

CASE STUDY ON DIRECT SOWING OF PADDY IN SELECTED MANDALS OF GUNTUR DISTRICT

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ABSTRACT

Rice (*Oryza sativa*) is one of the most important staple food crops in many Asian countries. The demand for rice growing, while the cost of irrigation is rapidly increasing, and adequate area to grow rice is unavailable. Therefore, India is facing a major challenge to increase rice production, the main food grain. A minimum of 258 and a maximum of 395 numbers of grains per panicle were observed in the direct sown field, and a minimum of 227 and a maximum of 351 numbers of grains per panicle were observed in the traditionally sown field. The grain yield under direct sown field was observed to be 2850 kg acre⁻¹ and under traditionally sown field grain yield was observed to be 2625 kg acre⁻¹. Area under direct sowing of paddy in Guntur district is increasing due to its distinct advantages. Hence, the direct seeding method requires less water and labour, and has lower cultivation costs with comparatively equal grain yields than traditional systems and the crop matures in less duration. Timely sowing gives farmers the possibility to take up a second pulse crop in time. This method can be a good measure when the monsoons are delayed and farmers do not have time and water to raise nurseries.

KEYWORDS: Direct Sowing, Seed Drill, Tillers, Panicle Length, Yield, and Benefit Cost Ratio