

Note and Agenda

FARM School Write-shop
2 - 3 July 2019

Introduction

Agriculture is a key economic sector in Cambodia. It employs 26.71% (i.e., about 15.76 million) of the country's population and contributes about 26.66% of its GDP. Subsistence agriculture is the main income source for most of the country's rural population. Smallholder farmers generally have one rice crop each year, mostly rainfed since cropped area equipped with irrigation is estimated at only 10%.¹

The sector is affected by various problems including limited infrastructure, underdeveloped value chains, water resource and land degradation, and plant pests and diseases. It is also highly vulnerable to climate-related hazards like droughts, floods, storms and strong winds. But while climate poses risks to agricultural production, interannual and inter-seasonal variability can also provide valuable resources. This means that information on climate fluctuations could help inform decisions for effective management of risks and resources.

Currently however, climate information from the Department of Meteorology (DOM) is not fully integrated into farm-level planning and decision-making due to the following gaps:

- Lack of mechanisms to identify farmers' climate information needs and requirements
- Limited access to climate information by farmers
- Lack of guidance in processing climate information into potential impacts and advisories
- Weak or non-existent feedback mechanisms between end-user farmers and DOM

The FARM School process aims to address these gaps in forecast generation and application in the agriculture sector. Designed as a season-long series of interfacing among forecasters, extension workers, and farmers, the FARM School is a multi-tier learning-by-doing capacity building program customized for farmers in specific areas. RIMES' FARM School curriculum and training materials is customized for Cambodia context through the 2-day writeshop with representatives from the Directorate of Agriculture (GDA), Department of Meteorology (DOM), Agriculture Research Institutes, Extension Office, Farmer Cooperatives/Associations.

FARM School Curriculum

The standard curriculum consists 13 interactive learning modules, organized into 4 sections, and delivered over 1 season.

1. Human dimension of the learning process
Module 1 Learning contract

2. Weather and climate, and forecast products
Module 2: Understanding weather and climate
Module 3: Familiarization with weather forecasts and climate outlooks
Module 4: Process of rain formation
Module 5: Introduction to weather measuring instruments and simple instrument fabrication and calibration

¹ Raitzer, D.A., L.C.Y. Wong and J.N.G. Samson (2015). Myanmar's Agriculture Sector: Unlocking the Potential for Inclusive Growth. ADB Economics Working Paper Series. <https://www.adb.org/sites/default/files/publication/177652/ewp-470.pdf>

Module 6: Field visit to weather observation station

3. Application of climate information in farm operations
 - Module 7: Field observation on weather and plant pests, diseases, and growth conditions
 - Module 8: Using climate information in setting up planting strategies
 - Module 9: Field water balance concept and its application in assessing irrigation requirements and flood risks
 - Module 10: Flood and drought control programs using low-cost and locationspecific technologies to manage impacts of extreme events
 - Module 11: Orientation on SESAME and familiarization with SESAME products

4. Assessing the economic value of climate information
 - Module 12: Assessment of economic value of climate information
 - Module 13: Evaluation and Preparation for FARM School Field Day

Agenda

Table 1 outlines the agenda for the writeshop.

Table 1. Writeshop Agenda

Time	Activity	Facilitator
Day 1		
08:30-09:00	Registration	
09:00-09:30	Welcome Remarks Background on the Activity	GDA RIMES
	Introduction of Participants	All
09:30-10:00	Group Photo and Tea Break	
10:00-12:00	FARM Field School Process and Modules	GDA and RIMES
	Topic 1. Human Dimension of the Learning Process	
12:00-13:00	Lunch	
13:00-15:00	Topic 2. Weather and Climate, and Forecast Products	GDA and RIMES
15:00-15:15	Tea Break	
15:15-16:15	Topic 3. Application of Weather Information in Farm Operations	GDA and RIMES
16:15-16:30	Wrap-up	
Day 2		
09:00-09:15	Recap of Day 1 and Overview of Day 2	
09:15-10:15	Topic 3. Application of Weather Information in Farm Operations (continued from Day 1)	GDA and RIMES
10:15-10:30	Tea Break	
10:30-12:00	Topic 3. Application of Weather Information in Farm Operations (continued)	GDA and RIMES
12:00-13:00	Lunch	
13:00-15:00	Topic 4. Assessing the Economic Value of Climate Information	GDA and RIMES

Time	Activity	Facilitator
15:00-15:15	Tea Break	
15:15-16:15	Discussion on Way Forward and Next Steps	GDA and RIMES
16:15-16:30	Closing	