



Revised Project annual report

project

Next generation agricultural extension: social relations for practice change

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1 Executive Summary

At the end of this reporting period the project begins Year 2. A variation to the project was submitted to ACIAR in June 2022 which included revisions to project implementation and personnel changes. With this variation the project has been extended by one year with a new project end date of 31/12/2026. The delay of fieldwork in the first year of the project was addressed with the one year extension, which means the project is, roughly, on schedule. By completion of year two, Activities 1, 2, and 3 will have data collection complete and the project will shift focus to more qualitative engagements (Activities 4&5).

Activities 1, 2 and 3 are underway and on track with research team members planning the first field trip to Cambodia in July 2022. Over the course of the reporting period there has been a focus on project design and stakeholder engagement (particularly with partners from the National University of Battambang (NUBB), the French agricultural research and cooperation organization (CIRAD) and the Cambodia Department of Agriculture in Pailin). Two inception meetings were held in July and November 2021 to support this process. Further, with fieldwork being delayed until mid-2022, the team focused on project initiation tasks. These included project governance (establishing ways of working, signing MOUs with partners), developing project strategies and policies (data management, communications, publications, Monitoring, Evaluation, Research and Learning (MERL), developing the project website and social media presence, and obtaining university ethics clearance. In Cambodia, a number of project initiation tasks also took place including recruitment and training of research project officers, purchasing of equipment and setting up a project country office at NUBB.

The global pandemic has been a challenge for the project in terms of delaying field work. A huge effort has been made by the project team to adapt the project design to the constraints of the pandemic. There have also been personnel changes which led to a lapse in some tasks while recruitment processes took place. The additional team members have added substantially to the expertise of the project, while retaining the collegial ways of working.

Several opportunities were presented to the project during this reporting period including the submission of a special issue to a peer reviewed journal, collaboration with a new partner, FAO in Cambodia (lean Russell joined the team as an advisor), and the planning of an international conference in Battambang, Cambodia (2024) on agricultural extension.

Our recommendations for action include the continuation of data collection and ensuring that project outputs begin.

2 Reflection on Project Design

2.1 Project research strategy

2.1.1 Responsiveness of research strategy:

The problem context explored by this project has not fundamentally changed, though as with all rural and agricultural developments, the ongoing impacts of the Covid-19 pandemic continue. There is some indication that individuals have returned home during the pandemic, which may mean that there is more available labour in the short-term, but that as economic development comes back online we expect the labour situation to return to the pre-Covid state.

The project is approximately 50% completed data collection for Activity 1 (i.e., survey of agricultural extensionists working in SE Asia) and the preliminary findings suggest that the topic, method, and focus resonate with participants and are resulting in valuable data. For the majority of interviewees, the focus on 'missing extensionists' has prompted reflection on the individuals who have enabled or inhibited extension research and practice. Furthermore, many of the participants have asked to remain involved with the Activity, which also suggests that they view the focus as worthwhile and valuable.

For Activity 2 (i.e., baseline census of 2100 households in the case study area) we have: developed and refined the census through in-team consultation led by Ariane Utomo, hired all enumerators, trained them, run pilot testing of the census, adapted the survey, and begun data collection. The data collection, which has just begun, has confirmed the applicability of the census questions, the sampling, and the training of the enumerators.

The theory of change (ToC) for the project remains unchanged and unchallenged, though the early activities (1-3) focus on establishing a baseline understanding, which would not be expected to challenge the project ToC.

The expertise of Ariane Utomo and Van Touch have confirmed the appropriateness of the methodologies chosen for Activities 1, 2, and 3. With replacement of Alexandra Peralta with Nicholas Harrigan (as Activity 7 lead), we have added an expert in social relations - providing the research team with an additional methodological perspective, which we will apply to the census data, in addition to Activity 7.

2.1.2 Activities & outputs:

Given the team turn-over, we have proposed an expansion of the Activities in the submitted variation. This was done to disentangle the early data collection and establishment of baseline understandings - separating the interviews of extensionists (now Activity 1 led by Caitlin Finlayson and Van Touch), the household census (now Activity 2 led by Ariane Utomo) and the census of farms (now Activity 3 led by Van Touch), with the original Activities retaining their ensuing order and leadership.

The proposed outputs remain on track and appropriate to the proposed reconfiguration of Activities. We have submitted a proposal for a special issue to the [Journal of Agricultural Education and Extension](#) that will draw together the findings of Activity 1 while also providing opportunity for interviewees to contribute papers. As noted in the project proposal, this

special issue will coincide with an International Conference to be held at NUBB in 2024 or 2025 - depending on the timeline of the special issue.

With the proposed variation, the sequence of the activities is appropriate and viable. All activity budgets are reasonable and will enable successful data collection, analysis, and outputs.

2.1.3 Intermediate Outcomes:

With the variation - and the one year extension - the project is nearly back on its original timetable, despite delays in fieldwork due to the Covid-19 pandemic. As such, the planned outcomes remain achievable and appropriate to the aims of the project.

Without being too optimistic, the 'slow research' beginning to the project has contributed to outstanding team development. The research team is respectful, collaborative, and supportive while also challenging one another. Despite the turn-over, the group has been an absolute joy to work with.

2.1.4 Project Monitoring and Reviews:

The project monitoring plan is producing evidence that is credible and meaningful. Ongoing monitoring takes place through activity leads submitting monthly activity reports every two months. These updates cover:

- Status of activity component;
- Report on activities over past 2 months;
- Plan for next 2 months activities;
- Request help/input from the team.

Following the submission of these updates, a MERL meeting takes place with all research partners to discuss the reports. The reports and meetings support the discussion of project progress, challenges/opportunities, support adaptive management, and capture lessons learnt, success stories, and impacts. These progress reports are also used to feed into this annual report and to generate content for the project newsletter, website, and social media. With the turnover of staff, and pandemic related restrictions, there has been a gap in the submission of these reports. However, our monitoring plan has restarted as of May 2022 and a 2-monthly MERL meeting was held in June 2022.

An annual project meeting between all research partners also takes place as part of the project monitoring plan. This allows for in-depth discussion of findings and data, and creates opportunities for collaboration and synchronisation between the different activity components. The 2022 annual meeting will be held in Sydney in September.

If substantial changes are suggested to the activities and outcomes the project team debates and discusses the viability of the proposal. To date, proposed changes have been minor, prompted by initial findings and fieldwork.

2.2 Reflection on gender strategy

The gender strategy has effectively informed hiring of the enumerators undertaking Activity 2 data collection (i.e., census of 2100 households), with approximately 50% male and female enumerators. This attention to the gender of enumerators is critically important given the gendered nature of farming and labour in Northwest Cambodia. Relatedly, our key partner (Partners for Rural Development (PRD)) is a female-led and gender-focused NGO operating at the intersection of agriculture and development, ensuring consideration of the gendered factors shaping farmer

decision making. Further, the initial data collection for Activity 1 and 2, confirms the appropriateness of the gender focus and strategy. Therefore we do not have any revisions to the gender strategy.

2.3 Reflection on capacity building strategy

As this is the first annual report, there are no learnings from the previous reporting period with regard to the capacity building strategy. Despite this, the last year of project operations and the project variation has confirmed a project-wide commitment to capacity building and support - especially for early career researchers. The project has hired 8 enumerators to collect data for Activity 2, with the project providing English language lessons in Battambang and funding for Masters studies at NUBB if the enumerators would like to undertake studies that align with the research project.

Through regular meetings, and especially due to the commitment of the Activity leaders, the entire project team has worked capacity building into day-to-day project operations. While a relatively simple act, this continual consideration of capacity building (primarily but not exclusively for early career project members) confirms the appropriateness of the strategy.

2.4 Recommended adaptations to the research strategy

All of our recommendations were recently submitted in the project variation.

3 Delivery on project activities, outputs and intermediate outcomes

3.1 Activities and outputs

Table 1: Project activity table

No.	Activity	Outputs/ milestones	Completion date
Activity 1			
1.1	Establish conceptual basis for extension as social relations; establish baseline understanding of partners and local extensionists	Review article and Project Brief on social relations	Yr2 Q2
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	<ul style="list-style-type: none"> Review article in draft format: "Farmers, place and power – agricultural extension in northwest Cambodia". Research assistant hired to assist with NVivo data analysis from the previous project. Submission of an abstract for a special issue on "Climate Change and Critical Agrarian Studies" from the Journal of Peasant Studies, entitled "Agricultural science in service of farmers' values: 'bounded' best practices". 		
1.2	Establish knowledge and preconceptions of key individuals involved in the extension sector in NW Cambodia	Empirical article and Project Brief on the knowledge of Cambodian extensionists concerning farmers' social relations.	Yr2 Q4
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	<ul style="list-style-type: none"> Hired research assistant in Cambodia to assist with data collection. Interviews planned to start in August. Special issue paper to be drafted following completion of data collection. 		
1.3	Elicit from world leading extensionists their views on the individuals 'missing' or 'behind the scenes' from classic extension research and practice	Empirical article and Project Brief that explore 'missing extensionists', with emphasis on the social relations that have not tended to be published but which are hypothesised to be central to successful extension efforts.	Yr2 Q4
Comments from previous reporting periods (if relevant)	N/A		

Comments for this reporting period	<ul style="list-style-type: none"> • Ethics application for Activity 1, "The missing extensionists: The role of social relations in agricultural extension" was approved by the Research Ethics Committee at the University of Melbourne (Project ID 22166) . • Two day Zoom workshop held in September 2021 to discuss Activity 1 with the team. The feedback was then integrated and improved the methodology also drawing on the analysis of 330 cassava farmer interviews from the former project. • 18/30 semi structured interviews with Southeast Asian international extensionists have been completed. • Submission of special issue proposal to the Journal of Agricultural Education and Extension. 		
1.4	Deliver a subject on 'social methods for community engagement'	Online training tools and Project Brief	Yr2 Q4
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	<ul style="list-style-type: none"> • Delivery of two-week intensive subject "Social Research Methods for Community Engagement" planned for September 2022. • Co-delivered between UBB and Unimelb. • The subject syllabus proposal has been edited and received approval from all Activity leaders. 		
Activity 2			
2.1-2.5	Completion of village mapping across 6 different sites in Battambang, and a household census across these sites	Publish baseline report and briefing note	Yr2 Q4
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	<ul style="list-style-type: none"> • Ongoing collation and response to comments from the research team for the household census questionnaire. • Tested questionnaire with farmers in the field sites. • Recruited fieldwork team (7 Research Assistants based in Cambodia) and organised field site visits during May 2022. • Held Household Census workshops online with the Cambodian research team, on Tuesday 7th and Friday 10th June 2022. • Team is ready to go to the field to collect census data, now awaiting questionnaire feedback from the team. • Ariane Utomo is planning to join Van Touch and team for field-sites visits in Battambang and Pailin, 16 July – 25 July 2022. 		
Activity 3			
3.1	Survey large areas of cassava, maize and rice to determine what farmers have done and what farmers are doing on their lands	Survey three large areas of lowland and highland crop production and management practices over a two-year period.	Yr2 Q4
Comments from previous reporting periods (if relevant)	N/A		

Comments for this reporting period	<ul style="list-style-type: none"> Field crop survey questionnaire templates from cassava, maize and rice have been prepared, and translated from English to Khmer. Descriptions of Activity 3: 'Farmer Field Survey and Crop Check' with respect to Aims and Sub-Research Questions, Approaches, Outputs, and Outcome and Evaluation were added into the Project Proposal document. Farmer interview questionnaire is drafted and being reviewed by the project team. Crop Check data-gathering templates for cassava, maize and rice were prepared. Study areas of the upland and lowland farming systems in the Northwest were identified and selected. 		
3.2	Establish the factors affecting yield and gross margin components under actual farmers' circumstances	Trained 300 collaborated farmers to work with the project team to benchmark their assigned 300 fields regularly from planting to harvesting over two years.	Yr2 Q4
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
3.3	Identify how identified factors lifting productivity and profitability can be trialed by a large number of farmers according to their own interests and evaluations	Academic article establishing identified factors depressing and lifting crop yields and gross margins. Consulted improved cropping practices with farmers to be trialed on their own fields. Documented seasonal and annual trend information by crops and its production areas	Yr2 Q4
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
Activity 4			
4.1	Establish the diverse economic practices and strategies used to build livelihoods for women and men in smallholder households in NW Cambodia (including paid and unpaid work on farm and off farm, and in the household)	Empirical article and Project Brief that explore household livelihood practices, past changes in village lives and livelihoods pertaining to agricultural practices, with attention to differentiating the experiences of women and men, and different sectors of the community.	Yr2 Q3-4 – Yr3 Q3-4
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection has not yet begun. Preparation has included: <ul style="list-style-type: none"> Revised research questions, methods and outputs for this Activity Began collating range of tools and approaches to inform workshop design Research assistant hired to complete annotated bibliography as foundation for literature review on diverse and community economies of NW Cambodia, and to inform development of field tools for this activity. 33 papers reviewed so far in this period 		

4.2	Determine the existing material and non-material assets and resources available, and/or being utilized to support diverse livelihoods practices	Empirical paper and Project Brief that explores key factors in community wellbeing, 'good' livelihoods, and investigates the experiences of past agricultural extension efforts in relation to the needs, desires, and aspirations of women and men in smallholder households.	Yr3 Q3-4
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
4.3	Identify the needs, desires, and aspirations of women and men in smallholder households (i.e. what does a 'good life' look like?)	Empirical paper and Project Brief that contrast knowledge and on-farm practices, exploring and explaining any differences between reported and actual practices.	Yr3 Q3-4
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
4.4	Establish what farmers have done and what farmers are doing to achieve aims for a 'good life'	Project report and Project Brief on the extent and nature of existing experiences with agricultural extension.	Yr3 Q3-4 - conclusion
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
Activity 5			
5.1	Establish how smallholders are connected to, including the types of relations that smallholders have, with emphasis on their efforts to expand connections	Baseline report and Project Brief documenting the social relations of households in the study, highlighting the number, strength, types, and nature of connections available to smallholder households.	Yr4 Q1-2
Comments from previous reporting periods (if relevant)	N/A		

Comments for this reporting period	<p>Data collection has not yet begun. Preparation has included:</p> <ul style="list-style-type: none"> • Revised Activity 5 research questions, methods and outputs, outcomes and evaluation. • Commenced discussions with Social Network Analysis experts at MQ. • Began collating references relating to Social Network Analysis. • A social network analysis meeting was held with Andrea, Van , Paula and Andrew. We brainstormed the appropriateness of SNA for the project and when it could be best used. Rather than conduct a broad SNA beginning with the census we felt it would be better used around the intervention stage of the project when we track how a particular intervention effects particular social relations. We also discussed the possibility of adding a material element to SNA - so tracking how material and social relations change through particular interventions. • An RA conducted a scoping study on the use of Social Network Analysis in agriculture. She produced a brief report, a list of key articles and an analysis of those articles. 		
5.2	Categorise the types of enabling and disabling relations experienced by smallholders	Empirical article and Project Brief that explore the enabling and disabling relations experienced by smallholder households, with attention to the inter-household relations and differentiated experiences of family members by gender and age. The outputs will analyse the nature and impacts of connections, with emphasis on determining whether the intentions, awareness, and practices of recipients have been affected by their relations - establishing how and which social relations are influencing existing practices.	Yr4 Q1-2
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
5.3	Quantify the extent and flows of information, intentions to change, and practice change via existing social relations.	Empirical article and Project Brief that quantify and analyse the spatial extent of social relations, including the content of flows through those connections and the impacts on awareness of agricultural technologies, intention to adopt, and implemented practice change of recipients (i.e., secondary impacts).	Yr4 Q1-2
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		

5.4	Analyse existing social relations, their nature, and their impacts on smallholder households, with emphasis and analysis on households that are (un)successful with regards to avoiding detrimental relations	Empirical article and Project Brief that identify the strategies, capabilities, and opportunities that allow farmers to avoid disabling social relations and/or to expand or strengthen enabling social relations. This will include exploring the types of smallholders or individuals who are (un)successful at avoiding disabling social relations, including knowledge of the incapacities or circumstances that farmers associate with disabling relations or the inability to forge enabling social relations.	Yr4 Q1-2
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
5.5	Identify key farmers (i.e., nodes of social relations) who affect the practices of other farmers	Empirical article and Project Brief that identifies the types of farmers who most effectively contribute to practice change amongst other smallholder households, including why they are so effective.	Yr4 Q1-2
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
Activity 6			
6.1	Connect farmers with supporting individuals and organisations at the CCBAC	Empirical article and Project Brief that analyses what happens (i.e., to awareness, intentions to act, and/or practice change) when farmers are offered the opportunity to expand their supportive social relations.	Yr4-5
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection has not yet begun. Preparation has included: <ul style="list-style-type: none"> • Begun discussions with University of Wageningen academics about a visit, where Brian will spend time working on the methodology and sampling for this Activity • Key challenges include the measurement of interventions relative to wider changes, if some individuals participate in multiple interventions, and how to distinguish the impacts. 		

6.2	Rigorous comparison of what supporting individuals and organisations believe relative to farmers.	Empirical article and Project Brief that contrast 'what farmers are seeking' with 'what supporting organisations do or are offering'.	Yr4-5
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
6.3	Identify gaps in extension services in NW Cambodia and attempt to fill those gaps at the CCBAC if possible	Empirical article and Project Brief that identify what can and cannot be accomplished collaboratively.	Yr4-5
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
6.4	Account for smallholders experiences with commercial actors (i.e., lenders and vendors), their influences on farmer behaviours, and knowledge of how these actors positively and negatively contribute to practice change	Empirical article and Project Brief that explore knowledge of the commercial sector and its influence on agricultural extension, with emphasis on micro-credit lenders and the role of indebtedness.	Yr4-5
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
Activity 7			
7.1	Identify which models or methods of agricultural extension are most effective (measured by changes to knowledge and/or on-farm practices) with different types of smallholder in Northwest Cambodia	Empirical article and Project Brief that analyse and compare social relations and on-farm practices before/after project interventions.	Yr6 Q1
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
7.2	Spatially map expanded social relations amongst smallholder farmers including changes to awareness, intention to act, or on-farm practices amongst extended social relations (i.e., secondary diffusion)	Empirical article and Project Brief that compare farmer knowledge and on-farm practices, with methodological implications for the agricultural extension sector.	Yr6 Q1

Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
7.3	Identify practice change attempts that do not eventuate, are partially implemented, or prompt adoption of an entirely different practice	Empirical article and Project Brief that contrast provision with social relations as a model of agricultural extension, with emphasis on primary and secondary impacts, including cost-benefit comparison of different extension models.	Yr6 Q2
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
7.4	Establish the monetary and non-monetary values of on-farm practice change for participating farmers and farming households	Empirical article and Project Brief that contrast the economics of different models and methods of agricultural extension, including cumulative monetary and non-monetary benefits for participants and for those connected via social relations (i.e., primary + secondary impacts).	Yr6 Q3
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		
7.5	Establish the combined monetary and non-monetary value of secondary diffusion of practice change resulting from the project	Final project report and Project Brief on the effectiveness of expanded social relations as conduits of information, intention, and practice change in the context of agrarian change and agricultural extension.	Yr6 Q3
Comments from previous reporting periods (if relevant)	N/A		
Comments for this reporting period	Data collection not yet begun		

3.2 Summary of progress towards anticipated outcomes

Table 2: Summary of project outcome information

Intermediate outcomes	Results Summary	Evidence
Reconceptualization of agricultural extension and historical analysis of the political economy of agricultural extension in Northwest Cambodia	Data to inform reconceptualisation 50% complete (Activity 1). Data Collection for Activity 2 underway. Data collection for Activity 3 is being refined and will begin once Activity 2 is underway.	Data collected and stored in secure project data cloud platforms. Drafted academic article on the political economy of agrarian change and agricultural extension in Northwest Cambodia.
Context of the gendered knowledge-practices of smallholder households in the case study area outlined	Activity 4 begins in years 2-3	
Appreciation for the spatial distribution of enabling and disabling social relations associated with successful farmer households	Activity 5 begins in years 2-3	
Actively support the practice of extension by extending smallholders' connections with enabling individuals and organisations	Activity 6 begins in year 3-4	
Empirical analysis and comparison of perceived and material impacts, including the primary and secondary impacts of past provisionist extension versus extension via social relations	Activity 7 begins in year 5-6	
End of project outcomes	Results Summary	Evidence
Complement and/or replace the globally-dominant but limited model of agricultural extension reliant on the transfer of technology-capital and information	Results for this outcome will be generated in Year 6	
Unanticipated outcomes	Results Summary	Evidence
None for this reporting period		

3.2.1 Gender outcomes

Central to our analysis is a sufficiently large sample to meaningfully analyse the differentiated experiences of agrarian change amongst different genders. This is central to the sampling and initial data collection, particularly for Activity 4 as listed in the table above.

3.2.2 Capacity building outcomes

Van Touch was trained by Paula Satizábal and Brian Cook on Qualitative Analysis Method using NVIVO. This training will be invaluable to the development of empirical articles.

Van Touch and Sophanara Phan received training on how to manage and maintain the project Facebook Page. Team members have now started posting and sharing contents, starting with cassava pests and diseases and their management practices (for example, Red Spider Mite, Cassava Mosaic Disease and Cassava Witches-Broom Disease). This training contributes to project outcomes pertaining to communicating project impact and stakeholder engagement within Cambodia.

3.3 Key Findings/Knowledge generation

Given this is the first annual report, our project has focused on methodological adaptations and data collection. With no activities completed there are no key findings or knowledge generation possible for this reporting period.

3.4 Most Significant Change observed by the project team this year

This story reflects the strong and ongoing partnership that the project has with Partners for Rural Development. This partnership was established with the previous project, *Uptake of agricultural technologies and best practices amongst farmers in Battambang and Pailin provinces* (ASEM/2013/003) however the project has built upon this foundation by strengthening and growing this partnership during this reporting period.

ACIAR Outreach could target cassava policy/decision makers and/or Cambodian NGOs with this communication.

Responding to farmer needs

In the northwest region of Cambodia, in Battambang Province, Sokunthea Nuon, the Country Director of [Partners for Rural Development](#) (PRD), sits with a cassava farmer. They have just been working together to complete the cassava harvest. Men and women work alongside each other, with women chopping the roots and documenting measurements, and men pulling the roots and loading the heavy sacks onto the truck. On some farms, yields have decreased from 60 tonnes to a meagre 10 tonnes. Sokunthea is discussing two key concerns of cassava farmers; soil condition and pests and diseases.

Before partnering with ACIAR and the University of Melbourne, Sokunthea had little knowledge about cassava planting and production. Since this partnership was established in 2017, her knowledge and experience has increased significantly. Sokunthea can now work with farmers and give advice to them about cassava planting and farm management. When she interviews farmers she takes pictures of pests and disease, and knowledge about how to manage them. The farmers, she tells me, are eager to learn about how to manage diseases. 'They feel happy when we share concerns and solutions with them', she says. Farmers tell her that often they do not know where to go when they have problems.

Responding to farmer needs and giving back to farmers and the community is a priority for PRD. Many NGOs, Kunthea tells me, never come back to the community.

PRD's engagement with farmers is set to continue with the *Next generation agricultural extension project* (funded by ACIAR). Seven new researchers have just joined the team at PRD and are about to conduct a household census and field crop survey. Sokunthea has been involved in training the team and passing on her knowledge and experience. She is also supporting the team by liaising with local authorities. She tells me that it is a fantastic team and is looking forward to seeing what new knowledge is produced.



Image 1: Sokunthea cutting cassava roots during harvesting
Photo Credits: Brian Cook



Image 2: Sokunthea with new research assistants, Dr Van Touch and Sophanara Phan
Photo Credits: Van Touch

4 Partnerships

Purpose, values and culture

During the project inception phase the research team discussed and agreed upon a number of research principles and ways of working. These discussions took place at the two inception meetings held in 2021. The principles relate to the areas of :

- Research ethics and integrity;
- Fair and beneficial research;
- Respectful relationships;
- Genuine partnerships;
- Power relations.

These principles have been documented in a 'ways of working' document which we see as a 'living document', open to reflection, revision and development. We acknowledge that the research team is cross-cultural, multidisciplinary, with multiple organisations as partners and team members based in multiple locations.

The purpose of partnership is defined as the drawing together of people with unique competencies and expertise to work together on a shared objective, while acknowledging that individuals and organisations will have different interests, resources and pressures. This purpose has not changed in the last reporting period.

Further reflection on the ways of working and project team culture will take place at the annual project meeting in September 2022.

Working relationships

The responsibility and ownership of Macquarie University has increased with the recruitment of Nicholas Harrigan to lead Activity 7. There are now 2 academic members of the research team based at Macquarie University. The University of Adelaide no longer has any responsibility or ownership in the project.

The team turn-over, surprisingly, confirmed the strength of the research team, with the entire research team involved in shortlisting, interviewing, and hiring the new research fellow. A critical consideration throughout this process was to ensure that the 'ways of working' remained strong and collegial. The new team members are fantastic individuals who fit the team while adding to the skillset of the research program. The decision to hire the research fellow was unanimous by all Activity leaders, which speaks to the effective way the team identifies and responds to challenges.

Monitoring

Given the early phase of the project and initial data collection, the partnerships shaping this project have been primarily 'inward facing'. The team continues to nurture the different parties involved in the research beyond the Activity leaders, including the PRD, NUBB and CIRAD.

The team is making the most of the online environment for discussion, exchange and team building. We hold meetings every two months, with each activity leader and partner provided the opportunity to report on challenges, opportunities, and needs. To date, these meetings have successfully allowed for continued relationship building with partners, while also ensuring that, once fieldwork could resume, data collection would begin.

5 Risk Management

Project implementation

The research team has encountered no issues or changes in contextual or direct risk to project participants, members, and ecosystems. Quite the opposite, having waited to resume fieldwork, we have implemented a precautionary approach to fieldwork (not wanting to risk becoming a vector for Covid-19 within rural villages) and can now resume planned data collection with risk, roughly, as they were pre-Covid.

A very significant risk that was experienced by the research team involved team turn-over. The research fellow was hired in Europe, the project manager resigned due to health challenges, and the Activity 7 leader (Alexandra Peralta) withdrew unexpectedly. This was a concerning series of events, which the research team considered openly - asking whether project leadership was to blame and if changes were needed. The team felt that, while unfortunate, the loss of Alexandra Peralta was minimal given her withdrawn involvement and the loss of the project manager blunted due to her dedication in having established a great deal of project operations in her year of employment.

The loss of the research fellow was significant, with the project leader having to absorb that role during his teaching period and at the time of a project variation. It took approximately 6 months to replace the fellow, which was a great relief to the Project lead.

While a risky period with regard to project operations, the team has weathered these events, included new members with additional expertise, and resumed the project following reduction of the Covid-19 pandemic limitations. In light of the one-year extension in the submitted variation, the project team is operating well and the project itself is on track.

Next user risks

No new knowledge on risks or potential harm to next users of project outputs have been identified in this reporting period.

6 Appendices

Appendix 1: Publications

No publications from this reporting period.

We share a methodology from Activity 2 - Household census questionnaire. Data is currently being collected for this activity. This is shared only for reporting purposes and is not for public use.

Appendix 2: Personnel table

Name	Gender	Agency	Discipline	Roles in project and specific responsibilities for project outputs	% Time on Project	ACIAR Funding of time input %
Brian Cook	M	University of Melbourne	Human Geography	Project Leader; responsible for everything	30	0
Katharine McKinnon	F	University of Canberra	Human Geographer	Co-investigator; responsible for community economies	10	0
Andrew McGregor	M	Macquarie University	Human Geographer	Co-investigator; responsible for analysis of system change	20	0
Ariane Utomo	F	University of Melbourne	Demographer/Geographer	Co-investigator; responsible for inter- and intra-household dynamics, focusing on gendered social relations	20	0
Nicholas Harrigan	F	Macquarie University	Quantitative Sociologist	Co-investigator; responsible for analysis of impacts and household economics	20	0
Van Touch	M	PRD	Agricultural Systems	In-country leader; responsible for in-country organisation and partner relations	100	100
Srean Pao	M	University of Battambang (UBB)	Agricultural scientist	Co-investigator; responsible for analysis of on-farm practices and collaboration between project and UBB.	10	0

Kunthea Nou	F	Partners for Rural Development (NGO)	NGO CEO	Co-investigator; responsible for farmer household data collection.	100	100
Manika Yim	F	Partners for Rural Development (NGO)	NGO Accountant/Bookkeeper	Co-investigator; responsible for project book-keeping and farmer household data translation and transcription.	100	100
Florent Tivet	M	(CIRAD)	Agricultural scientist	Co-investigator; responsible for on-farm demonstrations	20	0
Research Fellow	?	University of Melbourne	Human Geographer	Post-doc	100	100
Caitlin Finlayson	F	University of Melbourne	Human Geographer	Project manager and Research Fellow	50	50
Nicholas Read	F	University of Melbourne	Statistician	Post-doc	20	100
Sophanarra Phan	M	Pailin Department of Agriculture (PDA)	Agricultural scientist	Responsible for collaborations with Battambang and Pailin agricultural departments	100	100
PRD Social Scientist 1	N/A	Partners for Rural Development (NGO)	Social Scientist	Data collection	100	100
PRD Social Scientist 2	N/A	Partners for Rural Development (NGO)	Social Scientist	Data collection	100	100
PRD Social Scientist 3	N/A	Partners for Rural Development (NGO)	Social Scientist	Data collection	100	100
PRD Agricultural Scientist 1	N/A	Partners for Rural Development (NGO)	Agricultural scientist	Data collection	100	100

Alexandra Peralta (University of Adelaide), Andrea Babon (University of Melbourne) and Paula Satizábal (University of Melbourne) have resigned during this reporting period. They have been replaced by Nicholas Harrigan (Macquarie University) and Caitlin Finlayson (University of Melbourne) respectively. A Research Fellow (University of Melbourne: Post Doc) to replace Paula Satizábal was being recruited at the time of writing this report.

Appendix 3: Annual Budget

With the change in personnel, costs were reallocated from the University of Adelaide to Macquarie University. This meant that the research operation costs for the University of Adelaide changed to zero and doubled for Macquarie University. Pay period 3 was changed due to the gap following resignations at the University of Melbourne. Payments to Nicholas Reed in periods 4-12 were lowered from \$5000 to \$1000. There is one underspent in regards to a research assistant from pay periods 1-3 which needs to be reallocated.

The submitted project variation, especially the one-year 'no cost' extension, has significantly altered the budget, with these changes documented in the variation files.

Appendix 4: Intellectual Property

An assessment of intellectual property was conducted on 01/06/2022. No significant issues have arisen in the reporting period.