

# Seeing the wood for the trees



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Scroll through most summaries of the Kyoto Protocol and you will notice that they all seem the same. There are discussions on the impact of climate change on weather, reports on the danger of continued reliance on fossil fuels and articles on the impact of rainforest destruction and the need to reforest our planet.

The careful student of the Protocol will quickly notice the difference between the quantitatively specified emission reductions by country and the ambiguous role of forests and soils in meeting these requirements.

For example, the treaty clearly specifies in article 3.1 that developed countries such as Japan, Germany and the United States must achieve reductions from the 1990 baseline of 6%, 8% and 7% respectively during the budget period of 2008–2012. Specific gases to be controlled are identified, and the exchange rates across those gases are set.

Contrast the clarity of article 3.1 with articles 3.3 and 3.4, which deal with forestry and land use change. Article 3.3 states that “the net changes in greenhouse gas emissions by sources and removals by sinks resulting from direct human-induced land use change and forestry activities, limited to afforestation, reforestation and deforestation since 1990, measured as verifiable changes in carbon stocks in each commitment period, shall be used to meet the commitments under this article of each party”. This seems to imply that reforestation and soil sequestration could be counted in meeting the quantified mitigation objectives. However, article 3.4 states that the meeting of the parties to the Kyoto Protocol shall “decide on which additional human-induced activities (besides afforestation, reforestation and deforestation) related to changes in greenhouse gas emissions and removals by sinks in the agricultural soil and land use change and forestry categories shall be added to, or subtracted from, the assigned amount for parties included in annex I.”

There has been no clarity added by the Conference of the Parties meetings in Buenos Aires in 1998 or Bonn in 1999. All indications suggest that the special Intergovernmental Panel on Climate Change report on carbon sinks, due in May 2000, will not provide the detailed answers needed to operationalise trading in credits earned by sink enhancement.

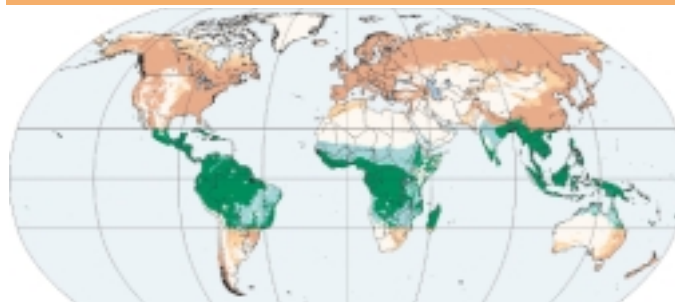
Feasible paths forward have not yet been illuminated by individual national efforts or by voluntary private sector action.

However, there is reason to believe that subsequent meetings of the Parties and other sovereign and private sector efforts will provide more structure in the next two years. There are four specific reasons for this optimism. First, the importance of reforestation is clear: In this case, two pictures are more valuable than a thousand words. Maps one and two clearly indicate the potential for reforestation in both the northern and southern hemispheres. Second, just as with the reduction of emissions, it is now widely recognised that the actions that increase forest and soil carbon storage also provide a multitude of local and regional environmental benefits in addition to their climate protection benefits. Third, the Clean Development Mechanism, which allows industrialised countries to undertake mitigation projects in developing countries, is scheduled to apply to signatories in the year 2000. Therefore, individual states that establish tar-

gets for greenhouse gas emissions and specify flexible mechanisms in the next few years will need to clarify the role of forests and soil sequestration. Furthermore, voluntary activities by the private sector will cause a series of market-generated standards. The final reason for optimism is that the outcome of the international debate will ultimately be influenced by the benefits accruing to the private sector. For example, in the United States, increased carbon sequestration in forests and soils, primarily on private lands, has the potential to capture 200 million tons carbon per year, or up to one-third of the Kyoto emissions gap.

Now is the time to undertake pilot trades, incorporate sinks into voluntary trading programs and enlist the capabilities of recognized third-party verification professionals. The historical experience with a host of other physical commodities has shown that there is no realistic alternative to the learning-by-doing approach. Governments and regulators cannot achieve their goals without guidance from real-world practitioners.

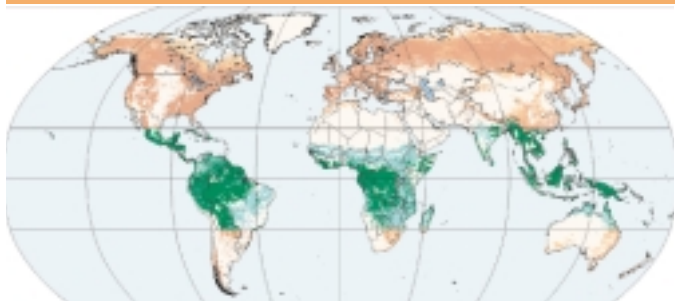
## 1. Original global distribution of forests



- Closed non-tropical forest
- Open non-tropical forest
- Closed tropical forest
- Open tropical forest
- Non forest
- Water bodies

Source: Compiled by the World Conservation Monitoring Centre for the World Commission on Forests and Sustainable Development

## 2. Current global distribution of forests



- Closed non-tropical forest
- Open non-tropical forest
- Closed tropical forest
- Open tropical forest
- Non forest
- Water bodies

Source: Compiled by the World Conservation Monitoring Centre for the World Commission on Forests and Sustainable Development

Source: World Resources Institute