

## Laying the foundation for a new practice

Today agriculture is passing through a crucial phase. Over the past 50 to 60 years, the focus of all agricultural development has mainly been on maximizing yields coupled with increasing specialization in production and ever larger farm sizes. Although yields have increased substantially contributing to increase in the ratio of total production but the small and marginal farmers and the environment have become victims at the alter of sacrifice. The ever increasing costs of cultivation due to dependency on external inputs, fluctuations in market prices coupled with vagaries of monsoon have made agriculture based livelihoods unviable.

This is the story of Dibakar Jani, a marginal farmer who has successfully experimented with a new technology to increase production from the same field where the farmer used to sow and forget till harvesting since the yield was negligible. As we dive through his initiatives we find the inputs he used, the costs involved and the lessons he learnt. In June 2006 Dibakar had the opportunity to be a part of 32 member team of farmers who received field based training cum demonstration on Organic practices and SRI (System of Rice Intensification) technology of paddy cultivation. "I was so much excited that I at once made up my mind to experiment with it whatever may be the output." Says Dibakar.

Dibakar Jani is a resident of Dayanidhiguda village, 8km away from the district headquarters at Koraput. He lives with his wife Bhagyabati, two sons and two daughters. His eldest daughter has studied up to primary classes and son has not qualified through matriculation .Now both of them help their parents in agricultural activities. The younger son and daughter are studying in high school. Dibakar has no land of his own. He grows paddy in a piece of govt land (half acre) i.e. only during rainy season. If the nature is merciful and there is no disaster, the yield he gets, support the food requirement of his family for only two months. For the rest period of the year, he has to depend on wage labour since he has no alternate means of livelihood.

In June 2006 Pragati, Koraput had organised field based training cum demonstration programme on SRI paddy cultivation and preparation of organic manures and pesticides. Back home, Dibakar decided to experiment with the new technology in half acre of land which is mortgaged with him by Sri Mugudi Santa of his village. Dibakar has paid a sum of Rs 2000/- for a period of three years.

At first he prepared the land and sowed sunhemp (Dhanicha) seeds and after one month he ploughed the field for green manuring.He arranged the seed bed measuring 10ft. long, 2ft. wide and 6 inch height and sowed 2 kg.of *Umuria chudi* variety of seeds after proper processing. According to existing practice of SRI technology the seedlings are transplanted within 8 to 12 days, but he was a bit late by 4 days due to sudden cessation of rains. He planted the seedlings one by one according to the spacing made before where as in the traditional practice there is no specific distance between either two rows or seedlings and a number of seedlings are planted together. Since he was doing it for the first time, he couldn't maintain the distance of 25 cm.from plant to plant and line to line. It was a little bit closer, so he couldn't use the weeder for weeding and he had to engage wage labour.

The difference was quite visible and it was a new experience for Dibakar. He was so delighted that he used to count the tillers. “There were minimum 50 and maximum plants had 100 to 120 tillers”. The panicles were also quite healthy. He has applied only organic manures i.e. 4 quintals of compost and 1 quintal vermin compost in total. For water management he was totally dependent on rain water. However in the fruiting stage he had to lift water through motor pump since rains stopped all on a sudden.

In last week of September the crop was ready for harvest. He got 4 quintals of paddy and another quintal was husk because there was delay in watering and the rain had stopped during the fruiting stage. However compared to traditional method of cultivation Mugudi Santa (real owner of the land) sowed 45kg of seeds and harvested 80 kg to 1 quintal of paddy from the same land and also had to invest in chemical fertilizers where as Dibakar has harvested almost 4 times from 2 kg of seeds by improvisation in skill. Though there are some gaps and little bit labour intensive since both the farmer and Pragati were experimenting for the first time, it has increased the confidence of Dibakar and his faith in organic practices. Now he is giving extra care to his vermin compost pit and motivating other farmers to adopt organic practices. The Agriculture department has also recognized Dibakar as a progressive farmer. The extra yield will ensure food security for his family for a period of another 4 months. Now he won't be searching for wage labour and has invested in summer vegetable crop. In another three months time he will start earning from sale of vegetables. Henceforth he has decided to use SRI method rather than traditional one. The success of Dibakar has inspired other farmers in the locality and 28 farmers are practicing the technology in this kharif.

The story of Dibakar can set example for small and marginal farmers.

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