

Title: Impact of Irrigation Water on Cropping Intensity and Profitability in Ganges Tidal Floodplain

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Abstract

The present study was undertaken to examine the effect of irrigation on cropping pattern, cropping intensity and crop production in the Ganges Tidal Floodplain areas. The study was undertaken to know the consequence of minor irrigation management on farm productivity and livelihood of the rural people. In this study, 30 Irrigated farms and 30 Non-irrigated farms from three upazilas namely Mirjaganj, Golachipa and Kolapara under Patuakhali district were selected. Tabular as well as statistical techniques were used whenever necessary to analyze the data. To assess the profitability level of cultivators simple tabular form was used and benefit cost ratio (BCR) was computed. The results of the analysis indicate that there was significant differences existed between per hectare costs and returns of T. Aman production in irrigated plots and Boro in non-irrigated plots. The findings of the study also reveal that annual income of Irrigated farms from one hectare of irrigated land were significantly higher than Non-irrigated farms. It reveals the different cropping pattern in different areas due to salinity, tidal effect and droughtiness. Cropping intensity reduces in more saline prone areas. Technical efficiency measures through the computer package Frontier 4.1. The study further reflects that, irrigation could judge as a very vital role to overcome the yield efficiency through adoption modern crop varieties package in production process. Economic as well as social statuses of the irrigated farmers have expectedly been improved due to irrigation facilities in the study areas.