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Expanding the development benefits from carbon offsets

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The Clean Development Mechanism (CDM) of the Kyoto Protocol which allows for trade in emission reductions between developing and developed countries has a specific aim of ensuring that carbon emission reduction projects contribute to sustainable development of the host country according to standards set by that country. However, the development potential of transactions under the CDM is constrained by a number of factors. Governments face the dilemma of setting demanding sustainable development criteria and running the risk of losing investments to other developing countries with less demanding standards, or setting less stringent standards and thus generating little benefit at the local level. This is compounded by the fact that concluding deals under the CDM in developing countries is more expensive, time-consuming and risky than buying carbon credits elsewhere.

Projects in the CDM tend to be large landfill gas to energy or hydrochlorofluorocarbon (HFC) destruction and to be concentrated in a few larger developing countries. Many of the countries most vulnerable to the impacts of climate change (such as the fifty least developed countries) have received no (or very few) CDM projects so far. The latest annual survey of the carbon market from the Carbon Finance Unit of the World Bank shows that 58% of the global volume of CO2 equivalent (CO2e) transacted under the CDM related to HFC destruction projects and the average transaction size in 2005 was 1.90 million tonnes CO2e up from the 1.24 million in 2004. Small scale projects which have more potential for local livelihood benefits are less likely to be targeted because of their high transaction costs. This is demonstrated in the annual survey which shows that there are very few projects in the CDM generating less than 50,000 tonnes CO2e per year.

From the development perspective, it is the voluntary market for carbon offsets which shows more promise. In this market buyers have other motivations besides regulatory compliance, such as a desire to take responsibility for their impacts on the global environment or to improve reputation. They are likely to be interested in a range of attributes of the offsets and securing the lowest price may not be the prime concern for such buyers. There is therefore more scope for offsets from small-scale projects which cannot compete in the CDM to find buyers in the voluntary sector. Market growth for voluntary carbon offsets has been seen over the last few years in this market; there are now 53 retailers worldwide, largely in Europe and the US. However, estimated at 6 million tonnes in 2005, the market is tiny in comparison with the CDM which reached 346 million tonnes in the same year. But the market is expanding fast with some estimating a voluntary carbon market of 500 million tonnes over the next three years.

Alongside its ability to extend the reach of compliance markets, and open up access to individuals and smaller organisations, the voluntary market is particularly important because of its potential for development benefits. A survey of retailers (Harris 2006) showed that micro- to small-scale forestry projects dominate the market followed by energy efficiency and renewable energy. Many customers in the voluntary market are thought to have a preference for offsets with additional attributes. This applies particularly to individual purchasers but also to businesses buying offsets for operational activities as well as NGOs and charities.

A major constraint to expansion of the voluntary market is the deep-seated concern that offsets, far from being a means of taking responsibility for one's actions may be a means of evading responsibility. They may simply serve to assuage people's guilt while doing little to make them take action to reduce their carbon emissions. (For more detail see IIED and nef Round Table

KEY MESSAGES:

- **The CDM has limited development benefits particularly for improving livelihoods of the poor because of the concentration on large low cost projects such as HFC destruction which out-compete small projects**
- **Voluntary carbon offsets outside the Kyoto Protocol and the CDM offer the potential for development benefits because they involve less complex procedures and target buyers who are interested in such benefits**
- **Although still very small, the voluntary market is growing fast. Development of standards could increase credibility of the voluntary market but might also work against projects with development benefits**
- **Offsets which combine mitigation and adaptation could be an effective way of channelling resources to those most vulnerable**

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Carbon Offsets: Development Opportunity or Carbon Get-out Clause 2005 www iied.org/climate change).

These misgivings are compounded by a lack of credibility over both the carbon and the development benefits of voluntary carbon offsets and carbon offsets in general. Emission reductions in offset projects usually involve the avoidance of future emissions. The calculation of emission reductions therefore relies heavily on assumptions about what would happen with and without the project. The CDM has agreed methodologies for estimation of emission reductions and a set of procedures for project approval which aim to ensure that projects provide genuine, additional emissions reductions.

In contrast, the voluntary market is unregulated and a wide array of standards and procedures have developed. While over two thirds of retailers use some form of standard, a widespread lack of transparency means it is possible that significantly less rigorous procedures may be followed, which has created doubt regarding credibility. This is exacerbated by the possibility of double counting in the absence of a widely used registry of projects and emissions. There is a danger that confidence in the market might be destroyed if emission reductions in some offset projects are found to involve questionable forms of calculation. As the principal motives for buying offsets are to take responsibility for actions or in the case of businesses to build reputation, these uncertainties can reduce the attractiveness of voluntary carbon offsets and deter investment.

The CDM Gold Standard in an effort to improve procedures recently launched a voluntary market version of its standards. The Climate Group in conjunction with the International Emissions Trading Association are also in the process of developing a voluntary carbon standard which they hope will help to ensure that offsets are more credible.

These improvements in standards may help the voluntary market to expand. However, it is possible that the introduction of standards could lead to disadvantages for the types of projects most likely to have development benefits, which are typically small scale. As strict standard requirements can impose larger transaction costs particularly on small projects where the proportionate burden is greater, the final standard content could affect the feasibility of developing such projects. Furthermore, greater commoditization could focus attention of buyers on price over other attributes. However, there is currently no universal intention by retailers to apply a market standard and it is unlikely that demand for additional attributes will dissipate completely.

Another option for expanding the development benefits of the voluntary market is to develop a different type of offset, a Mitigation-Adaptation (Mit-Ad) offset, which offers both emission reduction (mitigation) and adaptation (actions) which help the communities most vulnerable to the impacts of climate change. For example, afforestation in a coastal area can be both a mitigation measure and a means of reducing vulnerability to flooding. Similarly composting of organic waste can reduce methane emissions but also have adaptation benefits. Applying compost increases the moisture holding capacity of dry soils, thus if this compost is applied to land that has become increasingly drought-prone as a result of climate change, it will assist a community in adapting to climate change.

Offsets from Mit-Ad projects are likely to cost more because of the dual activities and the need to meet standards for both mitigation and adaptation. Thus a premium price for the carbon credits would need to be charged. However, in the voluntary market this higher price need not be a deterrent, because the value to buyers in the voluntary market is not simply the carbon offsets themselves, but also the story behind them. Mit-Ad projects provide a unique story. Buyers of Mit-Ad voluntary carbon offsets are not only reducing future emissions into the global atmosphere, but are also alleviating the local problems caused by emissions of the past. They provide a unique way of uniting global emissions reductions with addressing the impacts of climate change on the ground in developing countries.

Adaptation standards need to be finalised before such a scheme can be put in place but there is exciting potential for uniting both mitigation, adaptation and sustainable development benefits within a single programme. IIED, together with the New Economics Foundation and other partners is developing a class of small scale, community-based, Mit-Ad projects in the most vulnerable countries (such as the least developed countries). Such projects will be targeted at vulnerable communities in vulnerable countries and support both mitigation as well as adaptation activities (for more information on these projects visit www.iied.org).

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