

forests —

Tropical forests are one of the planet's most precious ecosystems, home to a huge variety of species, storehouses of genetic resource diversity. They provide crucial environmental services — from conserving soil and watersheds to protecting against floods, landslides and other natural disasters — and are important sources of tourist income. Internationally, forests have a crucial role in maintaining the climate balance as reservoirs and sinks of carbon: standing forests are the most important carbon dioxide reservoir on earth. Yet deforestation is escalating, and now accounts for 13 million hectares a year, equivalent to 1.5 per cent of the 858 thousand million hectares of the world's tropical forests.

Even though an estimated 20 per cent of the world's emissions of greenhouse gases are associated with deforestation — and two thirds of this is attributed to the loss of tropical forest — the issue has, until recently, been conveniently swept under the carpet.

Two years ago in Montreal, the 11th Conference of the Parties (COP13) the UN Framework Convention on Climate Change, took up the issue under a new agenda item on "Reducing emissions from deforestation in developing countries: approaches to stimulate actions". Proposed by Papua New Guinea and Costa Rica, it was finally decided last December at COP 13 in Bali. The decision — "Reducing emissions from deforestation and degradation" (REDD) — is a major accomplishment, sending a strong message that developing countries are prepared and willing to reduce emissions.

The Bali conference — already being dubbed "the Forestry COP" — also included "policy approaches and positive incentives related to reducing emissions from deforestation; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries" as part of the Bali Action Plan for a full, effective and sustained implementation of the Convention through long-term cooperative action, which will be part of the new international climate regime that will come into being after the present provisions of the Kyoto Protocol expire in 2012. Thus Bali finally put forestry into the climate equation.

As many agree, compensated reductions under REDD would facilitate more ambitious targets as part of the post 2012 agreement, lower the costs of climate change mitigation, and buy time for research and development of technology to cut future emissions. It will also increase the developing countries' contribution, since deforestation is, for many, the main source of emissions.

There is still much uncertainty about the form REDD mechanisms will take in developing countries — but, as projects and pilots are already being established, it is essential to understand their implications now. The signs are that they are likely to be very context specific, although bound by certain indicative guidance (e.g. under a voluntary non-market approach) and by the fundamental principles of market systems (e.g. under a market based instrument of the post 2012 climate regime).

the future

by Roberto Dobles

There is consensus that methodologies exist, and are good enough, for proceeding with designing the REDD mechanism, addressing such issues as developing emissions baselines (based on historical emissions, taking into account national circumstances) to estimate future reductions, and establishing monitoring and reporting protocols.

Challenges related to governance pose the greatest obstacle. Major institutional and policy ones must be overcome. Significant investment will be needed to develop specialized institutional capacity and technical expertise — and for the process of policy and regulatory reform since deforestation is a side effect of lack of governance, legal uncertainties and non-forest policies

Depending what is driving deforestation, REDD payments could be used to: (a) strengthen existing policies — or create new ones and innovative measures — including law enforcement and capacity building; (b) enhance stakeholders' involvement through such economic incentives as payment for environmental services. The former provides an opportunity for governance reform. The latter is a means of translating carbon payments into effective incentives for sustainable forest management, combining international support and national action.

The question of how these compensated reductions or enhancement of sinks will be financed is left open. The Stern Review of the Economics of Climate Change estimated that halving global deforestation rates over the next decade would cost approximately US\$ 5- US\$10 billion a year through a system of policy approaches and positive incentives.

There are already payments for carbon sequestration from afforestation and reforestation. However, after the Bali decision on REDD, emission reductions from deforestation and degradation will also be eligible for funding under the Convention, though how this will happen under a post 2012 regime is still unresolved

Forest carbon has been excluded from regulatory markets through concerns about methodology and market stability. It is increasingly recognized that methodological concerns can be tackled and that forest carbon is vital in mitigating climate change.

Market stability concerns have centered around the effect of the potential magnitude of emission reductions from REDD in developing countries on the already determined Kyoto Protocol target for 2008-2012. The post 2012 situation is different. Commitments for the new climate regime have not yet been fixed but are expected to be much more ambitious — so the potential magnitude of REDD credits should provide hope, not concern.

Combining an ambitious long-term target with shorter Kyoto-type commitment periods could create a robust balance between the demand for and supply of emissions reductions from deforestation and the enhancement

of carbon stocks by sustainable forest management. Market stability is therefore, a weak argument against REDD credits.

Developing countries wishing to reduce their emissions from deforestation must have immediate access to the carbon market, since early action will provide early learning. Banking and grandfathering REDD compensated reductions will help grasp opportunities that may not be around for long on present trends.

Decisions to convert forests fail to account for the value of the environmental services they provide. Since these externalities don't enter the cost-benefit equation, the social costs of deforestation exceed the private gains, and forests will continue to be converted or degraded.

In 1950, half of Costa Rica was covered by forest, but this declined rapidly to 29 per cent by 1986. Over the last decade the country has turned the tide, on both public and private lands. Deforestation is more than counterbalanced by reforestation and regeneration of abandoned productive land, and forest cover is almost back to the 1950 level.

This success is due to a remarkable set of institutional innovations and legal reforms in the mid 1990s. In 1996, for example, a new law explicitly recognized forests' environmental services and gave private landowners compensation under a contract where they undertook to protect the forest land for 20 years. Simultaneously, Costa Rica moved aggressively, establishing a National System of Conservation Areas under the Ministry of Environment and Energy. Thus, by the end of the 1990s, a novel set of institutions was ready to mediate the creation of markets for forest environmental services, with the government acting as an intermediary.

Forest ecosystems protection is an issue of public good, and it is hard to conceive of an effective and equitable solution without appropriate compensation for those that provide them.

REDD is particularly important as it provides a unique market incentive for tackling some of the underlying market and governance failures.

From a market perspective, it brings together the demand and the supply sides of the problem by making sustainable forest management more attractive. As for governance, it provides an opportunity for reform and reducing opportunity costs.

If countries want to engage with forest carbon markets, they need to tackle failures of governance and policy. Governments and donors must also invest in capacity building. All this will reduce transaction costs and risks to buyers, and thus increase the demand, and willingness to pay, for ecosystem services. However, fully including REDD credits in the carbon market will only be possible once there is a long-term global post 2012 climate regime. 