

Entry No. IRR-0134

Category	: International Rice Research Conference
Select Theme	: Sustainable and equitable farming systems
Endorsement email	:
Keyword 1	: System of Rice Intensification (SRI)
Keyword 2	: Sustainable intensification
Keyword 3	: Sustainable management practices
Title of Entry	: Technological evaluation at farmers' peril: Sage of SRI adoption under multiple deterrents in Odisha, India
Presenting author	: Debdutt Behura
Presenting author email	: d_behura05@yahoo.co.in
Co author 1	: Surajit Halder
Co author 2	: Ashutosh Pal
Co author 3	:
Co author 4	:
Co author 5	:
Co author 6	:
Co author 7	:
Co author 8	:
Co author 9	:

Co author 10	:
Co author 11	:
Co author 12	:
Co author 13	:
Co author 14	:
Affiliation presenting author	: Orissa University of Agriculture and Technology, Bhubaneswar, Odisha, India
Affiliation 1	: Ph.D Scholar of the IPPAE, Justus-Liebig University, Giessen, Germany
Affiliation 2	: Ph.D scholar, Visva- Bharati, West Bengal, India
Affiliation 3	:
Affiliation 4	:
Affiliation 5	:
Affiliation 6	:
Affiliation 7	:
Affiliation 8	:
Affiliation 9	:
Affiliation 10	:
Affiliation 11	:
Affiliation 12	:
Affiliation 13	:

Select only one type of presentation

: 15 minute oral presentation

Abstract

: Technological interventions coupling productivity improvement, was not rightfully acknowledged at Odisha in terms of rice yield underperformance. Low irrigation potential, spatiotemporal disparity in rainfall pattern and relentless confrontation with biotic and abiotic stresses has been jeopardizing rice production in recent years. System of rice intensification (SRI) proclaimed to stand alone under aforesaid constraints was introduced in the state during early 2000 with many hopes especially among marginal and small farmers for realization of higher production horizon. Nonetheless, the present scenario of patchy adoption pattern has necessitated this comprehensive study on dynamics and determinants of adoption of SRI. Increased SRI area allocation is observed at the expense of reduced number of adopting farmers. The average treatment effect of the dis-adopting SRI technology explained that economic scarcity of skilled labour, difficulties in transplantation and mechanical weeding, low irrigation potential and poor on-farm water management were major constraints as experienced by SRI adopters as well as dropouts. Farmers' compliance in following different resilient SRI components that also varied spatiotemporally has resulted in realized incremental yield. The benefits out of SRI outweighed that of conventional practice both in terms of yield (more than three quintals per acre) and profits in spite of the severe drought faced by the state during 2015-16. However, more than 75% had expressed their inability for area expansion because of compelling factors. High female labour displacement was observed as women are disadvantaged due to highly skilled nature of the operations. A considerable decline in hazardous and environment polluting chemicals usage is also observed in SRI farms. Probit analysis indicated that active social involvements of NGOs, on-farm training and demonstrations, and realized incremental rice income influenced SRI adoption. Further SRI area expansion hindered mainly because of infeasible land topography, area saturation and lack of farmers' interest. Redesigning location specific technology pertaining to different SRI components is necessary. Resource farmers should be identified at the community level and developed who would promote demonstration and dissemination of SRI. Mechanization should be taken up in large scale. Necessary arrangements should be made to provide adequate training to the young labour especially to the young

[Read Less»](#)

Uploaded Files »

No files found.