

COMPARATIVE STUDY OF SUGARCANE PRODUCTION AS MONOCULTURE AND INTERCROPPING WITH CDP CROPS IN SOME SELECTED AREAS OF KUSHTIA DISTRICT

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Abstract

The study was conducted at Daulatpur upazila a sub zone of Jagati sugarmill during 2001-2002, to compare the production practices of sugarcane as monoculture and intercrop with CDP crops, to determine the technical efficiency and factors influencing the inefficiency of sugarcane production as monoculture and intercropping of various CDP crops. Forty intercrop growing farmers and 30 sole sugarcane practicing farmers were selected randomly from the list prepared with the help of the cane development assistants. Both sugarcane growers cultivate in high land that was loamy soil and also cultivates ISD-16 sugarcane variety. Both sugarcane growers were weeding and fertilizing three times in sugarcane day after transplanting. Row to row distance of intercrop sugarcane was higher than sole sugarcane but plant to plant distance was more or less same. Transplanting and harvesting time of both sugarcane growers were October - January and October - March, respectively. The results of the study shows that human labour, an important and largely used input in cultivating sugarcane, as well as intercrops occupied a major portion of the total costs. The study also reveals that the sugarcane + other combination accrued the highest net return followed by sugarcane + potato, sugarcane + maize and sugarcane + lentil. Of all the combinations, sugarcane + potato were found to be the most desirable and compatible combination in respect of cane yield and the net return per hectare. Stochastic frontier production function showed that the monoculture practicing farmers had the technical efficiency of thirty five percent while intercrop farmers achieved forty seven percent of the frontier production level. So, both the group of farmers were far behind the level of technical efficiency. But intercropping farmers were technically more efficient than the monoculture practicing farmers. The coefficient of education was negative in the inefficiency function indicating that the farmers with more education tend to be technically more efficient. This showed that the farmers with more education respond more readily in using the improved technology and produce more output with similar amount of inputs. Policy planners should give emphasis finding out how the farmers can achieve the maximum achievable level of production. The farmers were found to have been facing the problem of high price of input as most acute in economical problem category, lack of technical knowledge in technical problem category and dishonesty of officials in social problem category for producing sugarcane and intercrops. If these problems can be solved than the production of sugarcane can be increased using the existing amount of input.