

Productivity, water use efficiency and economics of system of rice intensification in Sivagangai district of Tamil Nadu

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ABSTRACT

Thirty six demonstrations on system of rice intensification (SRI) were carried out in 25 hectares of farmers fields in Mahibalanpatti village, Manimuthar sub basin, Sivagangai district of Tamil Nadu during north east monsoon season (October 2008 – January 2009) under Tamil Nadu-Irrigated Agriculture Modernization and Water Bodies Restoration and Management (TN – IAMWARM) Project. Two methods of rice cultivation *viz.*, SRI and conventional were compared. The results revealed that adoption of SRI favorably influenced all the yield attributes of rice *viz.*, number of productive tillers m⁻², length of panicle and numbers of grains panicle⁻¹. Significant superiority of SRI in terms of grain yield was also evident due to 22.1 per cent yield increment by SRI than conventional method of rice cultivation. Higher grain yield coupled with substantial water saving (35 per cent) resulted in higher WUE of rice under SRI method. Higher gross income, net profit and benefit cost ratio were also associated with SRI than conventional method of rice cultivation. The cost of cultivation was comparatively lesser in SRI which resulted in gaining an additional net profit of Rs.9,980 ha⁻¹ in SRI as compared to conventional method of rice cultivation.

Key words : SRI, Yield attributes, Grain yield, Water use, Economics

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