

SRI Can Withstand Drought

“Ame dhana karu thilu, kintu emitia dhana kebe kari na thilu”, (We were growing paddy but has never grown in this method....) says Abhimanyu Ota, a farmer from Godipalli village in Nayagarh District who adopted SRI for the first time. This SRI farmer during an interaction held on 18th Nov 2011 said that this is the first time in his life he is witnessing such a wonderful experience and expects to have a bumper harvest.

Insufficient rainfall has affected agricultural activities in 17 out of 30 districts and the spectre of drought looms over the state for the second successive year. According to the Agriculture Department, Govt. of Odisha, a minimum of 34 blocks in 16 districts have received less than 50% rainfall this year.

Amongst all, Nayagarh is one of the worst affected districts in the state. After initial rain in the first week of June there was absolutely no rain till the second week of July. Most of the farmers in the district had started sowing their land by mid of June. But due to lack of rain, growth of the crops became stunted. The farmers were not able to do transplanting till the second week of July.

Despite of this natural vagary, farmers in Godipalli and neighbouring village of Nayagarh district speaks a different story. The 190 farmers who have adopted SRI for the first time are happy with their crop fields. They claim to have a good harvest from their fields this time in contrast their fellow members who had undertaken paddy cultivation in conventional method.

As has happened in most parts of the district, few farmers from these villages could transplant paddy under the conventional method due to delayed rainfall. But, farmers who came forward to adopt SRI were able to undertake transplantation. Even though, transplantation could be done only during the last week of September, this didn't have any adverse affect on the plant growth as other cultural practices like weeding; water management and manuring were undertaken in time. As per teh SRI farmers, paddy grown under this method has higher tolerance to drought condition in comparison to conventional paddy. This gets evidenced looking at the huge variation in number of tillers per hill and number of grains per panicle found in the SRI and conventional fields.

- **Number of tillers per hill in case of conventional fields is drastically less in comparison to SRI fields** - Conventional field : 8 - 10 tillers per hill vs. SRI field: 34-67 tillers per hill
- **Number of grains per panicle** - Conventional field : 110 – 190 Vs. SRI field : 220 – 280

The severe impact of the drought on the conventional paddy can further be witnessed by looking at the vacant fields where there is no crop where as no such instance could be found in case of SRI.



The difference between SRI and conventional paddy fields can be seen from the below mentioned pictures, taken from two consecutive plots in Godipalli village.



Agriculture is dependent mostly on the local climatic conditions. Amongst all the crops, rice is more vulnerable to the fluctuating climatic conditions. However, at this crucial juncture of time, when erratic rainfall has posed a threat to agriculture, SRI (System of Rice Intensification) has emerged as a successful innovation to help the small and marginal farmers to tackle this problem.

(This experience is drawn from a project intervention i.e., “Paddy productivity enhancement through package of agriculture practices including SRI” being implemented by Centre for World Solidarity with support from TRIPTI, Panchayati Raj Department, Govt. of Odisha in collaboration with two local organisations, BOJBP and NIRMAN.)