BRIEF REPORT

PROVINCIAL WORKSHOPS 2015 IN THAILAND

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

Venue: NFE Surin office, Tha Tum district, Surin VTDC office, Tron district, Uttaradit
Date: 13-14 March 2015, Surin 16-17 March 2015, Uttaradit

ABOUT THE WORKSHOP

Asian Center of Innovation for Sustainable Agriculture Innovation (ACISAI), Asian Institute of Technology in partnership with Provincial Non-formal and Informal Office of Surin and Vocational Training and Development Center for Thai People along the Border Areas, Uttaradit province, Ministry of Education (MoE) Thailand, i.e., the local management units of SRI-LMB in Thailand, organized a two-day workshop in both provinces providing a platform for the smallholder rainfed farmers and their community to share their learning and experiences they gain during Farmer’s Participatory Action Research (FPAR) conducted in wet season 2014. This opportunity was also utilized to prepare plans for the next cycle of FPAR for wet season 2015.

OBJECTIVE OF THE WORKSHOP

♦ Sharing and learning of the productivity gain both in terms of yield and net profit from FPAR experiments conducted using SRI idea, i.e., “more with less” by farmers
♦ Sharing of preliminary finding from monitoring, evaluation and learning study to access the benefit derived by FPAR farmers with respect to non FPAR farmers by Ubon Ratchathani Rajabhat University
♦ Prioritizing and planning the next FPAR session

WELCOME REMARKS BY PROVINCIAL DIRECTORS

In Surin province, Mrs. Orasa Supharee, Director, Provincial Office of the Non-formal & Informal Education (NFE), Tha Tum welcomed all the participants and expressed her concern, especially impact of the increasing cost of rice production and cost of food prices on smallholders and poor farmers throughout the country. She emphasized the need of capacity building and knowledge sharing platforms so that these smallholders could continue to access newer pathways to produce more with less cost and at the sometime maintain high quality produce for local and export market under the ambit of nation’s “ Sufficiency Economy” policy.

In Uttaradit province, Mr. Ars Phonhet, Director, VTDC Center, Uttaradit welcomed all the participants and highlighted the importance of such provincial workshops being effective in acquiring newer knowledge through action research findings for reducing cost of production and increasing rice yields using SRI method. He also emphasized that such gatherings helped the farmers sit together and resolve issues regarding usage of water, fertilizer and discover better ways for rice production in a more cooperative way.
DISCUSSION BY FARMERS AND THEIR VIEW

Important findings of FPARs that farmer's trainers and farmers reported during the discussion are:

With SRI
- More number of tillers per hill;
- Higher yield and less cost of production;
- High quality of grain is providing opportunity to them to sell their produce as seed; and
- Not all varieties require wider spacing, e.g., the shy tillering varieties like Black Jasmine could do well with 15 x 15 cm spacing, especially if soil is poor.

Saving in SRI Technique per Rai (1 rai=0.625 ha)
- Reduce seed rate saved about 250-500 baht;
- Reduce water use, saved 2-3 less irrigation cycle;
- Reduce agrochemicals use saved about 1000 baht;
- Reduce cost of weeding about 300 baht; and
- Reduce insect's attacks in SRI field (30 to 40%)

YIELD AND ECONOMIC TRENDS

All SRI plots where one or more SRI management practices were followed resulted in higher yield and consequently gave higher net return compared to the yield level reported in baseline and background paper submitted by Ministry of Agriculture and Cooperatives (MoAC) at the time of the project's inception workshop. Average yield of 5.63 tons/ha was received in rainfed areas of the project spanning both in Surin and Uttaradit province (n = 23) and a net return of 2,121 US$ / ha was achieved at a prevailing farm gate price. In areas where supplementary irrigation was available, a much higher yield level over 6.24 tons/ha (n = 13) with a higher net return of 1,835.75 US $/ha was achieved. These gains were possible with integration of fewer SRI management practices along with farmers existing management practices.

![Figure 1: Average net return ($/ha) and average yield (tons/ha) in rainfed and irrigated areas](image)

**SRI-I = All SRI principles**

[SRI-Locally Adopted Practice (LAP)] All SRI management principles except the 'learning factors' (seedling age, fertilization, spacing, seedlings/hill). Other factors were kept similar to that of local practice.

(Water management was not followed in rainfed areas except demonstration plots.)
SRI demonstrations conducted in Surin, where most of the recommended practices were followed (12-15-day-old single seedlings, wider spacing (25 x 25 cm) and maintenance of aerobic soil until tillering stage) outperformed all other tested combinations in rainfed areas. An average yield level of over 8.21 tons/ha was achieved, which is more than double compared to the reported yield level either by MoAC or baseline report (which is 3.35 and 3.44 tons/ha, respectively).

Figure 2: Average yield (tons/ha) and percentage increase in yield in SRI demonstration, SRI-I, SRI-LAP compared to baseline survey

Figure 3: Average net return ($/ha) and average yield (tons/ha) in Surin and Uttaradit province

Out of 48 experiments (24 in each province) planned during the CFPARs; farmers were able to complete 43 experiments. In Surin 5 experiments could not be completed due to delayed rainfall at 3 locations, whereas 2 experiments were lost due to heavy bacterial blight in mid-September due to delayed and continuous rain in these two districts at later growth stage.

KEY LEARNINGS

SRI practices are amenable to the rice production system in both provinces and able to provide better yield and net return under rainfed and irrigated system:

- With the adoption of more elements of SRI management practices higher yield levels could be achieved compared to adopting fewer practices.
- Water availability and drought are important determinants for higher yield. But SRI plants provided better response under early season drought.
- SRI suits well to the upland system (Ban Khok) and well amenable to farmers experimentation and adaptation.
- Varieties like Black Berry and Black Jasmine gave good response to the SRI management practices and resulted into higher yield and net return compared to the baseline levels.
In addition to these discussions, farmers also discussed and verified the key findings from monitoring evaluation and learning studies presented by researcher from Ubon Ratchathani Rajabhat University (UBRU), which is one of the sub-contractors of the SRI-LMB.

The MEL survey results corroborated the trends from FPAR 2014 that farmers adopting SRI practices are harvesting more and able to gain higher net return compared to farmers those who are following traditional method (non FPAR).

In addition, Oxfam based Policy and Communication officer of SRI-LMB initiated discussion with the local stakeholders for developing better policy options based on the project intervention. The outcome of the discussion would be utilized to develop evidence based policy briefs. Following questions were asked during the brainstorming session.

- *What are the problems faced by the farmers?*
- *In their opinion, how can these problems be solved through government support?*

These options would be later crystalized and shared with policy makers during the national planning and review workshop.

**SUMMARY FOR NEXT FPAR**

- All planned experiments in wet season 2015 would be set up using full set of SRI principles (as many as possible). For comparison purpose, similar area (one rai) and similar planting method (direct seeding or transplanting) would be marked in nearby field, their practices would be noted and at the end of the experiment yield and net returns would be compared.
- Single factor experiment would be only set-up on a need basis.
- Rice Berry, Black Jasmine and other important varieties having good market should be tested at more sites under SRI management.
- Monthly backstopping from provincial office would be ensured. Country office of SRI-LMB would backstop at planting, tillering, flowering and at harvesting stage. A total of 6 times backstopping would be ensured from country and provincial office.
- A pre-planting workshop (one day) would be organized to provide needed trainings on identified issues by farmers.
- FPAR diary would be further simplified and made available to farmers.
- Field experiments will begin from early June onwards.
- Project would provide drum seeder and hand weeder for experimental purposes, one set in each province.
- Soil testing would be ensured before experiment to provide need-based nutrients.
- For 1000 seed weight some small weight balance would be made available during harvesting.

**RECOMMENDATIONS BY Farmers**

- To have an agreed backstopping plan between NFE teachers and farmers. In addition, availability of NFE teachers at the time of urgency.
- Focus of learning should be more on labor saving technologies like use of drum seeders, improvement and ease in using seedling raising in seed tray.
- More training on cost effective soil improvement technologies.
- More promotional activities like training, workshop, etc. to make more people aware about the SRI and SRI LMB project.

**CONCLUDING REMARKS BY Farmers**

- The SRI techniques give new hope to smallholder's farmer that they could increase the rice yield with less input on a sustainable basis.
- The difference between yield and net return of SRI and Farmer Practice (FP) were highly encouraging.
- Farmer acknowledged the importance of raising seedlings in dry seedbed and also using younger seedling.