Spatial Pattern of Multidimensional and Consumption Poverty in Districts of India

Guru Vasishtha[1] · Sanjay K. Mohanty

Abstract

Though studies on multidimensional poverty have been gaining research and pro-grammatic attention, no attempt has been made to understand the association of multidimensional poverty with consumption poverty in India. Using data from the National Family Health Survey-4, 2015–16, this paper examined the associa-tion and spatial clustering of multidimensional and consumption poverty in the dis-tricts of India. Context-specific indicators were chosen to provide robust estimates of multidimensional poverty. The Alkire and Foster method was used to estimate the indices of multidimensional poverty. The spatial patterns of multidimensional and consumption poverty were examined using Moran's I statistics, Local Indica-tor of Spatial Association, and cluster maps. A set of spatial regression models was used to understand the predictors of multidimensional poverty. The results suggest that 30.3% of the population in India was multidimensionally poor, with an average intensity of poverty of 44.2% and a multidimensional poverty index of 0.13. The state variations in multidimensional poverty were high. The univariate Moran's I statistic of multidimensional poverty was 0.75, while that of consumption poverty was 0.56, suggesting that multidimensional poverty was spatially clustered. Though spatial regression model shows multidimensional poverty is positively associated to consumption poverty, the extent of association is limited. Besides, fertility level, share of rural population, health insurance, and percentage of scheduled caste population were significant predictors of multidimensional poverty. Based on the results, we suggest that multidimensional poverty measures may be integrated along with consumption poverty and that districts with high levels of multidimensional and consumption poverty should be prioritized for evidence-based planning.