ECONOMIC ANALYSIS OF FARM HOUSEHOLDS UNDER ALTERNATIVE FARMING SYSTEMS IN A SELECTED AREA OF BANGLADESH

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ABSTRACT

The study was conducted in the village of Kazirshimla under Trishal Thana in Mymensingh District. The major objective of the study was to examine the economic organization and performance of the whole farm business using a variety of income measures. Data were collected and analysed with respect to 48 farms, out of 95, falling in four farming systems, namely Crop-Cattle-Poultry, Crop-Poultry and Crop-Fish. In order to achieve the objectives of the study, tabular as well as functional analysis was performed. The sample farms did not vary considerably across farming systems in terms of socio-economic attributes, namely, family size and educational status. However, number of components or sub-systems in the farming system seemed to have varied directly with possession of fixed farm assets, namely, owned and operated land area and value of farm resources. The results showed that gross margin per taka of variable cost varied considerably among enterprises within each farming system. Among the individual enterprises within the crop component, vegetable and potato gave the highest gross margin per hectare and per taka of variable cost in all the systems of farming. Among the components of the whole farm business, fish component provided the highest gross margin per taka of variable cost in all the systems of farming. Net farm income was reasonably high for all the systems except for Crop-Catle-Poultry farming system. Furthermore, operator's labour and management income and, management income were both positive in all the systems except for Crop-Cattle-Poultry farming system in which these were negative. These results indicate that the farms, except for Crop-Cattle-Poultry were economically viable even, under full cost assumption. Out of four farming system, the Crop-Cattle-Ptoultry-Fish system was economically most viable. Management income was the highest and positive in this system compared to others. The results of the Cobb-Douglas production function analysis of the Crop-Cattle-Poultry-Fish system indicated that the coefficient for total cropped area, seed/seedling, human labour and mechanical power in crop component were found to be positive and significant. The co-efficient for labour, feed and component, and labour and feed in poultry component had positive and significant contribution to gross return. The co-efficient for labour and feed were found to be positive and significant but fertilizer had significant and negative contribution to gross return from fish component. On the basis of the research findings of the study, it might be suggested that the farmers of the study area can cultivate vegetables and potato in a large scale in order to their farm income. Extention worker may encourage farmers of similar areas of the country to follow fish component. The policy makers should pay an immediate attention to develop sound marketing facilities for both inputs and outputs.