On the relationship between inequalities and sustainability : micro and macro evidence on natural resources and economic growth form India

Abstract

This dissertation focuses on two problems squarely at the intersection of economic inequalities and sustainability: loss of natural resources and quantifying inclusive economic growth. The first essay investigates the role of inequalities in the decline of common pool land resources (CPLRs) - natural resources to which local communities have varying degrees of access. Decline in extent of CPLRs impacts environmental sustainability as well as rural livelihood strategies negatively. The essay establishes a credible micro and macro causal relationship between economic inequalities and the leading driver of CPLR loss – privatization of land. I use the only nationally representative data on CPLRs for India with comprehensive information on household as well as village characteristics. To address endogeneity of inequalities with loss of CPLRs, variation in harvesting techniques used by households is exploited as an instrumental variable. Results indicate that the impact of inequalities is in opposing directions for losses originating from different levels of governance. For privatization at village level, increase in inequality decreases the likelihood of loss. However, the likelihood of commons' land being privatized by the state increases with increase in inequality.

The second essay addresses the preceding step to any temporal analysis of consumption expenditure (CE). To circumvent numerous issues with standard price deflators, this essay proposes using a micro-level numéraire - the implicit price reported by each household for a basket of cereals - to convert nominal CE to real CE. This is demonstrated empirically using the unit level consumption expenditure data of the National Sample Surveys from 1983 to 2012. The real CE, measured as quantity of cereals' basket at the household level, exhibits similar trends as real CE estimated using standard price deflators at the national level. However, at any lower geographical aggregation, it captures regional inflation more appropriately than standard deflators.

Inclusive growth has been presented as a panacea to the pursuit of economic sustainability in the recent years. Yet, there is a lack of robust metrics to evaluate inclusiveness.

The third essay constructs a normative metric to track the distribution of economic product in a growing economy. Using welfare measures for different types and intensities of inequality

aversion, the essay defines equally distributed equivalent consumption (EDEC) as the desirable egalitarian distribution of the product of growth. EDEC is the consumption that, if obtained by every individual in the society, would result in the same level of welfare as the actual consumption distribution. To evaluate how inclusive has growth really been, the proposed metric - inclusivity index - measures the elasticity of normative gap between real consumption and EDEC with respect to consumption growth. An empirical analysis for this metric is conducted using real CE estimated in essay 2. Vertical (across deciles) and horizontal (across social groups) decompositions for these metrics show that economic growth has been far from inclusive in the last three decades.