

SRI farmer-Surendra Masti

1. Personal Details

Surendra Masti is 38 years old and a farmer by occupation. He lives in Mahadeiput village of Koraput district. He has studied up to class 10th. His family consists of his mother, two sisters and three children. Since last 20 years he has been fully engaged in agriculture as it is the only means of livelihood for the family.

2. Paddy Cultivation:

He owns 12 acres of land out of which 2 acres are low land, 1 acre medium land and the rest 9 acres are uplands. He depends on monsoon for agriculture activities as there is no other means of irrigation. If there is failure or irregularity of monsoon, it is a difficult period for the family. Out of his total landholding he raises paddy in only 6 acres of land (2 acre low land, 1 acre medium land and 3 acre up land). Yield from up land is very low i.e. 4 to 5 quintal per acre and in the low lands it is 11 to 12 quintals per acre. But the yield feeds the family only for six months and for the other half of the year they have to purchase paddy for consumption.

3. SRI Adoption:

Surendra got an opportunity to attend trainings on SRI organized by Pragati in 2006 but he was not at all convinced. Again before Kharif 2007 he participated in a training on SRI & Sustainable Agriculture. In the mean time he had seen another farmer of a nearby village adopting SRI and got impressed by increased yield. He was tempted to try out for himself though with a lot of doubt in his corner of heart. He decided to do SRI in only 40 cents of medium land in Kharif 2007.

He stuck to the practices he had learnt during training. He had prepared the land with drainage channels so that the field wouldn't be flooded with water, raised a nursery bed to prepare seedlings applying cow dung compost and vermin compost. He had prepared seedlings from 700gm of *Khandagiri* variety of seeds. He prepared the seedbed, covered with the soil mixture and after broadcasting the seeds covered the bed with vermicompost. Transplantation was made when the seedlings were 12 days old. He also maintained proper spacing (25 sq.cm .- Line to line and plant to plant). After ten days of transplantation he first weeded the land by using a weeder and subsequently did it three times at an interval of 12 days each.

The inputs he used for manuring were green manuring (sun hemp) and 50 kg. of cow dung compost. He applied cow dung compost after each weeding. Regarding the use of implements he prepared the marker locally. He could get the weeder as Pragati has provided support of a few weeders in the area. He also used to consult Pragati field workers. Surendra observed that there were no pest attack or plant diseases. He harvested 3 quintals of paddy from that patch of land.

He has adopted SRI in 1 acre in Kharif 2008. He has used 2 kg. of seed treated in brine solution and raised a seed bed. As the monsoon was a bit delayed this time all the agricultural activities were deferred. He transplanted 12 days old seedlings and did weeding 4 times. He had applied only organic manures. This time things are beyond the control of the farmer as monsoon rains was quite



unpredictable and stopped suddenly when the plants were in fruiting stage. There is also no facility for irrigation to save the crops. He feels that this year he wouldn't be getting good harvest either in traditional or SRI method.

4. Innovations and modifications: (If any innovations and /or modifications made in adoption of practices and/or implements)

The wooden marker for proper spacing of plants was prepared locally by farmers.

5. Benefits of SRI: (Narrate what are all the benefits that farmer could perceive in conventional Vis-a-Vis SRI in the same piece of his land)

Surendra is however convinced that SRI offers certain advantages over traditional method of paddy cultivation. He was previously using 24 kg. of seeds in that patch of land in conventional method where as for SRI he had raised only seedlings from 700gm of seeds out of which he used only 50% of seedlings. He also observed that there was no pest and diseases but previously in traditional method there was at times plant disease like leaf blight and pests like stem borer .Of course weeds were more but due to weeding by weeders the land could get green manure. There is less requirement of water in SRI as compared to traditional method. He could observe that there was less requirement of labour as the whole family was engaged in weeding in traditional method where as he could do it alone in 2 to 3 hours with the help of a weeder.

There was also on an average of 10 to 25 tillers where as in traditional method there were 2 to 3 tillers. The panicles were also long and the number of chaffy grains was negligible. Above all the most important difference he could observe was increase in yield. He harvested 3 quintals of paddy from 40 cents of land where as he used to harvest 1.5 to 1.75 quintals from the same patch in traditional method.

6. Constraints in SRI Adoption: (Narrate the constraints that the farmer faced while adopting the SRI practices from nursery till harvesting)

The most important constraint for Surendra was that he couldn't convince himself of planting only one seedling and discouragement by the fellow farmers of his village. As he adopted for the first time in Kharif 2007 he had to consult Pragati field staff more frequently but in Kharif 2008 he could manage himself. He now believes that once a farmer starts adopting the practices there wouldn't be much problem for him. However the farmer has to stick to transplantation of seedlings 8-12 days old, water management and timely weeding.

7. Lessons learnt: (Based on his adoption of SRI)

After practicing SRI for two consecutive years Surendra has learnt that

- SRI can help increase productivity with less seeds, less water and organic practices.
- It requires less labour for weeding as compared to weeding in traditional method.
- Less vulnerability to pest attacks and diseases as the rice field is not flooded with water and the plants are healthy.
- Water management is an important factor in SRI.SRI can be the best method if there is facility for controlled irrigation.
- A single seedling can bear so many tillers.

8. Suggestions: (In his opinion to improve the method as well as the ways and means to adopt SRI easily by farmers on a large scale)

- Awareness generation among farmers on practices and techniques as SRI involves change of practices as compared to traditional method.
- Government as well as NGOs should take initiatives for promotion of SRI through awareness generation, trainings and demonstrations for make believe.

- Government should support for irrigation facilities and provision of organic inputs at subsidized rates.

9. Comparative table: (Presenting variations in different aspects of conventional and SRI methods for e.g. Nursery, management practices, yield parameters, cost of cultivation, net profit).

Difference in practices and yield as observed by the farmer in 40 cents of medium land where he has adopted SRI in Kharif 2007.

Practices	Traditional method	SRI method
Amount of land	0.40 cent	0.40 cent
Land type	Medium land	Medium land
Water source	Rain water	Rain water
Seed variety	Khandagiri	Khandagiri
Seed used	24 kg	700 gm. Before treatment in brine solution
Preparation of nursery	Ploughed a patch of land ,applied cow dung manure and sowed seed	Prepared raised seedbed 6ft long,2ft wide and height 6 inches, applied cow dung manure and vermin compost
Land preparation	Ploughing Rs -200	Ploughing,apply green manure dhanicha and ploughed again, prepared land with drainage channels Rs- 250
Manures	Cow dung compost	Cow dung compost
Transplantation	Put 3 to 5 seedlings at one place after seedlings are 45 days old	Planting 12 days old seedlings
Spacing of plants	No proper spacing	25 sq. cm. (plant to plant and line to line)
Weeding	Twice Manually	4 times by weeder
Pests and diseases	disease like leaf blight and pests like stem borer	Nil
Tillers	2 to 3	10 to 25 tillers
Yield	1.5 to 1.75 quintals	3 quintals after excluding chaffy grains

10. A couple of his field photos

