

Challenges of reducing emissions from deforestation and forest degradation (REDD+) on the African continent

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The United Nations Framework Convention on Climate Change (UNFCCC) has asked policy-makers and researchers to explore ways in which African countries can enhance their role in climate change mitigation by receiving a larger share of carbon projects.¹ Consequently, the need for a Reducing Emissions from Deforestation and Forest Degradation (REDD) mechanism in developing countries has become an increasingly important part of the convention's agenda. Since the inception of the REDD concept at the 2007 13th UNFCCC Conference of the Parties (COP 13) in Bali, the concept has moved from a highly specific mechanism to tackle deforestation and degradation towards a broader inclusion of efforts to conserve and manage forests to enhance carbon stocks. The international move towards conservation and management of forests to enhance carbon stocks as a broader concept, has seen the emergence of REDD+.² The REDD+ concept as defined in the UNFCCC Dec 1/COP 13 Bali Action Plan and subsequent COP decisions relates not only to reducing emissions from deforestation and degradation, but to the role of conservation, sustainable management of forests and enhancement of forest carbon stocks, particularly in developing countries. The REDD+ mechanism offers developing countries: an opportunity to offset their carbon emission levels, financial benefits through trading of REDD+ offset credits, improved livelihood of local people adjacent to forests, and contributions towards biodiversity conservation.^{1,3,4} Despite these potential benefits, there are challenges associated with the development and implementation of REDD+ mechanisms on the African continent.

Capacity issues

The potential of REDD+ varies per country based on the forest type, biomass and the amount of carbon that can be sequestered. High quality data, which are consistent and comparable across developing countries, are therefore critical especially if REDD+ is to be integrated into the international carbon market.³ African countries therefore need to strengthen their technical capacity to accurately measure, monitor and report emissions versus storage in order to deliver environmentally effective and economically efficient emission reductions. The unfortunate part is that most African countries lack the technical capacity to pilot these studies.^{3,5,6} Unless the capacity gap is adequately addressed, it will be a challenge for most African countries to effectively participate in the REDD+ mechanism.

Funding

Technologies to measure carbon emissions from land-use change and carbon storage are improving,⁶ but the costs of obtaining and implementing these technologies are also very high. REDD+ is a complex mechanism and requires a huge amount of funding to sustain it over the required period of time. A lack of funds, together with the high expectations of local communities, means that most African countries are unable to access the latest mitigation technologies, and thus are faced with a unique situation – deciding whether or not to invest public funds in order to leverage private funding. Similarly, many African countries are unable to even conduct REDD+ feasibility studies, hindering their effective participation in climate change mitigation mechanisms. A lack of agreement at the UNFCCC negotiations, particularly with regard to the source of long-term REDD+ financing, results in uncertainties for effective participation of most African countries in the REDD+ mechanism.

Land tenure issues

Most forests and woodlands in Africa are located in rural areas, where land is considered communal. Unclear land tenure practices in Africa also provide challenges for development of the REDD+ mechanism. Without clear and defensible rights to land or forests or the sequestration service itself, suppliers cannot make a credible commitment to supply carbon offsets.^{3,7} Most African countries have multiple tenure systems whereby several land users may have multiple



claims to access different resources on the same piece of land,⁸ for example communal grazing and agricultural land. If carbon sequestration projects are adopted where property rights are unclear, it is also possible that the elite and rich people may take control over the land.¹ As a result, the majority of those who are dependent on forests will not benefit from carbon trade. This imbalance could lead to 'leakage' – emissions occurring in another area as a result of introducing an emission reduction programme – and perhaps even increased emissions.

Methodological issues

The conditions and complexity associated with negotiating climate change mitigations also make it difficult for most developing countries to participate properly in international climate change mitigation activities. For instance, the Clean Development Mechanism, which allows emission-reduction projects in developing countries to earn certified emission reduction credits,⁹ is restricted to afforestation and reforestation and applies only in areas where there has been no forest for the past 50 years¹⁰ – a condition which does not hold in most African countries. In addition, the definition of forest as vegetation with 10% to 30% tree cover or biomass,¹¹ excludes many arid African countries altogether from qualifying for REDD+. It is also difficult practically to have a standardised mitigation method that could apply to all countries in Africa.

We are of the opinion that unless African forestry perspectives are included in global climate change debates, REDD+ mechanisms for the continent risk being at best inadequate, and at worst inappropriate.¹² Davis⁶ also argues that if current challenges facing REDD+ are not fully resolved, a market-based REDD+ could fail to achieve positive outcomes, or even increase global emissions if developing countries are allowed to sell carbon offsets from reduced deforestation that do not correspond to actual emissions reductions. It should be noted that the implementation of REDD+ will require 'learning by doing' in order to improve its effectiveness. The following recommendations explore the degree of governance and institutional capacity that should be in place for REDD+ to take off in Africa.

Proposed recommendations

We concur with Jindal et al.¹ that successful implementation of carbon sequestration activities requires building or enhancing in-country institutional capacity at a national level. Institutional capacity building needs to extend beyond the provision of support for monitoring systems, forest assessment, technical assistance, training and educational programmes,³ to include efforts to enhance the effectiveness of structures responsible for local property rights, forest management, local economic development and relevant law enforcement. Capacity building should also include the integration of forest-dependent communities in the designs of benefit-sharing mechanisms, and the integration of the knowledge and experience of indigenous peoples and local communities into locally informed forest carbon monitoring, reporting and verification techniques.

We commend the requirement for a detailed national forest assessment study to accurately estimate what the REDD+ mechanism can contribute to the livelihoods of the local people. We express that African governments need to work together with sector partners and research institutions to conduct these feasibility studies, which must inform the design and implementation of REDD+. This recommendation implies that African governments need to source or allocate funds to address the technical challenges associated with REDD+ development and implementation. Such funds should also be used to train local people so that they are able to monitor and report on the REDD+ initiative.

The challenge is that the criteria used for funding are unclear, and where rules and procedures exist, they are too technically complex to allow many African countries to qualify. The allocation of funds for research and development in most African countries is inadequate, and few developed countries are willing to provide funds to initiate REDD+ mechanisms. African governments need to increase investment into the development of a good knowledge base on climate change mitigation mechanisms. We also concur with Ricketts et al.⁴ that wealthy nations should be prepared to compensate substantially developing nations for embarking on REDD+ mechanisms. African countries should support a funding mechanism approach when participating in the REDD+ mechanism to allow institutional development before participating in market-based funding approaches. They should also identify alternative sources of funds, raise revenues and build public-private partnerships with private funders.

The majority of rural people in Africa depend on forest resources for their livelihood. This dependence implies that the implementation of REDD+ would affect them directly; but without their participation, REDD+ would likely be unsuccessful. We recommend that the REDD+ initiation in Africa should encompass broad public consultation and active participation of local people. Extra-sectoral awareness on climate change mitigation should be at a forefront within the sector itself and within the broader public.

A transparent trust committee, democratically elected by local people and traditional leaders, needs to be established to address land tenure and carbon rights challenges, and to ensure that benefits accrued from REDD+ mechanisms are equitably shared amongst those responsible for forest management. Benefit sharing should be very flexible and should be based on national and local circumstances. Clarification of property rights over carbon and land tenure is also required.

To encourage effective participation in the REDD+ mechanism, the definitions and methodologies used should consider the diverse local conditions which exist in the forests in Africa. The initiation of REDD+ needs to be accompanied by programmes established as part of the REDD+ implementation strategy in order to: reduce dependency on forests, reduce emissions, restore forest in



Natural forest in Limpopo Province, South Africa (photo: Michael Cherry).

degraded landscapes, promote biodiversity conservation, and create employment opportunities for local people. African governments need to source or allocate funds for development and implementation of these programmes.

We also concur with the views by Nepstad et al.¹³ that countries must develop policies that eliminate forest clearing and degradation. In countries where those policies exist, they must be strengthened and effectively implemented as part of national policy frameworks that promote sustainable forest management and rural development. The idea is to ensure that local people who are dependent on the forest realise the multiple benefits, such as emission reduction, biodiversity conservation, the financial benefit from selling carbon credits, and improvement in their livelihoods. However, if these programmes and policies are not effectively implemented, 'leakage' is likely to result, as those dependent on forests become involved in deforestation in another area to sustain their livelihood. This possibility also implies that the REDD+ mechanism must offer compensation that will reach the communities that are dependent on forests.

We suggest that the REDD+ mechanism should be implemented in a nested manner – both nationally and subnationally – in order to provide countries with the flexibility to manage their collective forest resources, and

also to avoid the problem of within-country leakage. Private sector participation could be mostly at a subnational level, while at a national level; the state could be responsible for reporting to the UNFCCC (at the international level). This concept can be easily applied across borders between participating and non-participating countries,⁶ in order to prevent international leakage.

There is also a need for all sectors of forest users and governments in Africa to participate in international climate change negotiations in order to ensure that REDD+ negotiations are transparent, effective, practicable and serve the needs of society. Developing countries should negotiate for funding mechanisms to drive the implementation of REDD+ in their countries, and they should be prepared to be responsible and accountable. The diversity and complexity of African forests should be considered when negotiating for mitigation options.¹² We recommend that countries should formulate a binding agreement during the next COP 17 in Durban (December 2011) under the UNFCCC to reduce their emissions and to compensate countries involved in mitigation initiatives. African countries also need to ensure that the ongoing UNFCCC process of establishing REDD+ guidelines keeps the implementation costs to a minimum.

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