

PROFITABILITY AND TECHNICAL EFFICIENCY OF POTATO 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, potato production practices, profitability, factors affecting profitability of potato production, technical efficiency and factors affecting inefficiency of potato production in the study area. Rangpur district was selected purposively for the present study.. Potato producers of the Rangpur sadar thana were the population of the study and sixty farmers were selected randomly from the population using table of random number. Among the sixty selected farmers, 24 were marginal, 22 were small and 14 were medium. Eighty two percent of the family members of the study area were literate which is slight higher than the national literacy level. Ninety five percent of the farmers used medium high land for potato production. Seventy eight percent of the farmers used loamy soil for potato production. Fifty three percent of the farmers sowed seed in optimum amount and date. Seventy eight percent farmers had contacted with the Block Supervisor in the study area. Sixty seven percent farmers were following vegetable -rice-vegetable cropping pattern. Eighty three percent farmers used cardinal potato variety. The study was found that total costs of potato per hectare was the highest for marginal farms (Tk.59466) and lowest for small farms (Tk.57464). On the return side, net return of potato was Tk.38266 for marginal farms, Tk.54716 for small farms, and Tk.67816 for medium farms and the benefit costs ratio of marginal, small and medium farmers were 1.59, 1.98 and 2.26 respectively. The study also indicates that the medium farms were most profitable compared to others. Per hectare cost of potato production was Tk. 58131 for all farm categories in the study area. Per hectare gross margin of potato cultivation under marginal, small and medium farms were Tk. 78282, Tk. 86091 and Tk. 94621 respectively. Estimated benefit cost ratios indicated that return over per taka investment was higher for medium farmers, which was Tk. 2.26 followed by small (Tk. 1.98) and marginal farmers (Tk. 1.59). So, positive relationship was observed between benefit and cost ratio and farm size. The result of Cobb - Douglas production function showed that seed cost per hectare, total fertilizer cost per hectare, total return from potato and family labor cost per hectare were significant at 1% level. Variety dummy was significant at 5% level. Land use cost per hectare, contract with Block Supervisor, mechanical power cost per hectare and pest management cost per hectare were not significant. The farmers with more education and more experience tended to be less inefficient. The farmers who made frequent contact with extension personnel were technically more efficient than the farmers who did not contact frequently with the extension personnel. Optimum sowing has positive impact on achieving higher technical efficiency of potato production.. On the basis of group total lack of quality seed is an acute problem for potato production, second problem is lack of adequate fund and the third problem is high rate of input price. Supply of adequate fund is the first suggestion that was given by the farmers in the study area.