



Sustaining and Enhancing the Momentum for Innovation and Learning around the System of Rice Intensification (SRI) in the Lower Mekong River Basin

National Inception and Planning Workshop Report

Cambodia

Phnom Penh, 21-22 May 2014



Organized by National IPM Programme of General Directorate of Agriculture (GDA), Ministry of Agriculture, Forestry and Fisheries (MAFF), Cambodia in partnership with ACISAI Center AIT Thailand Food and Agriculture Organization (FAO) and Oxfam



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ABOUT THE PROJECT

SRI-LMB (www.sri-lmb.ait.asia), an EU-financed and AIT (www.ait.asia) led project, aims to contribute towards enhancing the resilience of rainfed farmers confronting climate change in the Lower Mekong River Basin (LMB) region. The purpose is to increase crop yield, productivity and profitability on sustainable basis at smallholder farmers' field in rainfed areas of LMB. The project through its action aims to address the food security and livelihood issue of smallholder farmers by developing adaptive measure against climate change. The action is being implemented in four LMB countries: Cambodia, Laos, Vietnam and Thailand. The total period for implementation is 60 months (2013-2017).



CONTACT DETAILS

SRI-LMB is a regional collaborative effort that brings various stakeholders together working at global, regional, national, and local level. The project is led by the Asian Institute of Technology (AIT) in partnership with FAO, Oxfam, SRI-Rice of Cornell University and University of Queensland together with many national partners coming from national universities, NGOs and ministries.

For better collaboration and coordination at all level, the project has established regional, national and local offices, which are called Regional Coordination Unit at (PCU), Project Management Unit at country level (PMU) and Local Management Unit (LMU) at provincial level (LMU), respectively. The newly established Institute-wide Center of AIT Asian Center of Innovation for Sustainable Agriculture Intensification (ACISAI) hosts the regional coordination unit (PCU) of the project. The General Directorate of Agriculture (GDA) hosts the country office (PMU) for Cambodia. The local management units of Cambodia, i.e., LMUs are located in Provincial Departments of Agriculture of Takeo, Kampot and Kampong Speu provinces. Contact details of key project personnel and staff working at regional, national and local levels are given below:

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ACRONYMS

ACISAI	Asian Centre of Innovation for Sustainable Agriculture Intensification
AIT	Asian Institute of Technology
CEDAC	Cambodian Center for Study and Development in Agriculture
CENTDOR	Centre for Development Oriented Research in Agriculture and Livelihood System
CFPAR	Central Farmers' Participatory Action Research
CSOs	Civil Society Organizations
DRC	Department of Rice Crop
EU	European Union
FAO	United Nations Food and Agriculture Organization
FFS	Farmer's Field School
FPAR	Farmers' Participatory Action Research
GDA	General Directorate of Agriculture
IPM	Integrated Pest Management
LMB	Lower-Mekong Basin
M&E	Monitoring and Evaluation
MAFF	Ministry of Agriculture, Forestry and Fisheries, Cambodia
MEI	Monitoring Evaluation and Innovation
MEL	Monitoring Evaluation and Learning
NGOs	Non-Governmental Organizations
OA	Oxfam America
PCU	Program Coordination Unit
RGC	Royal Government of Cambodia
RUA	Royal University of Agriculture
SRI	System of Rice Intensification
SRI-LMB	System of Rice Intensification in the Lower Mekong River Basin
TORs	Terms of Reference
ToT	Training of Trainers



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EXECUTIVE SUMMARY

Cambodia's agriculture continues to play an important role in supporting economic growth, ensuring equity, securing food security, and promoting development of the rural economy. The Royal Government's vision is to modernize Cambodia's agriculture, based on a new approach and with changed scope and pace, to transform this sector from an extensive stage of development, i.e. primarily depending on expanded use of available resources (such as land and other natural resources) and traditional agricultural inputs, into an intensive stage of development that primarily depends on the application of techniques, new technologies, research and development (R&D), mechanization and increased capacity of irrigation to improve productivity, and diversify into high value crops and other agricultural products including livestock farming and aquaculture while taking into account the need to ensure efficient management of land and sustainability of environment and natural resources. The promotion of commercialization and agro-industry development is foreseen to increase added-value of agricultural products and income of people.

In line with the above, a National Inception and Planning Workshop of the SRI-LMB project in Cambodia was organized on 21-22 May 2014 at Himawari Hotel, Phnom Penh, Cambodia. The workshop was attended by some 44 persons (08 women) from the Department of Rice Crop, SRI Secretariat, Project Management Unit, Royal University of Agriculture, and Provincial Departments of Agriculture, Local Management Units, District Agriculture Offices, civil society organizations (CSOs), the Asian Institute of Technology and the Food and Agriculture Organization.

In the planning part of the workshop, project partners from Kampot, Kampong Speu and Takeo provinces deliberated, discussed and presented their work plans for the entire duration of the project with a detailed emphasis on the first year (2014). These plans were critiqued and summarized as a draft for finalization. In addition, for effective governance and to provide the strategic direction to the project implementation, the proposal for establishing a National Steering Committee was discussed. A draft Term of Reference was proposed to be circulated and finalized in the coming weeks. Finally, dates of the forthcoming capacity building exercise for farmers and trainers in the Central Farmers Participatory Action Research were discussed and finalized to pave the way for commencement of Participatory Action Research in the wet season of 2014.



1. BACKGROUND

1.1 CONTEXT

The Cambodia National IPM Programme will start to implement the AIT-led, FAO and Oxfam partnered, EU-financed project entitled: "*Sustaining and Enhancing the Momentum for Innovation and Learning around the System of Rice Intensification (SRI) in the Lower Mekong River Basin*" (<http://www.ait.ac.th/news-and-events/2012/news/ait-signs-agreement-with-eu-for-3-4-million-euro-project>) that became operational in February 2014. The main objective of the project is to enhance resilience of rainfed rice farming systems involving small-scale farmers confronting climate change in Lower Mekong River Basin (LMB) countries (Cambodia, Lao PDR, Thailand and Vietnam). The project will address food security challenges within the context of impacts from and adaptation to climate change by stimulating local innovation using SRI and Farmers' Field School (FFS) approaches and to enhance research capacities to continue to support this development. The project organized its Regional Inception and Planning Workshop from 09-12 April 2013 involving various stakeholders from all four countries, and compiled and analyzed the needed background information from each of the four implementing countries. The National Inception and Planning Workshop (NIPW) organized on 21-22 May 2014 at the Himawari Hotel; Phnom Penh, Cambodia was a follow up to the regional activity as to further proceed with the development of the implementation plan in Cambodia

1.2 PURPOSE

The purpose of the National Planning and Inception Workshop was to ensure wider national consultation on the objectives and activities of the project prior to implementation of activities in three selected provinces of Cambodia namely Takeo, Kampong Speu and Kampong Speu.

1.3 OBJECTIVES

The National Planning and Inception Workshop was organized by the FAO IPM office of Cambodia and the Project Management Unit (PMU) and was expected to:

- Kick-start the project in Cambodia by informing a larger audience about the project, its goal and objectives;
- Revisit the project definition, goals, overall work plan for Cambodia;
- Finalize the country strategy paper;
- Formulate the country-specific log-frame, responsibility of each stakeholder and budgeting; and,



- Form a National Steering Committee/Technical Working Group comprised of representatives from government, local partner CSOs, research institutions and universities.

Please refer to Annex 1 for the detailed schedule of the National Inception and Planning Workshop.

1.4 PARTICIPANTS

Participants included representatives from the Department of Rice Crop, SRI Secretariat, Project Management Unit, Royal University of Agriculture, Provincial Departments of Agriculture, Local Management Units, District Agriculture Offices, and CSOs, National IPM Team, AIT and FAO. (The list and contact details of each participant are given in Annex 1.)

2. SUMMARY OF SESSIONS

The two-day workshop was divided into two major sections: Plenary and Planning sections. The plenary session set the stage for planning part of the workshop and helped to share the project's aims, purpose and objectives, both regionally and nationally, to seek views from various stakeholders. The planning part, a closed session involving only immediate implementation partners, helped the provincial teams to develop detailed work plans with support from the project coordination and management unit.

2.1 OVERVIEW OF THE SRI-LMB PROJECT

The first presentation in plenary session was delivered by Dr. Prabhat Kumar, Regional Coordinator SRI-LMB Project, PCU AIT, Thailand. He provided the background on the genesis of the project, "Sustaining and Enhancing the Momentum for Innovation and Learning around the System of Rice Intensification (SRI) in the Lower Mekong River Basin". The overall objective of the project is to contribute to enhance resilience of rainfed farmers confronting climate change. The project aims to increase crop yield, productivity and profitability on sustainable basis of smallholder farmers in rainfed areas. The project is being implemented in Laos, Thailand, Vietnam and Cambodia. In Cambodia, project sites have been identified in three provinces: Kampot, Takeo and Kampong Speu. The major activities and timeframe of the project include planning and preparation for 12 months, implementation of field activities and M&E study during the 12th-48th months and documentation and delivery of policy options for dialogue during the 36th-60th months. The organization structure for implementing the project was explained. The vision of "food-secure, better nourished and prosperous rice farmers, producers and consumers in the Asia/Pacific region who benefit equitably from a vibrant, innovative and transformed rice sector that is more productive, efficient and environmentally sustainable by 2030" was emphasized.



2.2 SYSTEM OF RICE INTENSIFICATION AND ACTION RESEARCH IN THE CONTEXT OF FARMERS, CAMBODIA

The next presentation in the plenary session was delivered by Mr. Kong Kea, Project Management Unit Coordinator. The history of the System of Rice Intensification in Cambodia was presented. SRI was first introduced to Cambodia in 2000 by CEDAC. GTZ was the first partner to provide funding support to CEDAC for SRI promotion quickly followed by other stakeholders like Oxfam, HEKS, Rachana, FAO and other projects. In 2005, the SRI Secretariat was established to facilitate meetings, conducting training for PDA, developing promotion materials, and collecting data for dissemination of SRI results. In early 2006, SRI was integrated into the National Strategic Development Plan (NSDP) and policy frameworks to reduce food insecurity and poverty of rural households. NGO and SRI promoters report that over 110,000 farmers have been trained and applied SRI practices with a yield increase of about 1 ton/ha. However, the adoption of some SRI practices is still difficult and limited due to lack of formal research activities investigating these cultivation practices and adaptation strategies.

For that reason, it is very important to conduct Farmer Participatory Action Research (FPAR) involving farmers, trainers and researchers to investigate the potential benefits, challenges and adaptations of SRI. In 2007, the FAO IPM programme integrated and promoted SRI through farmer participatory action research in Farmer Field Schools (FFS). FFS and action researches were conducted in Prey Veng province. Based on learning from their experiments, farmers modified SRI practices to suit their local conditions.

The SRI-LMB project will be implemented in Cambodia in three provinces including Kampong Speu, Takeo and Kampot from 2014- 2017. The major activities will include the conduct of Central Farmer Participatory Action Research (CFPAR) for each target province, organization of Farmer Participatory Action Research (FAR), conduct of post-FPAR activities, organization of exchange visits for farmers, development of extension and promotion materials, monitoring and evaluation of FPAR and post-FPAR activities, conduct of annual evaluation workshop and participation in the annual regional workshop.

2.3 RICE -BASED FARMING PRACTICE IN THREE PROVINCES IN CAMBODIA

Mr. Suon Seng, Executive Director, Center for Development Oriented Research in Agriculture and Livelihood System (CENTDOR) shared the results of the Participatory Rural Appraisal (PRA) of rice-based farming practices in the three pilot provinces. The PRA was carried out to identify and analyze key constraints of rainfed rice production systems in Kampong Speu, Kampot and Takeo. The results of the study showed that there are three types of farming systems, namely: short duration rice production, medium duration rice production and long duration rice production. Of the survey respondents, about 28% cultivate short duration rice, 45% grow medium



duration rice and 90% grow long duration rice; some farmers growing rice of different duration period. The yield of short duration rice production and medium rice production are largely affected by irrigation access, fertilizer application and application of SRI practices. The study also showed differences between transplanted and broadcasted rice production, resulting mainly from lack of field labor. The study strongly suggested that the SRI-LMB project should encourage farmers to apply SRI in their community.

2.4 MONITORING, EVALUATION AND IMPACT

Dr. Dignpal Bahadur, Monitoring and Evaluation Expert, SRI-LMB Project, PCU - AIT, Thailand started with a brief sharing on the key concepts related to monitoring, evaluation and impact (MEI). The main concepts of MEI are: 1) Monitoring is a continuous assessment of project implementation in relation to agreed schedules, use of inputs infrastructure and services; 2) Evaluation is a periodic assessment of the relevance, performance efficiency and impact both expected and unexpected of the project in relation to stated objective; and 3) M&E is useful for learning and knowledge management to replicate best practices and or highlight failures. He added that there some steps in designing a monitoring and evaluation system such as: 1) Establishing the purpose and scope, i.e., why M&E is needed and how comprehensive the M&E system should be; 2) Identifying performance questions, information needs and indicators to know what to monitor and evaluate in order to manage the project well. It is also important to plan information gathering and organization, i.e., how the required information be gathered and organized. The draft outline of the MEI protocol was shared for further feedback from the participants. The draft protocol included the objectives of MEI study, expected outcomes, methodology, structure of operationalization of study with key roles and responsibilities of the main actors. Draft parameter that the study would focus on was also shared for feedback from the participants.

2.5 DISCUSSION ON THE MONITORING AND EVALUATION SYSTEM IN CAMBODIA

Mr. Choung Sophal, Dean of Agronomy Faculty, Royal University of Agriculture (RUA) provided a general introduction of the planned Monitoring Evaluation and Learning (MEL) for the SRI-LMB project in Cambodia. The rainfed areas in Southeast Asia are chronically low productivity areas with a very high level of uncertainty and risk. The system of rice intensification (SRI) has been gaining momentum at farmers' field level, capturing their imagination by enabling them to get higher yields with reduced external inputs. SRI has potential to increase average rice yield by at least 10-15%. SRI crop is more tolerant to flooding and drought compared to conventional practices. The planned MEL study will help to analyze and understand the cause-and-effect relationships that contribute to the innovation process to facilitate SRI adaptation to local bio-physical and socio-economic conditions. The MEL will facilitate understanding of the pattern of change among different groups of



farmers due to direct and indirect effects of Farmers' Participatory Action Research (FPAR). MEL will analyze the patterns of change geographically and by social group, and devise means to make the information available to decision makers at different levels in a timely fashion and in appropriate formats. The major activities of MEL will include: 1) identification of local monitor (local surveyor), one per district and National Researcher (national supervisor), one per country; 2) provision of training to local monitors with assistance from the Regional Researcher for data collection at FPAR and non-FPAR sites; 3) provision of quality assurance of the MEL data by backstopping data collection and compilation activities, 4) analysis of data to assess change in practices of FPAR graduates by wealth, gender, topography, soil (to be carried out with support from MEL Expert and Regional Researcher); 5) taking the lead in presenting and discussing MEL learning and research findings at the annual national workshop (3 workshops for the entire project duration; one each year) and representing the country at the annual regional workshop; 6) preparation of the MEL research report (interim and final) and submission to PCU (AIT); and 7) supervision of MEL research work at country level and supporting the work on Master' s thesis and/ or internship activity of student as a part of their engagement in the MEL work.

2.6 SRI-LMB COMMUNICATION AND POLICY ADVOCACY STRATEGY

Mrs. Nguyet Bao Dang, Policy Advocacy Consultant, Oxfam gave a presentation on the SRI-LMB Communication and Policy Advocacy Strategy. Long lasting results, impact and improvement of development interventions can only be achieved if they are adopted, integrated and promoted by the government at all levels. Policy makers and policy implementers, through their decisions and actions greatly influence the livelihoods of the poor, smallholder farmers and other vulnerable groups. It is also widely recognized that only a wide-range of programme strategies targeted at multiple causes - including policy causes - will lead to reducing poverty and inequality. All of these conditions can only be fulfilled if project designers and implementers are aware of them from the beginning and have a clear approach to tackle these issues. For this reason, the SRI-LMB project has chosen the approach to work closely with Cambodian governmental agencies at all levels to create improvement in terms of food security, resilience and profitability for smallholder farmers, by setting a clear implementation roadmap and a policy advocacy strategy.

The morning session of the second day focused on gathering knowledge, experiences and expertise of the workshop participants. The insights and information will be crucial for the development of the project's policy advocacy strategy. The participants went through four main exercises: Self-reflection to understand key characteristics define smallholder farmers in Cambodia; Mind map to understand the policy environment surrounding smallholder farmers; Problem tree to analyze the root causes of the challenges - including policy challenges - confronting smallholder farmers in their pursuit of food security, resilience in the context of climate change and sustainable income generation; and Stakeholder mapping to identify who could directly influence and elicit change. Improvement and positive change can happen at district, provincial and national levels, as



long as root causes of problems are clearly seen, informed and tackled by leadership. (The detailed group workshop outputs are attached as Annex 4 to this report.)

2.7 PLANNING FOR PROJECT ACTIVITIES

Mr. Kong Kea facilitated the provincial level planning. He shared broad guidelines for preparing the plans. Participants worked in provincial groups (i.e., Kampot, Kampong Speu and Takeo provinces) to draw up work plans for the SRI-LMB project, focusing on the year 2014. Discussions would continue into the second day.

3. PLANNING ACTIVITIES

On second day of the workshop, the planning process continued with participants working in provincial groups (i.e., Kampong Speu, Kampot and Takeo) led by their respective provincial coordinators (Local Management Unit Coordinators). The groups planned for the key activities first and further divided these key activities into sub activities and sub-sub activities. This step was followed by resource planning (both human and materials).

A presentation by the three groups was held in the afternoon of the 22nd May 2014. Feedback was received from the entire group. As agreed, the work plans were taken back to the respective provinces for further deliberation and detailed discussion. The work plans were used for the development of CFPAR/FPAR training curricula.

3.1 MAJOR ACTIVITIES PLANNED BY KAMPOT, KAMPONG SPEU AND TAKEO

Major activities for three provinces for the year 2014 included the conduct of baseline survey, organization of the CFPAR, conduct of FPAR, conduct post-FPAR, organization of cross visit and Field Day and planning for the next year (see Annex 2).

3.2 CLOSING AND WAY FORWARD

The planned process led to the achievement of the objectives and expected outputs from the workshop, i.e., to kick-start the project by informing a larger audience by sharing its goal and objectives; to revisit, co-create and co-own the project activities, the project definition, goals, overall work plan for Cambodia; resource management plan and clarity on roles and responsibility of each stakeholder.



As a summary of these planning activities, a Country Strategy Paper of the SRI LMB, Cambodia would be assembled in coming days thus completing the inception and planning part of the project activities in Cambodia.

4 FORMATION OF NATIONAL STEERING COMMITTEE/ TECHNICAL WORKING GROUP

Mr. Chou Cheythyrih, FAO-IPM Project Coordinator facilitated the discussions on the formation of National Steering Committee or technical working group. The National Steering Committee is envisioned to provide strategic direction to the project work in order to mainstream Agriculture Research for Development and climate change adaptation at national level. The proposed composition of the SRI-TWG included the Director of Department of Rice Crop, Project Management Unit, Local Management Units, and representatives from RUA, Oxfam, Srer Khmer, ATSA, Rachna, HEKS, and CEDAC. The roles and functions of the SRI-TWG are:

- Provide general oversight and strategic direction to the development of work plans of the SRI-LMB project;
- Critically review project progress and results and provide guidance to the annual work plan of the project;
- Facilitate collaboration between various ongoing projects working with similar mandate in selected provinces and beyond;
- Create awareness about the project work among various government and development agencies at national and local provincial levels;
- Facilitate sharing of results of the project work with a wider audience in Cambodia.

5 Additional recommendations from the Deputy Director of NIPMP

Mr. Ngin Chhay, Director of Department of Rice Crop and Deputy Director of National IPM Programme, gave additional recommendations in his closing remarks as follows:

- Project Management Unit should have good relationship with Provincial Departments of Agriculture, Local Management Units and Local Authorities in selecting the key farmers to attend the CFPAR;
- Local Management Units should have good relationship with District Trainers and Local Authorities as to select good FPAR sites, consistent and good level of farmers attendance, obtain farmers' cooperation in the project;
- Every special topic should reflect the real problem encountered in the field and use, if needed, fresh specimen for better facilitation of the topic;
- Farmer Participatory Action Research (FPAR) should identify topics based on real problems and get specific results; (He suggested that Dr. Prabhat Kumar, PCU SRI-LMB Project to provide an orientation on field experiments.)
- The Monitor, Evaluation and Learning (MEL) should clearly address defined indicators and provide conclusions of the MEL study;



- National Technical Working Group should share their experiences - both the good and bad points - and recommendations for improving project activities;
- Technical Working Group should closely cooperate in the implementation of the project in order to achieve success and sustainability of the project.



Annexes



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33	Ms. Roath ChanSophearith	Staff	OXAM AMERICA
34	Mr. Oum Samoeun	E.O , RACHANA	012 491 064
35	Mr. Ya Phork	Staff	RUA
36	Mr. Sun Vibai	Research Assistant	RUA
37	Mr. Choung Sophal	Lecturer	RUA
38	Mr. Siv Sok leang	Translator	Sunrise Corp
39	Mr. Hy Sayonvireak	Earphones	Sunrise Corp
40	Mr. Voeung Chanthan	Agricultural officer	Takeo
41	Mr. Sok Ravuth	Agricultural officer	Takeo
42	Mr. Nhep Sorn	PDA-Director, Takeo	Takeo
43	Mr. Ouk Sokha	Agricultural officer	Takeo
44	Mr. Meas Vannak	Agricultural officer, Takeo	012 415 463



Annex 2: KEY ACTIVITIES AND TIMELINE FOR SRI LMB project, Cambodia from 2014 to 2017

SL.	Activities	2014	2015	2016	2017	
1	Baseline Survey	23-28 June				
2	Training of Trainer	01 July-31 Nov				
3	FFS and field day	36 FFS	36FFS	36 FFS		
4	Post FFS activities		36 Post FFS	72 Post FFS	72 Post FFS	
5	Provincial evaluation and	x	x	x	x	
6	National Reflection and refresher	x	x	x	x	
7	Regional workshop		x	x	x	
8	Monitoring and supervision	x	x	x	x	
9	Monitoring and Evaluation Impact and Learning	x	x	x	x	



Annex 3: KEY ACTIVITIES AND TIMELINE FOR KAMPOT, KAMPONG SPEU AND TAKEO (for the year 2014)

3.1 Kampot Province

No	Activities	Sub activities	Process (How)	When	Resources needed	Who (Person responsible)	Output
1	CFPAR						
		District selection		First week of June 2014	Project document, fuel	LMU	List of participants
		Farmer selection		First week of June 2014	Project document, fuel	LMU	List of farmers
		Site and location selection		First week of June 2014	Project document, fuel	LMU	List of location
		Baseline survey	Questionnaire development	Fourth week of May 2014	Questionnaire stationary supplies, fuel, lunch, refreshment for participants and Trainers	National Team, LMU, Trainers	Complete baseline survey
		Cropping calendar development	Group discussion	Fourth week of May 2014	Stationary supplies, computer, printer	National Team, LMU, Trainers	Complete crop calendar on rice production
		Problem identification and prioritization for training and field trials	Group discussion	Fourth week of May 2014	Stationary supplies, computer, printer	National Team, LMU, Trainers	List of problems in rice production
		Concept note and TOT curricula		June 2014	Stationary supplies, computer, printer	National Team	TOT training curricula
		Trial development with protocols	Group discussion	First week of July 2014	Stationary supplies, computer, printer, fuel, lunch, refreshment for participants and Trainers	PMU, LMU, Trainers, and farmers	Trial design for CFPAR is available
		Setting of the	Trial design	First week	Field, irrigation	National	Field layout



field trial, seedbed raising, field layout		of July 2014	source, fertilizers, manures, seed, seeding tray	Team, LMU, and participants	completed
Intensive TOT (05 days)	Training curricula	01-05 July 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, and participants	SRI rice farming
Second meeting	Training curricula	23-26 July 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, and participants	SRI rice transplanting
Third meeting	Training curricula	20-22 August 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, and participants	SRI rice transplanting
Fourth meeting	Training curricula and data sheet	06-11 October 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, and participants	First data collection (tillering stage)
Preparation for field day	Plan meeting	29 November 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, PDA, and participants	Field Day schedule
2 FPAR					
Farmer selection		Mid June 2014	Project document, fuel	LMU and Trainers	List of farmers
Site and location selection		Mid of June 2014	Project document, fuel	LMU and Trainers	List of location
Curricula for FPAR	Group discussion	First week of July 2014	Stationary supplies, computer, printer	LMU, Trainers and famers	FPAR training curricula
Opening FPAR, Seeding, broadcasting		Mid July 2014	Stationary supplies, fuel, snack for farmers and Trainers	LMU, Trainers and famers	FPAR training curricula
Field care and maintenance	Irrigation and weed control	July-November 2014	Stationary supplies, fuel, snack for farmers and trainers	LMU, Trainers and famers	Field studies
Meeting at	Group	Septembe	Stationary	LMU,	Data



	tillering stage	discussion and field studies	r 2014	supplies, fuel, snack for farmers and Trainers	Trainers and famers	collection sheet at tillering stage
	Meeting at 50% flowering stage	Group discussion and field studies	October 2014	Stationary supplies, fuel, snack for farmers and Trainers	LMU, Trainers and famers	Data collection sheet at flowering stage
	Meeting at harvesting stage	Group discussion and field studies	November 2014	Stationary supplies, fuel, snack for farmers and Trainers	LMU, Trainers and famers	Data collection sheet at harvesting stage
	Data analysis and Field Day	Group discussion	November 2014	Transportation , meals, and stationery supplies	National Team, LMU, PDA, and farmers	Field Day schedule
	Compilation of all data from 3 districts	Group discussion	First December 2014	Transportation , meals, and stationery supplies	National Team, LMU, and Trainers	
	Sharing of detailed data with PCU	Group discussion	December 2014	Transportation , meals, and stationery supplies	National Team and LMU	
3	Provincial Evaluation and Planning Workshop					
	Basic data analysis and results, interpretations available	Group discussion	December 2014	Transportation , meals, and stationery supplies	National Team, LMU, and Trainers	
	Workshop to share results across the province	Group discussion	December 2014	Transportation , meals, and stationery supplies	National Team, LMU, and Trainers	
	Seasonal reporting	Group meeting	December 2014	Transportation , meals, and stationery supplies	National Team, LMU, and Trainers	Final results
4	Reporting					
	Narrative and financial reporting to AIT	Group meeting	December 2014	Transportation , meals, and stationery supplies	National Team	



3.2 Takeo Province

No	Activities	Sub activities	Process (How)	When	Resources needed	Who (Person responsible)	Output
1	CFPAR						
		District selection		First week of June 2014	Project document, fuel	LMU	List of participants
		Farmer selection		First week of June 2014	Project document, fuel	LMU	List of farmers
		Site and location selection		First week of June 2014	Project document, fuel	LMU	List of location
		Baseline survey	Questionnaire development	Fourth week of May 2014	Questionnaire stationary supplies, fuel, lunch, refreshment for participants and Trainers	National Team, LMU, Trainers	Complete baseline survey
		Cropping calendar development	Group discussion	Fourth week of May 2014	Stationary supplies, computer, printer	National Team, LMU, Trainers	Complete crop calendar on rice production
		Problem identification and prioritization for training and field trials	Group discussion	Fourth week of May 2014	Stationary supplies, computer, printer	National Team, LMU, Trainers	List of problems in rice production
		Concept note and TOT curricula		June 2014	Stationary supplies, computer, printer	National Team	TOT training curricula
		Trial development with protocols	Group discussion	Second week of July 2014	Stationary supplies, computer, printer, fuel, lunch, refreshment for participants and Trainers	PMU, LMU, Trainers, and farmers	Trial design for CFPAR is available
		Setting of the field trial, seedbed raising, field layout	Trial design	Second week of July 2014	Field, irrigation source, fertilizers, manures, seed, seeding	National Team, LMU, and participants	Field layout completed



				tray		
Intensive TOT (05 days)	Training curricula	06-11 July 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, and participants	SRI rice farming	
Second meeting	Training curricula	28-31 July 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, and participants	SRI rice transplanting	
Third meeting	Training curricula	27-29 August 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, and participants	SRI rice transplanting	
Fourth meeting	Training curricula and data sheet	02-07 November 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, and participants	First data collection (tillering stage)	
Preparation for Field Day	Plan meeting	29 November 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, PDA, and participants	Field Day schedule	
2 FPAR						
Farmer selection		Mid June 2014	Project document, fuel	LMU and Trainers	List of farmers	
Site and location selection		Mid June 2014	Project document, fuel	LMU and Trainers	List of location	
Curricula for FPAR	Group discussion	Second week of July 2014	Stationary supplies, computer, printer	LMU, Trainers and famers	FPAR training curricula	
Opening FPAR, Seeding, broadcasting		Third week of July 2014	Stationary supplies, fuel, snack for farmers and Trainers	LMU, Trainers and famers	FPAR training curricula	
Field care and maintenance	Irrigation and weed control	July-November 2014	Stationary supplies, fuel, snack for farmers and Trainers	LMU, Trainers and famers	Field studies	
Meeting at tillering stage	Group discussion and field studies	September 2014	Stationary supplies, fuel, snack for farmers and Trainers	LMU, Trainers and famers	Data collection sheet at tillering stage	



	Meeting at 50% flowering stage	Group discussion and field studies	October 2014	Stationary supplies, fuel, snack for farmers and trainers	LMU, Trainers and famers	Data collection sheet at flowering stage
	Meeting at harvesting stage	Group discussion and field studies	November 2014	Stationary supplies, fuel, snack for farmers and trainers	LMU, Trainers and famers	Data collection sheet at harvesting stage
	Data analysis and Field Day	Group discussion	November 2014	Transportation , meals, and stationery supplies	National Team, LMU, PDA, and farmers	Field Day schedule
	Compilation of all data from 3 districts	Group discussion	First December 2014	Transportation , meals, and stationery supplies	National Team, LMU, and Trainers	
	Sharing of detailed data with PCU	Group discussion	December 2014	Transportation , meals, and stationery supplies	National Team and LMU	
3	Provincial Evaluation and Planning Workshop					
	Basic data analysis and results, interpretations available	Group discussion	December 2014	Transportation , meals, and stationery supplies	National Team, LMU, and Trainers	
	Workshop to share results across the province	Group discussion	December 2014	Transportation , meals, and stationery supplies	National Team, LMU, and Trainers	
	Seasonal reporting	Group meeting	December 2014	Transportation , meals, and stationery supplies	National Team, LMU, and Trainers	Final results
4	Reporting					
	Narrative and financial reporting to AIT	Group meeting	December 2014	Transportation , meals, and stationery supplies	National Team	



3.3 Kampong Speu Province

No	Activities	Sub activities	Process (How)	When	Resources needed	Who (Person responsible)	Output
1	CFPAR						
		District selection		First week of June 2014	Project document, fuel	LMU	List of participants
		Farmer selection		First week of June 2014	Project document, fuel	LMU	List of farmers
		Site and location selection		First week of June 2014	Project document, fuel	LMU	List of location
		Baseline survey	Questionnaire development	Fourth week of May 2014	Questionnaire stationary supplies, fuel, lunch, refreshment for participants and Trainers	National Team, LMU, Trainers	Complete baseline survey
		Cropping calendar development	Group discussion	Fourth week of May 2014	Stationary supplies, computer, printer	National Team, LMU, Trainers	Complete crop calendar on rice production
		Problem identification and prioritization for training and field trials	Group discussion	Fourth week of May 2014	Stationary supplies, computer, printer	National Team, LMU, Trainers	List of problems in rice production
		Concept note and TOT curricula		June 2014	Stationary supplies, computer, printer	National Team	TOT training curricula
		Trial development with protocols	Group discussion	Third week of July 2014	Stationary supplies, computer, printer, fuel, lunch, refreshment for participants and Trainers	PMU, LMU, Trainers, and farmers	Trial design for CFPAR is available
		Setting of the field trial, seedbed raising, field layout	Trial design	Third week of July 2014	Field, irrigation source, fertilizers, manures, seed, seeding	National Team, LMU, and participants	Field layout completed



				tray		
Intensive TOT (05 days)	Training curricula	14-19 July 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, and participants	SRI rice farming	
Second meeting	Training curricula	11-14 August 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, and participants	SRI rice transplanting	
Third meeting	Training curricula	09-11 September 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, and participants	SRI rice transplanting	
Fourth meeting	Training curricula and data sheet	24-29 November 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, and participants	First data collection (Tillering stage)	
Preparation for Field Day	Plan meeting	29 November 2014	Transportation, meals, lodging, and stationery supplies	National Team, LMU, PDA, and participants	Field Day schedule	
2	FPAR					
Farmer selection		Mid June 2014	Project document, fuel	LMU and Trainers	List of farmers	
Site and location selection		Mid June 2014	Project document, fuel	LMU and Trainers	List of location	
Curricula for FPAR	Group discussion	Third week of July 2014	Stationary supplies, computer, printer	LMU, Trainers and famers	FPAR training curricula	
Opening FPAR, Seeding, broadcasting		Third week of July 2014	Stationary supplies, fuel, snack for farmers and trainers	LMU, Trainers and famers	FPAR training curricula	
Field care and maintenance	Irrigation and weed control	July-November 2014	Stationary supplies, fuel, snack for farmers and trainers	LMU, Trainers and famers	Field studies	
Meeting at tillering stage	Group discussion and field studies	September 2014	Stationary supplies, fuel, snack for farmers and	LMU, Trainers and famers	Data collection sheet at tillering	



				trainers		stage
	Meeting at 50% flowering stage	Group discussion and field studies	October 2014	Stationary supplies, fuel, snack for farmers and trainers	LMU, Trainers and famers	Data collection sheet at flowering stage
	Meeting at harvesting stage	Group discussion and field studies	November 2014	Stationary supplies, fuel, snack for farmers and Trainers	LMU, Trainers and famers	Data collection sheet at harvesting stage
	Data analysis and Field Day	Group discussion	November 2014	Transportation , meals, and stationery supplies	National Team, LMU, PDA, and farmers	Field Day schedule
	Compilation of all data from 3 district	Group discussion	First December 2014	Transportation , meals, and stationery supplies	National Team, LMU, and Trainers	
	Sharing of detail data with PCU	Group discussion	December 2014	Transportation , meals, and stationery supplies	National Team and LMU	
3	Provincial Evaluation and Planning Workshop					
	Basic data analysis and results, interpretations available	Group discussion	December 2014	Transportation , meals, and stationery supplies	National Team, LMU, and Trainers	
	Workshop to share results across the province	Group discussion	December 2014	Transportation , meals, and stationery supplies	National Team, LMU, and Trainers	
	Seasonal reporting	Group meeting	December 2014	Transportation , meals, and stationery supplies	National Team, LMU, and Trainers	Final results
4	Reporting					
	Narrative and financial reporting to AIT	Group meeting	December 2014	Transportation , meals, and stationery supplies	National Team	



Annex 4: OUTPUTS OF GROUP DISCUSSIONS ON SRI-LMB COMMUNICATION AND POLICY ADVOCACY STRATEGY

4.1 Mediation and Self Reflection

Participants worked in three small groups to answer one question per group. All responses from each individual in the groups were included.		
Q1: what characteristics define “smallholder farmer” (SHF) in your country?	Q2: When talking about food security, climate change resilience and income, what challenges are SHFs facing in pursuing these wishes?	Q3: What are three most important improvements or changes you want to happen to SHFs?
<ul style="list-style-type: none"> - Have farming land less than 0.5 ha - Have farming land less than 1 ha - Have no animal as labor force for plowing - Do subsistent farming - No irrigation system - A big family with many family members - Widow women /disable person as a head of family - Small farming land - No irregular job - Farming land less than 0.4 ha - No animal for plowing - No irrigation - A farmer who no farming land and have no irregular job - Have less farming land - Small farming land - Small farming land, lack of general knowledge on Gender, food nutrition.. - Vulnerable to flood, drought - Farming land less than 0.5 ha - No animal for plowing - Low income - Lack of labor force - Small house - Doing subsistent farming - Lack of resource - High risk to low productivity - Know-how is limited - Use own/family members' physical labor - Small farming land and do traditional farming practices 	<ul style="list-style-type: none"> - Vulnerable to drought, - Farmer quit doing farming and migrate to city to seek for job - Child face with malnutrition - Child drop school to help their parent to earn more income - Vulnerable to drought - Farmer quit working on farming - Child face with malnutrition - Child drop school - Food insufficient, high temperature, irregular rain - Low income and high expense - Low income but high expense - Lack of labor force - Vulnerable to drought, flood - Migration - Food insufficient - Face to natural disaster (drought, flood) - Migration to earn income - Use low quality seeds - No irrigation - Unfertile soil - Lack of labor force - Migration - Food insufficient - Decrease arable land - Low income and lack of knowledge - Lack of growing technique - Lack of resource and input (seeds, land, fertilizer) - Low productivity - Food insufficient - Lack of knowledge lead to lack of ability or creativity to adapt to climate change 	<ul style="list-style-type: none"> - Train farmer on know-how and growing technique - Build irrigation system - Create market for farming products - Conduct research for new type of seeds that can adapt to climate change and diseases - Build more/rehab the existing irrigation - Train/provide more farming technique to youth - Farmer do alternative job such as selling labor - Migration into the city/abroad to get job - Follow SRI - Grow other crops - More saving for family's daily life and community - Rice yield increase - Improve soil quality - More additional income - Build irrigation - Follow SRI - Increase cropping - Apply growing technology - Exchange experience - Use appropriate seeds - Rice yield increase - More additional income - Receive new knowledge - Pure seeds (10 types) - Proper technology is SRI - Train farmer on general knowledge such as Gender, food nutrition - Create training program for



<ul style="list-style-type: none"> - No irrigation - Danger species damage crop - Having limited Knowledge on growing technique - Small farming land - Low income - Face high risk of low productivity, health, and career - Have farming land less than 0.5 ha - Plant only rice - Small land - Low income - Small house - Landless - Low income - Less farming land - Small farming land - Have many children - Having land less than 1 ha - Agriculture production is just for home consumption - Do farming for feeding family, not for sale - Practice traditional technique - Small land - Living on the margin of vulnerability (to climate change, market, health, politics) - Chronic poverty - Food nutrition insecurity - Lack of resource 	<ul style="list-style-type: none"> - Low income - Low productivity - Lack of knowledge in changing/use seeds to adapt to climate change - Depend on aid/donation - No alternative job - Decrease arable land, lack of good quality seeds, lack of knowledge, and low productivity - Lack of good quality seeds, more danger species emerge, lack of market - Use low quality seeds - Lack of natural fertilizer - Lack of growing technology - No irrigation - instable market price - lack of technology in adjusting soil quality - Lack of labor force - Expense on fertilizer - Lost income due to low productivity caused by climate change - Food insecurity - Difficult to adapt to climate change - Low income - Less yield - Flood/drought - Cheap price - Food insufficient - Low income - High risk to climate change - Lack of technique and ability to cope with climate change - Low income - Poor of resource (small land, fertilizer) - Input and cost - Irrigation facility 	<p>farmer</p> <ul style="list-style-type: none"> - Increase job opportunity/alternatives - Provide training on production technique - Create market - Provide capital support, and loan - Increase income (how to generate more income from existing land) - Market for SHF's farming products - Increase crop production - Diversify income - Increase technique in agriculture - Increase income - Create market - Training to provide more information - Create programs to address farmers' need, not donor's interest - Farmer push research agenda - Enough income - Ability to adapt to climate change - Increase price for rice production - Provide good technique - Technical capacity building - Resource improvement - Better and fair market linkage - Agri-insurance
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4.2 Understanding the Policy Environment

Group 1: Using mind map, list out current key policy agenda and practices

Result: Small holder farmer

- Increase farming productivity: pure seeds (10 types of seed), FFS training, harvest and seeding, seed promotion



- Facilitate rice export: one window services
- Climate change: drought, flood, insect pests
- Animal raising
- Gender training
- Organize farmer/producer groups: create market, purchasing, standardization, innovation

Group 2: Government's Direction

Result: Small holder farmer

- To build knowledge/capacity: provide training, subsidize agricultural input and material
- To increase well-being/better livelihood: create market for agricultural products, build irrigation system
- To create job: small handicraft enterprise initiation
- To push for agri-businessman: establish community, organizing group

Group 3: Process how agricultural policy is formulated and who are involved in the process

Result of Group 3:

The process of agricultural policy formulation:

1. Study/identify the issues/needs
2. Analyze the issues and then prioritize
3. Prepare and draft related document
4. Meeting and release the findings
5. Adjust/amend policies
6. Develop good policies for implementation
7. Implementation
8. Solution

Who is involved in the process?

1. Farmers
2. Local authorities
3. Technical departments
4. All related agricultural departments
5. Ministry of agriculture
6. University/institution
7. Businessmen/charity



4.3 Problem Tree Analysis and identification of possible solution

Group 1:

Root causes of low income:

- Domestic violence: lack of knowledge and law
- Low productivity: unfertile soil, disease, lack of irrigation, pests damage crop, seeds, climate change, low technology, harvesting
- Market: no clients, poor promotion, low standard, cheap price, low quality
- Community: weak community organizing

Group 2:

Root causes of low income:

- Low knowledge: lack of access to information, no training received, no research study
- Lack of job/career: lack of capital, lack of knowledge on alternative job
- Low productivity: unfertile soil, dependent on rain, pests damage crop, seeds
- Migration: this causes lack of labor force
- Low income but high expense
- Children drop out of school and this increases poverty, more unknowledgeable persons

Group 3:

Root causes of poor knowledge and lack of ability:

- Low income caused by:
 - low productivity due to low quality seeds, unfertile soil, disasters, lack of irrigation
 - lack of jobs
 - lack of markets because of low product quality, not enough product to meet the demand, and unstable market
 - lack of opportunity
 - located/reside in the remote area
 - lack of human resource
 - lack of access to information and communication



4.4 Stakeholder mapping and power analysis

Group 1:

<i>Interest</i>	High	-NGOs -Farmers	-Aquip (seeds) -Local authorities (village, commune, district) -Community who produce seeds	-MAFF -GDA -CARDI
	Medium	-Agricultural university		-Water resource ministry
		MOC	MOE	Company (who sell agricultural inputs)
	Low	Low	Medium	High

Group 2:

<i>Interest</i>	High	- Company		-MAFF
	Medium		NGO	
	Low			
		Low	Medium	High

Group 3:

<i>Interest</i>	High		-Aquip -Golden Seeds -CAVAC -CEDAC	-Ministry of agriculture -CARDI -Agriculture department -Agriculture office
	Medium		-Farmer -Agriculture development community	-FAO -ADB
	Low	Low	Medium	High