

PRODUCTIVITY AND RESOURCE USE EFFICIENCY OF BORO RICE CULTIVATION IN SOME SELECTED HAOR AREAS OF KISHOREGANJ DISTRICT

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ABSTRACT

The present study was undertaken to (i) describe the socio-economic profile of the boro rice growers of the haor areas, (ii) determine per hectare costs and returns of boro rice cultivation in the haor areas by farm size, (iii) determine the productivity and profitability of boro rice cultivation in the haor areas by farm size, (iv) determine the resource use efficiency (technical) in boro rice cultivation, (v) identify the problems faced by the farmers in boro rice cultivation, and (vi) suggest policy implication deriving from the facts above. A total number of 60 boro rice growers were randomly selected by using stratified random sampling technique of which 23 were small, 18 were medium, and 19 were large. Three villages namely, Dhamiha, Rahela and Kaistohati of Dhamiha union under Tarail thana were the locale of the study. Data were collected from the farmers through direct interview method. The collected data were then analyzed following descriptive as well as frontier production function analysis. It was revealed that on an average, the surveyed farm families consisted of 7 members of which 3 were male, 2 were female and 2 were children. The highest portion of the farmers were within the age group of 36-50 years. On an average, about 40 percent farmers were educated. Agriculture was the main and only occupation of most of the farmers (92%). Almost 77 percent farmers had their own land. Average farm size was 1.83 ha in the study area. Boro - fallow - fallow was the major cropping pattern in the study area. Considering all farms, per hectare total cost were Tk. 17426.71 on cash cost basis and Tk.25463.31 on full cost basis. Considering farm category it was found that small farmer paid higher cash cost for boro rice cultivation (TK. 175 31/ha) compared to the large farmers (TK.17350/ha) and the medium farmers (TK.17115/ha). Again, considering full cost, small farmers spent the highest cost (TK.26814/ha) followed by the medium farmers (TK.24914/ha) and large farmers (TK.24341/ha). Per hectare gross returns from boro rice were TK.33219.43, TK.32484.88, TK.32501.79 and TK.32771.65 in case of small, medium, large and all farms, respectively. Per hectare net returns from small, medium, large and all farms were Tk.6404.98, Tk.7570.86, Tk.8161.02 and Tk.7308.50, respectively. On cash cost basis, benefit cost ratio (BCR) for small, medium, large and all farms were found to be 1.52, 1.63, 1.68 and 1.60, respectively. However, on full cost basis, it was found that for small, medium, large and all farms these ratio were found 1.24, 1.30, 1.34 and 1.29, respectively. The findings led to the conclusion that seed, fertilizer and irrigation significantly affected the return from boro rice. Education level and family size also significantly affected the return from boro rice. Considering all farms, the mean efficiency in boro rice cultivation was 87.73%. However, many problems were associated with boro rice cultivation like, quality seed crisis in the sowing period, fertilizer crisis, shortage of hired labour in the peak period, high wage rate, high irrigation cost, low output price and lack of cooperation from Block Supervisor (BS) were the major problems. Electricity supply for irrigation was the most pronounced suggestion from the farmers. The concerned agencies should be particularly aware of those problems and take necessary measures to solve those as far as possible.