Estimation of District Level Poor Households in the State of Uttar Pradesh in India by Combining NSSO Survey and Census Data

Hukum Chandra[1#], U. C. Sud[1] and Nicola Salvati[2]

[1]Indian Agricultural Statistics Research Institute, New Delhi-110012

[2]University of Pisa, Pisa, Italy

Abstract N.12

The National Sample Survey Organisation (NSSO) surveys are the main source of official statistics in India. A range of invaluable data at the macro level (e.g. state and national level) is generated through these surveys. However, the NSSO data cannot be used directly to produce reliable estimates at the micro level (e.g. district or further disaggregate level) due to small sample sizes. There is a rapidly growing demand of such micro level statistics in India as the country is moving from centralized to more decentralized planning system. In this article we employ small area estimation (SAE) techniques to derive model-based estimates of proportion of poor households at district level in the State of Uttar Pradesh in India by linking data from the Household Consumer Expenditure Survey 2006-07 of NSSO 63rd round and the Population Census. The poverty line used in this study is same as those of year 2004-05, given by Planning Commission, Govt of India. The poverty line is used to identify whether a given household is poor or not. A household having monthly per capita consumer expenditure below the state's poverty line is categorised as poor household. The results show that the model-based estimates are reliable. In contrast, the direct estimates are very unstable. These estimates are expected to provide invaluable information to policy-analysts and decision-makers.

Key words: NSSO survey, Population census, Small area estimation, Poor households, Proportion.

[#]corresponding author: Email: hchandra@iasri.res.in, Phone: +91-11-25841475, Fax: +91-11-25841564.