

# Conserving Forests Through Periodic Grants: Bolsa Floresta, Brazil

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Short title: Conserving forests through grants, Brazil

**Key Message:** In Amazonas, Brazil, the government and private institutions created an innovative mechanism to finance a PES scheme for tropical forest conservation and the promotion of sustainable livelihood practices. The area and the scheme are comparatively large, covering about 10 million hectares (an area larger than Portugal). The scheme is considered to be the largest of such schemes in tropical forests (FAS, 2009).

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Reviewer: Sven Wunder

# What is the problem?

Amazonas is Brazil's largest state. 98% of it is covered by forest (Viana, 2006) and it alone accounts for 10% of the world's remaining rainforest. Despite the recognized relevance of forests in the context of climate change, there is still no mechanism of compensation for maintaining standing forests, something particularly relevant in the Amazon, where deforestation is estimated to contribute to a substantial portion of global  $CO_2$  emissions (Viana, 2006). The forest of Amazonas, while relatively well-conserved to date, now faces imminent threat from non-sustainable timber industry practices, encroachment by soybean cultivation, and drought-driven fires (Viana, 2006). Not only are carbon stocks and conservation efforts at risk; so too are the communities in the area that depend on the forest for their livelihoods – as conversion of the forest for other uses would eliminate the resources they depend upon.

### Which ecosystem services were considered and how?

Bolsa Floresta (the Forest Conservation Allowance Program) in the state of Amazonas, is a government established payment for ecosystem services scheme managed, at present, by Fundação Amazonas Sustentável (FAS, Sustainable Amazonas Foundation). The program focuses on a region commonly referred to as the "Deep Amazon," the most conserved part of the biome. In the "Deep Amazon," deforestation rates are historically low, access is difficult and there are a large number of protected areas (Viana, 2008).

It is the goal of Bolsa Floresta to cooperate with indigenous populations living in the region, particularly within extractive reserves and similar protected areas where human use is permitted. By supporting livelihoods and guaranteeing the basic needs of people in the region, the program aims to maintain standing forests and sustain both ecosystem services and local livelihoods (Wertz-Kanounnikoff et al., 2008). As a result, the program focuses on ecosystem services in two ways. First, it aims to compensate the people seen as responsible

for conserving the forest - because standing forests are considered to be important in the context of climate change. Second, it aims for better use of ecosystem services - for example, through extracting non-timber products for improved social returns.

# Which policies were adopted on the basis of this info about ecosystem services?

Created in 2007 by a state law, Bolsa Floresta compensates and finances sustainable livelihood practices in communities living within protected areas that commit to zero net deforestation (FAS, 2009). The central mechanism for this, and other initiatives, was the creation of an endowment fund to purchase the ecosystem services provided by standing forests. The program began by focusing on protected areas (these are already recognized as having "environmental goods" and "environmental services"). The plan, however, is for the initiative to broaden its scope in the future to include land outside of protected areas (Viana, 2008).

By 2009, less than three years after its creation, 6,350 families living in 14 protected areas in the Amazonas were receiving roughly US\$ 30/month per family (FAS, 2009). Direct payment to individual families (Bolsa Floresta Familiar) is just one program component. There are three others. These address community organization (Bolsa Floresta Associação), basic social benefits (Bolsa Floresta Social) and alternative income (Bolsa Floresta Renda). Bolsa Floresta Associação transfers money to community associations in proportion to the number of families receiving Bolsa Floresta Familiar - fostering local organization. Bolsa Floresta Social and Bolsa Floresta Renda each provide around US\$ 80,000 to every protected area for projects related to education, health, communication and transport (in the case of Bolsa Floresta Social) or sustainable livelihood practices (in the case of Bolsa Floresta Renda) (FAS, 2009).

In order to participate in the program, one has to attend a training course on climate change and sustainability and commit (in writing) to zero net deforestation (FAS, 2009). As the program is still in its early years, it is difficult to assess whether deforestation has been reduced (Wertz-Kanounnikoff et al., 2008). Questions of additionality have, however, already been raised as deforestation was unlikely to be high in the protected areas, even without the program (Wertz-Kanounnikoff et al., 2008). Still, the Bolsa Floresta is held up as a worldwide example of the use of payments for environmental services (PES) for REDD implementation and has the potential to be replicated in other Brazilian states and Latin American countries (Viana, 2008).

#### What was necessary for developing the instrument?

Discussion regarding the establishment of an endowment fund for payment for ecosystem services started before 2005, led by the Secretariat of Environment and Sustainable Development (SDS) of the Government of Amazonas, in collaboration with a number of nongovernmental organizations<sup>1</sup> (Viana, 2006). Presented in international meetings and discussed with local stakeholders, this process defined an innovative implementation strategy. Although born within state government and initially managed by it, the program changed hands shortly after its creation. In 2008, the Amazonas government joined forces with Bradesco, one of Brazil's largest commercial banks, to establish the Fundação Amazonas Sustentável - FAS, a public-private independent institution (FAS, 2009). On that occasion, both partners donated about US\$ 11.8 million to form an endowment fund, where only the financial returns are used to sustain the program (FAS, 2009).

<sup>&</sup>lt;sup>1</sup> The Institute for Conservation and Sustainable Development of Amazonas (IDESAM), Institute of Environmental Research of the Amazon (IPAM), Global Canopy Program (GCP), Amazon Working Group (GTA) and National Council of Rubber Tappers (CNS)

From the start, the fund was intended as an alternative for parties interested in reducing CO<sub>2</sub> emissions through reduced deforestation (Viana, 2006) in a context of undefined international policy. The final arrangement (more flexible than schemes managed by government institutions) includes good governance mechanisms, such as external auditing, and has attracted other partners. These partners include Coca-Cola Brazil, which has donated US\$ 11.8 million to the fund (2009), and Marriott Hotels which is financing the implementation of an already well-known REDD initiative, the Juma Project (FAS, 2009). At present, FAS has a capital of about US\$ 38 million, as well as approximately 60 employees to run its operations (FAS, 2009).

#### What other factors were important for a successful policy uptake?

The Bolsa Floresta is not an isolated initiative of the Amazonas state government. Since 2003, the state has been supporting an initiative called Zona Franca Verde (ZFV, Green Free Trade Zone), based on a mix of policies to foster sustainable development and reduce deforestation. These policies are based on long-term sustainable development goals and invest in science, technology and innovation, having in mind that there is a deadline, 2023, for tax and location incentives (Manaus Free Trade Zone). These, until now, have been responsible for the state's economic performance (CEPAL, 2007).

#### References:

COMISSÃO ECONÔMICA PARA AMÉRICA LATINA - CEPAL (2007). Análise Ambiental e de Sustentabilidade do Estado do Amazonas. Chile: Nações Unidas. Available online: http://www.eclac.org/publicaciones/xml/1/29161/LC-W126.pdf

FAS - Fundação Amazonas Sustentável (2009). Relatório de Gestão 2009. Fundação Amazonas Sustentável. Manaus. Available online: http://www.fas-amazonas.org/pt/useruploads/files/relatorio2009\_final.pdf

WERTZ-KANOUNNIKOFF S, KONGPHAN-APIRAK M, WUNDER S. (2008). Reducing forest emissions in the Amazon Basin: A review of drivers of land-use change and how payments for environmental services (PES) schemes can affect them: CIFOR.

VIANA, V. M. (2006) Draft version of the "Amazonas Initiative for Forest Conservation and Ecosystem Services". Presented at UNFCCC COP 12 at Nairobi, Kenya, on November 6-17th, 2006. Available online: http://www.idesam.org.br/documentos/04\_PaperNairobi25.pdf

VIANA, V. M. (2008). Bolsa Floresta (Forest Conservation Allowance): an innovative mechanism to promote health in traditional communities in the Amazon. Estud. Av., São Paulo, v. 22, n. 64.

VIANA, V. M. (2009). Desatando o nó entre florestas e mudanças climáticas. Fundação Amazonas Sustentável. Manaus.

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