UNFCCC Submission on issues related to modalities and procedures for alternative approaches to addressing the risk of non-permanence under the clean development mechanism.

25th March 2013

Agenda item 12(b): Methodological issues under the Kyoto Protocol: Land use, land use change and forestry under Article 3, paragraphs 2 and 4 of the Kyoto Protocol and under the clean development mechanism

The Gaia Foundation, Third World Network (TWN) and EcoNexus

Introduction

This submission outlines a number of concerns with proposals to re-define LULUCF activities under the CDM to include non-permanent activities. We find that there is no scientific motivation, nor economic benefit for developing countries in the proposal to include non-permanence in the CDM. Rather, that including non-permanence in the CDM entails significant risks to environmental integrity, as well as social and economic concerns.

We remind parties that current Kyoto Protocol rules demanding permanence were set in order to maintain environmental integrity. As the global climate crisis has worsened, a weakening of these rules would be perverse.

The assumption that participation in the CDM will benefit developing countries, and LDCs in particular, must also be questioned in the context of the current state of the CDM and global carbon markets.

Furthermore, there should be no weakening of permanence rules in discussions beyond LULUCF/CDM. Permanence is key to "real" emissions reductions, and it cannot be buffered, insured or accounted away.

Scientific concerns (environmental integrity)

1) Major challenges in Monitoring, Reporting and Verification (MRV)

Measuring carbon captured in soils presents major problems. It is not possible to measure every square metre of land to assess the carbon stored. Variations in soil type and practice means large uncertainties regarding amounts of sequestered carbon from plot to plot. Reducing the high levels of uncertainty in measuring soil carbon to a level of accuracy needed to trade carbon for offsets is technically and financially unviable. When measuring carbon stored in ecosystems such as forests, the margin of error can be ±50%[1], and as high as ±1000%[2]. The levels of uncertainty when measuring carbon

[1] Kintisch, E. (2007) Improved monitoring of rainforests helps pierce haze of deforestation. *Science.* vol 316, 27 April, pp 536-537

sequestered in soils through agricultural practice are far higher than with forests. This is especially the case when thousands of farmers are participating in the scheme, increasing the level of uncertainty. One can thus conclude that such high variability and margins of error can make the use of non-permanent offsets such as soil carbon virtually worthless for climate mitigation purposes.

2) Risk of leakage

Land-based methodologies for carbon offsetting are vulnerable to leakage, where the project simply shifts emissions-releasing activities such as deforestation, tillage, development, application of fertilisers etc to an area outside of the project boundaries, resulting in no overall emissions reduction or benefit to the climate.

A methodology for soil carbon sequestration piloted by the World Bank, known as the Kenya Agricultural Carbon Project (KACP) has been promoted as a viable model that can lay the groundwork for future soil carbon offset projects. However an analysis by the Institute of Agriculture and Trade Policy (IATP)[3] found the methodology flawed for a number of reasons, which included the high risk of leakage.

3) Buffer credits

The use of buffer pools and discounting credits has been proposed as a means of addressing leakage or risk of reversals by holding a portion of credits in reserve (a buffer pool) or under-estimating credits (discounting). While these methods can partially compensate for environmental integrity concerns such as leakage and reversals, such accounting tricks cannot compensate the high levels of uncertainty in MRV (which can be greater than 1000%), nor compensate the risk of reversals, and compromises the integrity of emissions reductions. Instead of being a scientific tool to address climate change, buffers have been proposed as the easiest solution to address fungibility concerns in offset credits (i.e. exchangeability or comparability with other offset products in order to be able to enter the carbon market). Buffers signify an economic sleight-of-hand, which cannot adequately compensate for environmental integrity concerns off offsets. Leakage, reversals and non-permanence beyond the buffer or discounting level will still be seen.

4) Questionable benefits of carbon offsetting

The implementation and experience of the CDM so far has achieved, at best, mixed results for climate change, communities and developing countries. Many theoretical assumptions made about how the CDM would function have not been borne out in practice. Just one example is the issue of "additionality". The counter-factual nature of additionality makes it impossible to prove with complete certainty what would or would not have happened otherwise. However, without additionality, offsets do not reduce emissions; instead they allow emission increases in developed countries. Analysis shows

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[2] Chen, W., Chen, J., Liu, J., Cihar J.(2000) Approaches for Reducing Uncertainties in Regional Forest Carbon. *Global Biogeochemical Cycles* 14(3) pp.827-838

[3] http://www.iatp.org/documents/an-update-on-the-world-bank's-experimentation-with-soil-carbon

that few CDM projects are, in reality additional[4]. The significance of this should not be understated. It means that the CDM has probably led to an *increase* of emissions instead of a reduction, and that it is exacerbating climate change instead of addressing the problem.

Many projects have also been criticised for their social and environmental impacts[5] in developing countries. The impact of the CDM has therefore had questionable benefits for climate change, communities and the environment. Therefore before considering alternative approaches to addressing non-permanence for inclusion in the CDM, parties should first ask whether the experience of the CDM has thus far been satisfactory, and whether including non-permanent activities will address - or more likely exacerbate - the current problems faced by the CDM and the climate objective that it is intended to serve. Carbon markets are already questionable as a strategy for climate change; expanding them to include even more questionable methodologies will be unwise.

Economic concerns

5) Collapsing carbon markets

The global carbon market is currently in a state of crisis. From a peak of €31 per ton, the global price of carbon plummeted to an all-time low of €2.81 in January 2013. Increasing supply of carbon credits through weakening rules on permanence into this unstable and unreliable scenario is likely to further undermine the price of carbon[6], and thus further threaten an already fragile (some might say doomed) CDM.

6) Cost effectiveness

It is sometimes suggested that participation in emissions trading can be a cost-effective means to reduce emissions, with developing countries benefiting from investment towards sustainable development. However carbon markets rarely deliver money to projects and communities on the ground. Out of a total carbon market volume of US$149 billion in 2012[7], only US$3,889 million (0.26%) was for project-based transactions, with only a very small proportion of that likely to reach the community level.

External "carbon consultants" play a key role in the complex MRV of carbon offsetting, particularly in land-based methodologies. The high fees paid to carbon consultants by offset projects means that project earnings are almost always a fraction of those anticipated.

[4] Harbara Haya, Payal Parekh, University of California: Hydropower in the CDM: Examining Additionality and Criteria for Sustainability, , 25 November 2011

[5] African Biodiversity Network, Biofuelwatch, Carbon Trade Watch, the Gaia Foundation and Timberwatch Coalition.: The CDM in Africa: marketing a new land grab. February 2011

[6] The Gaia Foundation.: Clear as Mud: why agriculture and soils should not be included in carbon offset schemes. April 2011

[7] World Bank: State and Trends of the Carbon Market 2012

Projects that have piloted land-based offset projects are beginning to express serious reservations about the cost-effectiveness of these approaches. The Sustaining Agriculture in a Changing Climate (SACC) project finds a number of shocking outcomes from the experience of developing climate finance for African farmers[8]. Among their conclusions are that: if using climate finance for agriculture, *projects can only expect to break even financially after 15 years*, even under optimistic scenarios. *Farmers are likely to receive just US$55 total over a project's 25 year lifespan*. And meeting the technical specifications for carbon accounting (such as regulating planting, spacing, thinning and harvesting) can be a major challenge for farmers and a long way from their reality, causing economic loss and frustration.

Ultimately, participating in the CDM in general, and non-permanent activities in particular, can lead to higher costs than earnings. There is thus no financial incentive for LDCs to participate.

Social concerns

7) Liability shifted to farmers/ host countries

By definition, non-permanent activities are at significant risk of reversals. It is extremely difficult, and perhaps impossible, to guarantee against reversals for land-based activities, with climate change itself increasing the risk of land-based carbon sinks becoming sources.[9]. Therefore proposals to shift liability for reversals onto host countries are a key concern for those countries and their farmers. Farmers are likely to object to conditions that oblige them to guarantee against changes in land-management practices for decades to come. The Australian "Carbon Farming Initiative", which requires farmers to guarantee land-management practices for 100 years has been criticised by farmers and banks as unworkable, as it effectively means that farmers cannot sell their land[10]. However any weakening of the time-span over which to guarantee permanence of emissions reductions will compromise environmental integrity and must not be considered in the quest for improved fungibility.

8) Food security

Food production, and the present and future ability of the planet to feed its population, is the most important and urgent reason for the need for an effective global response to climate change. All responses to climate change must therefore take food security into account. The global peasant farmers' movement La Via Campesina has further

[8] ICRAF: Not for the Carbon; rethinking climate finance for farmers. 18 December 2012

[9] It is widely predicted that a 2.2C global temperature rise would trigger Amazon dieback. See: IPCC (2007) 'Summary for policymakers.' In Parry ML, Canziani OF, Palutikof JP, van der Linden PJ, Hanson CE (eds) 'Climate change 2007:impacts, adaptation and vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.' Cambridge: Cambridge University Press.

[10] http://www.abc.net.au/radionational/programs/breakfast/background-briefing-soil-carbon/4533764

developed thinking around food security into a more holistic concept of "Food Sovereignty"[11]. This can be defined as a holistic approach that considers the needs of small-scale food producers, ecosystems and crop diversity as integral to sustainable food production.

Farmers' organisations, social movements and CSOs are increasingly concerned that an emphasis on the carbon trading potential of land could negatively affect farmers' rights, access to land, or encourage agricultural production that focuses on "carbon farming" at a cost to food production, food sovereignty, crop diversity and resilience to climate change.

Instead, carbon markets are more likely to incentivise soil carbon sequestration activities that prioritise profit over social, ecological and climate resilient benefits. Agro-ecological small-scale farmers (who currently feed 70% of the planet's population) must be at the centre of any global food strategy; but complex and expensive land-based CDM projects will not be accessible, relevant or beneficial for small-scale farmers based in developing countries.

Conclusion

There must be no weakening of current rules regarding permanence in the discussions around LULUCF, CDM, or in any new regime.

The CDM has failed to financially benefit developing countries, whilst also failing to address climate change. Many view the challenges faced by the CDM as indication that it is facing collapse. The inclusion of non-permanent offsets in this scenario will only exacerbate an already grave scenario for developing countries and the planet.

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[11] La Via Campesina: Declaration of the Forum for Food Sovereignty, Nyeleni, Mali, 2007