Comparative study of system of rice intensification and conventional method of rice cultivation in Madurai district of Tamil Nadu

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ABSTRACT
Twenty two on farm demonstrations on System of Rice cultivation (SRI) were carried out in 12 hectares of farmers fields in Alangampatti and Karungalagudi village, Manimuthar sub basin, Madurai district of Tamil Nadu during November 2008 – February 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 17.0 per cent yield increment by SRI than conventional method of rice cultivation. Higher grain yield coupled with substantial water saving (24.1 per cent) resulted in higher Water Use Efficiency 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.11,000 ha⁻¹ in SRI as compared to conventional method of rice cultivation.

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