

Ensuring Integrity in Forest Carbon Markets; A concept note¹

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The issue:

In the context of forestry, Carbon Compliance, Offsets, Trade, Investment and Finance are regarded as synonyms to Carbon Markets and so far perceived as fundamentally financial transactions amounting to tens of billions of dollars, but with little “spill over” to the forests and their dwellers. Judging from the amounts of money invested in the markets, it must be profitable financially, despite serious technical, legal and institutional hurdles. The rates of capital flow and geographic coverage are expected to accelerate exponentially post Copenhagen.

Similar to other forest-related climate change mitigation measures, investors have the good intentions of achieving measurable, real, verifiable, additional and permanent (MRVAP) carbon sequestration and storage in healthy forests as well as reductions in GHG emissions associated with unsustainable forest practices. The question on the minds of foresters (and other concerned parties) however is: how could forests and forest-dependent communities benefit from such enormous financial flows? Some are even more skeptical and doubt if, under the present system, there will be true gains outside the market place. Yet, some others do not object to using forests to “bail out” polluters, as long as forests and their communities benefit from such schemes.

¹ Forest Carbon Finance Summit 2009. Harvard Law School/WWF/Duke University, Washington, DC, March 2009.

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This Concept Note makes the case that in order to ensure the integrity of Forest Carbon Markets, carbon compliance must be integrated into sustainable forest management (SFM).

Carbon Trade

Carbon Credit Trading currently amounts to over \$60 billion and it is conceivable that it will reach a \$ trillion before the end of the next decade so long as anthropogenic activities continue to generate at least 40 billion tons of CO₂ annually. However, investing in carbon credits only, without due attention to other essential services of forest ecosystems, may lead to a collapse in the carbon markets since the amount of carbon sequestered and stored by world forest ecosystems is very high. In 2005, the almost 4 billion hectare of global forests contained an estimated amount of 633 Gt of total carbon (i.e. that contained in living biomass, dead wood, litter and soil), or an equivalent of nearly 160 tons of carbon per hectare. Forest carbon is depleted at a rate of 1.6 Gt annually³.

Two practical questions are posed often. Firstly, can carbon emissions be balanced (offset) by carbon sequestration in dynamic forest ecosystems? Secondly, is marketing of carbon credits the best way forward? There is a myriad of technical, governance and institutional issues to be resolved before satisfactory answers become available.

The almost exponential growth of the carbon market is taking place in the shadow of many uncertainties most obvious of which is forest carbon property rights. Conceiving and institutionalizing carbon property rights are the most difficult tasks for governments because they are legal as well as economic rights. Before completely defining rights and measurements, carbon has been ascribed monetary value in the market place, and the market is yet to provide security for purchasers. Carbon traders and purchasers are lacking

³ FAO , Forest Resources Assessment 2005

confidence that the carbon assets they are selling and buying are real and have a tangible value. In order for these emerging rights to have a status of legal private rights, they require definition and valuation of rights like other “property” rights. Notwithstanding that security of tenure is a pre-requisite appropriate market function; some argue that trading can proceed while such issues are being addressed by administrative and legislative branches of governments. Some governments are making progress in this regard though slowly, while national and international demands for carbon compliance are mounting.

In addition to trading carbon sequestered in natural forests, there is a growing carbon market for planted forests (carbon plantations). Provided that the appropriate silvicultural procedures are in place, including planting appropriate species, and that natural forests are not cleared specifically for plantations, planting trees on degraded land is environmentally, economically and socially feasible. However, in some regions (*e.g* in Australia) there is growing trend to grow trees as carbon sinks on arable land normally allocated for food production; solely for financial gains. In certain locations the opportunity costs of tree plantations are presumably higher than cereal production for example. If this trend picks up in other parts of the world, the consequences could be detrimental for global food security. On the other hand, if woody biomass becomes more economic as feed for bio-fuel generating facilities and if tree breeding programmes yield more efficient carbon fixing strains, there will be more conversion of natural forests into plantations.

Reduced Emission from Deforestation and Forest degradation (REDD)

REDD is another fast moving target driven mainly by the conviction that it is a “viable” economic approach to reduce

GHG emissions associated with deforestation and forest degradation. The overarching objective is to act fast to slow global warming down. The current undisputed political commitments at the highest possible levels have led to substantial allocation of funds (or at least commitments) through ODA and by several bilateral aid agencies, international financing institutions, IGO's, INGO's and the private sector. REDD should be part of a comprehensive forest-based response to climate change. It should be kept in mind however that combating deforestation is broader than climate change. It is a development issue.

Like carbon finances and Payments for Ecosystem Services (PES), REDD has become "a fact of life" in the international arena regardless of the reservations raised about these schemes. There are already tens of studies, reports and books critically analyzing and evaluating the merits of these approaches and uncovering the associated uncertainties⁴. For example, there are fears that only countries with historic high deforestation rates are bound to benefit more from REDD schemes than those with low rates of deforestation because carbon credits are issued for emission reductions, not carbon stored. Nonetheless, many IGO's, INGO's, Financial Institutions, Development Assistance Agencies and researchers are now on board in order not to miss the boat which is sailing at full speed.

Carbon Markets and REDD

Carbon Compliance and REDD are inter-connected, and portrayed with the explicit objectives of reducing forest loss, maintaining forest cover and enhancing carbon sequestration

⁴ For recent reviews, see for example,

*CPF (2008) Strategic Framework for Forests and Climate Change. <http://www.fao.org/forestry/cpf-climatechange>

*Friends of the Earth International.(2008) REDD myths. Issue 114. info@foei.org

*Kanninen, M., et al. . (2008). Do Trees Grow on Money? The Implications of Deforestation Research for Policies to Promote REDD, CIFOR.

and conservation in forest biomass. However, the implicit objectives of the two approaches are often regarded as different. At least in the forestry circles, carbon compliance is regarded as a buying “rights to release carbon in the atmosphere”, while REDD is looked at as a mechanism to reward the complacent (i.e. those who remove and degrade forests). Meanwhile, carbon trading is perceived as essentially financial transactions for profits mainly by brokers. Governments of many developing countries do not possess funds needed to carry out activities aimed at reducing deforestation and increasing carbon sequestration and storage in forest ecosystems. They rely on foreign assistance or the lucrative private carbon markets. There are some concerns however that a lot of confusion will arise at international and national levels when proceeds from carbon offsetting sales in one locality are used to address the direct and underlying causes of deforestation and land degradation under REDD schemes in another. The confusion would further exacerbate when the two schemes are administered by different departments in national governments and/or when all proceeds are ploughed into national accounting systems. Although many governments understand the challenges of climate change and appreciate the need for urgent action, the response is still fragmented by institutional silos. Often, the big picture is only clear at the centre of organizations, sitting mainly with policy planning level while ODA and private funds are received by ministries of finance.

Sustainable forest management is the approach to ensuring integrity of forest carbon markets

Buyers of carbon compliance credits and carbon traders must realize that forests are more than carbon. Policy approaches whether to conserve carbon in forest biomass or to reduce emissions from deforestation and forest degradation should be

holistic, addressing the multiple functions of forests and incorporating measures to maintain forest health and integrity as well as addressing the direct and underlying causes of deforestation, rehabilitating degraded forests and restoring landscapes.

Sustainable forest management (SFM) is a unifying concept providing a flexible, robust, credible and well-tested framework that simultaneously enhances carbon sequestration and storage, reduces carbon emissions, improves forest adaptation to climate change, protects biodiversity, furnishes environmentally-friendly forest products and supplies carbon neutral renewable energy resources, in addition to other essential forest ecosystem services. Equitably implemented, the sustainable management of forests protects the livelihoods of forest dwellers, especially the Indigenous people while contributing to the national economy.

There is no need to re-invent SFM to cater specifically for carbon compliance and / or climate change mitigation programmes, REDD included. Calling for still another round of specific planning tools and initiatives runs the risk of yielding fragmented policy approaches and possibly failure. What is needed is to build upon existing policies intended to promote SFM and to harmonize these policies with national development policies such as agriculture policies, energy policies, poverty reduction strategies, urban planning, etc. It is advisable to integrate explicit efforts to sequester carbon, reduce deforestation and promote forest restoration as part of the national forest programmes and national development strategies.

For successful implementation of carbon compliance projects as well as mitigation (REDD) and adaptation measures, much of the responsibility lie with the forest sector to manage natural forests, protected areas, planted forests and agroforestry systems sustainably with a view to ensure balanced realization of their economic, environmental and social values. In

particular, the high vulnerability of forest communities and the threat imposed by climate change on their livelihood coupled with possibilities of financial gains from carbon compliance markets need to be addressed in any policy approach under consideration.

Lessons learnt from the on-going efforts to improve forest management indicate that a number of crucial challenges will need to be addressed in order to achieve maximum benefits from potential REDD and existing carbon compliance investments. These include: establishing legal clarity; building capacity for law enforcement; establishing clear, legitimate land tenure; and establishing a national consensus on investment objectives and implications through stakeholder participation.

Viable carbon offset purchases will require serious investments in livelihood-support systems and capacity building that will offer an economic alternative for the people living on the fringes of forests and depend on their products and services. If these issues are not considered seriously, only the elite and rent-seekers would be allowed to capture the benefits which may lead to intra-societal conflicts.

National and local forest administrations are in a good position to facilitate the implementation of forest-related carbon compliance, adaptation and mitigation measures and to provide necessary coordination. They should, in the meantime, initiate and maintain collaboration with other governmental agencies dealing with natural resources (e.g. agriculture, water, energy and recreation) as well as with other stakeholders, such as local governments, Indigenous people, community groups, forest owners, private sector, research institutes, NGO's and national planning and financing entities.

It should be kept in mind however, that the forest sector would only be able to achieve its "share" of sequestering and storing carbon hence reducing net emissions of GHGs on the long term

if “decarbonisation” of the global energy system does not lag behind.

Conclusions

1. In spite of the fact that carbon compliance markets are growing fast and that REDD schemes may follow soon, Carbon forestry, or more correctly Carbon silviculture as a science and practice is in its infancy. More attention and resources should be allocated for capacity building and research in this area.
2. The intricate links between carbon finance and REDD must be studied in terms of complementarities and added values, including coordination among financing institutions, technical and development assistance organizations and INGO’s addressing the two fields.
3. Sustainable forest management (SFM) provides a viable integrated approach to ensuring the integrity of forest carbon markets as well as reducing deforestation and land degradation. Investment in carbon compliance and REDD financing should be designated as investment in SFM. For carbon compliance to succeed on the long run and for reducing emissions of GHG’s associated with deforestation and forest degradation to be effective, SFM should be the driver, fuel and vehicle.
4. Investing more in rehabilitation and restoration of degraded lands including through tree plantations where feasible should be encouraged.
5. Forest-related measures to conserve carbon and reduce deforestation, commendable as they may be, would not yield their intended benefits unless the world moves seriously toward low-carbon economy.
6. Investors and national authorities must pay attention to those who implement the activities on the ground. Often field foresters and local communities are left out of discussions and designing of carbon compliance and REDD

projects. While they are entrusted with the responsibility of project management and often encounter risks and bear liabilities, very little funds trickle down to them.

7. Moral and often good business responsibilities of carbon buyers and traders should not stop at purchasing carbon credits at the market place (Stock Exchange), followed by signing a contract and paying the sellers. Buyers should ensure sellers' compliance as well.
8. Pouring public and private funds into a limited number of countries in the tropics and sub-tropics, especially those with modest technical and absorptive capacities is counter productive and may be conducive of corruption. On the other hand, there are some shining examples of countries with well-informed, honest institutions in charge of implementing such projects. These successful examples should be tapped and shared with others.