

**RANA, PUSHPENDRA** [S17-P70]

*Role of smallholder forestry in rural prosperity*

Co-author: Ashwini Chhatre, Indian School of Business, India

Smallholder forestry plays an important role in sustaining livelihoods of millions of people around the world. Given size and production constraints, little faith is normally placed on smallholder forests to provide higher economic returns. Many scholars, however, argue that till the time no other higher-return alternatives emerge, rural population may need smallholder forestry as a buffer to fall back in times of hardship and low agricultural yields. In addition to providing a safety net to rural poor, smallholder forests sustain local consumption as well as provide a possible pathway out of poverty for rural households. However, little attention is paid to the regulatory challenges that currently limit the potential of smallholder forestry to ensure rural prosperity.

Using an example of harvesting of Khair (*Acacia catechu*) in Indian Himalayas, we show that smallholder forestry involves a trade-off between income and environment and presents a regulatory challenge.

Sale of Khair trees constitute a significant source of income to thousands of small land-owners across India. Khair trees are found in both public forests and private lands that occur interspersed with one another in human-dominated landscapes. Forest department regulates the harvesting of trees on private smallholder forests through a ten-year felling cycle. Harvesting is rotated across administrative units within the district so that the trees are harvested in any given unit in every ten years to rest the harvested area for regeneration and to ensure effective monitoring. The trees can only be harvested by registered forest contractors after obtaining permits from forest officials. The regulation also involves provisions of official exemptions whereby contractors can seek extension in their working period beyond allotted time period. We show that these official exemptions provide a great opportunity to contractors to maximize their profits by harvesting illegally not only from private lands but also from neighboring public forests by evading government monitoring and supervision. Even farmers allow contractors to harvest immature trees from their lands in lure of higher income due to economic value of these trees.

In such kind of situations, we explore the regulatory requirements under which smallholder forests are able to meet their income potential without environmental harm. We specifically look at the challenges posed by unclear property rights and lax enforcement of regulations on the trade-off between income and environment. We argue that higher craving for income would result in unsustainable exploitation whereas overwhelming stress on enforcing regulatory provisions would directly affect livelihoods of thousands of small land-owners. This papers shows the conditions under which this trade-off can be resolved in favor of higher incomes without destroying the very ecological basis of forest growth. The conditions include restriction on official exemptions, changes in the harvest season and duration, and reforms in property rights to ensure sustainability in small-holder forestry. We derive policy implications of these findings, and the pathways from the current low equilibrium to rural prosperity through small holder forestry.