Impact of household and demographic characteristics on poverty in Bangladesh: A logistic regression analysis

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This paper examines the determinants of poverty in Bangladesh. Poverty is multi-dimensional in nature and depends on interactions of various socio-economic factors. Several demographic and health factors can shape up the economic status of a household, and theory suggests that the ability of a household to earn a given level of income can depend on the characteristics internal to the household. While most studies done on poverty measurements rely on the income, expenditure and consumption data, this study has used data from Bangladesh Demographic and Health Surveys (DHS). The main objective of this paper is to identify the factors that have relative effect on poverty of the household. Thus, poverty is captured at micro level that can provide insights for policies to eradicate poverty at national level. The principal component analysis was used to create an asset index which gave the social economic status (SES) of each household. The variables were tested as a univariate model to see the effect on SES. Finally, a logistic regression was estimated based on this data with the SES (that is poor and non-poorest) as the dependent variable and a set of demographic variables as the explanatory variables. The results presented in this paper suggest that the DHS data can be used to determine the correlates of poverty. The results also suggest that demographic and household data can describe poverty. The probability of a household being poor depends on the ownership of assets and other household data. A closure look was then taken to identify whether the results were driven by rural or urban property. The further analyses suggest that rural poverty is significantly affected by the demographic and household characteristics. The results were mostly driven by rural poverty rather than urban poverty. The paper has some policy values as it suggests that rural people suffer more from the plight of poverty than do the urban people. Hence, the government needs to focus on improving the standard of living in rural areas of Bangladesh.

Keywords: Principal components analysis, Logistic regression, Demographic and Household Characteristics