

## **Adaptation of SRI in the Ayeyarwaddy Delta of Myanmar, by Metta Foundation**

With funding from CARITAS-Swiss, the Metta Development Foundation, an indigenous NGO, mounted a project introducing SRI to help cyclone-affected communities in the Delta region to recover from the extensive damage caused by Cyclone Nargis in 2009. Because agriculture and farming are the main source of food security and livelihoods for the vast majority of these communities, the purpose was to provide them with the skills and material support necessary to readily restore their farming operations.

Farmer Field Schools (FFSs) were introduced to train farmers on the principles and techniques of SRI (the System of Rice Intensification) as an entry-point methodology for restoring rice cultivation, and at the same time to demonstrate how rice yields can be sustainably increased under the prevailing circumstances.

In the 2009 rainy season, 35 facilitators trained by the Metta-CARITAS project conducted 33 FFSs in Laputta, Myaungmya, Patheingyi and Kangyidaung townships of Ayeyarwaddy division. A total of 688 farmers (617 male and 71 female) participated in these schools, averaging 21 farmers per FFS. The project distributed drum seeders and rotary weeders to the farmers to use with SRI methods on their fields.

Among those trained, 633 farmers proceeded to cultivate a total of 679 acres of rice. Three modifications of SRI were used by these farmers. Because of the rainy season, a majority used seedlings 15-20 days old, a little older than recommended, but more than 10% of the farmers did use very young seedlings, 8-10 days old. Another 10% used the drum seeder to sow seeds in lines instead of transplanting. Metta wanted to evaluate this option.

From the cultivated 679 acres, a total of 40,398 baskets (808 metric tons of new rice), worth US\$ 202,000 at the current local price, were produced. This was an enormous help to the farmers in a situation where many had not been able to resume growing rice due to the damage done by the cyclone. Use of organic matter for soil fertilization helps to mitigate the effects of salinity.

After participating in FFS training, farmers were not only able to reestablish their rice farming, but many were able with the new methods to increase their yields as well, by about 30-100% more than their usual averages in the pre-cyclone period, around 40-50 baskets (800-1000 kg) per acre. It should be noted that most of the farmers did not use any chemical fertilizers to grow this rice this time. So, by saving this cost they enjoyed increased benefits in addition to their increase in yields.

Also, at least 20% as many farmers who had not participated in FFS training also used the new techniques on their fields, cultivating about one acre each with SRI methods. They have

cultivated all together 170 acres of rice with these new methods, in addition to the area planted by the FFS farmers. Their yield came to around 10, 000 baskets (200 tons) of new rice, equivalent to around US\$ 50,000.

The current season started from December 2009, and Metta staff have begun another 33 new FFSs. From the two batches, nearly 1,000 farmers have this season started cultivating more than 1,000 acres of rice with SRI methods. The majority have used drum seeders this time, with the second largest group using 8-10 day-old young seedlings. Only a very small percentage used somewhat older seedlings, 15-20 days, which is an indication of farmer satisfaction with the results obtained from starting with younger seedlings. The labor-saving possibilities of direct-seeding are popular with farmers.

Because this is the summer season and water control is better, rice yields this time are expected to be much higher than in the preceding rainy season. Harvesting is expected to be done in April 2010.

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<http://ciifad.cornell.edu/sri/countries/myanmar/MyanMettaSumm09.pdf>