

## **Update of SRI in Myanmar**

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After being introduced in 2001 in Kachin State in the north of Myanmar, the use of SRI has continued to spread across the country. Initially it was the **Metta Development Foundation** which introduced the idea through its Farmer Field School (FFS) program in an effort to improve the basic food-security status of Kachin and Shan farmers living in the border areas where civil conflicts and war have taken a serious toll on the lives of majority of the communities living there.

Today, a number other NGOs are also actively engaged in disseminating SRI in many parts of the country. Among them, **GRET** in Rakhine State bordering Bangladesh, **GAA** (German Agro-Action) in Wa region and Ayerawadi division, and **World Concern** in Kachin, Shan and Chin states, all have a number of ongoing projects in which SRI is a major intervention to address the food security status of the communities that these organizations have been working with. Besides this, there is a consortium of 20 NGOs, (mostly local) known as the **Food Security Working Group** (FSWG) in the country which has also taken an interest in SRI, and many of these NGOs have been supporting communities with SRI methods, although on a limited scale.

SRI has recently been introduced by Metta Foundation in lowland **Ayerawadi division**, in the 'rice bowl' of Myanmar. Rice being the main crop there, grown in both the summer and wet seasons, farmers' response to SRI in this low-lying delta area has been observed to be much higher than in northern, more mountainous part of the country, especially Kachin, Shan and Chin states, where wet-season rice is practiced in just a single season.

In the delta area, where chemical fertilizers and pesticides are heavily used, constituting a major part of the cost of rice production there, farmers are desperate to try alternative methods to get out of this costly conventional system of rice cultivation. Therefore, the initial cost-saving with SRI from using no or less chemical fertilizers seems to be the immediate motivating factor for farmers to try SRI.

To disseminate SRI in Ayerawadi division, Metta has recently started an intensive three-month, season-long training on SRI near Patheingyi, the capital of Ayerawadi. Since the middle of November 2007, 24 farmers from various part of Ayerawadi division have been attending the training. During the training, the participating farmers have grown around 10 acres of rice using SRI methods which is now in the early tillering to booting stage. After the training, they are all planning to use the methods on their own fields, and at the same time will be working as farmer-trainers to share the methods with other farmers in their areas.

Since 2001, Metta Foundation has conducted more than 600 FFSs where SRI has been taught as the major strategy for rice cultivation. According to various project reports and evaluation studies conducted by Metta, more than 50,000 farmers in Kachin and Shan states who have directly participated in FFS training or have learned from these directly participating farmers are now using SRI in various degrees. While a majority of them are using the basic principles of SRI, adapting a few practices according to their capacity, at least 15% of them, or 7,500 farmers, are believed to be using the major practices of SRI.

Another 5,000 farmers are believed to be using SRI in various degrees in the working areas of the other NGOs mentioned above.

Based on 3 acres as the average area of cultivation for rice, at least 150,000 acres are believed to be cultivated in 2007 using at least some of the practices of SRI, notably young seedlings. Over 50% of these areas now use single and young seedlings, with wider spacing also common. SRI is believed to be used in full scale, with at least 5 to 6 of the practices used together, in around 10, 000 acres in the last wet season (2007). Since in Kachin and Shan states, rice is grown only in the wet season, oftentimes it is difficult to practice the recommended water management. No concrete figure is available as to how much acreage has been cultivated with SRI by farmers working with the other NGOs mentioned above. However, considering that at least 5,000 farmers working with them are using SRI to various degrees, if they grow just one acre each, the total area under SRI would increase to 155,000 acres.

Rice yields with SRI have been reported to vary significantly with the practices used. Yields are reported from 4 tons per hectare to 10 tons per hectare, with most of the averages from 5 to 6 tons per hectare. This gives farmers an increase of 100 to 300% over their baseline yields of 2 to 3 tons per hectare. In most cases, where farmers have used 5 to 6 SRI practices, they have achieved an average of 6 tons per hectare.

In the past, SRI is used mostly in the upper part of the country where rice is grown only in the wet season. Due to higher altitude there, these farmers do not generally have an opportunity to practice summer rice, for which SRI is most suitable. Now that SRI has been introduced into the lower part of the county where summer rice is the main crop, and where farmers have greater interest in SRI due to the cost-savings attainable, it is possible that dissemination of SRI would be much wider and faster in the lowlands.

At the same time, larger yield gains and greater profitability from SRI are possible in the lowlands because there is (a) better control over water management, which is a limiting factor in the wet season, and (b) more possibility for reduction in costs of production since purchased inputs are not used much by farmers in the northern areas who have little access to inputs and less purchasing power.