

# Characterization and Economic Evaluation of Predominant Farming Systems in Birbhum District of West Bengal

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**Abstract**—The present study attempts to evaluate, characterize and economize the predominant farming systems across four blocks of Birbhum district, West Bengal covering 120 farm households at very base level. For convenience of the study, the researcher has categorized the farm as <0.5 ha (marginal farm), 0.5-1.0 ha (small farm), 1.0-1.5 ha (medium farm) and >1.5 ha (large farm) at her own discretion ignoring the conventional size classes. Simplex tabular method with suitable statistical techniques has been used in this dissertation to characterize the farming systems economically. Finally, to judge the socio-economic livelihood status of the family, composite scoring of 36 parameters have been taken under consideration and grouped into four distinct clusters. The results depicts that the region is still predominantly paddy based where 84 out of 120 sample farm households belong to cereal based farming system. Cereal followed by Dairy was identified as two most important components (followed by 38 farm households) regarding economics and livelihood of the entire sample households. Cereal contributes 49-50% share of income among all size classes whereas Cereal + Dairy + Oilseeds + Pulses + Fishery system exhibited highest system profitability (1.65). Among dairy based farming system Dairy + cereals + poultry + oilseeds + vegetables + sheep/goat has exhibited 3.01 system profitability. Not much diversification has been found in those four blocks. Regarding composite scoring to judge the current livelihood status of the farm households, the result is not satisfactory for the region as a whole as more than 50% of farm households belong to low and poor level of livelihood. The region is predominantly backward with purview of overall welfare of the farm-family. Lack of access to credit, inadequate infrastructural facility and lack of reliable market access would be the major socio-economic constraints identified in this region.

**Keywords:** Characterization, Farming System, System profitability, Livelihood, Constraints.