

REDD

– last hope for tropical forests?



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Introduction

Tropical deforestation happens because it is more profitable to cut down trees or forests than look after them. This is due to a combination of market, policy and governance failures which make alternative land uses more attractive - in other words the opportunity costs of sustainable forest management (SFM) or conservation become too high. A key response to market failure is the development of payments for ecosystem services (PES) mechanisms. Since its linked to climate change, the most important PES opportunity currently is for 'forest carbon' payments.

Forest carbon payments can occur either for carbon sequestration, deriving from the net absorption of carbon dioxide in planted trees or by protecting carbon stocks, which would otherwise be emitted, in natural forests. The latter is known as avoided deforestation (AD) in the voluntary carbon markets and Reduced Emissions from Deforestation and forest Degradation (REDD) in the United Nations Framework Climate Change Convention (UNFCCC) context.

Various concerns, which space precludes discussing here, have resulted in forest carbon trading being excluded or marginalised in the regulatory carbon trading markets like the Clean Development Mechanism (CDM) of the Kyoto Protocol and the EU Emissions Trading Scheme. But increasingly, its being realised that inclusion of AD or REDD is vital for tackling climate change. The momentum for this has accelerated rapidly since the Stern Review (2006) observed that deforestation contributes about a fifth of man-made carbon dioxide emissions. Stern pointed out that while AD is allowed for industrialised countries in the Kyoto Protocol, it is not permitted for tropical countries where most deforestation occurs. Stern proposed AD or REDD as a "highly cost-effective way of reducing greenhouse gas emissions.... fairly quickly" while recognising that "major institutional and policy challenges" must be overcome.

At the Bali UNFCCC meeting in 2007 "the urgent need to take further meaningful action to reduce emissions from deforestation and forest degradation" was agreed. However the precise mechanism for REDD is not yet agreed, partly since whatever mechanism is decided will result in different 'winners' and 'losers' among tropical or developing countries, due to various methodological and practical complexities.

'Compensated Reduction' REDD

The front-running REDD proposal in the UNFCCC negotiations is 'compensated reduction' in which developing countries could, on a voluntary basis, sell carbon credits gained by reducing their deforestation rates against a baseline or 'business as usual' deforestation rate. A common aspect of REDD proposals is that a national programme, as opposed to a project based approach, is essential due to the 'leakage' problem. 'Leakage' occurs when carbon gains in one place are lost when deforestation pressures are displaced to another forest area. Proponents of compensated reduction argue that:

- it is the only genuinely market driven approach and will ensure the "additionality" of carbon payments (see Box 1);
- it can facilitate more ambitious emission caps in a post-Kyoto regime;
- it will lower global climate change mitigation costs and 'buy time' for technology and policies to cut industrial emissions;
- it will increase developing country participation in climate change mitigation, since for most tropical countries deforestation is their main source of greenhouse gas emissions, and therefore encourage US participation; and
- there should be synergies between REDD and a national climate change adaptation plan.

But compensated reduction is vulnerable to various criticisms and faces a range of challenges, including:

- will REDD cause market flooding and suppress carbon prices, seriously reducing the economic viability of renewable energy and other key mitigation options?
- equity concerns, including those associated with additionality (Box 1);
- a perverse incentive for low deforestation countries to increase deforestation in order to gain credits later on. It means that countries like India and Costa Rica which now have very low or even negative deforestation rates would have no carbon-based incentive to keep their forests. A similar situation faces indigenous and other communities which have conserved their forests for centuries;



- the highest deforestation rates tend to be in weaker governance countries: it will require high levels of political will and sustained donor support to deliver the necessary policy, governance and tenure reforms for REDD to work;
- the definition of baseline deforestation rates is problematic. The approach likely to be favoured with compensated reduction is an average historical deforestation rate assumed to continue into the future. But deforestation can slow as forests are depleted or speed up as countries experience faster economic development. An alternative is to predict future deforestation rates, but this is also difficult due to the many unpredictable factors which affect deforestation rates;
- countries could decide on 'anti-poor' REDD strategies (Box 1) or stop their REDD efforts once 'low hanging fruit', like forest fire prevention, have been captured and before the main policy and governance failures are tackled (although this would ultimately mean less success and less REDD payments);
- up-front funding will be needed as carbon payments would not flow until 2017 – the end of the next UNFCCC (or post-Kyoto regime) accounting period. Initial costs include national 'carbon infrastructure' (e.g., specialised institutions, expertise and technology), for REDD research and planning, and for the policy/legal reform process – known as 'Readiness' activities¹. The international community will need to take the lead in pre-financing REDD and/or underwriting the risks to forward investors in REDD credits;
- government actions may have little effect on deforestation rates since 'extra-sectoral' factors like agricultural commodity prices (e.g., due to the biofuels boom) can be key drivers of deforestation;
- it is voluntary for tropical countries - if key forested countries opt out, international leakage is likely due to the continuing demand for timber and NTFPs.

Market flooding

The key to the market flooding concern is how much the demand for carbon offsets will increase. If the industrialised country emission targets remain weak, as under the Kyoto Protocol, then the concerns are justified. However, it is being increasingly recognised that very strict emission reduction targets are vital for tackling climate change, and to ensure that the first priority is to cut emissions at source. In fact the proponents of compensated reduction think that it would facilitate the setting of stringent emissions targets; without a big increase in the supply of carbon offsets, the price of carbon could rise beyond 'willingness to pay' buyer prices.

Box 1: Additionality and equity issues of REDD

REDD is not inherently 'pro-poor' and could prove anti-poor. Carbon offsets must show 'additionality'. This means that it has to be shown that the carbon gains would not have happened without a carbon payment, e.g., carbon storage would not be additional if forest management is economically viable for timber or other products, or if there is no threat to the forest. Therefore REDD actions must target threatened forests. Thus the main 'winners' could turn out to be would-be developers or degraders, e.g., wealthier farmers planting oil palm, rather than forest conserving communities.

A related ethical issue is that these developers are often politically well-placed individuals who tend to break 'paper' laws, e.g., encroachment on state or community tenure land. Therefore REDD payments could end up compensating them for the opportunity costs of obeying the law. Clearly the 'correct' solution is legal compliance, but governments may find REDD payments politically more expedient. Other equity concerns are that governments could adopt a 'fences and fines' approach to REDD, possibly involving the eviction of indigenous or other poor groups from protected areas and/or ignoring customary tenure and other property rights. Use of a credible standard like the Climate, Community and Biodiversity Alliance (CCBA) standard, used in the recently designed Aceh, Indonesia, REDD programme, would greatly help, but it will be difficult to oblige governments to use such standards. Other factors determining equity outcomes are the level of transaction costs, how project contracts are structured and compliance regimes.

Source: Wunder (2007); www.climate-standards.org; and other sources.

¹ The World Bank Forest Carbon Partnership Facility has earmarked \$300 million for 'readiness' and pilot projects, and DFID has announced a £50 million fund for the Congo Basin. The Norwegian Government has also pledged \$550 million per annum for REDD, but it is not clear what proportion will be for readiness.



Alternative 'non-market' REDD proposals

There are various alternative REDD proposals to market-based compensated reduction. Some of them propose a global fund rather than carbon trading, although a weakness of this is that it is less likely to result in 'real' carbon benefits, and how to financially sustain it. Other proposals revolve around compensating the maintenance of carbon stocks in standing forests. Such approaches would make it easier to reward community conservation, but at the sacrifice of carbon 'additionality'. This reflects a wider tension with PES mechanisms of the trade-off between environmental and equity benefits – PES is a difficult area for win-win benefits.

Unresolved REDD issues

Other unresolved issues in the UNFCCC discussions include:

- whether REDD credits should be fully 'fungible', i.e., tradable across all carbon trading mechanisms, or whether they should be limited to a REDD or AFOLU (Agriculture, Forestry and Land Use) market – this relates to the market flooding concern;
- how to combine a national REDD strategy with a project-based REDD approach – the latter is necessary in order to include the private sector, given the poor record of governments in market-based approaches;
- there was agreement in Bali that it is vital to include forest degradation – the second D of REDD – but there are methodological and measurement costs which will increase transaction costs;
- crediting of 'early action' or pilot REDD projects for the period prior to the next UNFCCC accounting period (2013-2017); and
- how to control the international leakage problem mentioned above.

Conclusions

Deforestation is caused by a combination of market, policy and governance failures. REDD would bring together the demand and supply sides of the problem by making SFM and conservation more attractive (tackling the market failure problem) and reducing its opportunity costs (driven by policy and governance failures). In fact REDD is unlikely to be effective unless the opportunity costs of forest conservation are reduced. It can also deliver major biodiversity and hydrological benefits, and should have major synergies with adaptation strategies. But there are major concerns about its equity impacts and (carbon) market flooding.

A compensated reduction REDD mechanism could be anti-poor according to how a country pursues REDD. Also, due to the high transaction costs for communities, external support by donors and international NGOs will probably continue to be essential for ensuring appropriate compensation for community conservation. On the other hand, to be effective and sustainable, any REDD strategy must tackle the main policy and governance failures, including lack of secure property rights for resident communities, inequitable governance and illegal logging - and that would be good for the poor.

In view of the perverse incentive problem of compensated reduction, it is suggested that a complementary non-market mechanism, which compensates the maintenance of the standing carbon value of forests, is a vital complement to a market-based REDD strategy. This would need to be mandated on industrialised countries by the UNFCCC – global governance should not only be driven by the market place. Finally it remains to be seen whether REDD payments will provide sufficiently strong market-based incentives for governments and the international community to overcome the political economy (policy and governance failures) drivers of deforestation.

References

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