Strengthening Mexico's programme on payments for ecosystems services

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Highlights

Evidence impact

- The World Bank used evaluation findings to provide additional funding to Mexico under the Forest and Climate Change programme.
- Comisión Nacional Forestal (CONAFOR), the agency implementing the payment for ecosystems services programme, decided to increase incentives for land at greater risk of deforestation, including community-owned land.
- CONAFOR roped in researchers to work together on a subsequent World Bank-funded impact evaluation of the programme.

Factors that contributed to impact

- The evaluation responded to the Mexican government and the World Bank's demand for evidence on the effectiveness of payments for ecosystems services programmes.
- The evaluation reinforced findings of the limited number of other studies available at the time.
- The research team built a long-standing partnership with CONAFOR at various levels that succeeded in overcoming the challenge of leadership changes at the agency.

Impact evaluation details

Title: Impacts of payments for ecosystem services programme in Mexico

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Context

Policies for reducing emissions from deforestation and forest degradation and fostering conservation (REDD+) have been a crucial part of international climate change negotiations. However, the implementation of REDD+ can potentially push those dependent upon forests further into poverty. In Mexico, over 12 million people depend upon forest resources as their main source of livelihood.

To achieve REDD+ goals without worsening poverty, many countries have national or state-level programmes that offer direct payments to communities and private forest landowners as compensation, to prevent them from using land in ways that degrade ecosystems. **Economic theory** suggests that payments for ecosystems services (PES) can be designed to lower deforestation while reducing poverty. However, these programmes have been difficult to evaluate, and there is **not enough high-quality evidence** on which PES designs work to do both.

Mexico's national commission for forestry, CONAFOR, started piloting the payments for a hydrological services programme, *Programa de Servicios Ambientales Hidrológicas*, in 2002–2003 in an attempt to strike a balance between forest conservation and socioeconomic development. A first of its kind national-level PES programme in a developing country, it offered payments to landowners to maintain forest cover as part of five-year contracts.

Researchers at the University of Wisconsin-Madison, University of California, Berkeley and Amherst College partnered with the government to evaluate the programme's environmental and socioeconomic impacts. The research on socioeconomic and environmental effects carried out by the partnership was expected to guide global efforts to design and implement effective REDD+ programmes.

Evidence

Using satellite data, a comparison of forest cover across time between PES participants and non-participants suggested that the programme was effective at reducing forest loss. Larger impacts were seen in community-held lands, lands that had a lower slope, and those closer to cities and in less poor municipalities. However, wealth increases for the participants were not significantly larger than those for non-participants. The findings also suggested that the programme did not seem to eliminate the overall trend of declining forest cover.

The evaluation found that the programme succeeded in targeting funds to areas of ecological and social priority. It also found that targeting high deforestation risk and more marginalised areas improved substantially between 2004 and 2010, due to changes in the programme rules and the eligible zones.

Findings showed that the programme had a positive impact on the extent and type of forest management implemented by participant landowners, which in turn would likely improve ecological services over the long run. The programme increased training and activities devoted to forest management among participant landowners. It also significantly increased the time participant landowners spent in activities related to preventing and combating forest fires, patrolling against illegal logging and poaching, undertaking pest control efforts and erecting fences to limit access by grazing animals.

Evidence impacts

CONAFOR and the researchers conducted another PES evaluation

CONAFOR engaged the researchers on a subsequent evaluation supported by Mexico's national evaluation agency El Consejo Nacional de Evaluación de la Política de Desarrollo Social(CONEVAL). A multidisciplinary working group that included members from the research team alongside CONAFOR and World Bank representatives steered the evaluation. CONEVAL also gave the team an award for best practice in the use of monitoring and evaluation results in the cycle of public policies.

The government increased support for more vulnerable land

CONAFOR decided to provide more support to community-owned land and land at higher risk of deforestation, having been informed by the evidence base, which included the 3ie-supported evaluation as well as other studies. Close engagement with the administration at multiple levels ensured that evidence-informed programmatic changes were retained despite changes in the political regimes.

The World Bank continued support to the Mexican government

The World Bank cited preliminary findings from the evaluation to justify additional funding for Mexico in 2011 under the World Bank's Forest and Climate Change programme. The programme was a precursor to Mexico's larger strategy to foster conservation and reduce emissions from deforestation and forest degradation (REDD+) and helped establish mechanisms

for payments for environmental services in pilot areas.

> **'The study definitely gave ammunition to those wanting to continue the programme and for the Bank to justify continued support.' — Stefano P. Pagiola, senior environmental economist, Environment and Natural Resources Global Practice, the World Bank**

Suggested citation

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