

ADOPTION AND IMPACTS OF ORGANIC FARMING: CASE OF WINTER TOMATO PRODUCTION IN BANGLADESH

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Executive Summary

Organic farming provides social, economic and environmental benefits but it still occupies a small share of the overall agriculture sector. The conventional agriculture in Bangladesh became heavily dependent on synthetic fertilizers and pesticides after the Green Revolution. This study aims to identify the determinants of the adoption of organic tomato farming and assess the impacts of adopting organic tomato farming. This study was conducted in two districts: Manikganj and Gazipur of Bangladesh due to the availability of organic vegetable production. A total number of 200 tomato farmers, taking 100 from each district, were surveyed randomly using a pre-tested interview schedule. Data were collected during the months of February to March 2022. A binary probit model and propensity score matching techniques were constructed to achieve the objectives. Findings indicated that about 20% of the respondents cultivated organic tomatoes. Marginal analysis suggested that farmers for each additional unit of education attained, the probability of adoption of organic farming is expected to increase by 1.90%. Findings also indicated that farmers who view television and contact made with extension services have about 9.5% and 3.7% more likelihood to adopt tomato farming. The ATT values suggested that organic tomato farming have a positive and statistically significant impact on the Benefit-cost ratio (0.847 to 1.118 times), and Selling price (9.76 to 12.65Tk/Kg) whereas a negative and statistically significant impact on total cost (47200 to 74800 Tk/ha). Modifying the extension approach through the use of mass media and other modern communication techniques can help with widespread adoption. While planning programs for the development of the organic tomato production sector in Bangladesh, policymakers should consider the support of farmers' institutions, provision of training to farmers and raise farmers' awareness about the environmental, economic and health benefits of organic farming.

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