Measuring Segregation of the Poor in India

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Despite strong economic growth over the last decade, India will not be able to achieve a single of the Millennium Development Goals (MDG) by 2015 due to significant regional disparities. States that were initially poor have grown more slowly and have not been able to keep pace with the rapid growth witnessed by the richer states. Literature on poverty in India has largely focused on issues such as challenging the official poverty estimate, proposing alternate poverty lines and debating discrepancies in national survey data. We are not aware of any study, which systematically quantifies the growing concentration of the poor in some states in India.

This paper for the first time, measures changes in the extent of segregation between the poor and the non-poor when the poor are defined in multi-dimensions. How has the spatial distribution of the poor in India evolved over a period of time? Are increasing numbers of poor concentrated in the urban sector? What has happened to the share of poor populations in persistently backward states? Finally, what are the policy implications of the growing concentration of poverty? The paper addresses these questions about poverty in India.

We estimate a poverty segregation curve to measure inequality in the distribution of the poor. The poor are ranked by their income levels, nutritional and health status and literacy levels. The curve shows the cumulative proportion of the poor population against the cumulative proportion of the non-poor population in each state, when states are ranked in a descending order of poverty level. Since segregation curves can intersect, they provide an incomplete ranking of states. Hence we also estimate three widely used measures of segregation, namely, the dissimilarity index, the Gini index, and the square root index. The square root index is aggregative and additively decomposable and is particularly useful to conduct segregation analysis at a sector level. We measure changes in the distribution of the poor since the introduction of the economic reforms in the early 1990s. The analysis is conducted for all 28 states and 7 union territories in India during 1992-93 and 2005-05. Each state is further classified into rural and urban sector. Poverty in each state is calculated using data on consumption expenditure from the National Sample Survey Organization (NSSO). Data on non-income factors such as access to drinking water, literacy level, body mass index is compiled from the National Family Health Survey (NFHS).

We find that the distribution of the poor became more unequal in the post reform period. The poor are increasingly concentrated in densely populated states with low average income levels. Furthermore, we measure segregation separately in the rural and the urban sector in each state. Using the square root index we find that a large part of the total segregation is explained by within-sector segregation. The poor are disproportionately concentrated in the urban sector compared to the rural sector. Overall our results indicate that although there has been a steady decline in poverty, there is a significant increase in the concentration of the poor in some states in India.