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“Bridging the gap between increasing knowledge and decreasing resources”

The Role of Forests in Combating Rural Poverty in Nepal: Panel Data Evidence on Asset Accumulation from Four Villages

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Abstract

Forest resource use contributes substantially to rural households' livelihood strategies and forest income often serves to reduce income inequality in the developing world. It is, however, still debated whether forest income constitutes a pathway out of poverty. In this paper, we examine the contribution of forest income to household asset accumulation, as a measure of poverty reduction, in four locations in Nepal. Using unique Poverty Environment Network (PEN) environmentally augmented panel data reflecting households' annual cash and subsistence income portfolios, we model change in the value of five selected assets that accumulate over time and the value of which could be quantified. To accommodate efficiency concerns in relation to modelling each asset type separately, we employed a systems model approach — i.e. Seemingly Unrelated Regression (SUR). Results indicate that although forest resources on average contribute 16 % of the total household income, there is no significant relation between forest income and change in cash savings or the value invested in land, livestock, implements and jewelry from 2006 to 2009. Increase in asset values were instead explained by other income sources, i.e. agricultural, wage and business income. Most forest income was furthermore obtained as subsistence income. This suggests that the forest resources that people have access to present little opportunity for profit generation and hence that forest income does not constitute a pathway out of poverty under the current set of regulations and tenure regimes. Our data confirms, however, that forest income may be disproportionately important for poor segments of communities and function as a safety net in times of crisis and as gap filler in lean periods. We conclude that the opportunities for commercialisation of forest resources should be enhanced if forest based poverty reduction is a political aim.

Keywords: Asset accumulation, forest income, Nepal, poverty reduction/alleviation, seemingly unrelated regression