

Executive Summary

Better management of forests is the most effective way to reduce emissions of carbon dioxide. As noted in the Chapter on forestry in the Fourth Assessment of the Intergovernmental Panel on Climate Change (IPCC),

In the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fibre or energy from the forest, will generate the largest sustained mitigation benefit.¹

These increased stocks would offset emissions and could be traded into international emission trading schemes, an important potential benefit for forest-rich developing economies.

Yet the World Bank, several industrialized economies and WWF and Greenpeace are instead promoting a strategy (REDD²) which concentrates only on preserving forest stocks by reducing deforestation and degradation.

According to the Fourth Assessment of the Intergovernmental Panel on Climate Change (IPCC) released in 2007, this would reduce emissions of carbon dioxide by 3.9 Gt of carbon each year. It also found that strategies to increase carbon stocks would absorb more - 9.9 Gt each year - but they are not part of the REDD strategy.

The premise behind REDD is the supposition that nearly 20 percent of global emissions of greenhouse gases are caused by deforestation. The strategy is to cut that and create massive global funds to pay developing countries to do so. The argument is that this would reduce the task of reducing emissions from other sources, like energy.

The REDD strategy is severely flawed - it reduces far fewer emissions than the sustainable forest strategy referred to in the IPCC report. It also risks significant economic damage - not only to the poor in developing economies where the strategy risks reducing production of food, but also by leaving more of the load on industrialized economies to reduce emissions.

How important is deforestation?

It is not at all certain that deforestation is generating nearly 20 percent of global greenhouse gas emissions as is generally claimed. This assessment is based on long-standing analysis by the Woods Hole Research Center of which the lead researcher, the internationally-renowned, Richard Houghton concedes has a very large margin of error. His method deduces the flow of carbon resulting from land use change in large global repre-

sentations over long periods of time. These calculations were based on two types of data: rates of land use change and per hectare change in carbon resulting from land use change and management. It is now commonly argued that satellite imagery provides the detail required to measure change in forest cover. The situation is much less clear. The Food and Agricultural Organization (FAO) reports that global deforestation is decreasing: it has run at 0.18 percent per annum over the period 2000 to 2005, compared to 0.22 percent in the decade between 1990 and 2000.³ Groups like WWF which urge that action must be taken to halt deforestation rarely recognize these figures.

The FAO contends that the only reliable way to determine the contribution of forestry to climate change is to measure carbon stocks then create systems to monitor them. Global models, like Woods Hole's, and satellite imagery are not enough. Reliable estimates of land use change and assessment of carbon on the forest floor and in the soil are required as well as the performance of forest stands. When that on-ground data and aerial imagery are combined, accurate assessments can be made.

That is not the only uncertainty about the size of the carbon sink created by forestry.

What the carbon accounting rules omit

It is also clear that the system of accounting adopted by UNFCCC to measure emissions of carbon from forestry has major deficiencies. UNFCCC accounting rules reduce the carbon stock each time a tree is felled. That is incorrect.

When timber is processed into wood products or paper (the fate of around 80 per cent of logged timber) the carbon remains stored, even when dumped into landfill. Research shows that the carbon stored in the stock of wood products in everyday use in Europe is equivalent to 30 per cent of the carbon in European forests. The US EPA has estimated that the long-term storage of the carbon in wood and paper products in landfills is equivalent to the amount of carbon that is in wood products that are in use.

It is clear that the amount of carbon that is stored and can be stored in the future from conversion of trees to timber and paper products is much larger than current UN accounting rules recognize.

Afforestation and reforestation is more important

Three processes determine the size of forest sinks - deforestation, reforestation and afforestation. The first reduces sinks, the other two increase them.

Research also shows that more emissions can be reduced and at

1 IPCC, 2007a, *Climate Change 2007: Mitigation of Climate Change*, Contribution of Working Group III to the Fourth Assessment Report of the IPCC, Metz, B, Davidson, OR, Bosch, PR, Dave, R, and Meyer, LA, (eds), Cambridge University Press, Cambridge, UK and New York, NY, p 543, accessed at: <http://www.ipcc.ch/ipccreports/ar4-wg3.htm>

2 Reducing Emissions from Deforestation and Forest Degradation

3 FAO, 2006, *Global Forest Resources Assessment 2005: Progress Towards Sustainable Forest Management*, FAO Forestry Paper 147, United Nations, Rome, accessed at: <http://www.fao.org/forestry/site/1191/en>

lower cost, by improving forestry and afforestation than by reducing deforestation. As a general rule, a forest that is sustainably managed for continuous harvesting from managed regrowth will absorb more carbon over time than one that is left as old growth because growing trees absorb more carbon than old trees.

The IPCC Fourth Assessment report estimated that all processes combined (without taking into account the retained carbon in processed wood products) could reduce emissions over time by up to 13.9 Gt each year. For reference, human activity is currently considered to be generating around 30 Gt of carbon each year. Improved forestry over the same period could increase the sink to absorb 6 Gt extra per year and afforestation would expand the sink by 3.9 Gt. Ceasing deforestation was equivalent to reducing emission by 3.9 Gt.

Not only would improved forest management and afforestation produce a bigger dividend, research commissioned by the UNFCCC Secretariat shows it is a more cost effective approach.

Other studies have shown that increasing plantations and greater sustainable harvesting of natural forests will produce a significant mitigation dividend. Use of timber products in construction as well as in biofuel substitutes for fossil-based fuel also can mitigate emissions in very cost effective ways.

Why the focus on deforestation?

Why then is REDD (reducing deforestation and forest degradation) the priority in strategies by the World Bank, the EU, other industrialized economies (Australia and Norway), as well as WWF and Greenpeace in the Bali process?

The World Bank has embarked on a new facility to ready and pay developing countries to cease deforestation and forest degradation—the Forest Carbon Partnership Facility (FCPF).

The reasons are political and technical. When the Kyoto Protocol was negotiated, WWF and Greenpeace and EU were strongly opposed to the idea that credits from forestry, from either Annex 1 parties who were obliged to cut emissions, or other parties, should be allowed to be counted. WWF noted this would ease the pressure on energy industries to cease relying on fossil fuels as energy sources.

Developing countries did not contest this at the time since they were not obliged under the Protocol to reduce emissions in their own country.

There was also a technical problem. Data on the size and performance of carbon sinks was poor. Measuring stored carbon was tricky. And there was little political interest in addressing

that problem at the time: the world's largest timber producer, the US, was disengaged once it was clear it would not adhere to the Kyoto Protocol. And Canada and Russia, the other significant forest nations among Annex 1 parties, were outgunned by the EU.

It is now time to fix this problem

It would make a nonsense of the UNFCCC Bali negotiating process if the leading and cheapest means to reduce emissions is disregarded, particularly given the high cost of alternative sources of energy and sequestration. China plans to reduce emissions by expanding forestry by 20 per cent. Is that contribution to be disregarded?

More than success at reducing emissions is at stake: the deforestation avoidance strategy carries a risk of damaging the economic welfare of developing countries. Contrary to the popular view that it is commercial forestry and illegal logging which is driving deforestation, as the European Commission has noted, the leading cause of deforestation is human settlement – conversion of land for semi-subsistence agriculture and commercial farming. Together they account for 80 percent of deforestation.⁴

These are essential processes in economic development in poorer countries. Over the centuries, Europe reduced its forest cover to the 25 percent today to provide land for food and settlement. That is the process occurring now in the developing world. Most countries have already set aside forest land for conservation. WWF contends that 12 percent of forest land is required for this. Worldwide already 11 percent of total forest land is reserved for conservation. Moreover, the area of forest designated for conservation has increased by 32 per cent over the 15 years between 1990 and 2005, with such increases experienced in all world regions.⁵

If the leading mitigation strategy for forestry is deforestation and, as is proposed in the REDD strategy, developing countries are paid to cease deforestation, they will be paid to cease conversion of land to produce food and sustain society. This is an anti-development strategy. And where this activity reduced commercial forestry in plantations and natural forest, this would remove an activity which created jobs, generated taxes and earned export income. Productive economic activity is halted and in return money is paid. This is a form of Green global welfare.⁶

This result would not trouble WWF and Greenpeace. The latter opposes “industrial” forestry worldwide and the former pursues policies which achieve that effect. For them, the campaign to halt global warming is a complementary vehicle to advance their strategy to restrict commercial forestry.

This is consistent with Green philosophy to give primacy to

⁴ FAO, 2006, Deforestation causes global warming: Key role for developing countries in fighting greenhouse gas emissions, Rome, accessed at <http://www.fao.org/newsroom/en/news/2006/1000385/index.html>

⁵ FAO, 2007, State of the World's Forests, United Nations, Rome

⁶ Some will argue that developing countries are being paid to provide environmental services. This is a perversion of the concept.

protecting the physical environment over improving economic welfare. They do not endorse the consensus struck at the UN Rio Earth Summit in 1992, and reiterated in 2007 when the UN Forum on Forests adopted the Non-binding Instrument on Forestry, that protection of forests needs to go hand in hand with commercial development of forestry to raise living standards and reduce poverty.

It is disappointing to see industrialized nations and the World Bank, who do formally subscribe to the UNCED consensus over environment and development, gravitating towards the same position through their articulation of and support for the REDD strategy.

Making REDD a pro-development strategy

It is notable that although the REDD idea has been on the table for at least two years, it has not been formally adopted by the parties to the UNFCCC. It does not deserve adoption until it recognizes the intentions of the parties who drafted the UNFCCC and the Kyoto Protocol to utilize forestry as a tool to mitigate emission of greenhouse gases. The following changes are required. REDD should:

Recognize afforestation and reforestation as equal, if not superior, forestry climate change mitigation strategies to deforestation.

Finance developing countries to create the infrastructure and capacity for building sinks, specifically:

- full forest inventories;
- the policy framework & infrastructure necessary to support sustainable commercial forestry;
- the resources and systems to develop and use the FAO tool to determine and measures changes to carbon sinks in forestry;

- creation of the property rights needed to support commercial or locally-based forest industry– which will require forestry companies to receive a share of property rights to carbon in an equitable and effective way, along with governments and landowners;
- and the resources required to properly conserve reserved forest areas.

Add the development dimension to REDD.

A prior step in implementing REDD strategies should be a development assessment. Does the strategy, say the deforestation avoidance strategy, support Millennium Development goals? Will it reduce or add to poverty? Will it raise or lower living standards?

Set provision of credits for developing countries' emissions in a longer timeframe.

It will be some time before a global trading system is established. In the meantime, the focus should be on fostering activity which will create a bigger sink. That has its own mitigation benefit. As well it creates a bigger bank of credits down the track.

The development dimension

In World Growth's report "Building a pro-development strategy on climate change", we warned about the risk of ignoring the interests of the world's poor by acting too precipitately to reduce emissions of carbon dioxide. The trends on discussion of forestry in the Bali process also carry the risk of disregarding the interest of the poor.

It is time to avoid that risk and adopt a strategy in which everyone wins. Measures can be implemented which effectively reduce emissions of greenhouse gases and at the same time enable developing countries to foster productive forest industries where environmental values are protected and living standards increase. ●



About World Growth

World Growth is a non-profit, non-governmental organization established with an educational and charitable mission to expand the education, information and other resources available to disadvantaged populations to improve their health and economic welfare. At World Growth, we embrace and celebrate the new age of globalization and the power of free trade to eradicate poverty and improve living conditions for people in the developing world.

Our Philosophy

World Growth believes that helping the developing world realize its full potential is one of the great moral aims for those of us fortunate to live in the wealthy developed world. We also believe that a misdiagnosis of what ails the underdeveloped world has yielded policy prescriptions that have been useless or even harmful to the world's "bottom billion."

World Growth believes that there is enormous untapped human and economic potential around the world. In order to unlock that potential, and allow the poorest of the world's poor a better life, it is necessary to realize changes in institutions and policies that permit growth and human flourishing.

Instead of aid and handouts, what the populations of developing countries need are social and political institutions and infrastructure that foster productive economic activity and generate robust economic growth. These include, but are not limited to, property rights and protections, the rule of law, free markets, open trade, government accountability and transparency.

For too long, well-meaning governments, aid agencies and others have promoted policies that fail to address the true problems that afflict poor societies. As a result, too many people around the globe remained locked in pre-modern conditions where their talents and inherent capacities are shackled.

The people of the developing world are fully capable of helping themselves to ensure a more prosperous existence. The path to prosperity does not begin with handouts from the West. Instead it requires identifying the genuine obstacles to growth and highlighting paths to reform that will yield sustainable and lasting change.

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