The Kyoto Protocol and the CDM in Africa: a good idea but …

P.V. Desanker

The CDM aims to support sustainable development in Africa, but developing CDM projects in the region turns out to be a challenge.

Paul V. Desanker is in the Department of Geography, Penn State University, University Park, Pennsylvania, United States, and Chair of the Miombo Network, Malawi. He participates in the United Nations Framework Convention on Climate Change (UNFCCC) as a Malawi delegate and as a member of the Least Developed Countries Expert Group (LEG).

The first Meeting of the Parties to the Kyoto Protocol, which took place from 28 November to 9 December 2005 in Montreal, Canada, reinvigorated the resolve of many countries to do something about climate change, and to continue to work towards lasting commitments to reduce greenhouse gas emissions. As countries took stock of progress to date in making the protocol operational, major concerns about the participation of Africa came to the fore. A number of side events discussed the progress of the Clean Development Mechanism (CDM) in Africa, including one organized by Malawi on behalf of Africa that emphasized the major challenges facing the region. This paper builds on those discussions to take a close look at how the CDM might be better engaged in Africa.

The Clean Development Mechanism, one of several mechanisms under the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC), has as its objective to help developed countries meet their agreed emission reduction targets through certified emission reductions in developing countries. The emission reductions achieved in the developing country are traded to the developed country. In this process, the CDM activity would contribute towards sustainable development in the host country (the developing country), while enabling the buyer of the emission credits (the developed country) to meet its targets. The rationale for doing this as a strategy for reducing overall global emissions is that the project should be "additional", meaning that the activity would not normally be implemented if it were not a CDM project. The requirement for additionality is aimed at ensuring that emissions are reduced beyond business as usual so that the project in fact contributes towards curbing global warming. Any relaxation of this condition would dilute the intentions of the Kyoto Protocol.

HOW HAS THE CDM FARED IN AFRICA?

One of the intentions in the creation of the CDM was to bolster Africa through technology transfer, community-level development benefits, enhanced private-sector investment and market development. Given the huge need for resources to support sustainable development plans in the region, and the seemingly large potential for CDM activities there, one might expect Africa to be a very active participant in the CDM. However, the reality is the extreme opposite. Projects in Africa that had successfully journeyed through the formal procedures for developing and registering a CDM project numbered four by December 2005. There were over 200 projects in various stages of development by this time, of which only a handful were in Africa.

The nature of the development benefits from a CDM project is left to the developing country to define, while the contribution towards offsetting a developed country's emissions is assessed and verified at the international level. This has several implications important to the success of the project. Any project needs to be developed with the close collaboration and cooperation of the hosting government to ensure that CDM activities have broad national sup-

port. Neglecting the role and interests of a national government has led in some cases to difficulties in registering CDM projects. The international oversight of the actual emission reductions raises the need for elaborate systems for approving, verifying and validating projects and accruing emission reductions. This process is widely seen as too complex and costly for many developing countries to navigate, or in the case of small projects (which have simplified rules) simply too costly. In addition, CDM projects are supposed to be developed by the private sector, often in domains – including forestry – that have traditionally not been managed through private investment in Africa.

Given the high degree of land degradation in many African countries and the heavy dependence on wood resources for energy, afforestation and reforestation projects (sink projects) make intuitive sense. The low technology requirements to grow trees should make this type of project very accessible even to rural communities. Yet the trends in African CDM participation for this type of project are especially grim. The reasons are many, and vary by country (and are not necessarily specific to Africa), but in general include:

- prohibitive costs and lack of investment capital to develop forest projects over the many years before income from emission trading starts to accrue;
- lack of private investors for afforestation and reforestation, since these activities have typically been carried out through government or donor-supported development projects in most of Africa;
- uncertain markets for emission reductions, especially the reluctance by many buyers in developed countries to consider credits from forestry activities;
- the complexity of the processes for developing projects to completion, especially the preparation of methodologies, and the lack of national technical capacity to develop methodologies without reliance on expensive international technical support;
- lack of adequate international institutional capacity for the various steps in a CDM project from mobilization of resources to certification and validation for the diversity of situations in the many countries of Africa;
- lack of institutional capacity in Africa for implementing all the requirements of CDM participation, such as the establishment of a Designated National Authority (DNA) whose role is to define sustainable development criteria and facilitate private investment in CDM activities;
- difficulties in identifying eligible projects.

Eligible sink projects need to be on land that had no forest at the end of 1989. Data sources for demonstrating this may be limited. Although aerial photos or satellite data such as Landsat imagery are widely available, their scale is often inadequate to deliver the necessary proof for small-scale projects, and land-use records are often unavailable.

Projects also need to demonstrate additionality and the absence of leakage (emissions shifted elsewhere as a result of the project). Given the reliance of many African countries on wood resources for energy and other day-to-day needs, it is a challenge to find eligible forestry activities that can be truly additional and not displace existing land-use practices important to people's livelihoods (e.g. grazing and fuelwood harvesting) or shift related emissions elsewhere.

An issue that emerged as a critical concern for Africa during the Montreal meeting was the CDM Executive Board's decision in September 2005 to

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Afforestation and reforestation projects (sink projects) make sense in Africa in light of the sometimes severe land degradation and heavy dependence on wood resources for people's livelihoods

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Not only fuelwood: CDM projects should help enhance rural livelihoods

allow as small-scale bioenergy projects only those that replace fossil fuels. As a result, many innovative projects aimed at replacing unsustainable fuelwood use with solar energy, sustainable biomass or biogas, or aimed at reducing unsustainable fuelwood use through more efficient cooking stoves, would be excluded from consideration under the CDM. Based on inputs from parties, the Executive Board will reconsider this issue.

WHAT CAN BE DONE TO MAKE PROGESS?

It is clear that development of successful CDM projects requires substantial effort and sustained local capacity building. Various international organizations have carried out workshops and support programmes to facilitate CDM project development in Africa, but it is obvious that these efforts have not consistently succeeded. Obstacles to participation need to be evaluated and programmes for building capacity need to be redesigned according to lessons learned from the handful of successful projects in Africa and from other developing countries where the CDM has thrived. In particular, capacity building needs to be tied to specific project ideas, project funding and national institutional frameworks. It needs to link all project steps including identification, development and investment.

Overambitious projects that seek to contribute to numerous sustainable development objectives are difficult to implement. CDM projects are unlikely to achieve sweeping sustainable development at the national level but are more likely to achieve meaningful benefits locally. Development criteria at the national level should be chosen with this in mind.

Projects should be initiated and developed by local rather than external groups wherever possible, to ensure benefits to local communities and meaningful local development. Where there is a need for additional capacity, local groups can employ external consultants. Capacity at the local community level can take a long time to build, often requiring a long-term approach combining outreach, extension and training.

African experts should be more involved in CDM design – both in negotiations at the Conference of the Parties level and in project management. Their involvement needs to be supported by research and analysis by African scientists working locally and taking local conditions into consideration. The formation of an African CDM Expert Group could help build the necessary knowledge and expertise to represent African interests in the CDM.

Carbon money alone may not be enough to fund CDM projects, so additional financing may be needed. Under the CDM rules it is possible to tap into donor money to support project development as long as the emission credits do not go to the donor. Bundling of projects across sectors and possibly between countries could be explored to achieve economies of scale, to reduce operational costs and to build on the limited capacity that exists.

African forests, including agroforests and urban forests, have a major role in helping developing countries adapt to climate change. Both timber and non-wood forest products are sold to provide income, especially in times of food shortage such as during drought. Other products such as mushrooms, honey, fruits and insects can be valuable food sources. Ecosystem conservation services provided by trees are equally important. As countries develop adaptation plans in Africa, the contribution of forests towards coping with and adapting to climate change is emerging strongly in the context of sustainable land management. CDM projects would be more attractive to investors if the values from products and services were factored into the economic analysis.

Africa needs to plant trees. If the CDM is not helping countries fund their planting, countries will need to work to change its rules so that the CDM will work for them. ◆