Innovation and learning around the System of Rice Intensification in the Lower Mekong river basin

System of Rice Intensification in the Lower Mekong river basin

The overall objective is to enhance the resilience of rainfed farmers of the Lower Mekong Basin region confronted with climate change, using the System of Rice Intensification principles.

“SRI is good for organic rice cultivation, which leads to higher yield and better price for farmers’ produce, while reducing their cost of production.”

Ms Mee Yang (SRI farmer-trainer in Lao PDR)

Context

Many of the small-scale rice farmers in the rainfed areas of Lower Mekong Basin (Cambodia, Lao PDR, Thailand, Vietnam) are poor, mostly sustaining their households through their rice production. Their livelihoods can be endangered by flooding, drought and other extreme weather events made more recurrent and severe by climate change. The System of Rice Intensification is an innovative technique that can enhance resilience of these farmers, by producing more and better rice while using fewer seeds, less water, less agrochemical inputs. It translates into more net income for the farmers.

Objectives

- To develop multi-institutional multi-stakeholder networks from local to regional levels.
- To enhance national and local research capacities, including farmer participation.
- To develop more productive and more sustainable agriculture practices, based on scientific knowledge combined with local wisdom and experiences. New methods should improve farmers’ livelihood while protecting the environment.
- To disseminate these practices, to provide training and knowledge among farmers in the region, as well as among all relevant stakeholders. This information-sharing should especially benefit the most vulnerable, including poor people, women and landless.
- To empower local farmers, through capacity-building activities and their participation in the research process.
- To generate more income for small-scale farmers to improve their household conditions, food security, and nutrition.
- To strengthen results-based policy advocacy for smallholder agriculture.

Impact

- Several capacity-building activities were organized, including training workshops and exchange visits. So far, the project has reached out to 30,000 farmers in the region. Farmers who benefited from the project training took ownership of the SRI principles. They improved their livelihood and started to share these new methods within their communities.
- Farmer’s Participatory Action Research (FPARs) activities were conducted on 405 experimenting sites in 2014, 2015 and 2016. They were set up to help researchers and farmers jointly define site-specific and low-cost techniques to improve agriculture practices.
According to results reported to ministries and verified by Universities and AIT, the average paddy yields with the new methods are 4.7 tons per hectare, which is 66% more than the regional baseline productivity. Farmers’ net profits have been almost doubled per hectare. These gains were achieved with 50% higher water productivity, 66% higher labour productivity, 30% less energy use, and increased fertilizer use efficiency.

Testimony

Ms. Thavee Yakham, project beneficiary and SRI farmer-trainer in Thailand

Ms. Thavee Yakham is one of the SMART Farmers of Northeast Thailand who opted to work with SRI ideas. She expresses appreciation that she doesn’t need to buy any additional inputs to benefit from the new technique. She participated in a season-long SRI training program organized by NFE, the Provincial Office of the Non-formal & Informal Education Center in Surin, in collaboration with AIT in early 2014. Soon she shifted from cultivating rice as per local practice, to managing her crop according to the principles of the System of Rice Intensification (SRI).

Her choice of variety was ‘Blackberry’, which fetches nearly three times high price than do local varieties because of its desirable eating and storage qualities. Even under adverse weather conditions that season, with lower rainfall in the early months, her crop stand was good. Compared to previous years, she harvested almost double the usual grain quantity, about 6 tons/ha instead of 3 tons.

She is now one of the farmer trainers who are leading farmers’ participatory action research in Tha Tum district of Surin province. She encourages other farmers in her community to join her in the innovative journey that she has started with SRI as a part of the SRI-LMB programme.

“SRI is good for me because I am able to harvest a good and profitable crop, even with less seed and fertilizers, and with less water”