

Two Pluses Don't Make a Positive: REDD and agriculture

by Oscar Reyes
Thursday, 20 January 2011

It is one of the first laws of diplomacy: when it is hard to agree on an answer, change the question. Reducing Emissions from Deforestation and Degradation (REDD) schemes are the product of two of these diplomatic back-flips.

First, whereas the Kyoto Protocol included no forestry or land-use emissions targets or mechanisms, such measures are a central feature in negotiations for a continuation or successor climate treaty. The former caution resulted from the complexity and uncertainty of accounting for reductions in these sectors, but the fact that significant measurement challenges remain has not slowed the rush to develop REDD. This new enthusiasm is largely driven by economic calculations. According to cost-benefit analyses like the influential Stern Review on The Economics of Climate Change, reducing tropical deforestation would be far cheaper than curbing fossil fuel use in the industrialised world.¹

A second switch concerns the framing of the question of how best to tackle deforestation. REDD puts a cash value on forests on the assumption that this will result in their preservation and, in turn, a "carbon saving." In other words, these schemes do not ask "how best might forests be protected?" but presume that carbon pricing mechanisms are the leading solution. Negotiations on REDD are then narrowed to questions of whether it is better to make forest payments through direct financial transfers or to develop forest carbon offsets. These are more often presented as a sequence, rather than a set of alternatives: almost all potential funders view their initial outlay as a means to "kick start" what will eventually be an offset scheme. The eventual extension of REDD to encompass all forms of land use is also under consideration.

The reality of REDD is likely to be far messier, more expensive and damaging than the economists claim. It will also prove fundamentally unjust - a concept that is alien to cost-benefit modelling. Indeed, the very idea that REDD offsets could be used to allow continued greenhouse emissions from industrialised countries turns the ethical responsibility for climate change upside down: it outsources responsibilities that should rest with the very countries and corporations that have disproportionately caused climate change. Such concerns are not simply ethical but practical too. Deforestation cannot be reduced to a question of cost without losing sight of the complexity of social factors and power relations that underlie why it is happening. Agriculture is at the forefront of this debate because its encroachment into previously forested areas is generally presented as the major cause of tropical deforestation.²

This article will show that REDD could favour large-scale farming and do considerable damage to the lives and livelihoods of small farmers, who play a vital role in food sovereignty. REDD "readiness plans" already include plantations and perverse incentives for the conversion of forested land for export-led agriculture. As such, REDD will not necessarily reduce deforestation, but can be characterised as a form of "structural adjustment" programme for land use.³

Not all agriculture is the same

REDD programmes will privilege one form of agriculture - export-oriented monocultures - and disadvantage others. This claim might seem counter-intuitive at first glance. As a price mechanism, REDD does not discriminate between how different types of agriculture intersect with forests. For the purposes of carbon accounting, all that matters is that a measurement can be made of "one ton of carbon saved" - in particular, if this is to be rendered equivalent to one ton of carbon emitted elsewhere in the form of an offset.

Yet the definition of forests currently adopted in international REDD negotiations contains a loophole large enough to drive a tractor through: it fails to distinguish between standing forests and plantations. Biodiverse, natural forests could therefore be burnt or logged and replaced with plantations, but this would not be treated as "deforestation."⁴

Furthermore, the effects of REDD on the ground are likely to entrench inequalities because it is an approach that values only what is visible in the form of monetary transactions. As Chris Lang of REDD-Monitor points out,

the cost of REDD is based on estimated land values, which are in turn based on the (discounted) values of the agricultural products produced on the land. An obvious problem with this approach appears when the person clearing the land does so largely to feed themselves and their family. The monetary value of the agricultural products might be very low (and therefore the opportunity cost is low), but for the family concerned the food produced is extremely valuable because without it they would go hungry.⁵

One probable result is that the costs of REDD will escalate considerably, because the real price of "avoided deforestation" - the financial difference that would allow small farmers to achieve viable livelihoods without clearing land - extends way beyond the "opportunity costs" that are used in most of the economic modelling being used to justify the scheme. What economics calls an "opportunity cost" is the value of a "benefit" that has been foregone, in this case land clearing for agriculture. Such estimates not only undervalue subsistence, but also fail to account adequately for a range of other factors, including corruption risks and weak institutions.⁶

More fundamentally, the economics of REDD requires the reduction of what is deemed valuable to a series of figures on a balance sheet - which is a poor marker of ecosystem complexity, as well as historical and cultural ties to and ownership of territory.

Whilst these issues are not new to economists, they have not been adequately addressed in the REDD debate. The simplicity and potentially distorting nature of the assumptions tends to get lost in the translation from economic modelling to policy documents, where the numbers acquire a more certain status. For example, McKinsey modelling of opportunity costs now forms part of the Democratic Republic of Congo's REDD Preparedness Plan (R-PP) for the World Bank's Forest Carbon Partnership Facility.⁷

The more worrying scenario is that REDD policies, when put into practice, will try to force the complex world they encounter to "behave" like the simplified model they have adopted. Yet there are serious problems that this does not account for. From a governance perspective, for example, REDD requires trust in the institutions implementing it. But why would farmers give up their livelihoods on account of a promise of conservation payments from institutions that they have experienced as alienating, and often corrupt?⁸ In particular, why would they do so in a context that hands control of territory to a series of forest consultants, employed to measure carbon storage capacities with apparent accuracy, so that the resulting "emissions savings" can be sold as offsets to allow industrialised country polluters to carry on polluting?

And if REDD schemes are approved, who is approving them, are farmers fully consulted, and what is the effect on the community as a whole? CDM projects have frequently been approved on the basis of dividing communities through bribery and bullying by offset developers, and REDD is unlikely to differ in its implementation.⁹ The dangers may be even more severe, in fact, since REDD will more frequently be undertaken in situations where property rights are contested or not formally recognised, which could spell dispossession and conflict.

REDD and land reform

Forest communities, including Indigenous Peoples, have not tended to enclose land in the form of individual plots, but use territories flexibly, often collectively. This has facilitated swidden agriculture - which has shown itself to be highly

sustainable in contexts where human land use is not overly intensive - as well as allowing for the gathering of non-timber forest products, whether for purposes of food, medicinal use or gaining additional income. REDD programmes would put a stop to such practices, enclosing common spaces through the granting of forest carbon concessions. In this respect, they can be seen as an extension of market-based land reform, and subject to the same problems that these raise.¹⁰

More generally, the reorganisation of the right to land is already inscribed in various ways in REDD "readiness" planning. The clear risk is that existing users of land are invisible to the government departments that draw up the plans. In the DRC, for example, the R-PP includes a strategic option to grant 10 million hectares of new logging concessions, and to facilitate the development of export-led intensive farming in the form of new cattle ranches and plantations.¹¹

The Guyana-Norway partnership opens up similar possibilities, setting out an "economically rational" development trajectory as a baseline, comparing this to "reduced emissions" (supported by REDD+ funding), and in the process agreeing to lock in a deforestation rate that is way in excess of the country's current practice - or, according to many observers, its likely trajectory. This is now being touted by the UN Secretary General's High Level Advisory Panel on Climate Change Financing as a key example of "spending wisely" (not surprisingly, perhaps, with both the President of Guyana and Prime Minister of Norway represented on the 20-strong panel).¹²

REDD, REDD+, REDD++, AFOLU

Agriculture is not formally a part of REDD, which is billed as a scheme to protect forests. Nor is it included within the usual definition of REDD+, with the plus referring to a broader (and often ill-defined) range of conservation measures.¹³ However, once the principle of "carbon storage" payments is introduced, and commodified in the form of tradeable offsets, the legal systems and monitoring regimes created to support this new market can be extended to every form of land use. This is called REDD++ in the jargon, with the extra + signalling the inclusion of agriculture. It is also sometimes referred to as Reducing Emissions from All Land Uses (REALU), or as Agriculture, Forestry and Land Use (AFOLU), which in the context of climate policy refers to all forms of "terrestrial carbon."¹⁴

The expansion of REDD

As REDD develops, there is likely to be increasing pressure to extend the scheme to all forms of land use. This would particularly be the case if cap and trade markets develop beyond the European Union. It is well known that attempts to create a US carbon market have stalled. This would have accepted large volumes of REDD credits, so its absence has suppressed the potential demand in the short term. The EU Emissions Trading System (EU ETS), which accounts for most of the carbon currently traded, also excludes carbon credits in relation to land use change and forestry. Yet this is not the whole story, with cap and trade schemes of various forms currently being considered by legislators in Japan, Korea and Australia, amongst others, as well as by regional governments in China and the USA. REDD programmes "kick started" with public money expect to yield offsets that will be purchased for use in these markets, and there remains a real risk that these could be followed by the spread of further agriculture and soil-based carbon offsetting, or REDD++ (see box).

The legislative space for this expansion is already being demarcated in a number of ways, despite the general lack of movement on the role of agriculture in climate negotiations at COP16 in Cancún. First, there is a blurring of the

boundaries between REDD+ and Nationally Appropriate Mitigation Actions (NAMAs), which the Bali Action Plan defines as non-binding voluntary actions undertaken by developing countries to limit their greenhouse gas emissions. At Bali, it was envisaged that these NAMAs would be backed by finance from industrialised countries, although they have since tried to redefine this climate finance commitment away from public transfers of funds and towards "investments" in offsetting on a sector-wide basis. Thirteen countries have so far included both "reducing deforestation" (explicitly or implicitly referring to REDD+) alongside actions to reduce emissions from agriculture in their NAMAs: Armenia, Brazil, Democratic Republic of Congo, Ivory Coast, Ethiopia, Ghana, Indonesia, Jordan, Macedonia, Madagascar, Morocco, Papua New Guinea and Sierra Leone.¹⁵ As the International Institute for Sustainable Development points out, the inclusion of REDD under NAMAs "could also allow for full accounting of all carbon stocks and changes in a landscape."¹⁶

The expansion of REDD+ towards agriculture is happening in parallel with proposed reforms to the Clean Development Mechanism (CDM), the carbon offset scheme at the heart of the Kyoto Protocol, to include a greater proportion of agriculture, reforestation and afforestation projects.

To date, CDM afforestation/reforestation currently accounts for just 56 of more than 5,300 projects under consideration for inclusion in the CDM, and no credits have yet been issued for these projects. The slow pace in developing such projects is partly accounted for by the availability of cheaper options, and partly by the restrictions placed upon the use of the credits that will be generated by them. Land-use and forestry CDM projects are currently only entitled to issue tCERs (the 't' stands for temporary) or ICERs ('I' for long-term), but these have proven unpopular with carbon traders, and the prices remain low. The EU ETS, which drives most of the demand for offsets, currently excludes Land Use, Land Use Change and Forestry (LULUCF) credits altogether.

Beyond this, a range of agricultural activities could be included in the CDM under the rubric of "soil management". While this could theoretically give support for small-scale, agro-ecological farming - which has been shown to increase organic matter in the soil, thereby increasing its capacity to act as a 'sink'¹⁷ - the transaction costs and monitoring difficulties of linking such activities to an offset scheme would prove prohibitive. The real "winners" from such proposals, therefore, are likely to be in large-scale industrial agriculture - with agribusinesses already looking to the possibility of CDM funding for "no-till" GM monocultures, and tree plantations to produce biochar (a controversial technique for creating charcoal and then burying it to "store" carbon).¹⁸ The parallel discussions on the expansion of REDD to AFOLU raise many of the same issues.

The World Bank is actively promoting these new agriculture methodologies through its BioCarbonFund.¹⁹ The second phase of this Fund, which is currently soliciting projects, has the stated aim of pioneering the inclusion of LULUCF projects in the carbon market - which includes those focused on afforestation, reforestation, the management of agricultural soils, wetland restoration and REDD.²⁰ To date, six of the ten approved CDM methodologies relating to land use have been pioneered by the Fund. These CDM projects are, in turn, used to build experience for REDD.

For example, the BioCarbonFund's Ibi Bakete CDM project is offered as a key example of past experience that will contribute to the development of the DRC's REDD preparedness.²¹ The project is intended, in the World Bank's own words, to convert a "natural grassy savanna" into "4120 hectares of fast growing forest plantations" (mostly eucalyptus and acacia).²² According to a field study by the International Alliance of Indigenous and Tribal Peoples of the Tropical Forests, however, the resulting plantations have marginalised the local indigenous population, excluding them from land that used to sustain their livelihoods.²³

The BioCarbon Fund also promotes agriculture methodologies under the Voluntary Carbon Standard (VCS), an initiative which aims to encourage carbon offset projects outside of the UN system.²⁴ These voluntary projects are notoriously free of regard for social or environmental integrity, since they are regulated by the same companies that stand to benefit from the growth of this market. However, the voluntary market is being actively courted as a means to pioneer agriculture and REDD offsets, with the BioCarbonFund facilitating meetings between VCS representatives and the UNFCCC.²⁵

Conclusion: reorganising territory, avoiding responsibility

REDD might best be understood as a way to reorganise territory, and the economic and legal systems governing its use.

The initial phase of REDD will mainly or entirely consist of direct payments - however, the objective from the outset has been to develop REDD as a carbon offset scheme.²⁶ REDD readiness means reconfiguring the knowledge-basis for addressing deforestation around a set of prescriptions governing how "carbon rights" can be commodified, and what means of governance can then insure the integrity of this system (despite its essentially unprovable nature). This requires expensive consultancies and complex accounting systems for "verification" of individual quantifiable units, a knowledge system and legal infrastructure that tends to shift decision-making further into the hands of corporate and state elites, rather than communities (irrespective of "best practice" criteria - which those same consultancies, ultimately, assess).

Moreover, in establishing a system of forest payment that will ultimately be used to "offset" industrialised country emissions, REDD shifts the burden of responsibility for tackling climate change from Northern-based corporations and governments to the global South. This point has not been lost on Business Europe, the main EU corporate lobby platform, which is advocating for greater acceptance of forestry credits within the European Union.²⁷

The bottom line is that REDD policy starts with top-down economic modelling, which is a bad place to start in addressing deforestation: generating a series of misleading questions, in forms that are alienating to the very communities dependent upon forested areas for their livelihoods. In its place, we need to switch the question back to how best to address deforestation, adopting a bottom-up approach that builds upon the knowledge of local communities' experiences at the frontiers of forestry and agriculture. Such an approach would seek to learn from and support existing practices to conserve forests - in parallel to tackling industrial and power-sector greenhouse gas emissions at source.

1 "The Economics of Climate Change: the Stern Review", Nicholas Stern, Cambridge: Cambridge University Press, 2008 p.603.

2 See, for example, "Causes of Deforestation: Direct Causes", NASA Earth Observatory, November 2010, http://earthobservatory.nasa.gov/Features/Deforestation/deforestation_update3.php

3 See forthcoming article "REDD and Latinamerican Politics", Joanna Cabello, November 2010.

4 "REDD will fail with the current definition of forests", Chris Lang, REDD Monitor, 8 September 2009, <http://www.redd-monitor.org/2009/09/08/redd-will-fail-with-the-current-definition-of-forest/>

5 "Does the opportunity Cost Approach Indicate the Real Cost of REDD?", Chris Lang, REDD Monitor, 5 August 2010, <http://www.redd-monitor.org/2010/08/05/does-the-opportunity-cost-approach-indicate-the-real-cost-of-redd/>

6 "Will REDD really be cheap?", Allen Blackman, Resources, p.4

7 "Readiness Plan for REDD 2010-2012", Democratic Republic of Congo Ministry of Environment, Conservation of Nature and Tourism v3.1, 15 July 2010, p.51, www.forestcarbonpartnership.org/fcp/sites/forestcarbonpartnership.org/files/Documents/PDF/Jul2010/R-PP_V3.1_English_July2010.pdf

8 "Does the Opportunity Cost Approach Indicate the Real Cost of REDD+? Rights and Realities of Paying for REDD+", Hans Gregersen, Hosny El Lakany, Alain Karsenty and Andy White, Washington: Rights and Resources Initiative, 2010

9 For examples, see Carbon Trade Watch, www.carbontradewatch.org

- 10 "Contemporary Discourses and Contestations around Pro-Poor Land Policies and Land Governance", Saturnino Borrás and Jenny Franco, *Journal of Agrarian Change*, Vol. 10 No. 1, January 2010, pp. 1–32, p.15
- 11 DRC, op. cit. Supra. Note 6, pp.119-123
- 12 "Report of the Secretary-General's High-level Advisory Group on Climate Change Financing", United Nations, 5 November 2010, www.un.org/wcm/webdav/site/climatechange/shared/Documents/AGF_reports/AGF_Final_Report.pdf
- 13 The Bali Action Plan paragraph 1(b)(iii) defines this plus as: "The role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries." Sustainable forest management is often used as a euphemism for industrial logging, whilst forest carbon stock enhancement alludes to industrial plantations.
- 14 Little REDD Book, p.114.
- 15 As of 18 February 2010. For full submissions, see: <http://unfccc.int/home/items/5265.php> . Further five countries have included forestry alone: Benin, China, Costa Rica, Mongolia and Togo.
- 16 "REDD After Copenhagen: The Way Forward", Peter Akong Minang and Deborah Murphy, International Institute for Sustainable Development, February 2010, p.11
- 17 "Earth matters -- tackling the climate crisis from the ground up", GRAIN, The Seedling, October 2009, <http://www.grain.org/seedling/?id=643>
- 18 For an explanation of the risks of no-till agriculture and biochar, see "Agriculture and Climate Change: Real problems, false solutions", Helena Paul, Almuth Ernsting, Stella Semino, Susanne Gura & Antje Lorch, Oxford: Econexus, 2009
- 19 The World Bank has also used its World Development Report to argue for an increase in soil carbon sequestration projects, see World Development Report: Development and Climate Change, World Bank Group, Washington DC, 2010, pp.166-173
- 20 "BioCarbonFund in Agriculture", R C Reddy. Presentation at "Workshop on Climate Change Mitigation in Agriculture in Latin America and the Caribbean: Investments and Actions, Food and Agricultural Organization, Rome, Italy, 19-20 April 2010, p.5
- 21 DRC, op. cit. Supra. Note 6, p.47
- 22 Carbon Finance unit – The World Bank: <http://wbcarbonfinance.org/Router.cfm?Page=Projport&ProjID=43647>
- 23 "The DRC Case Study: the impacts of carbon sinks of Ibi-Batéké Project on the indigenous Pygmies of the Democratic Republic of Congo", S Makelo, 2006, <http://www.international-alliance.org/documents/Climate%20Change%20-%20DRC.pdf>
- 24 VCS is an initiative of The Climate Group, the International Emissions Trading Association and the World Economic Forum
- 25 Op. Cit. Supra Note 18
- 26 "A solution to climate change in the world's rainforests", Geoffrey Heal and Kevin Conrad, Financial Times, 29 November 2005. Despite its name, the Coalition (and the scheme it proposed) have their roots in a carbon trading seminar spearheaded by Heal and Conrad, two Columbia University economists. See "Forests, Carbon Markets and Hot Air: Why the Carbon Stored in Forests Should not be Traded", Chris Lang, in *Upsetting the Offset: The Political Economy of Carbon Markets*, edited by Steffen Böhm and Siddhartha Dabhi, Colchester: Mayfly Books, 2009
- 27 "New permits to pollute sought", David Cronin, Inter Press Service, 16 September 2010, www.ipsnews.net/news.asp?idnews=52851

