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STOCHASTIC FRONTIER ANALYSIS TO MEASURE TECHNICAL EFFICIENCY: EVIDENCE FROM SKILLED AND UNSKILLED AGRICULTURAL LABOUR IN INDIA

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Abstract: This paper comprises the stochastic frontier model which has been applied to measure the technical efficiency of skilled and unskilled labour. By considering the certain input variables listed in the cost of cultivation suggested by the Commission of Agricultural Costs and Prices (CACP) for Indian states during the main cropping season. Result of the study shows that the evaluated average technical efficiency estimates have been found between 71 to 84 % for both type of labour. Factors i.e. use of seeds (77 % efficient), fertilizers (29 % inefficient), manure (3 % efficient), land, human (9 % efficient), attached (10 % efficient) and casual (103 % efficient) labor, animal labor (is between 1 to 4 % efficient), hired machine (33 % inefficient), owned machine (7 % efficient), insecticides (20 % efficient), irrigational cost (31 % efficient), fixed cost (36 % inefficient) and operational cost (197 % inefficient) have a significant at 1, 5 and 10 % level of significance¹.

Key words: Technical efficiency, Mustard production, Stochastic frontier analysis, Skilled/Unskilled Labour.

JEL Codes: O13, O14, O21, Q12, Q18.

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