INPUT-OUTPUT RELATIONSHIP AND TECHNICAL EFFICIENCY OF TOBACCO PRODUCTION IN SOME SELECTED AREAS OF RANGPUR DISTRICT

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Abstract

The present study was undertaken to find out the socio-economic characteristics of tobacco farmers. Profitability and factors affecting profitability of tobacco production and technical efficiency and also factors affecting inefficiency of tobacco production in the study area. Rangpur district was selected purposively for the present study. Sixty fanners were selected randomly from the population using simple random sampling. Among the sixty selected farmers 26 were small, 23 were medium and 11 were large. Primary data were collected by the author himself. A Cobb-Douglas production function model was also applied to estimate the contribution of key variables to production processes of tobacco. The major findings of the study are that the cultivation of tobacco is a profitable business, but the Virginia variety is more profitable than the Motihari and Jati. The study reveals that total costs of tobacco per hectare was the highest for small farms (Tk.39627) and lowest for large farms (Tk.36979). On the return side, net return of tobacco Tk.6151 for small farms, Tk.12312 for medium farms and Tk.l 7945 for large farms. The benefit costs ratio of small medium and large farmers were 1.16, 1.31 and 1.49 respectively. The study also indicates that the large farms were most pufilable compared to others. Per hectare gross margin of tobacco cultivation under small, medium and large farms were Tk. 24952, Tk. 31146 and Tk. 35464 respectively. It indicates that the gross margin was highest in large farms followed by medium and small farms in the study area. Estimated benefit cost ratios indicated that return over per taka investment was higher for large farmers, which was Tk. 1.49 followed by medium (Tk. 1.31) and small farmers (Tk. 1.16). So, positive relationship was observed between benefit cost ratio and farm size. The result of Cobb-Douglas production function showed that among the selected variable animal labor cost and land use cost per hectare was significant at 1% level. Mechanical power cost and fertilizer cost was significant at 5% level. While the other variables like labor cost, seed cost, cow dung cost, irrigation cost and pesticide cost were insignificant. On the basis of lack of fund is an acute problem for tobacco production. So, supply of adequate fund is the first suggestion that was given by the farmers in the study area.