

# A post-Hague compromise on reforestation

The deadlock result from The Hague, in November, is a textbook example of A W Tucker's 1950 treatise on games and decision theory.<sup>1</sup> In the 'prisoner's dilemma' two players are kept apart and, acting rationally – but without knowing the other's strategy – make decisions that leave both worse off. With open communication the players might jointly prepare a strategy that leaves them both better off. There is an analogy in the debate over the inclusion of forests in Kyoto's Clean Development Mechanism (CDM). And there is a win-win strategy that advances the interests of developing countries and the goals of the climate convention.

Society cannot get on the path to environmental sustainability if we don't improve our management of forests and soils worldwide. Effective management means we must start moving towards a system of comprehensive accounting and recognition of climate impacts from all land-use decisions. These scientific and economic facts were unambiguously recognised in the UN Framework Convention on Climate Change. Numerous other global conventions – on biodiversity, desertification, wetlands and others – point in the same direction. Unlike Kyoto, these



other conventions lack the capacity to steer massive capital flows to support better land management. Because emissions trading and crediting for carbon sink enhancements are core implementation tools in the Kyoto Protocol, we now have a powerful mechanism that can provide serious financing for reforestation worldwide.

However, the terms and conditions under which land use, land-use change and forestry (LULUCF) in both developed and developing countries are credited were not settled at the COP 6 meeting in The Hague. We now have the chance to open communications on how best to seize this rare chance to elevate environmentally sound land management to a valuable global asset that deserves large-scale financial support.

Forest destruction accounts for 20% of global greenhouse emissions. Forest destruction and degradation impoverishes local people, pollutes water, kills endangered species, and spreads deserts. Environmentally sound reforestation can reverse all these. Because forests are of overriding importance to climate and sustainability, we don't have the luxury of postponing the development of effective methods for including them in the global solution. We can't find the best way to steer serious financing to forests until we start immediately to try good approaches to carbon crediting. Despite the rhetoric, we now have these at hand.

A workable first step is to recognise inclusion of the less controversial reforestation/afforestation projects in the CDM. A specified schedule for developing technical terms and conditions should be set, with signature at COP 7 in Marrakesh in November 2001 being the goal. A negotiated agreement on standards for avoided deforestation has not yet been found because this important activity introduces unique (but solvable) questions. Once workable standards for these projects are found, they too can be recognised for inclusion.

The in-field experience of solid programmes by non-governmental organisations, governments and private organisations based in Argentina, Brazil, Malaysia, India, the UK, Norway, Tanzania, Switzerland, South Africa, Costa Rica, the Netherlands, Germany, the US, Canada, New Zealand, Russia, Australia and elsewhere reminds us that good reforestation project standards can be defined and put into place now. The positive results from many of these early projects has proven that



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this strategy can be a win-win option for all involved.

Many of the technical questions regarding crediting of forestry projects are also faced by fossil fuel emissions reduction projects. For both categories we know enough to act: superior solutions for both can only be found through direct experience. Good standards, combined with transparency and the right of developing countries to approve projects, will help assure quality. Finally, experience to date shows that forestry projects face long-run failure if they don't effectively engage local communities.

Estimates suggest that even a limited role in the CDM could trigger the reforestation of three million hectares (8.5 million acres) of land per year.<sup>2</sup> Reforestation is just a part of the solution to climate change. It appears that even the most aggressive global reforestation programme under the CDM would account for no more than 15% of the emissions reductions required under Kyoto. But we cannot afford to wait: it will take decades to perfect the tools needed to finance all the solutions.

It's ironic that the generalisation of the 'prisoner's dilemma' to more than two participants results in "The Tragedy of the Commons"<sup>3</sup>: we all follow the path to overconsumption of the planet's scarce resources. We now have the chance, in both the context of game theory and the environment, to listen to one another, find good and ratifiable solutions, and simultaneously advance both climate protection and reforestation worldwide. ■

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<sup>1</sup> See, for example, Lewontin, R C, 1961 "Evolution and the Theory of Games". *Journal of Theoretical Biology* 1: 382–403

<sup>2</sup> Walsh, Michael, "Maximizing financial support for biodiversity in the emerging Kyoto Protocol markets". *The Science of the Total Environment*, 240 (1999)

<sup>3</sup> Hardin, G, 1968. "The Tragedy of the Commons". *Science* 162, 1243–8