

## Seeing REDD in the Amazon: a win for people, trees and climate

■ VIRGILIO M. VIANA



*Tucked away in a tangle of Brazilian rainforest, a quiet revolution is unfolding. In Amazonas, the country's biggest state, people are using an approach called REDD to conserve their forests in return for credit. This project's success has huge implications for reducing deforestation, cutting emissions and eradicating poverty, and its time has definitely come. Between 1990 and 2005, over a million square kilometres of forest were lost in the tropics. Half that was in the Amazon. Deforestation accounts for over 17 per cent of global greenhouse gas emissions, so a curb on felling is key to successfully mitigating climate change. But the Amazon is prey to unsustainable development, and the costs of inaction and laissez-faire are higher than those of stopping deforestation. REDD is the most promising solution yet for this volatile mix of issues.*



### The perverse logic of clearfelling

Deforestation remains an entrenched and ongoing issue in the Amazon, the world's largest and naturally richest rainforest. But Amazonas, Brazil's largest state, is seeing significant signs of change.

Amazonas harbours some 1.57 million square kilometres of rainforest – six times the size of the United Kingdom. It is also the site of the Juma Sustainable Development Reserve Project, the Amazon's first independently validated project where locals are being rewarded for protecting their forests, and reducing carbon emissions in the process.

Dubbed REDD for 'reduced emissions from deforestation and degradation', such projects are up against a formidable status quo in the Amazon. Deforestation there has an economic and social logic. It is the result of a perverse system that financially rewards those who clearfell, from land grabbers and illegal loggers to agribusiness. Cattle farming, for instance, is a highly profitable enterprise. From 1996 to 2006, numbers of cattle in the Brazilian Legal Amazon – that part of Brazil within the Amazon basin – rose from 37 million to 73 million. Deforestation is not a result of irrationality, ignorance or stupidity: people do get, or expect to get, real benefits from deforestation and unsustainable forest harvesting.

Besides the environmental impacts of expanding agribusiness and poor forestry practices, unsustainable development in the Amazon has also led to significant poverty and social inequality, notably the highest concentration of slavery cases in Brazil. Similar social

injustices, targeting indigenous and traditional people in particular, occur on other deforestation fronts throughout the tropics.

### A paradigm that has to shift

Over the last few decades, a cautious optimism has emerged as isolated attempts to curb deforestation have yielded positive results. In Amazonas, deforestation has been in continuous decline, from 1582 square kilometres in 2003 to 479 in 2008 – a 70 per cent decrease. As a result of political change in 2003 with the election of Governor Eduardo Braga, the state enacted a set of public policies aimed at reducing deforestation and improving livelihoods of forest dwellers. Lessons learned there and elsewhere can be expanded, adapted and replicated.

Obviously, the solution is not a simple, technical one. The starting point is no less than a radical change in the development paradigm. Forests have historically been seen as valueless, and forestry as backwards – neither of them worthy of inclusion in 'development' strategies, or of the usual set of policy instruments encouraging proper investment, such as tax incentives and appropriate credit. Yet the major drawbacks being felt through deforestation now suggest that forests need to be regarded as valuable assets to individuals, families, business and governments. This paradigm shift has to be translated into broad cross-sectoral policies in areas such as finance, education, health, energy, and sustainable land use systems.

In short, public, non-profit and private sector policies have to be guided by a simple message: 'forests are worth more standing than cut'.



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And some valuations of standing forests in the Amazon have produced very positive results. On the one hand are the results of public policies aiming to increase the value of forest products – such as honey and managed timber – supporting private sector investment and social-environmental entrepreneurship. In Amazonas, the price paid to producers of andiroba oil, derived from the nut of the *Carapa guianensis* tree, increased 3.6 times from 2003 (when sustainable development policies began to be rolled out) to 2008. The more profitable sustainably harvested forest products become, the less attractive deforestation is, and the greater the economic stimulus to conserve forests.

On the other hand, environmental services such as carbon sequestration and storage have big potential and are a key part of the equation too. The more valuable environmental services are, the more resources will be available for investment in improving local people's quality of life and ability to generate income.

### Ready for REDD: building on success

The biggest challenge is not how to reduce deforestation, but how to finance the reduction. The agricultural frontier in the Amazon is pushed along by a multi-billion dollar per year economy. If the nature of the battle is predominantly economic, irreversible success will come only with sustainable finance – public, private and non-profit programmes aimed at stopping deforestation for carbon stored, biodiversity conserved, water supply protected or poverty eradicated. Financing a new development paradigm in the Amazon is relatively low in cost compared to the environmental services produced by its standing forest ecosystems.

Take water: every year, Amazonian forests pump out 8 trillion tonnes of it into the atmosphere. There is no price tag on that yet, but it has clear economic significance for Amazonian agricultural production, electricity generation and industry that generates over US\$1 trillion a year. And now, REDD has opened up the possibility of valuing carbon-based environmental services in the Amazon. Sceptics say there may be methodological problems with REDD, but Amazonas's groundbreaking Juma project overcame all such barriers, including the establishment of baselines – benchmarks for calculating emissions reduction. Under the REDD initiative there, spearheaded by the Amazonas Sustainable Foundation (FAS), communities in the reserve are rewarded for their stewardship. In 2008, the scheme was validated according to standards of the Climate, Community & Biodiversity Alliance by the international verification service TUV SUD. It passed the methodology test with flying colours.

Juma is part of a broader initiative focused on payments for environmental services: the Bolsa Floresta (forest conservation grant) programme. Initiated by the Amazonas government and Brazilian private banking giant Bradesco, this is now funded by a range of players. The Marriott hotel chain, for instance, is financing Juma through voluntary contributions from guests. The total investment of US\$8.1 million per year supports 6000 families committed to zero deforestation in all Bolsa Floresta projects. Families receive direct cash payments through a highly efficient instrument: an electronic debit card accessible in banks and post offices in any town. Communities also receive investments for income generation activities, social programmes and supporting local associations. Poverty eradication is a key component of environmental conservation. Bolsa Floresta is now ready to be scaled up, and IIED is assessing a wide variety of schemes for their potential.

The global carbon market reached US\$118 billion in 2008 but very little of it was invested in protecting tropical rainforests. Meanwhile, the international community faces a process of great strategic importance: the new international climate agreements, to be signed in December 2009 in Copenhagen. If these include forest carbon as both a market instrument and a mechanism for intergovernmental funding, they will set a historic precedent.

Forests conservation and greenhouse gas emission reduction targets must top the list of priorities in the new climate agreements. REDD can become a significant catalyst of change to stop deforestation and eradicate poverty in many regions of the planet. As Nelson Mandela has said, 'Those who are hungry are in a hurry.' We urgently need to start a revolution in the world's forests. Time is running short.

### Next steps

- REDD financing mechanisms should be flexible so they can incorporate both inter-governmental funding (at national scale) and market-based funding (at project level).
- REDD should be allowed in the carbon credit market with a quota to avoid flooding the market. Even a small quota of 10 per cent would generate more resources than any other international financing mechanism for tropical forest conservation and poverty. REDD could tip the financial and governance balance in favour of sustainable forest management.
- REDD funding should use instruments such as certification and validation to ensure appropriate benefit sharing for indigenous peoples and local communities.

### Further reading & websites

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