Community forest management simultaneously reduces poverty and deforestation in Nepal

- Community forest management gives primary responsibility for day to day forest management decisions to local communities.

- Between 2000 and 2012, community forest management led to a 37% relative reduction in deforestation and a 4.3% relative reduction in poverty in Nepal.

- At the level of individual small administrative areas this equates to 1.7 hectares of avoided deforestation and 14 households lifted out of poverty.

- Areas with community forest management were 51% more likely to witness simultaneous reductions in deforestation and poverty.

- Benefits were greater when areas dedicated to community forests were larger and had existed for longer. Poorer areas with community forests were less effective at reducing deforestation.

The current context

Forests are critical to sustainable development: they regulate the world's climate, sequester carbon from the atmosphere, harbour biodiversity, and contribute to the local livelihoods of millions of people worldwide.

Halting and reversing forest loss is vital or a more sustainable future. Since the 1980's governments and international organisations have promoted decentralised community forest management to tackle both conservation and rural poverty.

Today, rural and indigenous communities have primary responsibility for managing approximately 13% of the world's forests. Case studies from around the world have shown that local communities can manage forests more sustainable, but the effectiveness of community forest management initiatives continues to be questioned.



What is community forest management?

Under community forest management, the rights and responsibilities for managing forests rest primarily with the communities that depend on them. Being allowed to make day-to-day decisions enables communities to make better use of local knowledge to promote more sustainable landscapes.

In Nepal, approximately one quarter of the country's forests are managed by a third of the country's population. Many other countries, such as Mexico, Madagascar, and Tanzania, have similar programmes.

Community forest management can help reduce deforestation and poverty in direct and indirect ways. For example, rights to land and resources, and the autonomy to manage them can stimulate collective action and lead to the design and implementation of local resource management rules. If established and enforced, these rules can lead to more just and sustainable management decisions.

More sustainable forest management can enhance soil fertility, agricultural productivity, livestock production, and commercialisation of forest products through forest-based enterprises, which can account for as much as half of a household's income.

Methodology

This study - authored by an international team of ecologists, economists and political scientists - focused on Nepal, which has one of the largest and longest-standing community forest management programs in the world. It overcomes previous limitations and makes three important advances by:

- Calculating the average effect of community forest management for the whole of Nepal using information from more than 18,000 community forests.



- Combining these data with poverty measures derived from the national census (1.36 Million households) and satellite-image based measures of deforestation.

- Isolating the effect of community forest management by controlling for a suite of factors that could also influence poverty and deforestation.

Implications

Identifying a mechanism - community forest management - that can credibly reduce carbon emissions at the same time as improving wellbeing of the poor is an important step forward in global efforts to combat climate change and protect the vulnerable.

Understanding what works for both people and nature, where and why - is critical for policy makers, to implement successful interventions.

Results from this study demonstrate that, on average, Nepal's community forest management programme has made significant contributions to jointly reducing deforestation and alleviating poverty. However, there is substantial variation in outcomes. Community forests in poorer areas might require additional support to avoid social and environmental trade-offs.

Reductions in deforestation did not occur at a cost to local wellbeing. Areas with community forest management were significantly more likely to witness simultaneous reductions in deforestation and poverty. Lessons from Nepal could provide valuable insight for initiatives in other countries. If other areas are able to replicate Nepal's success, community forest management could play an even greater role in achieving multiple Sustainable Development Goals.

Making better use of existing data sources, and rigorously analysing them is a critical step towards reducing evidence gaps and implementing better policies.

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