



APRIL 2024 | ISSUE 8

# PROJECT UPDATE

A NEWSLETTER FROM THE NEXT GENERATION  
AGRICULTURAL EXTENSION PROJECT



## Collaboration and data integration

FROM BRIAN COOK

PHOTO: ACTIVITY 6 CO-DESIGN WORKSHOP

Hello/ជំរាបសួរ (Chom Reap Sour) from the research team of the *Next Generation Agricultural Extension Project: Social relations for practice change*. This quarter the team held a workshop to finalise the design of Activity 6 which will undertake a series of collaborations with farmers. Activity 3B has also been working alongside maize, cassava, and rice farmers collecting data on farming practices. We also facilitated a GIS teaching session at NUBB. April is a special month for the team with the celebration of Khmer New Year/បុណ្យចូលឆ្នាំខ្មែរ. We wish everyone and their families peace, prosperity and happiness for the coming year!

## Project Overview

FROM CAITLIN FINLAYSON

This project aims to produce an innovative model of agricultural extension founded on expanding enabling social relations, which will complement and/or replace existing models of extension based on the provision of technology, capital and information.

Duration: January 2021 to December 2026

Target Areas: Cambodia

Budget: AUD\$4.5million

Project Leader: Associate Professor Brian Cook, The University of Melbourne

# Activity 6 Co-Design

FROM BRIAN COOK

PHOTOS: CAITLIN FINLAYSON

A 3-day co-design workshop took place between February 5-7 at the National University of Battambang (NUBB). This workshop focused on the design of Activity 6 which will undertake a **series of collaborations with farmers**.

Part 1 of the co-design process took place at NUBB in July, 2023 ([read more here](#)) as Activity 6 aims to utilise the experience and knowledge of existing local partners to implement the farmer collaborations.

7 research team members from Australia joined the workshop, including all Activity Leads from the University of Melbourne, Macquarie University and the University of Canberra. Research team members from the Pailin Provincial Department of Agriculture, Forestry and Fishers (PDAFF) and Partners for Rural Development (PRD) were also in attendance.

On Day 1 Activity Leads, Research Project Officers and partners presented the major findings and insights from Activities 1-5. For example, Dr Nicholas Harrigan from Macquarie University (see top image) presented insights from the 2507 household census (Activity 2) on the challenges that households face, broadly categorised as low income, wellbeing (basic, hopes, independence from family, and healthcare), low productivity and specific concerns/issues.

In another presentation, Pherom Song from PRD presented insights from 54 household interviews mapping farm relations (see middle image) on Activity 3A data. These insights covered what relations (human & social, historical, non-human, environmental and economic) produce a farm, and what the positive and negative influences are on a farm.

Days 2 and 3 were spent in participatory dialogue sessions (see bottom image), discussing the criteria for selection and applying that criteria to the potential collaborations. The workshop produced a short list of collaborations which will be finalised over the coming months.







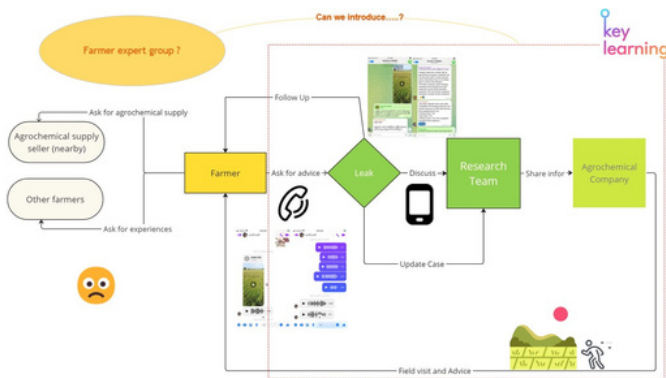
## Understanding farming practices

FROM VAN TOUCH, PANHALEAK CHAY AND SOPHANARA PHAN

PHOTOS: PANHALEAK CHAY AND SOPHANARA PHAN

Throughout this quarter, the research team has finalised collecting quantitative data by utilising field logbooks to document farming practices and resources employed in maize, cassava, and rice production. The primary objectives of Activity 3B are to acquire an in-depth analysis of the **agricultural practices and farm resources** employed by farmers in Northwest Cambodia and to explore the underlying reasons behind their **decision-making processes**.

We now have data from 204 households - 46 maize farmers, 58 cassava farmers, and 100 rice farmers.

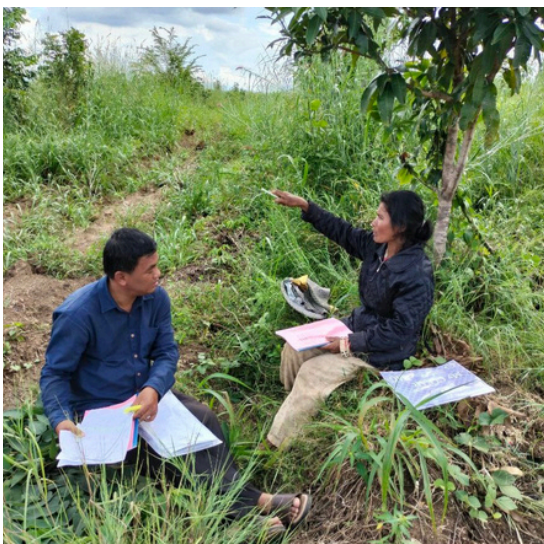


Collaborating closely with farmers allowed the research team to build trust and strong connections. Through these interactions, farmers felt comfortable sharing various challenges they face in farming, including issues related to weather conditions, pests and diseases, and seed quality.

Record-keeping efforts (see top and bottom images) and regular crop checks have helped farmers become more conscious of farm input usage and encouraged them to carry out more frequent crop checks. For example, when a female farmer noticed damage to her rice crop, she carefully investigated her fields for signs of disease outbreaks and contacted our team (see middle image) to seek assistance.

Our Senior Project Officer Leak verified the crop issue with the farmer, shared the information with the wider team (which includes a government agronomist) and found a reputable agrochemical company to further investigate the crop disease, confirm the diagnosis and offer actionable advice.

Reflecting on this experience, the team plans to establish farmer expert groups. These groups will serve as platforms for connecting interested farmers with local agricultural government staff, NGOs, and farm input companies, fostering collaborative problem-solving and facilitating knowledge exchange within the community.



# Visualising data at NUBB

FROM LE-ANNE BANNAN AND CAITLIN FINLAYSON  
PHOTOS: CAITLIN FINLAYSON

23 participants attended a one-day **Introduction to QGIS** course held on February 2 at the National University of Battambang (NUBB). Amongst the participants were undergraduate and post-graduate NUBB students, 9 Next-Gen Research Project Officers, the Chief of Agronomy from PDAFF, 3 NUBB Faculty staff and 2 students from CE-SAIN, Royal University of Agriculture.

The course introduced geospatial information systems and technology as well as an opportunity to use an industry level standard software (QGIS) to conduct basic spatial analysis. It was facilitated by Le-Anne Bannan and assisted by Dr. Van Touch, both from the University of Melbourne (see middle image).

Content covered the foundations of geographic information science (GIS) and spatial analysis, examples of their use in a Cambodian context and how to create a basic site-selection map in QGIS with open-source data and software.

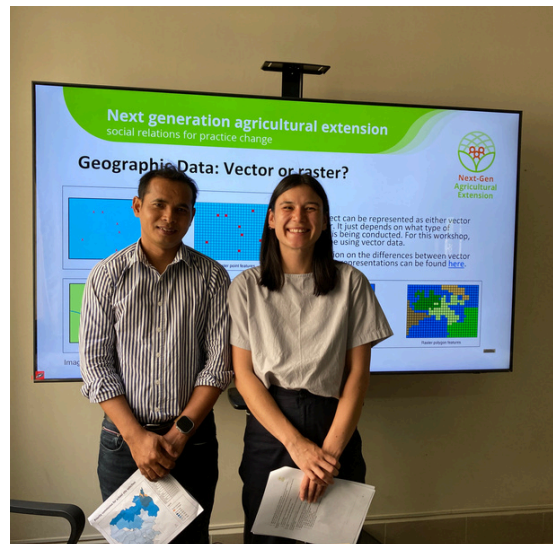
Feedback from the students indicated that they learnt about: the history and meaning of GIS, the usefulness of GIS to organise and visualise data, and how to use the QGIS interface to add data, save and edit layers, open attribute tables and create maps. Participants said that they found the course very useful and were encouraged to apply this approach to their own studies.

*"I would like to practice continuously because I think it is really useful for my life learning"*

*"GIS is a platform for indicating places and to study geography. As well as for understanding world changes for example deforestation, climate change affects or other purposes."*

*"I would like to understand the land use of a village in Battambang".*

All 18 participants who completed the feedback survey said that they would attend a course like this again and would recommend it to a fellow student or colleague.



## Project Partners



មន្ទីរកសិកម្ម រុក្ខាប្រមាញ់ និងនេសាទ ខេត្តប៉ៃលិន  
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MACQUARIE  
University  
SYDNEY AUSTRALIA

## Resources

Check out the latest articles, blogs and research outputs which are shaping the project:

### **Engaging youth in future farming in Cambodia**

Authors examine rural school students' perceptions of a career in farming finding that engagement with educational agricultural activities significantly influences students' relatedness to the local environment and perceptions toward agriculture's impact on the local community. These in turn have a positive effect on attitudes toward a career in farming.

[Read more](#)

### **Smallholder cassava farmer strategies in Cambodia**

Beban and Gironde bring a gender lens to the question of how farmers adapt their livelihoods to navigate the volatile global market and ecological conditions of cassava production in Kampong Thom and Ratanakiri provinces. They find that the agrarian transition is neither linear nor unidimensional, and that it contributes to deepening class, gender and ethnic divides.

[Read more](#)

