

Review of REDD+ and Carbon-Forestry Projects
in RFGI Countries

Responsive Forest Governance Initiative (RFGI) Research Programme

The Responsive Forest Governance Initiative (RFGI) is a research and training program, focusing on environmental governance in Africa. It is jointly managed by the Council for the Development of Social Sciences Research in Africa (CODESRIA), the International Union for the Conservation of Nature (IUCN) and the University of Illinois at Urbana Champaign (UIUC). It is funded by the Swedish International Development Agency (SIDA). The RFGI activities are focused on 12 countries: Burkina Faso, Cameroon, DR Congo, Ghana, Kenya, Mozambique, Nigeria, Senegal, South Africa, South Sudan, Tanzania, and Uganda. The initiative is also training young, in-country policy researchers in order to build an Africa-wide network of environmental governance analysts.

Nations worldwide have introduced decentralization reforms aspiring to make local government responsive and accountable to the needs and aspirations of citizens so as to improve equity, service delivery and resource management. Natural resources, especially forests, play an important role in these decentralizations since they provide local governments and local people with needed revenue, wealth, and subsistence. Responsive local governments can provide forest resource-dependent populations the flexibility they need to manage, adapt to and remain resilient in their changing environment. RFGI aims to enhance and help institutionalize widespread responsive and accountable local governance processes that reduce vulnerability, enhance local wellbeing, and improve forest management with a special focus on developing safeguards and guidelines to ensure fair and equitable implementation of the Reduced Emissions from Deforestation and Forest Degradation (REDD+) and climate-adaptation interventions.

REDD+ is a global Programme for disbursing funds, primarily to pay national governments of developing countries, to reduce forest carbon emission. REDD+ will require permanent local institutions that can integrate local needs with national and international objectives. The results from RFGI Africa research will be compared with results from collaborators in Asia and South America in order to enhance RFGI comparative scope, and to broaden its geographic policy relevance.

RFGI Working Paper No. 2

Responsive Forest Governance Initiative (RFGI)
Supporting Resilient Forest Livelihoods
through Local Representation

**Review of REDD+ and Carbon-Forestry
Projects in RFGI Countries**

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The Council for the Development of Social Science Research in Africa (CODESRIA) is an independent organisation whose principal objectives are to facilitate research, promote research-based publishing and create multiple forums geared towards the exchange of views and information among African researchers. All these are aimed at reducing the fragmentation of research in the continent through the creation of thematic research networks that cut across linguistic and regional boundaries.

CODESRIA publishes *Africa Development*, the longest standing Africa based social science journal; *Afrika Zamani*, a journal of history; the *African Sociological Review*; the *African Journal of International Affairs*; *Africa Review of Books* and the *Journal of Higher Education in Africa*. The Council also co-publishes the *Africa Media Review*; *Identity, Culture and Politics: An Afro-Asian Dialogue*; *The African Anthropologist* and the *Afro-Arab Selections for Social Sciences*. The results of its research and other activities are also disseminated through its Working Paper Series, Green Book Series, Monograph Series, Book Series, Policy Briefs and the CODESRIA Bulletin. Select CODESRIA publications are also accessible online at www.codesria.org.

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Abbreviations and Acronyms

A/R	Afforestation and reforestation
AfDB	African Development Bank
AFOLU	Agriculture, forestry, and other land use
CAR	Central African Republic
CBFF	Congo Basin Forest Fund
CBFP	Congo Basin Forest Partnership
CCBA	Climate, Community, and Biodiversity Alliance
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CERGIS	Centre for Remote Sensing and Geo-Information Services, University of Ghana
CIF	Climate Investment Fund
CIFOR	Centre for International Forestry Research
CO ₂	Carbon dioxide
CODESRIA	Council for the Development of Social Science Research in Africa
COP	Conference of Parties
CREMA	Community Resource Management Area, Ghana
DANIDA	Danish International Development Agency
DRC	Democratic Republic of the Congo
DWD	Directorate of Water Development, Uganda
ECL	Envirotrade Carbon Limited, Mozambique
EML	Envirotrade Mozambique Limitada, Mozambique
EU ETS	European Union Emissions Trading System
FC	Forestry Commission, Ghana
FCPF	Forest Carbon Partnership Facility
FIP	Forest Investment Program
FLEGT	Forest Law Enforcement, Governance and Trade

FORIG	Forestry Research Institute of Ghana
GEF	Global Environment Facility
GHG	Greenhouse gas
GRIF	Guyana REDD+ Investment Fund
GTZ	German Technical Cooperation
HA	Hectare
IIED	International Institute for Environment and Development
IISD	International Institute for Sustainable Development
INGO	International nongovernmental organization
IUCN	International Union for Conservation of Nature
JI	Joint Implementation
KFP	Kachung Forest Project, Uganda
LFC	Lango Forest Company, Uganda
LRA	Lord's Resistance Army
LULUCF	Land use, land-use change, and forestry
MCLT	Mozambique Carbon Livelihoods Trust
MDG	Millennium Development Goal
MINEP	Ministry of Environment and Nature Protection, Cameroon
MINFOF	Ministry of Forestry and Wildlife, Cameroon
MLNR	Ministry of Lands and Natural Resources, Ghana
NaFORRI	National Forestry Resources Research Institute, Kifu, Uganda
NAG	Norwegian Afforestation Group, Uganda
NCRC	Nature Conservation Research Centre, Ghana
NDF	Nordic Development Fund
NEMA	National Environment Management Authority, Uganda
NFA	National Forestry Authority, Uganda
NICFI	Norway's International Climate and Forest Initiative
Norad	Norwegian Agency for Development Cooperation
NOVACEL	Nouvelle Société d'Agriculture et d'Élevage, DRC
NTFP	Non-timber forest product
PES	Payment for Ecosystems/Environmental Services
ODA	Official Development Assistance
RED	Reduced Emissions from Deforestation
REDD	Reducing Emissions from Deforestation and Forest Degradation

REDD+	Reducing Emissions from Deforestation and Forest Degradation (+ = and enhancing forest carbon stocks in developing countries)
RFGI	Responsive Forest Governance Initiative
R-PIN	Readiness Plan Idea Note
R-Plan	Readiness Plan
R-PP	Readiness Preparation Proposal
SADC	Southern African Development Community
SCCP	Sofala Community Carbon Project, Mozambique
SCF	Strategic Climate Fund
SDC	Swedish Agency for Development and Cooperation
SMF	Sustainable Forest Management
SPGS	EU Sawlog Production Grant Scheme
UIUC	University of Illinois at Urbana-Champaign
UN	United Nations
UNCSD	United Nations Conference on Sustainable Development
UNFCCC	United Nations Framework Convention on Climate Change
UWA	Uganda Wildlife Authority
VPA	Voluntary Partnerships Agreement
VER	Verified Emission Reduction
WCS	Wildlife Conservation Society
WWF	World Wide Fund for Nature



About the Author

Mukundi Mutasa is an independent researcher and part-time lecturer of Disaster Information Management at the National University of Science and Technology (NUST) in Zimbabwe. He worked as a documentalist for the Southern African Research and Documentation Centre (SARDC, Zimbabwe) from 2004-2007, and as a Project Assistant for Norway-based UNEP/GRID-Arendal's Africa Program between 2007 and 2008. He was a graduate student in the Department of International Environment and Development Studies (NORAGRIC) at the Norwegian University of Life Sciences (UMB) between 2008 and 2010 and worked for Ruzivo Trust (Zimbabwe) as a Research Fellow in 2010. His research interests include climate change resilience, social vulnerability to disasters, utilization of indigenous knowledge systems in the context of rural development, and natural resources management.



Preface

James Murombedzi, Jesse Ribot
and Gretchen Walters

Struggles for control over and access to nature and natural resources; struggles over land, forests, pastures and fisheries, are struggles for survival, self determination, and meaning. Natural resources are central to rural lives and livelihoods: they provide the material resources for survival, security, and freedom. To engage in the world requires assets that enable individuals, households, and communities to act in and on the world around them. The ability to accumulate assets and the ability to access government and market services depends partly on such resources along with the political-economic infrastructure – rights, recourse, representation, markets, and social services – that are the domain of government. Democracy, which both enables and requires the freedom to act, is predicated on these assets and infrastructures. Since the 1980s, African governments have been implementing local government decentralization reforms aimed at making local government more democratic by making them responsive and accountable to citizen needs and aspirations; in many places this has been done through a decentralisation of natural resource governance to local administrations. In order to be responsive to individual, household and community demands, local governments, too, need resources and decision-making powers. There must be a public domain – a set of public resources, such as forests or fisheries, which constitute this domain of democracy, the domain of decisions and services that citizens can demand of government. Natural resources, when decentralized into the domain of local authority, form an important part of the resources of individuals, households, communities and governments, making possible this move toward local democracy.

Natural resources provide local governments and people with wealth and subsistence. While nature is not the only source of rural income, the decentralization of natural resources governance is a core component of local government reform. However, governance reforms have been implemented in a context broadly characterized by an enduring crisis of the Western economic and financial systems, which in turn has stimulated privatization and liberalization in every sphere of life, including nature. The process has deprived local governments of public resources – depriving individuals and communities of a reason to engage, as a powerless government is not worth trying to influence. Privatization is depriving forest-dependent peoples of their access to formerly ‘public’ or traditionally managed resources. National governments, as well as international bodies such as the United Nations programme, titled the Reducing Emissions from Deforestation and forest Degradation (REDD), further this trend as they collaborate with private interests to promote the privatization of natural resources. The resulting enclosures threaten the wellbeing of resource-dependent populations and the viability of democratic reforms.

The specter of climate change is deepening the crisis of enclosure. A key response to climate change has been the attempt to mitigate greenhouse gas emissions through enhancing the capacity of forests in the developing world to store carbon, ostensibly for the benefit of the atmosphere as well as the communities who use these forests. UN REDD seeks to pay communities, through their national governments, to conserve their forests as carbon storage. A plus ‘+’ was added to REDD, forming REDD +, to call for improved ecosystems services, forest management, conservation, forest restoration and afforestation to enhance the capacity for carbon storage. Designed on the basis of similar payments for environmental services (PES) schemes, REDD+ has the potential to inject vast new sums of money into local resource use and governance. In the context of fragile local governments, nascent democracies and powerful private interests, such cash inflows result in the commercialization and privatization of forests and natural resources and the dispossession of local resource users. This financialization of natural resources grossly diminishes the scope for democratic natural resource governance schemes. To be sure, the implementation of REDD+ can also learn from and avoid the pitfalls experienced in these PES schemes, especially if they represent local interests in natural resource governance decision making.

The Responsive Forest Governance Initiative (RFGI) is an Africa-wide environmental-governance research and training program focusing on enabling responsive and accountable decentralization to strengthen the representation of forest-based rural people in local-government decision making. Since January 2012, the programme has carried out 33 case studies in 12 African countries, with comparative cases Nepal and Peru, to assess the conditions under which central authorities devolve forest management and use decisions to local government, and the conditions that enable local government to engage in sound, equitable and pro-poor forest management. Aimed at enabling local government to play an integrative role in rural development and natural resource management, these case studies are now being finalized and published to elicit public discourse and debate on local government and local democracy. This Working Paper series will publish the RFGI case studies as well as other comparative studies of decentralized natural resources governance in Africa and elsewhere that focus on the intersection between local democracy and natural resource management schemes. Using the concepts of institutional choice and recognition, the cases deal with a comprehensive range of issues in decentralized forest management in the context of REDD+, including the institutional choices of intervening agencies; the effects of such choices on accountability and representation; and the relationships between local government and other local institutions. The series will also include syntheses discussing the main findings of the RFGI research programme.

Based at CODESRIA, and funded by the Swedish International Development Agency (SIDA), the RFGI is a three year collaborative initiative of CODESRIA, the University of Illinois at Urbana-Champaign (UIUC) and the International Union for Conservation of Nature (IUCN). RFGI working papers and documents, including the background papers, the RFGI programme description, and the RFGI Methods Handbook, can be found online at <http://www.codesria.org/spip.php>, IUCN http://www.iucn.org/fr/propos/union/secretariat/bureaux/paco/programmes/paco_forest/thematiques_et_projets/gouvernance_and_iucn_tools/projets_en_cours/_programme_de_recherche__initiative_pour_la_gouvernance_democratique_des_forets/ and UIUC <http://sdep.beckman.illinois.edu/programs/democracynenvironment.aspx#RFGI>



Introduction

Several African countries are endowed with abundant forest resources that can be used to trap carbon dioxide (CO₂), which is considered the main climate change-causing greenhouse gas (GHG).¹ Of particular mention are the rainforests of central and eastern Africa. The Congo Basin, which is part of Africa's 635 million hectares of forest, harbours the world's second largest block of rainforest (Mantlana 2011). The forests, according to UNEP (2006:200) can 'play an important role in carbon sequestration, and by investing in forest development and conservation, countries can benefit from carbon trading.' It is against this background that reducing emissions from deforestation and forest degradation (REDD) in developing countries, which has since been upgraded to REDD+ with an added focus on enhancing forest carbon stocks in developing countries, is premised. REDD+ is viewed as a way of mitigating climate change by utilizing Africa's, and other continents', forest resources. The concept argues for providing incentives for communities to conserve their forest resources, which then contributes to halting the rate of CO₂ that is being emitted into the atmosphere. A detailed discussion on forest-based climate mitigation and adaptation initiatives, centring mainly on REDD+, will be provided in this paper.

This paper provides background information on REDD+ in Africa for the Responsive Forest Governance Initiative (RFGI), a collaborative initiative involving the Council for the Development of Social Science Research in Africa (CODESRIA), the International Union for Conservation of Nature (IUCN) and the University of Illinois at Urbana-Champaign (UIUC). RFGI focuses on enabling democratic decentralization in forest management in forest-based rural populations in Africa. Because REDD+ projects have implications for commu-

nities that are dependent on forest resources for their livelihoods, local people should be represented in forestry and REDD decisions. The project, working in 10 African countries, seeks to ‘enhance and help institutionalize widespread responsive and accountable local governance processes that reduce vulnerability, enhance local wellbeing, and improve forest management [all which are] necessary ingredients of any sustainable REDD+ and climate adaptation strategy’ (Sall *et al.* 2010). This review paper presents background for the various REDD+ pilot projects and other carbon sequestration initiatives in selected African countries, while arguing that for REDD+ projects to be successful, they have to pay attention to the different tenurial arrangements and identify who the real beneficiaries of the projects are.

Desk Study Methods

This study utilized secondary sources to gather the required information. It relied heavily on the availability of online literature on REDD+ and forest-related climate adaptation activities in Africa. The majority of the information materials were sourced electronically with the African Development Bank (AfDB), Centre for International Forestry Research (CIFOR) and the Green Resources AS (GRAS), a Norwegian company involved in carbon sequestration projects especially in east Africa, providing the bulk of the material. Some information was also sourced from regional blocs, such as the Southern African Development Community(SADC) through its REDD+ NETWORK, from which country-specific information on REDD+ activities or REDD+ readiness was obtained.

The desk research approach is essential for snapshot studies. However, it has a number of limitations as it only documents projects that are widely written about, or those in online documents. It misses out on some project documents or reports that are only available in hard copies in government offices and offices of project implementers. To counter this, a number of people were contacted although the response rate was lower than anticipated.

It is limited too, in that it rarely documents issues that result in bad publicity for the project. These issues might include how the project has negatively impacted on indigenous people or has actually led to leakage with people who were originally using that forest, now 'degrading' other areas. This is because, in most cases, project evaluations are written in a way that focuses mainly on their positive impacts so that they can be appealing to donors and would-be beneficiaries. Such evaluations rarely criticize the project implementation, especially

when the reports are drafted by the project implementers themselves, instead of by independent evaluators.

The language barrier also poses a huge challenge to desk-reviews. The researcher was not familiar with other languages apart from English. Although some international websites provided the English versions of most publications whose original language was anything but English, there is no denying the fact that some important issues might still have been lost in translations.

Using secondary literature sources exposes the researcher to risks of recycling incorrect interpretations of the research findings (Bryman 2008). This is because the original analysis might be influenced by bias and/or other factors that might not be instantly clear to any other researcher intending to use that analysis.

The other challenge is found in the amount of literature published on a certain subject such as REDD+. The researcher is either faced with an insurmountable task of narrowing down the focus from a large pool of resources (Bryman 2008) or an absolute dearth of information with very little of it available in the public domain. The latter was true with some countries such as Burkina Faso where not much has been published on the country-level REDD+ projects.

What is REDD+?

The evolution of reducing emissions from deforestation (RED) as a form of climate financing has taken just over half a decade. The concept started when RED was initiated in 2005 at the 11th meeting of the Conference of Parties (COP11) to the United Nations Framework Convention on Climate Change (UNFCCC) after it was realized that the Kyoto Protocol, an international environmental agreement to regulate the amount of greenhouse gas (GHG) emissions, was limited in its scope as it only included afforestation and reforestation in trying to curb the release of CO₂ into the atmosphere. It was argued that this excluded other forms of trapping CO₂ such as avoided deforestation. The second 'D' representing forest degradation was added in 2007 at COP13 in Bali, Indonesia (Merger *et al.* 2011), while the concept was then upgraded to REDD+ at COP15 in Copenhagen, Denmark, in December 2009. The concept was widened to include sustainable forest management (SFM), 'forest conservation and enhancement of carbon stocks in forests' (Merger *et al.* 2011:551). There is already talk of adding another plus (+) to make it REDD++ whereby such an approach would take 'into account emissions from agriculture and other land uses, as part of a broader AFOLU (agriculture, forestry and other land use) program' (Minang *et al.* 2009:3).

According to Mantlana (2011:1), REDD+ is 'a global initiative to slow, halt, and reverse forest loss and the related emissions in developing countries.' The initiative's main objective is to create a financial value for the carbon trapped by the forest (Caravani *et al.* 2010). As a result of their carbon trapping capacity, forests are viewed as carbon sinks. REDD+ is a 'mechanism that provides compensation to tropical countries for reductions in deforestation – making the

forests worth more standing than cleared' (Boucher *et al.* 2011:7). It is a scheme whereby these carbon markets are offset producing carbon credits that can be bought by countries, or different entities in the countries that are deemed to be the heavy polluters, especially the Annex 1 countries under the Kyoto Protocol (see Appendix 1 for the list).² It is more of a compensatory gesture whereby these countries buy the credits, in the form of fundable projects being implemented in the developing nations who are also heavily affected by climate change. This justification is founded on the climate justice discourse, which argues that 'there can be no grand global [climate change] bargain without justice at its core' (Adams and Luchsinger 2009:33). This is because, as argued by Adger *et al.* (2006:3), 'the distribution of climate change impacts is likely to be unjust, and that climate change impacts are likely to create new vulnerabilities, the causes and distribution of which are unfair.' The most affected are the least responsible for causing the phenomena (Long *et al.* 2010).

The ongoing REDD+ pilot projects are being used to test and strengthen the REDD+ approach so that there can be a successful implementation in the post-2012 period. A number of developing countries and advocacy organizations are arguing for the inclusion of REDD+ initiatives in any post-2012 climate change agreement that is expected to succeed the current commitment period of the Kyoto Protocol, which comes to its end in 2012. There is no denying the fact that if successfully implemented, REDD+ will become pivotal to tackling the climate change challenge (Peskett and Stephenson 2010). It is aimed at mitigating climate change by supporting the implementation of policies in developing countries that aim to reduce emissions from deforestation and forest degradation, while at the same time working towards enhancement and sustainable management of forests (Peskett and Stephenson 2010). The argument, as shown above, is that forests provide more benefits when they are intact than when they are degraded.

The focus on REDD+ is also premised on the understanding that 'deforestation and forest degradation are key causes of climate change, responsible for about 15 per cent of global warming pollution' (UCS 2009 in Boucher *et al.* 2011:6). It is further argued that 'trees contain enormous amounts of carbon [which constitutes] about 50 per cent of the weight of wood,' and when the trees 'are cut, this carbon is released into the atmosphere as carbon dioxide' (Boucher *et al.* 2011:6). This is an undesirable outcome as the CO₂ that is released into the atmosphere is a main cause of climate change.

There are a number of African countries where REDD-related activities such as carbon sequestration, payment of ecosystem services (PES) and the mainstream REDD+ and REDD++ activities are already being implemented. However, this paper focuses mainly on RFGI's four core countries: Burkina Faso, Ghana, Mozambique and Uganda, while using Cameroon, Democratic Republic of the Congo (DRC), Mali, Senegal, South Africa, The Sudan³ and the United Republic of Tanzania as the comparative countries.



Deforestation, Forest Degradation and Drivers of Change

To further understand what REDD+ is endeavouring to achieve, it is crucial that the terms deforestation and forest degradation are defined and differentiated as well as identifying the drivers of change. Boucher *et al.* (2011) posits that deforestation is when a forest that was once there has been cleared, while forest degradation is when there has been some disturbance in the forest cover, even though the canopy might still remain. There are differing views on what constitutes deforestation and degradation, and the politics involved both in the definitions and the processes (Blaikie 2001; Blaikie and Brookfield 1987).

Deforestation, however, is argued to be high in Africa due to a wide range of factors (UNEP 2006). Table 1 shows deforestation and reforestation rates in RFGI core and comparative countries between 1980 and 1995. Reforestation rates are presented as higher than deforestation in the respective countries presenting a picture of various country-level initiatives to address deforestation challenges in Africa. Deforestation and forest degradation are not new phenomena. People have been cutting down trees for a long time, clearing land mainly for crop production (Boucher *et al.* 2011; Marzoli and Del Lungo 2009). This makes it difficult to conclusively argue that the process is environmental degradation instead of development. It is, of course, unthinkable that forest replacement for agricultural purposes would be viewed as degradation by the 'responsible' farmers (Blaikie and Brookfield 1987).

However, agricultural practices in Africa are still seen as the main cause of deforestation and forest degradation since 'there is growing pressure to in-

Table 1: Rate of deforestation and reforestation in RFGI countries

Country	Total forest extent ('000 ha)		Forest area (% of land area)*	Annual rate of Deforestation (%)			Reforestation (%)
	2005	2010		1980-89	1990-95	1985-95	
	Burkina Faso	5,949		5,649	20.6	0.7	
Cameroon	21,016	19,916	42.1	0.6	0.6	14.0	
Democratic Republic of Congo	155,692	154,135	68.0	0.7	0.7	10.0	
Ghana	5,517	4,940	21.7	1.3	1.3	2.0	
Mali	12,885	12,490	10.2	0.8	1.0	27.0	
Mozambique	40,079	39,022	49.6	0.7	0.7	4.0	
Senegal	8,673	8,473	44.0	0.6	0.7	25.0	
South Africa	9,241	9,241	7.6	0.1	0.2	2.0	
Sudan	70,220	69,949	29.4	1.0	0.8	6.0	
Tanzania	35,445	33,428	37.7	1.1	1.0	8.0	
Uganda	3,429	2,988	15.2	0.9	0.9	--	

Source: AfDB (2011a), *(AfDB, 2011c)

crease the area under agriculture to meet the food requirements of the growing population'(UNEP 2006:204-206).

Apart from agriculture, deforestation in developing countries is also associated with a high demand for energy in an environment where there is already a lack of energy alternatives. Most communities rely on forest resources for fuelwood and charcoal production. In fact, more than 90 per cent of the rural households in eastern, western and southern Africa are dependent 'on woodfuel, including fuelwood and charcoal, for their energy requirements' (UNEP 2006:198). Appendix 2 presents the estimated charcoal production for RFGI countries. As of 2010, DRC, Ghana, Mozambique and Tanzania were estimated to be producing more than 1.5 million tones of charcoal each per year. In addition, there are other non-timber forest products (NTFPs) that people draw from the forests.

NTFPs help in enhancing household income in much the same way as timber-based products such as woodfuel and woodcarvings. The NTFP benefits are usually drawn from 'ecotourism, the crafts industry, the traditional medicine sector, the pharmaceutical industry and bush meat trade' (UNEP 2006:199).The value of the tree is not only in the amount of money that can be made out of auctioning the products that can be made from it (Maathai 2010).

In fact, scientists are only now beginning to understand the vast range of services - natural, social, psychological, ecological, and economic - that forests perform: the water they clean and retain; the climate patterns they regulate; the medicines they contain; the food they supply; the soil they enrich; the carbon they entrap; the oxygen they emit; the species of flora and fauna they conserve; and the peoples whose very physical existence depends on them (Maathai 2010:86).

Deforestation and forest degradation are not new phenomena. People have been cutting down trees for a long time, clearing land mainly for crop production (Boucher *et al.* 2011; Marzoli and Del Lungo 2009). This makes it difficult to conclusively argue that the process is environmental degradation instead of development. It is, of course, unthinkable that forest replacement for agricultural purposes would be viewed as degradation by the 'responsible' farmers (Blaikie and Brookfield 1987). However, agricultural practices in Africa are still seen as the main cause of deforestation and forest degradation since 'there is growing pressure to increase the area under agriculture to meet the food requirements of the growing population' (UNEP 2006:204-206).

Quantifying how much the NTFPs contribute to deforestation and forest degradation in Africa is, however, a very difficult task. Belcher and Schreckenberg (2006) argue that although engagement in NTFP projects is premised on the idea that they will encourage biodiversity conservation, in some cases they actually result in either intensive or extensive harvesting of the forest species. This is because when there is an incentive to harvest, people are likely to harvest large portions of forests, or will target a particular species depending on its market demand. The biggest challenge though is that for as long as people will find benefit in the forests, they will not define this process as deforestation or forest degradation.

Kaimowitz and Angelsen (1998) quoted in Anke *et al.* (2008:31) argue that 'more roads, higher agricultural prices, lower wages and a shortage of off-farm employment generally [lead] to more deforestation.' However, they also conclude that 'the effects of agricultural input prices, household income levels, tenure security, population growth, poverty reduction, national income, economic growth, and foreign debt' on deforestation remain unclear (Anke *et al.* 2008). On population growth, this contradicts with the popular but controversial notion of the 'tragedy of the commons,' which argues that the more inhabitants there are in a particular location, the higher the chances of resources of that area being severely depleted (Hardin 1968).

The argument of population growth and poverty as contributing to deforestation and forest degradation is, however, picked up by SADC, which has committed to supporting its member states in identifying and exploiting the benefits of REDD+.⁴ The regional bloc argues that the main drivers of deforestation include 'the expansion of agriculture, shifting cultivation and unregulated logging. All these are connected to high population growth, persistent poverty, increased energy demand and weak regulation and management of forests' (SADC 2011a). This, therefore, requires that there be sustainable management of forests, and REDD+ appears to be geared towards that goal. Bond *et al.* (2010:11) argues that 'the reasoning behind REDD+ is that forests are converted to other uses, primarily agriculture, because it makes economic sense to the land managers and users, i.e. the returns from converted landscape exceed the returns from the natural forest or woodland.' As such, those with the forest access and usage rights should be compensated for conserving those forests. Conserving the forests need to be more profitable than forest clearance for agricultural and charcoal production. Without that profitability, REDD+ will not be likely to succeed.

REDD+ Funding

There are three major funding platforms for REDD+ projects, excluding NGO and INGO funding. These are the World Bank's Forest Carbon Partnership Facility (FCPF), the Forest Investment Program (FIP) and the UN-REDD Programme.

The Forest Carbon Partnership Facility

The Forest Carbon Partnership Facility (FCPF) is a global partnership that is currently hosted by the World Bank's Carbon Finance Unit. It became operational in 2008. The FCPF is mainly involved in providing technical assistance to developing countries to develop their national REDD+ strategies and systems, test approaches that can demonstrate REDD+'s capability, and in providing performance-based payments for emission reductions programmes. The Readiness Fund and the Carbon Fund are the two mechanisms through which support is channelled (FCPF *et al.* n.d.). Appendix 3 shows the list of donors funding REDD+ projects under the FCPF.

The Forest Investment Program (FIP)

The Forest Investment Program (FIP) is another funding platform falling under the Strategic Climate Fund (SCF) framework.

[The FIP] is one of the two funds within the framework of Climate Investment Funds. [It] supports developing countries' efforts to reduce deforestation.

tion and forest degradation and promotes sustainable forest management that leads to emission reductions and the protection of carbon reservoirs. It is an implemented joint partnership of the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the Inter-American Development Bank and the World Bank Group (FCPF *et al.* n.d.).

FIP's objective is 'to promote the sustainable management of forests and to increase investments in order to help the countries in reducing emissions of greenhouse gases due to deforestation and forest degradation' (AfDB 2010a:15). Under the FIP work, AfDB has supported the Republic of Congo, the Democratic Republic of the Congo (DRC), Burkina Faso and Ghana in preparing their national FIP strategies. Some REDD projects, such as the Geographically Integrated EcoMakala+ REDD Pilot Project in DRC, are bankrolled through the Congo Basin Forest Fund (CBFF)(AfDB 2010a). The CBFF is a multi-donor fund that was established in 2008 to support forest management initiatives in the Congo Basin (Caravani *et al.* 2010). It, too, falls under the FIP.

The UN-REDD Programme

The UN-REDD Programme, a United Nations (UN) collaborative initiative, was launched in September 2008 as a capacity-development agency to assist developing countries in preparing and implementing REDD+ strategies so as to become REDD+ ready (UN-REDD n.d.). The program, which banks on the expertise of the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP), provides support to three African countries – DRC, Tanzania and Zambia – from a pool of 13 countries worldwide. In addition, there are other African countries that are not directly funded by the UN-REDD Programme, but attend the various fora that the Programme organizes. These include the Central African Republic (CAR), Ethiopia, Gabon, Ivory Coast, Kenya, Nigeria, Republic of Congo, and Sudan.

The governments and/or regional groupings that have committed to funding the UN-REDD Programme are shown in Table 2.

Table 2: Contributions to the UN-REDD Programme (all amounts in US\$)

Country/ government	Commitments	Deposits	Deposit rate (%)
Norway	84,406,889	84,406,889	100
Denmark	8,076,988	8,076,988	100
Spain	3,046,138	3,046,138	100
Japan	1,314,700	1,314,700	100
Total	96,844,715	96,844,715	100

Source: Multi-Partner Trust Fund

<http://mdtf.undp.org/factsheet/fund/CCF00>

Norway: The Major Funder

A closer look at the REDD+ funding presented above shows that Norway is one of the major funders. The country's International Climate and Forest Initiative (NICFI) was launched in December 2007 in Bali. Norway pledged approximately \$500 million per year to REDD programming. The argument behind NICFI funding is that climate and development should be mutually supportive of each other (Norad 2011a). In addition to providing bilateral support to Tanzania and to other civil society and research organizations through the Norwegian Agency for Development Cooperation (Norad) administered grants, NICFI channels most of the funding through multilateral programmes. According to Norad (2011a), these channels include:

- a. the UN-REDD programme;
- b. the World Bank's FCPF and FIP, and the Guyana REDD+ Investment Fund (GRIF); and
- c. the AfDB-hosted CBFF.

The fact that Norway is the major funder of REDD+ projects in Tanzania is not without its challenges though. At times, the Norwegian interventions in the country risk the REDD process in the country being termed a 'Norwegian

project' resulting in other investors distancing themselves from Tanzania because they feel that they do not have a role to play in the country. As such, REDD+ initiatives in the country risk losing funding if Norwegian policies and focus change. However, 'REDD is expected to remain at the core of Norwegian development cooperation in Tanzania' (Norad 2011b:40).

REDD+ in RFGI Countries

The following sections present the findings showing the various REDD+ pilot projects in RFGI core and comparative countries.

Burkina Faso

Burkina Faso is one of the poorest countries in Africa. A staggering 97 per cent of the population relies on fuelwood as their main source of energy. In addition, firewood and charcoal constitute 85 per cent of energy consumption, and energy demand in the capital, Ouagadougou, is attributed to deforestation of the supply area within the city's 150 kilometre (km) radius (Westholm and Kokko 2011).

Although Burkina Faso is seen as having the lowest estimated mitigation potential compared to the other pilot countries under the FIP, there is still great potential for emission reductions as the country has 'vast areas of tropical semi-arid lands' making up for its 'low per-hectare carbon content' (Westholm and Kokko 2011:12).

REDD+ is still in its infancy in Burkina Faso though and not much is published on the REDD+ projects in the country.⁵ The Burkinabe government, however, 'is committed to establish necessary policies and to make institutional changes that will transform land-use dynamics, forest governance, and the flow of resources to local communities' and has initiated the process of developing a REDD+ Readiness Strategy following the methodological steps of the FCPF (MEDD 2011:61). The Government has expressed enthusiasm to engage in REDD+ related activities. It 'seeks to improve the management of its dry forests and open savannah woodland and intends to take advantage of the emerg-

ing international REDD+ mechanism' (FIP 2011:3). The country's Readiness Preparation Proposal (R-PP) document was expected to be ready by the end of October 2011. Burkina Faso is not supported under the FCPF, which provides technical support to countries to develop their REDD+ strategies in order to become REDD+ ready, but is keen to submit its R-PP document to the FCPF Participant Committee on a voluntary basis (FIP 2011). It is, however, supported by AfDB through the FIP to develop its national FIP strategy (AfDB, 2010a). Appendix 4 presents REDD+ and carbon forestry projects in Africa with a particular focus on RFGI countries.

Table 3: Proposed REDD+ projects in Burkina Faso

Project	Budget (million USD)	Implementing agency	Potential funders
Decentralized Sustainable Forest Management (PGDDF)	11.5	World Bank	Luxembourg, Sweden, and Denmark. Global Environment Facility (GEF), the BioCarbon fund and Nordic Development Fund (NDF). ⁶
Participatory Management of State Forests (PGPD)	11	African Development Bank (AfDB)	World Bank, Luxembourg and Sweden
Forest Products Utilization and Value Chains (FIP/PVVPF/DF)	6	World Bank	Luxembourg, Sweden, Denmark and NDF. ⁷
Information sharing and lessons-learning (ISL)	1.5		World Bank through FIP

Source: MEDD (2011)

Ghana

In Ghana, the development of a legal, policy, and institutional framework for REDD+ has been identified as one of the main challenges that might delay or hinder the country from effectively benefitting from the opportunities presented by REDD+ initiatives. The Ghanaian forest legal framework leans more on commercial timber production. As such, just like timber, carbon stored in the forests is bound to be classified as an economic commodity (Katoomba 2009). Bamfo (2010) argues that 'climate change could bring financial opportunities to Ghana's forest sector if the governance challenges facing the sector are well addressed' without further specifying what these challenges include. In addition, afforestation and reforestation (A/R), the Clean Development Mechanism (CDM), carbon sequestration, REDD+ and land use, land-use change and forestry (LU-LUCF) are seen as the carbon finance tools of relevance to Ghana (Bamfo 2010).

Ghana's economy is largely dependent on cocoa production, especially for the export market. 'Cocoa is Ghana, Ghana is cocoa' is one statement that is not uncommon in Ghana. In fact, cocoa production, which has been credited with reducing poverty in cocoa-producing households from 60.1 per cent in the early 1990s to 23.9 per cent as of 2005, has also seen the land for cocoa trees expanding at an annual growth rate of five (5) per cent (World Bank 2007). According to Richards (2009), a key REDD action, included in the more degraded high forest reserves, is to increase productivity and income of existing cocoa farms so that these farmers have less need to abandon the farms for new forest areas. Such an approach should be complemented by measures to improve livelihood and income options in the source areas of migrant farmers' (Richards 2009:17).

Just like in Burkina Faso, REDD+ is relatively new in Ghana. The REDD+ Secretariat is hosted in the country's Forestry Commission (FC), which is in the process of compiling an inventory of REDD+ initiatives in the country. The country submitted its Readiness Plan Idea Note (R-PIN) to FCPF in 2007, which was developed by the FC, IUCN, the Ministry of Lands and Natural Resources (MLNR), Forestry Research Institute of Ghana (FORIG), CIFOR, and the University of Ghana's Centre for Remote Sensing and Geo-Information Services (CERGIS). The R-Plan development stage started in April 2009 after the country's R-PIN was accepted in July 2008, and the R-Plan provides a road-map towards achieving REDD+ Readiness in Ghana. The country is currently

implementing its R-Plan, and is developing its technical and institutional approach to REDD+. The R-Plan implementation is expected to be completed in 2012. This stage sees pilot projects being run in the country and lessons being learned from those pilot projects before REDD+ is fully scaled up (FC 2007).

Appendix 4 presents the REDD+ pilot projects in Ghana, RFGI countries and other African countries.

Mozambique

According to the SADC REDD+ Network, 'almost 70 per cent of Mozambique (54.8 million hectares) is forest and 80 per cent of Mozambique's population (20 million people) live in forest-dependent areas where the incidence of poverty runs at 54 per cent' (SADC 2011b). These statistics differ by each source with Marzoli (2007), quoted in Wertz-Kanounnikoff *et al.* (2011) arguing that the total forest cover in Mozambique is estimated at around 40 million hectares, which translates to 51 per cent of the country. It is further argued that there is widespread deforestation and forest degradation in the country, and the annual deforestation rate stands at 0.22 per cent (SADC 2011b). This rate was even higher between 1990 and 2005, when it was pegged at 0.58 per cent, according to Marzoli (2007 in Wertz-Kanounnikoff *et al.* 2011). A number of drivers have been identified as leading to deforestation and forest degradation in Mozambique, among them illegal logging, veldt fires, and agricultural production (Wertz-Kanounnikoff *et al.* 2011).

REDD+ is barely understood by the general populace in Mozambique. The people working on the REDD+ process also possess scant knowledge about the concept, while information about CDM and other carbon credit projects in the country is very restricted (Ambiental n.d.). However, Mozambique has been involved in REDD+ initiatives since 2008 when the country 'prepared and submitted to the Forest Carbon Partnership Facility (FCPF) [its] Readiness Plan Idea Note (R-PIN). A National REDD+ Working Group was established in 2009' (Wertz-Kanounnikoff *et al.* 2011:3). From then on, the Working Group's work plan was developed and revised, and the draft REDD+ strategy has been subjected to government and public consultations. The country is considering submitting its R-PP to the FCPE.

In addition, Mozambique is involved in a South-South partnership with Brazil. The project, *South-South REDD: A Brazil-Mozambique Initiative* for zero

deforestation that is supported by the International Institute for Environment and Development (IIED), has four main areas:

- a. The development of a process towards National REDD Strategy including a national multi-stakeholder dialogue, the strengthening of institutional capacity and pilot demonstration projects;
- b. Discussion about how to implement policies and measures proposed in the National REDD Strategy;
- c. Development of viability studies for pilot mechanisms for PES and public policies related to REDD;
- d. Dissemination of experiences of this South-South REDD collaboration.⁸

Refer to Appendix 4 for other REDD+ and carbon credit projects in Mozambique and other African countries. The Mozambique Carbon Livelihoods Trust (MCLT) was launched in 2007 (Powell 2007). It aims to ensure 'that the community and individual farmer proceeds of carbon offset sales from Envirotrade Carbon Livelihoods projects' in the country are safeguarded. Through the Fund, which is also known as the '*Fundacao Carbono Para Vida*,' about one third of the proceeds go directly to MCLT and 'are paid out to [the] individual farmers over seven years, to the community trust funds annually and in other payments for forest management and conservation' (Powell 2007).

Sofala Community Carbon Project

One of the few documented projects in the country, the Sofala Community Carbon Project (SCCP), seeks to develop 'sustainable land use and rural development activities in communities within the Gorongosa National Park buffer zone... [and] to improve rural livelihoods, engage in habitat restoration, forest management and conservation of biodiversity and generate verified emission reductions (VERs)' (Envirotrade 2009:10). The project is sometimes referred to as the N'hambita Community Carbon Project. A brief project profile appearing on the RIO+20 United Nations Conference on Sustainable Development (UNCSD) website⁹ presents the following as its benefits:

- a. A minimum of two-thirds of carbon credit sales revenues are to be returned to the local community in the form of contracted payments to farmers and community activities and payment for in-country services;

- b. Prevention of the release, or sequestration of, more than 250,000 tons of CO₂;
- c. Restoration and protection of more than 10,000 ha of forest;
- d. Increased project opportunities for carbon buyers.

Box 1: The Sofala Community Carbon Project

SCCP had a pilot phase that started in 2002 with 53 farmers in N'hambita and Munhanganha wards participating. The project implemented its research and development phase between 2003 and 2008. Since 2008, the project, which is under the Plan Vivo flagship, has been financed by carbon sales and investment from Envirotrade Carbon Limited (ECL) and managed through its local subsidiary, the Envirotrade Mozambique Limitada (EML), and is working in Gorongosa and Zambezi Delta. It provides the smallholder farmers with an option to choose a land-use system from a pool of nine different systems that include seven agro-forestry, one agricultural, and one forestry system. The individual farmers then sign a contract with the project developer based on the type of land-use system they wish to engage in. However, the farmers are not restricted to signing one contract.

The contract 'includes a carbon calculator derived from the technical specification'. The project developer monitors the implementation of the landuse and the annual monitoring results and then guide the amount of credits that will be 'issued to the buyers and retired on the public Markit [Environmental] Registry.' The agro-forestry and agricultural systems are the favourite of a majority of smallholder farmers in the project area.

Area	Number of farmers	Number of contracts
Gorongosa site	1,422	3,968
Zambezi Delta	412	605
Total	1,834	4,573

In addition, REDD has been adopted on 9,599 hectares (ha) in the Gorongosa site. The SCCP envisages paying between US\$433 and US\$808 per ha over a period of seven years for the carbon sequestered by the chosen land-use activities, and that this will significantly contribute to household income. In comparison to the period prior to SCCP, smallholder farmers in the project site were earning an average annual income of US\$50. The SCCP, however, will pay annual payments of US\$116 per household. The project encourages other 'activities such as bee-keeping, sustainable timber logging, [and] processing of NTFPs.'

Source: (Envirotrade 2010)

Table 4 provides a summary of SCCP agroforestry and REDD+ activities in Mozambique as of 2010.

Table 4: Summary of Sofala agro-forestry and REDD+ activity

System name and description	tCO ₂ per hectare	Area managed in project (ha)
Faidherbia , dispersed interplanting of a nitrogen-fixing tree with reverse phenology in the machamba	117	1,088
Cashew , planting a cashew orchard	137	178
Homestead, planting fruit and shade trees around the homestead	154	131
Mango , planting a mango orchard.	115	55
Woodlot, planting a woodlot of indigenous tree species to provide firewood.	184	189
Boundary , planting a border of trees around the field or <i>machamba</i> or indigenous tree species to reforest the area.	12 tCO ₂ /100m	2,472
<i>Gliricidia</i> , dispersed interplanting of a nitrogen-fixing tree.	37	54
No-burning of agri-residues , a payment to the farmer to incorporate agri-residues and not burn them in piles which is baseline scenario.	26	2,249
REDD+ , a conservation programme, which rewards communities and individuals for protecting zones from deforestation and degradation.	Dependant on stratification 39-158	9,495
Total area managed in project (ha)		11,744

Source: Goodman (2010)

Lessons from Mozambique

A number of lessons have been learned from other carbon projects in Mozambique. The Zambézia Community Forest Climate Project whose framework was designed between 2008 and 2009 identified 4,700 ha ‘in the Maungo community near Mocuba town with potential to host a REDD+A/R program’ (Indufor 2009:2). The Maungo community was consulted and agreed to hosting the afforestation and reforestation (A/R) project in their area, while local NGOs and local government have pledged their technical support to the project (Indufor 2009).

The project identified the following major lessons regarding climate forest projects in the country, as presented by Indufor (2009):

1. Contrary to the belief that Mozambique is a large country with large swathes of unused land, the land is actually in use, one way or the other, and communities depend on it for cattle grazing, charcoal making and small-scale cultivation. Indufor (2009) argues that this presents opportunity costs whether or not these activities are legal because communities already have their uses of the land. These uses should be taken into consideration when implementing any type of project that relies on land resources available to those communities. As such, it is essential that climate forest projects are not seen to infringe on communities’ rights to access and use that land without providing an alternative.
2. Entrance into the carbon market encounters various challenges. It is argued that the market has not effectively reached out to the poorest countries, and this is compounded by the fact that forests are not accounted for in the Kyoto Protocol and neither are they included in the European Union Emissions Trading Scheme (EU ETS). This is regardless of the fact that they are considered as highly effective in halting climate change. There are arguments for forests to form part of the post-2012 climate agreement that will succeed the first Kyoto Protocol commitment period.
3. The capacity of Mozambicans on climate change issues, and how forests relate to climate change, is limited. Indufor (2009) argues that even though a number of NGOs have pledged support to REDD+ activities,

only the N'hambita project (also known as SCCP) has so far been fully implemented in Mozambique. The capable national experts have a general dislike of working in the rural areas, and engaging willing international experts escalates the project implementation costs.

4. Carbon projects should limit leakage of deforestation to other areas. The Zambézia Community Forest Climate Project was initially developed to focus on avoided deforestation activities only before it was decided that REDD+ would also be promoted with a view to increasing the communities' awareness on the potential carbon value of native forests. Avoided deforestation is usually criticized for failing to avoid leakage as the communities might shift their deforestation activities to other locations. As such, REDD+ projects should support other income-generating activities simultaneously with REDD+A/R activities.
5. In order to keep communities interested in the REDD+ projects, regular and upfront payments are required. The communities need to be convinced that the projects will provide them with real and tangible benefits, and there is no better way of doing so than making regular and upfront payments to them.

The following are some of the lessons from stakeholder consultations prior to the formulation of the Zambézia Community Forest Climate Project framework:

1. Forest climate projects must be developed under an internationally recognized offset standard.
2. Communicating the concept and principles of a 'carbon project' to rural communities in Mozambique is extremely challenging.
3. Carbon projects can take a long time to develop.
4. Upfront external investment is a pre-requisite for the start-up phase of a community carbon project.
5. A management organization that will coordinate and manage the activities is critical to the success of the project (Indufor 2009).

Uganda

There are a number of carbon-offset schemes in Uganda. These are listed in Appendix 4. However, Box 2 profiles one of the proposed carbon forestry projects in Uganda, the Kachung Forest Project (KFP).

Box 2: Kachung Forest Project

The Kachung Forest Project (KFP), which is developed, implemented, and managed by the Lango Forest Company (LFC), was formerly known as the Ugandan branch of the Norwegian Afforestation Group (NAG Uganda), in Dokolo District. The source of livelihood for the people in Dokolo is mainly agriculture, with 78.9 % engaged in subsistence farming. The project, applying the afforestation and reforestation (A/R) methodology, proposes to ‘establish and manage exotic and indigenous plantations on approximately 2,130 ha of degraded grass and shrubland.’ It is argued that the successful implementation of the project is dependent on good relations between the implementers and the local communities. The KFP, therefore, proposes to work with a number of stakeholders. The project, which is now registered by the UNFCCC as a CDM project, is being implemented on land that was acquired by the LFC in 1999 under a 50-year contract, which can be renewed upon expiration.

Source: (GRAS 2010a)

Lessons from Uganda

A number of lessons can be drawn from Uganda’s experience with REDD+ and other carbon forestry projects. Table 5 presents a few benefits and risks associated with projects in the East African country.

Table 5: Possible benefits and risks for communities arising from carbon forestry projects

<i>Benefits</i>	<i>Risks</i>
<ul style="list-style-type: none"> • Economic benefits to local communities in the form of cash incomes as well as through access to non-timber forest products (NTFPs) (e.g. in the Plan Vivo project, participants receive timber revenues and 60% of the carbon credit sales). • Financial assistance to government agencies such as the NEA or UWA to invest in forest conservation or planting with some benefits for local communities. (e.g. revenue from carbon credit sales, timber and NTFPs in the Nile Basin Reforestation Project). • Generation of other locally valued ecosystem services such as more regular and higher quality water supplies and control of soil erosion and sedimentation. 	<ul style="list-style-type: none"> • Prioritising areas with clearer land tenure and/or creating pressure to 'formalise' land tenure. • Shortage of arable land linked to the increased value of forests. • Inadequate financial and technical capacity for communities to engage directly in carbon sequestration projects. • Displacement of communities [and] loss of access to resources (e.g. cases are reported in commercial plantations in Kibaleand Mt. Elgon). • Lack of understanding of contractual conditions can lead to communities being tied into long and inflexible contracts that may restrict their favoured land management practices.

Source: Kasimbazi (2010:8)

REDD+ IN RFGI Comparative Countries

The RFGI comparative countries include Cameroon, the DRC, Mali, Senegal, South Africa, The Sudan and Tanzania. Appendix 4 presents REDD+-related projects from these countries and other projects worth noting from other countries in Africa.

The role of the DRC and its neighbours in future REDD+ success is immense considering that the Congo Basin is the second largest forest block in the world, as earlier presented. The DRC Government has recognized this and believes it can exploit the opportunities for the country's economic and social development. The government 'intends to make REDD+ a major program for the preservation of its forest resources, which will be integrated into its national

social and economic development policy' (MECNT 2009:13).

As presented earlier, the Geographically Integrated EcoMakala+ REDD Pilot Project is one of the projects in the vast central African country. The project 'aims to help reduce deforestation and poverty in the Congo Basin' (AfDB 2010a:iv). The following are its specific objectives:

- a. To increase forest cover and improve the living conditions of forest dwellers;
- b. To establish the necessary basic condition for Democratic Republic of Congo (DRC) to become eligible for carbon market benefits and PES (AfDB2010a).

The country, however, which has experienced the burden of conflict for decades, faces challenges of weak institutions to ensure sustainable forest management. Meanwhile, Box 3 presents the REDD Pilot Project in Cameroon.

Box 3: The REDD Cameroon Pilot Project (2008-2010)

Cameroon has been actively involved in the REDD process since 2005. The country has made progress in terms of technical and organizational developments for the implementation of REDD.

The Ministry of Environment and Nature Protection (MINEP) in collaboration with the Ministry of Forestry and Wildlife (MINFOF) are coordinating REDD activities nationally. Since 2007, the country has encouraged the development of REDD pilots to assess the feasibility of a potential REDD mechanism.

The REDD Cameroon pilot project was initiated in 2007 after consultation between MINEP and GAF AG, an international remote sensing company based in Germany. The REDD Pilot Project was designed to integrate itself fully in the overall REDD Readiness efforts of the Government of Cameroon.

Source: http://www.redd-services.info/sites/default/files/Flyer_COP16_Website.pdf

Discussion

Although a number of REDD+ initiatives on the continent have been presented, this should not imply that the projects are not without challenges. Successful implementation of REDD+ activities faces a number of constraints, for example:

- a. Establishing baselines against which payments for reduced reforestation can be made;
- b. Monitoring, reporting and verifying the changes in land use;
- c. Ensuring that the changes made are permanent;
- d. Taking measures to ensure that deforestation is simply not migrated to another location (leakage);
- e. Resolving legal and policy issues in order to clarify who owns the carbon and who should benefit from its conservation;
- f. Establishing the levels of payments necessary to ensure changes in land use (Bond *et al.* 2010).

In addition, as learnt from the reported stakeholder consultations in Mozambique, communicating the concepts and principles of carbon projects to the communities is highly challenging (Indufor 2009). As such, community mobilization becomes difficult to achieve. In Uganda, there is a lack of understanding of the legal obligations and privileges of communities involved in REDD+ and carbon forestry projects too (Kasimbazi 2010).

With deforestation still of great concern in Africa, and RFGI countries in particular, it becomes apparent that deforestation and forest degradation need to be curbed, and it might be argued that there is no other beneficial way to do this

than through participating in REDD+ projects. However, it should be noted that this is not that simple, and the groups of those who benefit and/or lose as a result of the projects are diverse, yet REDD+ is premised on the notion that it will help communities neighbouring the forests, while at the same time reducing the emissions into the atmosphere, as the consequence of these emissions has been proven to be harmful. It is, therefore, important to probe the following questions if REDD+ and carbon forestry projects are to be a success:

- a. Who is entitled to land and what level of access do they have to that land?
- b. Of what benefit is the forest to the people who access it?
- c. Is the rural poor benefiting from REDD+, the CDM and/or carbon sequestration projects? What is their level of benefitting, if any?
- d. What is the role of the central government in the projects considering large portions of the land in most of the countries in Africa is state land?
- e. What are the contractual arrangements in place, and are the participating communities privy to their legal obligations and/or privileges?

Sustainability of REDD+ in Africa

In as much as REDD+ programs are expected to be sustainable, and the changes permanent, it should be noted that the programs also need to answer questions relating to their resilience to natural phenomena. This is mainly because although countries and communities might work hard to conserve forests, they (the forests) are particularly vulnerable to 'natural variations and perturbations [implying] that storage is uncertain, [further] raising questions about the potential permanence of the actions taken' (Vatn and Vedeld 2011:6). For example, the KFP in Dokolo District, Uganda, is argued to be vulnerable to fire outbreaks. However, there are strategies in place to limit the occurrence of and damage by fires to the project (GRAS 2010a). It is essential therefore that fire management is among a pool of risk management strategies for every REDD+ project in Africa, especially those countries that are vulnerable to high incidences of forest fires.

There is need to ensure that REDD+ does not end up undermining the capacity of local communities to adapt to future challenges impacting on their livelihoods. For example, in Ghana where cocoa production is seen as a major contribution to poverty reduction, REDD+ should be seen as being in synch with

efforts to reduce poverty instead of undermining them. As FAO et al. (2008), cited in Ribot (2011), argue, there is a possibility that the REDD (and REDD+/REDD++) consortia might end up depriving 'communities of their legitimate land-development aspirations' thereby eroding their culturally engraved conservation values. If REDD+ is to succeed, and if it is to be accepted by the communities as an initiative that contributes to their development, instead of their underdevelopment, then REDD+ investors should ensure that these concerns are addressed from the very beginning. According to Ribot (2011), it is important that the locals' enfranchisement and emancipation be considered, in addition to the three E's+ (3Es+) advocated for by CIFOR, i.e. effectiveness, efficiency, equity, and co-benefits, if the rights of local people are not going to be infringed upon by REDD+ projects. Only then can it be argued that a real plus (+) has been added to REDD (Ribot 2011).

There are questions too regarding the sustainability of some funding sources. For example, Tanzania's REDD+ projects are already viewed as a Norwegian project (Norad 2011b). This suggests that some stakeholders might not be interested in supporting REDD+ initiatives in Tanzania because they are viewed as a Norwegian project. At the same time, the East African country risks losing financial support in the event that Norway casts its interests elsewhere.

Carbon Rights Ownership

It is of great importance that REDD+ clarifies a number of issues too, such as who owns the carbon rights, who is involved in contracting, and who exactly will receive the payments. In short, who are the beneficiaries and are they worth the benefit? Some mechanisms pay to national governments, mainly because of the cheaper transaction costs compared to paying forest owners or users directly. In such cases, it is necessary to explore how benefits from REDD+ and carbon credit schemes then trickle down to communities and how efficiently that is done. National governments are associated with frustrating levels of red tape and corruption that might end up discouraging communities from participating in REDD+ initiatives. However, there are arguments that payments 'should ideally be made directly to forest owners/users making the land-use decisions. This would provide an incentive to individual forest owners/users to make informed decisions on the land use choices' (Karousakis and Corfee-Morlot 2007:35). In a

number of cases though, the private investors own the carbon rights. This is the case with the Mt. Elgon reforestation project in Uganda where FACE Foundation owns the CO₂ credits while the Uganda Wildlife Authority (UWA) owns the trees and other related proceeds (Lang and Byakola 2006).

In southern Africa, discussions about carbon rights have been very limited, and these appear to follow the same path as the mineral rights in the region, which are vested in the state, leaving communities with no rights (Bond et al. 2010). They further argue that if carbon rights were to be classified as a mineral, this 'would severely limit communities' access to REDD+ incentives'. Mineral rights in the region tend to supersede other national legislation because of the economic importance of mining (Bond et al. 2010:25). It is important, therefore, that REDD+ and carbon forestry projects give consideration to communities' access rights instead of totally excluding them from their sources of livelihoods.

The legality of the projects and communities' say in those projects are some of the issues to ponder. According to an evaluation report of the N'hambita project in Mozambique, the 'N'hambita community now have legal certificate to land-use since the project has worked closely with a Mozambique-registered NGO, ORAM, and the community to register the communities [sic] legal status in terms of Mozambique land law' (Marzoli and Del Lungo 2009:14).

REDD+ and Security of Land Tenure

Among the challenges facing REDD+ implementation are those associated with the different land tenure systems in existence in the countries, the feasibility of the projects, the conflicts on the continent, the illegal activities that might draw back the benefits of A/R and/or avoided deforestation, high poverty levels, and the lack of capacity prevalent in the communities (Henry et al. 2008). Land tenure systems vary from country to country. However, in most cases in Africa, much of the land is state-owned, and as such, the State has the sole right to lease the land to any investor, and the same speaks for A/R projects under REDD+ programs. The most common tenure regimes in southern Africa include state, private, or freehold and communal land (SADC 2008). Table 6 presents the various tenure systems in Uganda.

Table 6: Tenurial arrangements in Uganda

Mailo	<ul style="list-style-type: none"> • Involves holding of registered land in perpetuity [thereby resulting in better preservation of woodlands or forests] • Restricts access through leasing/renting, especially where landlords are resident
Customary	<ul style="list-style-type: none"> • Land held according to the customs of a particular community [and] the use of forests and woodlands is 'virtually open-access' • Challenges might arise when the owners of the land, that is the community, might find it beneficial to turn the land into private tenure and agriculture instead of keeping it under communal management.
Freehold	<ul style="list-style-type: none"> • Landholder is allowed to exercise full powers on the land; produce what they wish; use the produce from the land in a way they wish; sell, lease, or subdivide the land. The carbon rights under this arrangement, therefore, belong to the owner of the land.
Leasehold	<ul style="list-style-type: none"> • This tenure system is created by contractual agreement between the landlord and tenant for a defined period of time. The landlord is entitled to rent or premium, and the conditions of the lease determine who the owner of the carbon rights will be. Once the lease expires, the landlord assumes the full rights of the land.

Source: Kasimbazi (2010)

The local people's access to land is threatened by forest carbon projects too. For example, in Mozambique, where large portions of land are being transferred to foreign investors, there are fears that local people will be denied access to resources such as wildlife and indigenous forests that they 'have traditionally relied [on] for much of their subsistence' (SADC 2008:31). In cases like these, REDD+ projects only become more of a curse than a blessing.

There are arguments that some tenurial arrangements in Africa discriminate against women, as resource tenure is legally allocated to men (Bryant 2001). It therefore would be interesting to find out how the benefits of participating in REDD+ initiatives will trickle down to women in the communities, especially to widows, single mothers, young girl-headed households, and unmarried women - whether divorced or never married - as these might be women not entitled to land ownership. However, land ownership in Malawi is inherited either follow-

ing a patrilineal system whereby land is inherited through the husband's lineage, or the female lineage in a matrilineal system (Lunduka 2009). These systems of course have their constraints, and either spouse is bound to feel insecure because they do not own the land; their position is highly vulnerable in the event of death of the spouse who owns that land, divorce or the land being bequeathed to the spouses' relatives and not to their children (Lunduka 2009).

Conflict, Commercial Logging and Forest Management

Conflicts are particularly challenging to REDD+, especially in Africa, as forests are used by armed militias as their refuge and as a base to launch their warfare from. Examples include the DRC's Virunga National Park that has been used by rebels in recent years, and forests of northern Uganda, southern Sudan and CAR that have been the refuge for Uganda's Lord's Resistance Army (LRA) in its over 20 years of rebellion in northern Uganda (UNEP 2007). The forests also provide refuge for displaced populations who need shelter and fuelwood for energy, and will understandably use forest resources at their immediate disposal. In Central Africa, for example, several conflicts in the past few decades have displaced people and caused significant land degradation through deforestation (UNEP 2006).

Commercial logging is viewed as a major cause of deforestation and forest degradation in Africa (UNEP 2006). This is exacerbated by the fact that there is a lack of capacity to effectively curb illegal logging on the continent as the majority of forest departments face acute staff and equipment shortages (UNEP 2006). Illegal loggers are exploiting the existence of such weak institutions, and if REDD+ activities are going to realize the benefits intended, the institutional capacity for forest governance in these countries will have to be enhanced. The weak institutions are also seen as a legacy of conflicts that have bedevilled the continent, particularly in relation to the DRC (AfDB 2010a).

Box 4: The Forest Law Enforcement, Governance and Trade (FLEGT)

FLEGT is the European Union's response to the problem of illegal logging of forests around the globe. The FLEGT Action Plan provides a number of measures to prohibit illegal timber from entering the European markets, to improve the supply of legal timber and to increase the demand for responsible wood products.

Trade accords entered into between the EU countries and timber exporting countries are essential in combating illegal logging of forests in these countries. The trade accords are known as Voluntary Partnerships Agreements (VPAs). The signatories to these accords receive good forest governance support.

The EU seeks to ban illegally-produced wood products from entering its market too. This is facilitated under the EU Timber Regulation.

Cameroon, CAR, DRC, Gabon, Ghana, Liberia and the Republic of Congo are the African countries that are currently implementing or negotiating FLEGT VPAs with the EU. FLEGT information missions have also been carried out to Côte d'Ivoire and Sierra Leone.

Source: (EFI 2008) and http://www.euflegt.efi.int/portal/home/vpa_countries/in_africa/

Avoided leakage for sustained avoided deforestation

It is still too premature to seek empirical evidence of leakage, or lack of it, although 'domestic leakage may significantly affect subnational REDD schemes' (Wunder 2008:69). It is therefore essential that any REDD+ project should apply stringent measures to curb leakages. This can only be achieved by providing alternatives to restricting access to, and usage of, the forests by the surrounding communities. There should be an alternative to their traditional medicine, timber, and fuelwood requirements. To highlight the importance of finding alternative sources of energy, it is argued that 'reducing the reliance on wood fuel energy and protecting the forest would promote sustainable resource use, protecting biodiversity and the economic sectors that rely on forest resources ... The REDD+ mechanism [therefore] offers an important source of financing that should facilitate conservation' (Watkiss *et al.* 2011). In Burkina Faso, for example, the promotion of alternative, non-fossil energy sources is seen as a wise strategy to reduce the pressure put on the forests by demand for fuelwood (Westholm and Kokko 2011). While in the charcoal production project in Nkoranza District, Ghana,

more efficient earthen mounds and/or kilns are seen as options to sustainably produce charcoal by reducing amounts of wood needed.

Uganda is an example of a country where national parks have also significantly reduced deforestation (Kanninen *et al.* 2007). However, this does not mean that for REDD+ to succeed, then new 'fortresses' should be created disregarding the surrounding communities' access and usage rights to those forests, as this only heightens conflicts with neighbouring communities. If these conservation parks are going to be created, they should consider the benefits that people were drawing from the forest resources, and ensure that there is a sustainable alternative to those forest resources; otherwise, it might be very difficult to ensure permanence and avoid leakages.

REDD+/++: In-Country Capacity

REDD+ programming is fairly new to most RFGI countries. As such, there are several challenges associated with this. For example, Indufor (2009) argues that there is limited capacity on climate change and REDD+ issues in Mozambique. Similarly, the understanding of REDD+ among national and local interest groups in Ghana is still weak (IUCN 2011). As such, it is necessary that the communities are fully engaged, and their capacity to make decisions is strengthened. Capacity development needs to transcend to the entities, either public or private, that are involved in REDD+ related activities as well.

Conclusion

In this study, various projects in RFGI core and comparative countries, and Africa in general, were outlined, as well as sources of climate finances. The main argument is that for REDD+ to succeed on the continent, it will have to address the challenges that abound, and ensure that communities who should benefit from the initiatives are the real beneficiaries. It is not uncommon to find indigenous groups being left out of land investment projects, and REDD+ should not fall into that same trap of having alienated the indigenous people. It is important to note that REDD+ is still a new concept, and the majority of the 'ordinary' people do not understand the concept yet. The fact that REDD+ is still new contributes to the challenges associated with accessing information on REDD+ projects in the countries. It is possible that some projects might fall within the realm of REDD+ and carbon credit schemes, yet the project implementers might not necessarily view the projects as such. This study, therefore, should be viewed as a start to understanding REDD+ and carbon credit schemes in the RFGI countries. Admittedly, it is not exhaustive of all the projects on the continent, and RFGI's engagement with researchers in each of the core and comparative countries is important to compile a comprehensive inventory of REDD+ and forest carbon projects in Africa.



Notes

1. Other GHGs that are responsible for climate change include methane (CH₄), Nitrous oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulphur hexafluoride (SF₆).
2. Heavy polluters are not just limited to Annex 1 countries though. There are other industrialised countries as well as emerging economies that pollute huge amounts of GHGs yet they are not mandated by the Kyoto Protocol to cut their emissions.
3. The country was officially divided into two on 9 July 2011 with the creation of South Sudan as the newest country in Africa.
4. Of the RFGI project countries, only DRC, Mozambique, South Africa and Tanzania are SADC member states.
5. This was confirmed by Lisa Westholm (FOCALI) too. She said that to her knowledge, “there are no fully running carbon credit projects in Burkina Faso.” However, she referred to a proposed INERA carbon sequestration project near Koudogou.
6. The Nordic Development Fund (NDF) is the joint development finance institution of the Nordic countries - Denmark, Finland, Iceland, Norway and Sweden. It finances projects in cooperation with other development institutions, and provides grant financing for climate change interventions in low-income countries. Its Nordic Climate Facility (NCF) provides funding for challenging and innovative climate change approaches (www.ndf.fi).
7. The project is also expected to ride on the achievements of many other projects implemented by national NGOs, e.g. NATURAMA, GEF/NGO Burkina Faso, the Network MARP/Burkina Faso, Women Forestry Fellowships in Burkina Faso/AMIFOB, as well as international NGOs such

as TREE AID, Christian Aid, AZN/Terre verte, Agroforestry and Forestry Promotion Association (APAF), SOS Sahel, New Tree, and civil society associations. This will help in establishing management agreements with forest user organizations, promoting active research, participatory planning methods and production, and marketing of forest products.

8. See more at <http://www.iied.org/natural-resources/key-issues/forestry/south-south-redd-brazil-mozambique-initiative>
9. See more at <http://www.uncsd2012.org/rio20/index.php?page=view&type=99&nr=32&menu=62>
10. The Markit Environmental Registry allows accountholders to manage all their environmental credits- carbon, biodiversity, water, ecosystems - in one place. Issuances are audited by the registry to ensure they have received appropriate accreditation and to check that they have not been previously issued. Credits receive a unique reference number so they may be monitored through their entire lifecycle. Retired credits are held and can be viewed on the registry, ensuring the same credits are not re-issued or sold at a later date (<http://www.markit.com/en/products/registry/markit-environmental-registry.page>).
11. Previously avoided deforestation technical specification, renamed in line with FAO definitions. It involves the conservation of miombo woodland in Mozambique, and, as reported in the 2010 SCCP annual report, the project was still undergoing peer review.
12. Area size is an approximation as agroforestry contracts may overlap on the same fields. Total agroforestry contract area is, therefore, greater than the absolute land contracts are on.
13. Green Resources AS (GRAS) became a major shareholder of NAG (Uganda) in 2006, effectively buying NAG out.
14. Virtual open access assumes that tenure is done haphazardly, thereby exposing the land to Hardin's controversial 'tragedy of the commons' theory (Hardin, 1968). As such, defining the land as open access is misleading considering that there are certain customary laws that determine who cultivates where and who can cut what type of trees and where. It is not appropriate, therefore, to define customary land tenure in this context as 'virtually open access'.

15. This is further supported by Isilda Nhantumbo in a blog on the IIED website. Isilda identifies the creation of 'private conservation areas' that would keep local people out and the possibility that the local people and national government might lose their rights to access land that they have used for generations further impacting on their food security as some of the risks associated with REDD+ projects in Mozambique. For more, see <http://www.iied.org/sustainable-markets/blog/redd-mozambique-new-opportunity-for-land-grabbers>
16. Cameroon and DRC are the only RFGI countries participating in FLEGT.
17. At the time of publication of the Kyoto Protocol Reference Manual on Accounting of Emissions and Assigned Amount (in 2008), the amendment to the Kyoto Protocol that contains an emissions target for Belarus (-8%) had not been ratified by a sufficient number of Parties for it to enter into force.
18. Countries with economies in transition have flexibility in the choice of base year.
19. Country which has declared its intention not to ratify the Kyoto Protocol.
20. Within the TOU, three protected areas exist: the Takamanda National Park; the Mone Forest Reserve; and the Kagwene Gorilla Sanctuary.
21. This project is envisaged as a REDD++ project, the first of its kind in Africa (Mason 2010).
22. The project is also implemented in Mauritania.



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Appendices

Appendix 1: Annex 1: Parties Under the Kyoto Protocol

Annex I Parties	Emission limitation or reduction (expressed in relation to total GHG emissions in the base year or period inscribed in Annex B to the Kyoto Protocol)
Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, European Community, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland	-8%
United States of America	-7%
Canada, Hungary, Japan, Poland	-6%
Croatia	-5%
New Zealand, Russian Federation, Ukraine	0%
Norway	+1%
Australia	+8%
Iceland	+10%

Source: UNFCCC (2008)

Appendix 2: Estimated Charcoal Production (in Tones) in RFGI Countries

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Burkina Faso	112,000	456,659	469,366	482,427	495,851	509,649	524,126	539,000	554,300	570,070	570,070
Cameroon	21,000	344,121	353,082	362,278	371,712	381,393	390,530	400,000	409,500	419,275	419,275
Democratic Republic of the Congo	1,431,274	1,482,124	1,534,781	1,589,308	1,645,773	1,704,243	1,764,057	1,826,000	1,890,000	1,956,391	1,956,391
Ghana	752,000	752,000	752,000	752,000	752,000	752,000	1,358,977	1,418,300	1,477,700	1,537,039	1,537,039
Mali	96,317	99,523	102,836	106,259	109,796	113,451	117,145	121,000	124,900	128,966	128,966
Mozambique	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,816,400	1,867,333	1,867,333
Senegal	110,208	110,208	110,208	110,208	110,208	110,208	110,208	110,200	110,200	110,208	110,208
South Africa	41,000	41,000	41,000	200,600	127,300	188,900	188,900	188,900	701,500	703,407	703,407
Sudan	743,342	768,654	794,827	821,892	849,878	878,817	906,495	935,000	964,500	994,871	994,871
Uganda	713,381	732,368	751,861	771,873	792,417	813,508	835,839	858,800	882,300	906,579	906,579
United Republic of Tanzania	1,164,705	1,203,457	1,243,498	1,284,871	1,327,620	1,371,792	1,416,220	1,462,100	1,509,400	1,558,324	1,558,324

Source: FAOSTAT 2011 (<http://faostat.fao.org/site/626/DesktopDefault.aspx?PageID=626#ancot>)

Appendix 3: List of FCPF Donors

Donor	Website
Agence Française de Développement (AFD)	http://www.afd.fr/jahia/Jahia/lang/en/home
Government of Australia	http://www.climatechange.gov.au/international/publications/fs-ifci.html
Government of Canada	http://www.climatechange.gc.ca/
Government of Finland	http://www.formin.fi/public/default.aspx?culture=en-US&contentlan=2
Government of Germany a. Ministry of Economic Cooperation and Development – BMZ b. Ministry of Environment – BMU	http://www.bmz.de/en/index.html http://www.bmu.de/english/aktuell/4152.php
Government of Italy	http://www.minambiente.it/home_it/index.html?lang=it
Government of Japan a. Ministry of Agriculture, Forestry and Fisheries – MAFF b. Ministry of Finance – MOF	http://www.maff.go.jp/e/index.html http://www.mof.go.jp/english/index.htm
Government of Netherlands	http://www.minbuza.nl/en/home
Government of Norway	http://www.miljo.no/climate-and-forest-initiative
Government of Spain	http://www.meh.es/portal/
Government of Switzerland	http://www.seco-cooperation.admin.ch/index.html?lang=en
Government of the United Kingdom a. UK Department of International Development b. UK Department of Energy and Climate Change	http://www.dfid.gov.uk/ http://www.decc.gov.uk/
Government of the United States of America	http://www.state.gov/

Source: FCPF website (<http://www.forestcarbonpartnership.org/fcp/node/20>)

Appendix 4: Selected REDD+ and Carbon Sequestration Projects in Africa (Incl. RFGI Countries)

Country	Project name	Site/Location	Funder	Implementers/Proponents
Benin	Community-based woody savannah management and woodlot for carbon sequestration	Northern Benin near Parako	--	--
	Forests and Adjacent Lands Management Project	National	World Bank	Ministry of Agriculture, Livestock and Fisheries
	Village-based Management of Woody Savannah & Establishment of Woodlots for Carbon Sequestration	--	Global Environment Facility (GEF)	National Government (Environmental Ministry)
Burkina Faso	Sustainable Energy Management Project	--	World Bank, Government of Norway, DANIDA	National Government (Energy Ministry)
Cameroon	Building Foundations for Success: Community Participation is Central to RED (capacity building and advocacy)	Transboundary (Cameroon, the Central African Republic, the Republic of Congo and Gabon)	Congo Basin Forest Fund (CBFF)	FERN, Belgium

Country	Project name	Site/Location	Funder	Implementers/Proponents
	Community Payment for Ecosystem Services (PES) in the Congo Basin	Nkolenyeng Community Forest (Southern Region); and Nomedjoh Community Forest (East Region)	Department For International Development (DFID, UK); CBFF	Centre for Environment and Development (Cameroon)
	Conserving the Cross River Gorilla Landscape: piloting a landscape-scale approach to Reducing Emissions from Deforestation and Forest Degradation (REDD)	Gulf of Guinea, Takamanda-Mone Technical Operations Unit (TOU).	Spain-UNEP Partnership for Protected Areas, in support of LifeWeb; USAID	Wildlife Conservation Society (WCS)
	Creation of forestry plantation in Garoua, North Province	Gashiga Reserve in Garoua	--	Commune de Garou
	Global Forest Watch (GFW) - Cameroon Project	--	--	World Resources Institute (WRI)

Country	Project name	Site/Location	Funder	Implementers/Proponents
	IUCN pro-poor REDD Project	Tri National Sangha landscape (transboundary involving Cameroon, the Central African Republic and the Republic of Congo)	Danish International Development Agency (DANIDA)	IUCN
	Making the Forest Sector Transparent: strengthening civil society engagement in the forest sector	National	DFID	Global Witness
	Multipurpose reforestation on degraded wet savannah zones in the commune of Meiganga, Adamawa Province	Adamawa Province	French and German cooperation	Commune de Meigang
	Northwest Cameroon Reforestation	Bamenda	Carbon Me (UK)	Youth Outreach Programme
	Reducing emissions from all land uses (REALU): research activities	National	Norwegian Agency for Development Cooperation (Norad)	Alternatives to Slash - and - Burn Partnership for the Tropical Forest Margins

Country	Project name	Site/Location	Funder	Implementers/Proponents
	S.A.F.E. Sustainable AgroForestry Ecosystem	Mankim, Camerun	CO2 Neutral (Italy)	--
	Tri-National Dja-Odzala-Minkebe (TRIDOM) Project	Western Congo Basin Moist Forest in Central Africa (Transboundary)	--	World Wide Fund for Nature (WWF); World Wide Fund for Nature (WWF); WCS; GTZ; SNV (Dutch Cooperation and Development Agency); PACT; Association pour la Protection des Ecosystèmes Tropicaux et le Développement de la Sangha (APEDTS R. Congolese NGO); Last Great Ape Association (LAGA Cameroon NGO); TRIDOM international governance institutions (CTPE: Tri-National Planning and Execution Committee; CTS: Tri-national Monitoring Committee; and CTSA: Tri-national Supervision and Arbitration Committee)

Country	Project name	Site/Location	Funder	Implementers/Proponents
Democratic Republic of Congo (DRC)	Batéké Fuelwood and Timber Plantation/Ibi Batéké Degraded Savannah Afforestation Project	Batéké	World Bank BioCarbon Fund	Nouvelle Société d'Agriculture et d'Élevage (NOVACEL)
	BCF-IBI Carbon Sink - Batéké	Maluku and Bankana	World Bank	Ministry of Environment
	Congo Kikwit Reforestation	Kikwit, Kwilu District, southwestern DRC	PrimaKlima-Weltweit (Germany)	Archdiocese of Kikwit
	Enhancing Institutional Capacities on REDD issues for Sustainable Forest Management in the Congo Basin	Transboundary (Congo Basin)	World Bank	Central African Forests Commission (COMIFAC)
	Geographically Integrated EcoMakala+ REDD Pilot Project	Goma, Makala and Mambasa	CBFF	WWF and WCS
	Isangi Geographically Integrated REDD Pilot Project	Isangi	CBFF	REDD National Coordination; and Joint Organization of the Ecologists and Friends of the nature (OCEAN)
	North Kivu Efficient Cook Stoves	North Kivu	Carbon Clear (UK)	Mercy Corps (UK)

Country	Project name	Site/Location	Funder	Implementers/Proponents
	Reforestation project using native species (establishment of the Bonobo Peace Project)	Maringa-Lopori-Wamba region	Capno International Development/Carbon2 Green Development Ltd/ OGEC/ BioDEC	The Bonobo Conservation Initiative
	South Kwamouth REDD Agroforestry Pilot Project	Kwamouth	CBFF; NOVACEL	NOVACEL
	Support to Sustainable Management of Forest Ecosystem	Luki Biosphere Reserve, Bas Congo Province	WWF DRC; GRADIC; GRAED; CEDIL and HKI	WWF Central Africa Regional Program Office (CARPO)
Ethiopia	Humbo and Soddo Community-Based Natural Regeneration Project	Humbo and Sodo	World Vision Australia; World Bank BioCarbon Fund	World Vision; Ethiopian Agriculture, Rural Development and Forestry Coordination Office
Ghana	A Rocha Ghana	Kumasi (and one other location)	Climate Stewards (UK)	A Rocha Ghana
	Carbon Finance to Improve Sustainable of Cocoa Production	Bongo, Bonzambepo Landscape	--	Katoomba Group; NCRC; Farmer organisations and Cocoa buyer organisations

Country	Project name	Site/Location	Funder	Implementers/Proponents
	Nyankamba Community Resource Management Area (CREMA)	Northern Ghana	--	Forest Trends; Nature Conservation Research Centre (NCRC); IDESAM Brazil; and Oxford University
	Sustainable Charcoal Production	Nkoranza District	--	Katoomba Group; and NCRC
	Towards Pro-poor REDD	Wassa Amenfi West District	DANIDA	Katoomba Incubator; IUCN and NCRC
Kenya	Aberdare Range/ Mt Kenya Small Scale Reforestation Initiative	Aberdare and Mt. Kenya Reserve Forests	--	Green Belt Movement (GBM); Ministry of Environment and Natural Resources; and Kenya Forest Service (KFS)
	Forest Again Kakamega Forest	Western Province	--	Kenya Forest Service (KFS)
	The International Small Group and Tree Planting Program (TIST) Carbon (CO2) Sequestration Project	Kenya, Tanzania and Uganda	World Bank BioCarbon Fund, USAID, Dow Chemical Company	CAAC, I4EI
	Kasigau Corridor REDD Project (phases I and II)	Taita Taveta, Southeast Kenya	--	Wildlife Works Inc.

Country	Project name	Site/Location	Funder	Implementers/Proponents
	Western Kenya Integrated Ecosystem Management Project	--	GEE, Co-financed by National Government, Japan's Policy and Human Resources Development Fund (PHRD)	KARI, ICRAE, KEFRI
Madagascar	Andasibe-Mantadia Biodiversity Corridor	--	World Bank BioCarbon Fund, GEF	ANGAP; Conservation International; Ministry of Environment
	The Ankeniheny-Mantadia-Zahamena Biodiversity Conservation and Restoration Corridor Carbon Project	Zahamena Ankeniheny Forest Corridor	Conservation International; World Bank	Conservation International; Government of Madagascar; local NGOs and communities
	The Committing Forests and Carbon Reservoir (FORECA) Pilot Project	National	Swiss Agency for Development and Cooperation (SDC); and undesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, Germany	Intercooperation (Forest Environment Team and DIC Madagascar) and the Gesellschaft für technische Zusammenarbeit (GTZ)

Country	Project name	Site/Location	Funder	Implementers/Proponents
	Dragon Tree Rainforest	Maromizaha, near Mantadia National Park	PrimaKlima-Weltweit (Germany)	Natur- und Artenschutz in den Tropen (NAT)
	Fandriana-Vondrozo Corridor REDD Project	East-central Madagascar	Conservation International	Madagascar Ministry of Environment, Forests and Tourism; Conservation International; local organizations and communities
	Madagascar Biodiversity Corridor Carbon Finance Project	Zahamena Ankeniheny Forest Corridor	World Bank	MINISTRY OF ENVIRONMENT, WATER AND FORESTS
	Makira Forest Project	Makira Forest, Maroantsetra	Conservation International (USA - VA); Sustainable Travel International (USA - WA)	Madagascar Ministry of Environment, Water and Forests (MEEF); Makira Carbon Company (MCC); and Wildlife Conservation Society
Mali	Acacia Community Plantations	--	World Bank BioCarbon Fund	Deguessi Vert, Malian Rural Economic Institute (IER)
	Gourma Elephant Range	Gourma District	--	--

Country	Project name	Site/Location	Funder	Implementers/Proponents
Mozambique	Gorongosa Forestry	Gorongosa National Park	Climate Action (China); Envirotrade (UK); Plan Vivo (UK); The CarbonNeutral Company (UK)	Sofala Provincial Government
	Quirimbas Carbon Livelihoods	Quissanga (and two other locations)	Envirotrade (UK)	Quirimbas National Park
	Sofala Community Carbon Project (formerly the N'hambita Community Carbon Project)	Gorongosa and Zambezi Delta	Envirotrade (UK) EU (2003 – 2008)	Plan Vivo and Envirotrade Mozambique Limitada
	Zambezi Delta Carbon Livelihoods	Guma, Sofala (and three other locations)	Envirotrade (UK)	World Wide Fund for Nature (WWF)
	Zambezia Community Forest Climate Project [proposed]	Maungo Community, near Mocuba	--	--
Niger	Carbon Sequestration and Rural Livelihoods Improvements through Acacia Plantations	--	World Bank BioCarbon Fund	Achats Services International (ACI); and ICRISAT; Ministry of Agricultural Development

Country	Project name	Site/Location	Funder	Implementers/Proponents
Senegal	Asiyla Gum reforestation project	Linguere department, Louga region	--	Asiyla Gum Company
	Green charcoal project	Ross Bethio, Saint-Louis, North-West Senegal	--	--
	Participatory Rehabilitation of Degraded Lands	--	GEF; AfDB; UNDP; National Governments	National Governments and United Nations Office for Project Services (UNOPS)
	Reforestation of the former ICS mining site in the Thiès region	Méouane, Department of Tivaoune	Industries Chimiques du Sénégal (ICS)	Industries Chimiques du Sénégal (ICS)
	Sequestration of Carbon in Soil Organic Matter (SOCSOM)	--	USAID	Senegal-USAID, Several Universities, Rockefeller
South Africa	Amakhala Conservation Centre Planting	Amakhala Game Reserve, Eastern Cape	Flying Forest (UK)	The Sindisa Foundation

Country	Project name	Site/Location	Funder	Implementers/Proponents
	Ferncliffe-Tshalanimithi Nature Reserve	Ferncliffe Nature Reserve near Pietermaritzburg	Climate Stewards (UK)	A Rocha South Africa
	Qwa Qwa Reforestation	Qwa Qwa	PrimaKlima-Weltweit (Germany)	--
	Working for Woodlands Thicket Restoration Project	Eastern Cape	--	--
	York Timbers: Sawmill Waste Power Generation	Mpumalanga	--	--
Sudan (incl. South Sudan)	Community-based Rangeland Rehabilitation for Carbon Sequestration	--	GEF	National Government (Environmental Ministry)
	Tindilo Reduced Emissions from Deforestation and Degradation (REDD) Project	Tindilo Payam Community Area, Terekeke County, Central Equatoria State	--	--
Tanzania	Afforestation in grassland areas	Uchindile, Kilombero and Mapanda, Mufindi	--	Tanzanian and Norwegian Governments, Green Resources Ltd/ TreeFarms AS

Country	Project name	Site/Location	Funder	Implementers/Proponents
	Advancing REDD in Kolo Forests (ARKFor)	Kolo	--	African Wildlife Foundation
	Bagamoyo Afforestation Project	Bagamoyo	--	Ms. Community Development Corporation Ltd/ The National Tree Seed Programme and Tanzania Forestry Research Institute (TAFORI)
	Building REDD Readiness in the Masito Ugalla Ecosystem Pilot Area in support of Tanzania's National REDD Strategy	Kigoma District, Western Tanzania	Royal Norwegian Embassy (US\$2.7 million three-year grant)	Jane Goodall Institute; Sokoine University of Agriculture (SUA); University of Dar es Salaam; and Forest Trends
	Combining REDD, PFM and FSC Certification in South Eastern Tanzania	South Eastern Tanzania	--	Mpingo Conservation Project

Country	Project name	Site/Location	Funder	Implementers/Proponents
	Community Based REDD Mechanisms for Sustainable Forest Management in Semi-Arid Areas	Shinyanga rural and Kahama districts	--	Tanzania Traditional Development and Environment Organisation (Tatedo); DASS (Development Associates); NAFRAC (Natural Forest Resources Management and Agroforestry Centre); Kahama and Shinyanga Rural District Councils; SUA; Clinton Foundation; National REDD Task Force; Ministry of Natural Resources and Tourism (Forestry and Beekeeping Division) and Vice Presidents Office (Division of Environment); NGOs; CBOs and Private companies
	Emiti Nibwo Bulora	--	--	Vi Agroforestry
	Hifadhi ya Mimitu ya Asili (HIMA) - Piloting REDD in Zanzibar through Community Forest Management	Unguja and Pemba islands, Zanzibar	--	CARE International in Tanzania

Country	Project name	Site/Location	Funder	Implementers/Proponents
	The International Small Group and Tree Planting Programme (TIST) Carbon (CO2) sequestration project	Tanzania, Uganda and Kenya	World Bank BioCarbon Fund, USAID, Dow Chemical Company	Institute for Environmental Innovation (I4EI) and Clean Air Action Corporation (CAAC)
	Making REDD and the Carbon Market work for Communities in Forest Conservation in Tanzania	--	--	TFCG; MJUMITA the Tanzanian Community Forest Conservation Network; The Faculty of Forestry and Nature Conservation at SUA; CARE International's Poverty Environment and Climate Change Network; Regional Community Forestry
	Reforestation in Grassland Areas	Idete, Mufindi District, Iringa Region	--	Green Resources Ltd
	Tanzania Forest Conservation Group and MJUMITA - Making REDD work for communities and forest conservation in Tanzania	Montane and lowland coastal/miombo forest in the Eastern Arc Mountains and Coastal Forest	--	--

Country	Project name	Site/Location	Funder	Implementers/Proponents
	Wildlife Conservation Society's (WCS) REDD Readiness in Southwest Tanzania	Southwest Tanzania, Mbeya and Rukwa Regions	--	WCS
Uganda	Abalinda Ebihangwa REDD Forestry Project [proposed]	Bugoma	--	Uganda Carbon Bureau (UCB)
	Budongo-Bugoma Landscape Project	Budongo and Bugoma forest reserves (Hoima, Kibale, Kyenjojo and Masindi districts)	--	NFA; Jane Goodall Uganda; WCS; and Nature Harness Initiatives
	Bukaleba Forest Project	Mayuge District	--	Bukaleba Central Forest Reserve (BCFR)
	Commercial Plantation Projects	--	Tree Farms AS of Norway	Green Resources, Busoga Forestry Company
	The International Small Group and Tree Planting Program (TIIST) Carbon (CO2) Sequestration Project	Uganda, Tanzania and Kenya	World Bank BioCarbon Fund, USAID, Dow Chemical Company	CAAC, I4EI
	IUCN pro-poor REDD Project	--	DANIDA	IUCN

Country	Project name	Site/Location	Funder	Implementers/Proponents
	Kachung Forest Project [proposed]	Dokolo District	--	Lango Forest Company. Proposed partners include NFA; District Land Board; National Environment Management Authority (NEMA); Directorate of Water Development (DWD); Makerere University Faculty of Forestry and the Social Science Department; National Forestry Research Institute (KIFU); Public Health Institute; Uganda Timber Growers Association; National Tree Seed Centre; EU Sawlog Production Grant Scheme (SPGS) and local NGOs
	Kibale National Park rehabilitation project/ Restoring a rainforest ecosystem	Southwest Uganda	ClimateCare (UK)	Uganda Wildlife Authority (UWA) and Face the Future
	Kikonda Forest Reserve Reforestation Project	Kiboga	--	--

Country	Project name	Site/Location	Funder	Implementers/Proponents
	Mount Elgon Reforestation	Mount Elgon (and one other location)	C Level (UK) and PrimaKlima-Weltweit (Germany)	Stichting FACE Foundation
	Nile Basin Reforestation Project	Western Uganda	World Bank BioCarbon Fund	NFA
	Restoring a rainforest ecosystem	Kibale National Park	ClimateCare (UK)	UWA
	Trees for Global Benefits	Bushenyi, Hoima, Masindi and Kasese Districts	Climate Action (China); Live Climate (USA-CA); Plan Vivo (UK); The CarbonNeutral Company (UK)	Environmental Conservation Trust of Uganda (ECOTRUST)

Source: AfDB 2010b, 2011b, CCBA: projects (www.climate-standards.org/projects), Ferguson 2009, IISD 2008, Jindal 2006, Johns, Johnson and Greenglass eds., 2009, Katoomba 2010a, 2010b, GRAS 2009, 2010b, 2010c, 2010d, Mason 2010, Mwayafu and Kimbowa 2011. More information was collected from the following websites: Africa Biocarbon Projects Database (<http://www.asb.cgiar.org/PDFwebdocs/biocarbon%20database.pdf>); Carbon Catalog (<http://www.carboncatalog.org/projects/>); CASCADE Project Information Brochure (http://www.ffem.fr/webdav/site/ffem/shared/ELEMENTS_COMMUNS/U_AD-MIFFEM/actualit%C3%A9s/CASCADE%20Project%20Information%20Brochure%20ACF%20-%20Feb%202010.pdf); CBF (<http://www.cbf-fund.org/node/229/Current-Portfolio>); Conservation International (<http://www.conservation.org/learn/climate/forests/Pages/projects.aspx>); FACE (<http://www.face-thefuture.com/en/projects/kibale-national-park-rehabilitation-project>); Forest Carbon Capital' Forest Carbon Project Inventory: <http://www.forestcarbonportal.com>; Forests Climate Change, Global Database of REDD+ and other Forest Carbon Projects (<http://www.forestclimatechange.org/redd-map/>); IUCN Pro Poor REDD Project (http://www.iucn.org/about/work/programmes/forest/fp_our_work/fp_our_work_thematic/redd/iucns_work_on_redd_plus_/iucns_pro_poor_redd_project/); Jane Goodall (<http://www.janegoodall.org/media/news/helping-local-communities-take-lead-redd>); Plan Vivo (<http://www.planvivo.org/projects/registeredprojects/trees-for-global-benefits-uganda/>); TATEDO (http://www.tatedo.org/cms/index.php?option=com_content&view=article&id=61&Itemid=64); The REDD Desk (http://www.theredddesk.org/countries/cameroon/info/activity/redd_pilot_project_cameroon); and The World Bank (<http://www.worldbank.org/projects>).



