaka & Gerald Sabela (CCIL Nursery, Murnass), Josephine Saul-Maora (CCIL Senior Scientist, Tavilo), Trevor Clarke (ACIAR project country manager), Tomoli Wowomi (DAL, Raikos District), Rex Wagol (DAL, Madang District), Aitul Weoh (Senior Extension Officer, CCIL, Madang), Bofeng Mebali (Assistant Project Officer, ACIAR/CCIL, Madang). The facilitators camped out at Erima during the training period.
- CMFTs participating and receiving certificates were Mathias Hambura (Mabonob Village, Madang District), Kokurai & Judith Omurup (Tamane Village, Madang), Samuel & Loltia Osi (Gohe/Mawan Village, Madang), Donisha Elson (Female, Gohe/Mawan Village, Madang), Daniel Sioba (Erima Village, Raikos District), Wadeng Liel (Galeg Village, Raikos District), Gidion Atai (Kumisanger Village, Raikos District), Joe Eresiga (Balama Village, Madang District).
- Other interested farmers also attended from surrounding villages including, Erima, Balama, Bom, Lalok, and Barum.
- The invited guests to witness the conclusion of the training and presentation of certificates were Ganei Agodop (Director, Economic Sector – Madang Provincial Administration, who first proposed the name 'Cocoa Model Farmer Trainer'), Allan Wahwah and team (Ramu Nico. Ltd), Cocoa Board team, and Ward councillors of Astrolabe LLG. Ramu Nickel public liaison officers attended the opening and closing training and expressed their keenness to collaborate with the project.



Figure 16 (above left): Josephine Saul-Maora explaining pests and diseases at the Erima training.

Figure 17 (above right): Training in budding of cocoa at the Erima training.

New Ireland

- Trevor and Alfred attended a meeting in the New Ireland Administrators office in Kavieng NIP on 25 January with Lamiller Pawut (Administrator, New Ireland Provincial Government), the CEO of Planning for the NIPG, Benjamin Kimbe (CEO Economic Services, NIPG).
- Lamiller spoke about the NIP Corporate Plan for the Province 2017 to 2022 and how the ACIAR Cocoa Project and the NIPPG Cocoa Program servicing 109 Wards fits into this.
- Kula has now accepted a contract with the Kokonas Industri Koporason (KIK) contract. Trevor mentioned that ACIAR Project is very proud of achievements in New Ireland and that Kula has been the best agricultural extension officer in the country, showing great initiative to start the program and keep it going, including running of four training modules for the 20 CMFTs and groups, setting up of 20 sites set up with budwood gardens and nurseries, and also training of the 109 VEWs selected by the Province for the NIPG extension of our program.

East Sepik

- Trevor briefly met with the Governor of East Sepik, Allan Bird, at Port Moresby airport and received strong support for our project. Following that meeting, Trevor and Alfred visited Wewak from 6-9 February to meet with East Sepik Provincial Government staff and Ian Samuel, deputy Governor, and the Governor's projects officer, Richard Manju. The Governor is promoting the planting of 65 million cocoa trees over the next three years, and Trevor and Chris Toli have written a proposal for the ACIAR project to support this through an extension of our strategy to many more Wards. The Deputy Governor and Provincial Government staff were supportive of our project and discussed the possibility of further funds from the government and an EU grant to East Sepik being directed to support expansion of our strategy. Jimmy Risimeri, our coordinator in East Sepik, has also accepted a contract with KIK.
- Trevor and Alfred visited Yakambole where Nola and Chris have completed 12 successful batches of dried cocoa on the solar drier the project assisted with, and the group is expanding the solar drier from five metres long with a six bag capacity to another 24 metres giving 30 bags capacity drying at one time. We also visited their new nursery and identified the Trinitario and Amazonian cocoa clones they have moved from East New Britain. They also have obtained a disc plough ready for trialling on soil aeration for Sepik Plains grasslands.
- They also visited Nimudogem where Leah and Edmund showed the new goat house they have built and the place for a holding paddock. The group at Passam were cleaning their budwood garden which is flowering, and a meeting was held with the group who have finished the training house and are preparing the nursery.
- Also discussions were held with the Provincial Livestock officer, John Worowan, on goat transport from Erap. Collaboration was discussed with John Meth from the Cocoa Board.

Simbu/Highlands

- At the Minister's invitation, John Konam has been preparing a special submission to the Minister of National Planning, Mr Richard Maru, for funds to extend the ACIAR activities in Karamui from the current seven Wards to all cocoa growing Wards in Karamui and to other suitable places in the Highlands such as the Jimi Valley. John has been working to get the support of all stakeholders, especially the Simbu Provincial Government and all local members of parliament.

Highlights:

- Commercial scale clean seed multiplication facilities have now been established on 13 grower sites, with capacity to supply sufficient volumes of clean planting material to all of the commercial farmers identified in the kaukau vale chain mapping completed last year.
- Formal evaluation of the workshop run by QDAF in Queensland in December was completed, and found overwhelmingly positive responses from the 10 participants. 100% of respondents stated that they will make changes to aspects of their business as a result of attending the workshop.
- Chris Gard has worked with FPDA to develop a 'wanbel agreement' template that can be used with any organisation that FPDA needs to work with. The purpose of the 'wanbel agreement' is for everyone to be clear about how FPDA and the organisation will work together. The agreement provides a framework for certification of the organisation involved in activities with FPDA if the organisation has put the 'wok mak' from this 'wanbel agreement' into practice. It can be used by the organisation as evidence that they are good to work with when they market themselves to the Government or an NGO or a company. The 'wanbel agreements' will be rolled out to all organisations and groups that FPDA works with in the training components of the project.

Full activity list

- Commercial scale Clean Seed multiplication and distribution has progressed well;
 - 13 screen houses completed so far (4 Asaro, 3 Minj, 4 Hagen Central, 2 Mul)
 - 1 screen house will be put up WHP next month.
 - 3 screen houses in Asaro filled with 1,636 clean seeds (1,276 Gimani and 360 Whagi besta).
 - Mixing, sieving and filling of growth media in seed boxes in 3 screen houses in Minj.
 - Planting of clean seeds in 1 house in Asaro and 3 houses in Minj completed mid-February.
 - Sweetpotato growers operating screen houses were hosted by FPDA at a meeting held in Goroka on 30 January 2018 for initial screen house production training.
- Phil Brown and Kirt Hainzer will visit the field multiplication sites in the last week of February to review protocols and install dataloggers to monitor temperature, humidity and soil moisture.
- Feedback from participants in the Pathogen Tested (PT) sweetpotato workshop held in December was collected in January. Very strong endorsement of the program was received, with all participants finding it very beneficial and will be using information from the workshop in their project activities in PNG.
- Rebecca Robinson helped FPDA develop their M&E systems and FPDA Learning and Development Policy.
- Bennie completed organisational planning workshops for two farmer groups in Asaro, including developing with them their organisational profile.
- Rebecca, Bennie, and Joe Koima (FPDA) attended National Standard for CDWs steering committee in Port Moresby. FPDA, CIC (Coffee Industry Corporation), CARE PNG now on the Industry Steering Committee. FPDA approved by NATTB (National Apprenticeships and Trade Testing Board) to trial portfolio assessment approach.
- Debbie developed plan for nutrition/food production training for focus farmer groups.
- Rebecca also assisted in developing FPDA Learning and Development Policy, which is still in draft form.
- Debbie (with support from Bennie) has completed organisational planning workshops for two farmer groups in Jiwaka and Hagen, including developing with them their organisational profile.

Planned activities for March

- Filming for the TADEP story capture will be completed in the first week of March.
- Training of FPDA staff in film and story capture will also be held at this time.
- Completion of the roll out of commercial scale clean seed multiplication will be achieved:
 - Complete mixing, sieving and filling growth media in seed boxes and planting clean seeds in WHP.
 - SP growers excursion to NARI Aiyura for exposure to Sweetpotato cleaning process and technology is being organised. This will happen on 5-7 March 2018.
 - Monitor growth performance of clean seeds.
 - Fencing of screen houses.
- By end March FPDA will have signed a 'wanbel agreement' with four farmer groups which undertakes to support the farmer group to achieve some of their priorities that they need outside help to achieve. Signing

this 'wanbel agreement' includes training in the PNG Governments six principles of democratic governance and the farmer group identifying performance criteria (wok mak) to achieve the six principles within their organisation.

- Chris and Bennie will run a Community Development Worker training in Goroka for officers from FPDA, CIC, CARE PNG, and Ok Tedi Development Foundation.



Figure 18 (above): Team photo at Sweetpotato production and PT technology workshop.

Back row: Guilhermino Soares (National Directorate for Quarantine and Biosecurity [DNQB], Timor-Leste Ministry of Agriculture and Fisheries), Lynne Jones (Northern Australia Quarantine Strategy, Department of Agriculture and Water Resources), Emma Coleman (Department of Agriculture and Fisheries), Rachel Langenbaker (DAF), Johnny Wemin (Fresh Produce Development Agency), Abel Ximenes (DNQB, Timor-Leste MAF), Benny Atigini (ANU Enterprise), Michael Hughes (DAF)

Front row: Jean Bobby (DAF), Matthew Kanua (ANUE), Debbie Kapal (ANUE), Sandra Dennien (DAF), Winnie Maso (National Agricultural Research Institute) Eric Coleman (Aus Sweetpotato Seed), Wilfred Wau (NARI)



Figures 19, 20 and 21: Sweetpotato production and PT technology workshop in action.