

MARCH 2012

## OVERVIEW

### IIED Sustainable Markets Group

**Project name:**

Monitoring the social impact of the Bolsa Floresta, Brazil

**Project leader:**

Maryanne Grieg-Gran

**Time frame:**

June to December 2011

**Cost:**

Part of a £15,000 grant

**Objective:**

To explore methods of understanding people's preferences regarding payments for ecosystem services.

## PROJECT SUMMARY

Cash or in-kind payments are becoming the tool of choice for stopping deforestation while supporting the development of poor forest communities. And to offer the strongest incentives, programmes have to learn the forms of compensation people prefer. IIED helped evaluate this for Bolsa Floresta in Brazil, one of the world's largest conservation payment schemes. In a survey offering a choice of payment packages, individuals preferred higher cash payments and lower community-based benefits. But the opposite was true in open-ended interviews and focus groups, where people called for more collective funds.

## THEORY OF CHANGE

In debates around the design of payments for ecosystem services, much discussion is centred on payment levels and formats – whether cash or in-kind, periodic or one-off. Although the size of payments is partly determined by available funding, they should also reflect opportunity costs for farmers who avoid deforestation. In-kind contributions of community infrastructure may bring more rewards for less investment, but cash payments can represent much-needed resources, allowing benefits to reach the most vulnerable community members. To ensure that as many people as possible

# Choosing incentives to protect ecosystems

## What kinds of payment do people want for protecting forests? Offering a choice changes their answers.

As any pollster knows, the way you ask a question can change the answer you get. Switching survey methods may even reverse the results completely – that's what happened for Bolsa Floresta, Brazil's 10-million-hectare rainforest protection programme, when researchers looked into the most cost-effective way to reward the forest's local stewards. Would participants prefer more cash in their own pockets, or more community-wide benefits? It depends how they are asked.

It's ever more important to get these incentives right, as a growing amount each year is paid across the global South to landowners, farmers and communities in return for conserving and managing ecosystems. These 'payments for ecosystem services' (PES) – which put an economic value on environmental benefits such as cleaner watersheds and carbon storage to ease climate change – are becoming a key tool for environmental and development initiatives.

There are efforts towards a worldwide payment scheme to prevent deforestation while helping poor people who draw their livelihoods from the forest. But international donors still need assurance that this is money well spent.

### Popular payments

The Amazonas Sustainable Foundation (FAS), who run Bolsa Floresta, partnered with IIED to explore methods

for making forest payments go further – from the perspective of local people.

One of the world's largest PES programmes, Bolsa Floresta is unusual not only in size but in its participatory approach. In Bolsa's 15 reserves, participants form 'Bolsa associations' that receive financing to manage the programme locally and enforce conservation.

The Bolsa Floresta also has two collective reward funds to invest – one for community infrastructure projects such as schools and ambulances, and one backing sustainable forest-based businesses. In addition, each family who pledges no deforestation receives their own monthly cash payment equivalent to US\$25.

FAS wanted to know if it was striking the right balance between these four components, or if altering the budget would better meet people's needs. The timing of this query was important. NGO projects typically save such evaluations for the end of their funding cycle, but FAS wanted feedback midway so they could adjust course.

Working with residents of the Juma, Rio Negro and Uatumã reserves, we gathered opinions in open-ended one-on-one interviews, and in a survey offering a choice of payment packages. The 'choice experiment', a technique borrowed from commercial marketing, is designed to clarify the trade-offs people make in complex decisions where the sticker

participate, payment schemes need to tailor their packages to public preferences. Choice experiments, long used in market research for complex commercial products such as new cars, offer a useful methodology to understand the tradeoffs people choose in the context of any given payment programme.

## KEY LESSONS LEARNT & INNOVATIONS

- Individuals offered a choice of conservation rewards strongly preferred cash payments, whereas people in open-ended interviews or focus groups called for collective benefits such as community infrastructure. Social pressure in groups and 'strategic bias' in interviews may mask participants' true preferences.
- All interviewees appreciate the need for collective benefits to improve their livelihoods. The preference for cash may be linked to limited understanding of the programme objectives or to confusion regarding the nature of the implementer (FAS versus the government). Social benefits like schools and health centres may be seen as citizens' rights and the government's responsibility – not as compensation for protecting resources.
- Our case study explores how 'choice experiments' can clarify complex preferences and tradeoffs that go beyond market factors such as price. This methodology should be further tested in these contexts and could be extended to inform decisions in other conservation and development initiatives.

## PARTNERS' VIEW

*The initiative to run this analysis and research is very positive, for sure. But maybe our biggest lesson learnt is the importance to continue to apply this research, looking for improvements on its methodology so it would be possible to achieve most conclusive results.*

Virgilio Viana  
Amazonas Sustainable Foundation

## IIED SUSTAINABLE MARKETS GROUP

The Sustainable Markets Group drives IIED's efforts to ensure that markets contribute to positive social, environmental and economic outcomes. The group brings together IIED's work on market governance, business models, market failure, consumption, investment and the economics of climate change.



Photo: CIAT/Neil Palmer

To understand participant's true preferences for payment schemes, survey methodology should be designed to reduce strategic bias in responses.

price is only one important factor. When asked open-ended questions, interviewees may show 'strategic bias' – they tend to try to influence programme managers strategically and do not necessarily reveal their true preferences. In a choice format, respondents are less likely to answer strategically because they are forced to make tradeoffs, giving up something for each improvement they request. To further reduce such bias, we had a third-party consultant administer surveys and interviews.

### Survey says...

The five payment packages we tested each had the same total funds, but distributed the money differently among Bolsa's four funding streams. Of 314 households surveyed in the choice experiment, about 80 per cent picked a package that raised the individual cash payment by a fifth at the expense of community benefits. Older people were more likely to stick with the status quo, whereas households with more economically active members tended to opt for more cash.

Another trend involved perceptions of FAS, which is a public-private partnership. Those who saw the organisation as part of the government were more likely to prefer increased cash payments, perhaps because they believe the government should provide social benefits regardless of good environmental behaviour.

The results of open-ended questioning, however, were just the opposite. Asked what improvements or increases they would like, 73 per cent suggested more funding for community-based components, rather than more cash for individuals. Collective rewards were also emphasised in focus groups that FAS held at the time of the survey, where social pressure and expectations may have played a part.

FAS are mulling over these conflicting data as they plan the next phase of the programme. IIED researchers put more trust in the choice experiment, which states tradeoffs in black and white and reduces strategic bias. We hope to extend this tool to PES sites elsewhere, along with the model of evaluating throughout project cycles. Further work could clarify how different kinds of questions trigger opposite answers, and help other researchers grapple with the methodological issues this raises.

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