

Highlights from the SRI Trials in River Basin Project (RBP), Oxfam-GB, during Boro 2005-06 Season in Bangladesh

River Basin Project (RBP) of Oxfam-GB, Bangladesh embarked upon an extensive programme to improve food security of poor farmers in the char areas of Bangladesh. It has shown keen interest in conducting trials on the System of Rice Intensification (SRI) in its RBP areas in northern Bangladesh during the 2005-06 winter rice production season.

The key findings of the SRI trials were:

- ◆ Ten farmers from three districts, viz., Gaibandha, Kurigram, and Lalmonirhat, undertook SRI trials. Average SRI and non-SRI plot sizes were only 9.5 and 7 decimals.
- ◆ Six farmers used BRRI Dhan-28, three used BRRI Dhan-29, and one used Jogoroni (hybrid) variety.
- ◆ SRI farmers achieved substantial savings in seed and pesticide use. Non-SRI farmers required 174% more seed, and incurred more than double the pesticide cost. However, differences in the cost of fertilizer, irrigation and labour were nominal between the two methods, although SRI required relatively less cost.
- ◆ Agronomic findings showed that proper spacing could not be maintained due to lack of experience in managing SRI plots. Seedling age was somewhat higher than recommended (due to cold injury). Nevertheless, effective tillers were 38% higher in SRI plots, and grains per panicle were also more than in non-SRI plots.
- ◆ The average age of SRI seedlings used was estimated to be 16 days. The average age of seedlings transplanted in non-SRI plots was 37.6 days. SRI farmers transplanted at 25x25cm spacing, whereas non-SRI farmers followed the more typical average spacing of 15x15cm.
- ◆ The average number of grains per panicle in SRI plots was 168 against 125 in the case of non-SRI plots. The number of grains per panicle was 34% higher for SRI plants.
- ◆ Average yield in SRI and non-SRI plots were 6.61 and 5.27 MTs/ ha respectively. SRI plots had thus 25% more yields. Production period was also shorter in the SRI plots.
- ◆ Analysis of results showed that net returns from SRI were 78% higher than from non-SRI plots. Benefit:cost ratios of SRI and non-SRI were 2.5:1 and 1.7:1, respectively, i.e., economic returns were 150% more than cost with SRI, compared with 70% more with standard practice. SRI was thus more than twice as profitable.

Based on results and discussions the following key recommendations were made to achieve better results in the upcoming rice seasons.

- Organise a 'lessons learned' workshop to evaluate performance of the first season's trials, and to plan for the next trial
- Training of farmers, NGO and DAE field staff on SRI concepts and practices.
- Improved irrigation management through community-based and rights-based approaches.
- Farmers' field days and cross-visits to disseminate the SRI approach.
- Strengthen the role of NGO and DAE field staff in SRI advocacy and promotion.