

YIELD GAP AND RELATIVE PROFITABILITY OF MODERN TRANSPLANT AMAN RICE: DEMONSTRATION VERSUS FARMERS' FIELD

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ABSTRACT

Gradual increase in rice production is essential to meet the food requirement of ever increasing population in Bangladesh. More adoption of modern variety (MV) rice and selected modern technologies are, therefore, required. With this end in view, the present study was designed to know the adoption rate, yield gap and relative profitability of Transplanted Aman (T. Aman) rice in demonstration and farmers' plot. To fulfil the objectives, thirty one farmers of Gazipur sadar thana were selected randomly from the list of 42 farmers who had demonstration trials on their fields. Data were collected by interviewing the sample farmers with a questionnaire. Tabular as well as statistical techniques were followed in analyzing data. It was found that on average, 15.16% of total cultivated land was utilized to cultivate Transplanted Aman (T. Aman) rice and 76.26% of total rice area was used to cultivate modern T. Aman rice. The rice varieties, BR-11 and Pajam, were cultivated respectively, in about 59.01% and 24.36% of modern rice cropped area. Also 84% and 68% of sample farmers cultivated BR-11 and Pajam at their land, respectively. Kalizira was the most popular local aromatic variety cultivated by 88% of sample farmers in 9.79% of their total rice area. The yield gap between the demonstration and farmers' plots was about 300.46 kg/ ha. On the basis of full cost, net return was higher in demonstration plots compared to that in farmers' plots. Net returns were Tk. 4545.00/ha and Tk. 3309.71/ha in demonstration and farmers' plots, respectively. At the mean level of labour use, a reduction of fertilizer use gap by one kg (i.e., an increase of one kg of fertilizer in farmers' plot) resulted in 2.72% decrease in yield gap. Similarly, a reduction of labour use gap by one man-day (i.e., an increase of one man-day of labour in farmers' plot) resulted in 11.61 % decrease in yield gap. The results indicate that it is needed to create awareness among the farmers to cultivate more MVs and to follow the recommended practices in T. Aman rice production as demonstration plot yielded a higher yield. In addition, there is a scope 10 increase per unit productivity in farmers' fields by increasing both the of labour and fertilizer.