CARBON AS A NON-TIMBER FOREST PRODUCT

By Margaret M. Skutsch

Under the Kyoto Protocol, forestry is permitted as a sink measure under the Clean Development Mechanism (CDM), but only in the form of 'afforestation' and 'reforestation'. These two forms are essentially plantation systems which, although cost effective in terms of carbon sequestration are in most cases not very beneficial to local populations, who depend on existing and bio-diverse forests for a large number of products. Many communities, however, transform unsustainable forest management practices (processes of degradation) to sustainable management under a variety of programmes unrelated to climate change policy. Examples include the Joint Forest Management programme in India, Forest User Groups in Nepal and community forest management in West Africa. This change to sustainable management has a two-way effect as regards carbon saving: it increases the sink capacity of the forest and, where harvested for firewood, it provides a perpetual renewable energy source. This form of forest management is, however, not recognised under the Kyoto arrangements.

Uncertainties

One of the reasons for not recognising the sink capacity of community-based management initiatives under the Kyoto Protocol is undoubtedly the difficulty of measuring the carbon saved and various uncertainties such as leakage and permanence. There are strict rules about how carbon saved can be measured and rigorous data will certainly be a prerequisite if such projects are to be accepted as 'climate' projects in the future, so that communities may access funds for them under Kyoto. However, the cost of employing professional scientific methods to gather and process such data (the so-called 'transaction costs') are likely to be prohibitive, meaning that any financial gains by the community as a result of 'selling' their carbon, will be wiped out. The trick is then to find techniques which can, at least, partially be carried out by the communities themselves at much lower cost and also to demonstrate that these are as reliable as 'expert' methods.

The utility of GPS/GIS devices

A research project, sponsored by DGIS, is being carried out by the University of Twente (the Netherlands), ITC and three regional research institutes (in Nepal, Tanzania and Senegal) to test the use of handheld GPS/GIS devices in conjunction with wide angle photography, as well as related methods used by local communities that are already engaged in sustainable community forest management schemes. The research institutes are working with local organisations involved in community forest management activities in ten countries. The purpose of the research is to demonstrate that such communities can make reliable assessments of the increased sink values of
their forest and monitor this over an extended time period. Hopefully, data gathered in this way will also be acceptable to international bodies responsible for verifying carbon offsets. If this objective can be realised, the forest-based livelihoods of these communities may be supplemented through the 'sale' of their carbon savings.

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