

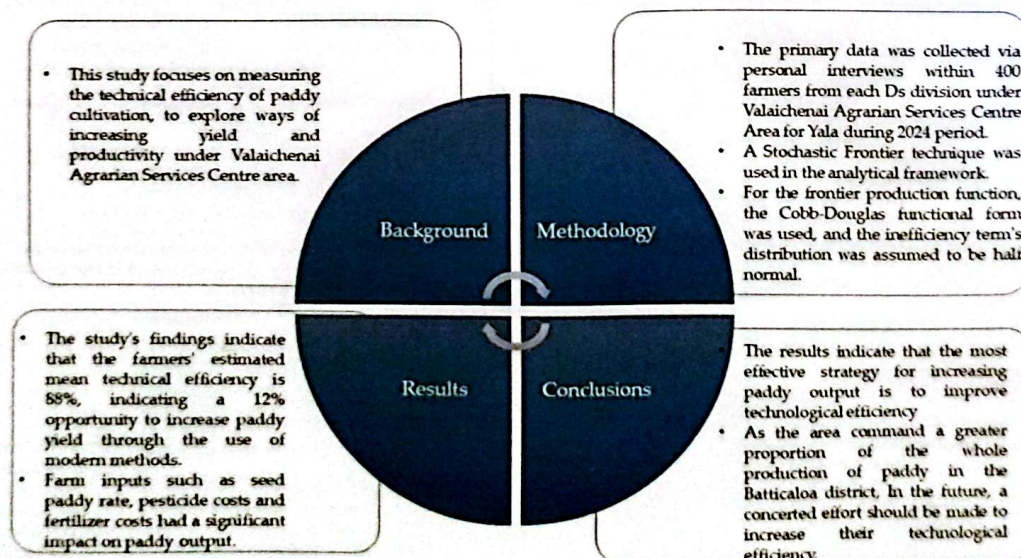
Production Efficiency of the Local Paddy Cultivation Under Valaichenai Agrarian Services Centre Area

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This study focuses on measuring the technical efficiency of paddy cultivation, to explore ways of increasing yield and productivity under Valaichenai agrarian services centre area. Primary data was used in this study. The primary data was collected using well-structured and pre-tested questionnaires administered across 400 farmers from each district secretariate division under Valaichenai agrarian services centre area for Yala during 2024 period. The district secretariate divisions selected for field survey were Koralai pattu, Koralai pattu south, Koralai pattu west and Koralai pattu central. A stochastic frontier technique was used in the analytical framework. For the frontier production function, the Cobb-Douglas functional form was used, and the inefficiency term's distribution was assumed to be half normal. The study's findings indicate that the farmers' estimated mean technical efficiency is 88%, indicating a 12% opportunity to increase paddy using modern methods such as adoption of labour-saving technologies, single-nutrient fertilisers, high yielding varieties, and improve soil management practices. Farm inputs such as seed paddy rate, pesticide costs and fertiliser costs had a significant impact on paddy output. Paddy farmer's technical efficiency is positively influenced by farming experience. The results indicate that the most effective strategy for increasing paddy output is to improve technological efficiency under Valaichenai agrarian services centre area. As the area command a greater proportion of the whole production of paddy in the Batticaloa district, In the future, a concerted effort should be made to increase their technological efficiency.

KEYWORDS: Cobb-Douglas Functional form; Paddy cultivation; Production efficiency; Stochastic frontier technique; Technical efficiency



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