Environmental governance and climate change in Africa

Legal perspectives

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The case of forestry projects in Cameroon

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ABSTRACT

This chapter examines the potential which the Clean Development Mechanism (CDM) offers for the reduction of carbon dioxide emissions in Africa. In doing so, the paper investigates the CDM's conditionality drawn from the provisions of the Kyoto Protocol itself, literature on the subject, and certain decisions of the Conference of the Parties (COP) to the protocol. This conditionality is examined within the context of African forest projects in general, and Cameroon forest projects in particular. The chapter concludes that there are a number of legal concerns under the protocol which require review if the objectives of the CDM are to be achieved, and proposes that a better option to climate change governance mechanism would consist of complementing project development with litigation.

INTRODUCTION

One of the most serious environmental and development challenges of this millennium is undoubtedly a change in the climate systems of the world.

Consequently, climate change has suddenly vaulted to the top of the global agenda. This is traceable to global initiatives intended to address the climate change phenomenon, its causes and adverse effects on common concerns of humankind. One such leading global agreement is the United Nations Framework Convention on Climate Change (UNFCCC) signed in 1992 as one of the outcomes of the Rio Conference on Environment and Development. To ensure the observance and enforcement of the UNFCCC, the international community converged in Kyoto and, with the exception of some major industrialised world powers, adopted the Kyoto Protocol.

The principal focus of the Kyoto Protocol is climate change. Climate change refers to the potential response of the earth's climate system to altered concentrations of greenhouse gases (GHGs) in the atmosphere.[1] There is consensus among scientists that the balance of evidence suggests that there is a discernible human influence on global climate change.[2] The principal anthropogenic GHG responsible for climate change is carbon dioxide (CO_2) from fossil-fuel based economies and deforestation from developing countries, including African countries.[3] The result is that these and other emissions pose a threat to humankind and environmental resources in equal measure. The Kyoto Protocol attempts to address the global overall emission of GHGs through a number of provisions on mitigation. This is, *inter alia*, through the Clean Development Mechanism (CDM) which is one of the three flexible mechanisms under that protocol.[4] The protocol, through its CDM, makes provision for investment by developed countries and their industrial legal entities in projects related to carbon emission reduction and carbon sequestration in developing countries, which would include Africa.[5] While these projects will enable developed countries (the so-called Annex 1 countries) to meet Kyoto emission reduction and quantified emission limitation targets, they should contribute to sustainable development in developing countries (so-called non-Annex 1 countries).[6]

The CDM, therefore, possesses some potential for climate change mitigation in Africa. Referring to African forestry projects in general, and Cameroon forestry projects in particular, this chapter commences with an investigation into legal conditionality or requirements under the Kyoto Protocol for the CDM mechanism, and attempts to assess the extent to which African forestry projects in general, and Cameroon forestry projects in particular, could play a role in the CDM context. The chapter then proceeds to examine the challenges to the attainment of the CDM conditionality provisions, and explores some

opportunities and benefits that may arise from an effective implementation of the CDM conditionality. The chapter suggests that, to reap such benefits, the continent must harness some legal responses that may enhance progress in the direction of the implementation of CDM forestry projects.

THE CLEAN DEVELOPMENT MECHANISM REQUIREMENTS OR CONDITIONALITY

The CDM and the other flexible mechanisms are market-based mechanisms that allow countries to buy and sell allowances of carbon credits created through emission reduction projects. Prior to the issuance of certified emission reductions by the CDM Executive Board, CDM projects must meet a certain number of conditions. These conditions or requirements are contained in the protocol itself,[7] in subsequent Decisions[8] arrived at during the Conference and Meeting of Parties and in some analytical and critical climate change literature on modalities and procedure.[9] The current CDM requirements may be subsumed under the following headings: eligibility or fitness, additionality or added value, acceptability, externalities and certification. In fact, these are the conditions under which all projects qualify as CDM projects in developing countries. It is these conditions that are examined seriatim in the sections below by drawing examples from forestry projects in Africa and Cameroon.

CLEAN DEVELOPMENT MECHANISM REQUIREMENTS FOR FORESTRY PROJECTS

Eligibility or fitness

Two dimensions of issues relating to land eligible for CDM projects in Africa are discernible, namely: the suitability of the forest within the definition of 'forest' provided by the host country as required by the Conference of the Parties,[10] and the type of forestry activity.[11]

The suitability of the forest

With regard to the suitability of the forest, the Conference of the Parties, through their Decisions (11/CP.7 and 19/CP.9), require countries to define and choose ranges for national threshold values of crown cover, tree height and

minimum land area. It is further required that these values be determined and communicated to the executive board of CDM by the Designated National Authority (DNA) of the host country. The Forestry Law[12] of Cameroon, for instance, defines forest as: '[A]ny land covered by vegetation with a predominance of trees, shrubs and other species capable of providing products other than agricultural produce.'[13] In spite of the fact that the conception of this definition by the Cameroonian forestry legislator came at a time when negotiations leading to the Kyoto Protocol were only just commencing, it must be noted that today this definition does not consider issues like crown cover, tree height and minimum land area as required by the CDM fitness criterion. In addition, the requirement of choosing single values each for crown cover calls for empirical and mathematical formulae entailing meticulous data analysis of CO_2 sequestration potential of various forest-types for African countries.[14] This complicates the definition of 'forest' within the CDM rules and forces many countries[15] out of the eligibility requirement. To meet this arm of the eligibility requirement, Cameroon is therefore still required to clarify and communicate the definition of 'forest' to the executive board of the CDM.

Type of forestry activity

The second dimension of the eligibility criterion turns on the type of forestry activity. For this, the categories are closed, at least for the first commitment period of the Kyoto Protocol. They include afforestation and reforestation (A/R) activities.[16] These activities have been considered the dominant mitigation options[17] by the Kyoto Regime. Afforestation under the CDM rules would mean planting trees on land that has been below all the threshold values, including crown cover, tree height and minimum land area of the host country's definition, for a period of at least 50 years.[18] Reforestation by the same rules entails planting on land that has been below the threshold value since 31 December 1989.[19]

Some authors have forcefully argued that afforestation and reforestation projects (or sink projects) make sense in Africa in the light of the sometimes severe land degradation that occurs, and because of the heavy dependence on wood resources for people's livelihoods.[20] While this argument may be tenable, it is unfortunate that many African countries have not or are unlikely to regard the argument in a similar light. Perhaps, for purposes of meeting the CDM eligibility requirement, these countries must rethink their position. For this to happen, however, countries must also surrender heavy reliance on external

funding for A/R projects. Fortunately, the Conference of the Parties, in Decision No 14/CP.10 and Decision No 19/CP.9, have simplified the modalities to what is now known as small-scale afforestation and reforestation projects intended to facilitate implementation. For these projects to qualify, therefore, the host country needs to approve that the project developers are low-income communities or individuals. This is a clear indication that the CDM requirements are framed basically for micro-level projects which, of course, is a potential which should be exploited by African countries.

Most forestry projects operating in African countries in the recent past have been structured around community participation in forest management for sustainability,[21] resulting from various national laws on procedure of acquisition and management. In fact, the community forestry project in Cameroon may to an extent be identified with the CDM project, as it is acquired and managed by village communities living on less than half a dollar a day and who are involved in small A/R projects in their compartment programs within their community forestry management plan as required by law.[22] The government has, however, not clearly determined the criteria that would define such a community as required by Decision 14/CP.10. It simply states that a community should be a village community neighbouring the forest.[23] Again, within the context of the Decision above, individuals involved in private forestry projects envisaged by the Cameroon Forestry Law[24] could also qualify under this CDM conditionality. They are, in addition, people living on less than half a dollar a day. In any case, for such small-scale A/R to qualify for CDM, they must result in net GHG removal by sinks of less than eight kilotonnes of CO_2 per year during the crediting period.

Additionality or added value

Under this head, emission reduction or sequestration must be 'additional' to any that would occur in the absence of the proposed projects in accordance with the CDM modalities and procedure.[25] Considered otherwise, additionality means that projects must result in a net storage of carbon and thus a net removal of carbon from the atmosphere.[26] Additionality may take various dimensions. Programme additionality, for instance, may imply that emissions reduction is additional to emissions stipulated by law in the host country. Additionality may also be investment in nature, whereas a project might justify added value

by showing that the creation of carbon offsets will entail cost that would not be incurred in the 'business as usual' opportunity. However, this may not be considered as a requirement *per se*. Finally, financial additionality requires that funding for the implementation of projects must not come from overseas development or funds from environmental assistance.

Throughout Africa, and in Cameroon in particular, legal issues that are likely to influence additionality as a CDM requirement could be articulated around land tenure policies, forest resource rights, and risk management regulations.

Land tenure policies

Land tenure reforms in most African countries after independence have led to much confusion. In Cameroon, for example, land tenure legislation[27] provides that land belongs to the state. Yet in terms of customary law, local communities own land and the generalised nature of ownership in this respect is that of collective land ownership. The result is that, as the government grants titles as evidence of ownership, the local traditional chiefs, who today in Cameroon wield political powers in addition to their natural ritual powers, may also establish elements of sovereignty over land ownership and management. A natural result is that some people may hide behind the state ownership provision to access and enjoy land at the local level, thereby ignoring the authority of local chiefs. Some authors have argued that this kind of confusion arising from national and local level overlaps may not favour carbon project uptake and management.[28]

Forest resources rights and risk management regulations

To meet the additionality requirement, rights to forest products must be clearly defined by law. If communities can clearly determine their entitlements or benefits to carbon, this will encourage proper investment and commitment to increase carbon sinks and sequestration. Generally, African forestry projects involving communities have hardly stipulated clear and precise provisions on benefits to local communities from forest management. In Cameroon, for example, the forest does not *stricto sensu* belong to the communities, but communities are entitled to forest products resulting from their activities as provided for by the 1994 Forestry Law. The latter law also provides that forest products of all kinds resulting from the management of community forests shall belong solely to the village communities concerned.[29]

A *prima facie* reading of this provision gives one the impression that even carbon sequestration belongs to the communities involved in A/R projects. Unfortunately, the same law provides that forest products comprise mainly wood and non-wood products as well as wildlife and fishery resources derived from the forest.[30] The law further lists certain forest products, and concludes by stating that the list of special forest products shall be fixed, as and when necessary, by the competent ministry.[31] This may be problematic since the list of special products is not closed and can be extended at the discretion of the minister concerned; it implies that carbon services could be included into the list of special products. Should this happen in the community forest or CDM projects, communities would be frustrated. Consequently, it is unlikely that they would risk investment for carbon sequestration, more so because they are unlikely to bring an action against the state in any court in such circumstances, as this would be substantially and procedurally very difficult.[32] Worse still, the minister reserves a right to suspend or terminate the community's forest management agreement.[33] The investment risk is accordingly multiplied in this case. A crucial question, then, is what becomes of the certified emission process in any of the cases above? The foregoing analysis notwithstanding, it can be submitted that, in any event, the provisions of the law are so clear, i.e. 'forest products of all kind' that a subsequent ministerial decision should not prevail over the law. This suggestion is predicated on the fact that, according to the hierarchy of legal norms, such a ministerial decision would not override the provisions of the law.

CDM projects involve investment by developed countries or their legal entities in projects in developing countries. However, a lot of caution needs to be exercised in terms of resource risk minimisation. Forest fires have always been the principal cause of African forest destruction and pose several risks to potential CDM projects.[34] Forest fires are often caused by communities as they use them as a clearing technique for subsistence agriculture, provoking fresh grass growth for cattle, and hunting, especially in the mountainous forest regions of Africa.[35] As a matter of fact, community crops and forests are usually extensively destroyed by fire. Consequently, there is need for harmonised policies and strategies[36] to address problems caused by fire because, if not, a difference in fire-fighting techniques would have far-reaching implications for carbon forestry projects, as this may discourage investors' confidence in carbon forestry in the host country.

Acceptability

For carbon emission reduction projects in developing countries to qualify as CDM projects, a number of criteria must be fulfilled. They include sustainable development, consistency and conformity with international legal instruments. There must also be an evaluation of the A/R CDM projects in connection with risks associated with the use of potentially invasive alien species or genetically modified organisms (GMOs). These criteria are considered below.

Sustainable development considerations

The Kyoto Protocol is firm on the sustainable development criterion.[37] The Conference of the Parties[38] also reiterates the fulfilment of this criterion for projects to be acceptable under the CDM. In this respect, therefore, African countries in general, and Cameroon in particular, must have clearly articulated criteria for sustainable development if the objective is to have forestry projects fall under the CDM regime. Of course, the fulfilment of this criterion may not be easy given the sustainable development *problematique* debate which pitches the concept as a goal, an objective; a process against rules, principles, procedures, and an emerging umbrella of environmental and related rights.[39] Furthermore, sustainable development considerations have posed numerous problems, and some writers have taken the view that it is a paradox as it requires bringing together irreconcilable ecocentric and anthropocentric principles.[40]

This notwithstanding, Cameroon has defined sustainable development criteria for project assessment under the CDM.[41] Unfortunately, these criteria have not yet been tested on any carbon forestry project. Therefore, the challenges in this respect that projects that are approved actually contribute to sustainable development, are significant. It has been argued that the indicators are not sufficiently tight and, in some cases, are even redundant.[42] Drawing examples from some community forestry projects, the community forestry legal framework stipulates some requirements that are intended to enhance sustainable management of forests. This would include a demonstration that all villagers participate in decision-making to create a community forest; that inventories are carried out; management plans are produced; forest boundaries are clearly demarcated; and benefit-sharing mechanisms are clearly set out.

Although in Cameroon all approved community forests today could be said to have fulfilled these conditions, more than half of the communities are not

respecting their management plans, especially those in the southern part of the country, where timber is the main forest product and attracts many timber exploiters for immediate financial gains.[43] How, then, will sustainable development be enhanced in these circumstances? It is proposed that, within a small-scale of CDM projects with simplified procedures, carbon funds could be more beneficial and could enhance a scenario where carbon forestry projects would replace illegal logging and the so-called 'sale of standing volume' as the former contributes to sustainable development in the country. In sum, proper mitigation of climate change through carbon forestry projects offsets and sustainable development considerations are mutually reinforcing.[44]

Consistency and conformity with international law

Projects vying to qualify as CDM projects within the ambit of the acceptability requirement must be consistent and comply with other international legal instruments. This would entail that African forestry projects in general, and Cameroon forestry projects in particular, must clearly demonstrate that they are not repugnant to the spirit of other international agreements and guidelines pursuing similar or related objectives. Therefore, any forestry project should demonstrate consistency and conformity with, for example, Agenda 21. Cameroon, like many other African countries, has signed and/or ratified most of these international natural resource management agreements and must therefore consider the provisions of the international law regime when crafting CDM forestry projects.

Regulatory framework for potentially invasive species and GMOs

Forestry projects that use invasive or potentially invasive species and GMOs are at risk of being successfully executed. For instance, the *daisies* have been identified as invasive species with enormous threat to forest margins, commercial forest plantations and others in the Southern part of Africa[45]. To ensure that this kind of risk is assessed and sufficiently controlled by countries undertaking forestry projects, the CDM cautions that such countries should provide regulatory frameworks which address such risks. Fortunately, some countries of the Southern African region, South Africa, for example, has legislation on the control, cultivation and trade of invasive species[46]. However, non-registration of a forestry project, for instance, will not be justified in the absence of regulations for potentially invasive species and GMOs, especially where there is little risk

for this affecting the project. It may nevertheless be important for sustainable management of ecosystems as a whole.[47]

In the case of Cameroon, there is no clear regulatory framework for such a cautionary approach, but a casual and somewhat indirect reference is made in Decree No 95-531-PM of 23 August 1995 as per the following phrase: '[T]he conditions organising the prevention and control of diseases and insects threatening forest plantations and species shall be determined by order of the Minister in charge of forestry.'[48] Unfortunately, as is the case with other incorrectly drafted and postponing provisions of this nature in forestry legislation, such a ministerial order is still awaited.

Externalities

The following sections examine two phases of externalities, namely impact assessment and leakage.

Impact assessment

For forestry projects to meet this requirement there must be a clear demonstration of a strategy to deal with impacts or effects that are likely to ensue from project implementation. Such impacts may be positive or negative in an economic, sociocultural and environmental sense. In fact, a majority of African countries have now crafted impact assessment policies for project initiation and implementation. In the case of Cameroon, there exists an arsenal of legislative instruments[49] for impact assessment of projects. It means, therefore, that in the case of CDM projects, the DNA would only approve forestry projects that take impact analysis into consideration. Cameroon, like many African countries, is most likely to meet this arm of externalities since it has various impact assessment policies and laws already in place.

Leakage

It is increasingly acknowledged that leakage is an important aspect of externalities in CDM projects. Leakage is the unplanned emission that may occur outside the frontiers of a project as a consequence of activities within the project. In forestry projects, for example, a conservation measure intended to increase carbon reservoirs or sinks within the forest may lead communities depending on such a forest to recover lost opportunities by increasing pressure on neighbouring

forests. Consequently, the carbon sinks or reservoirs envisaged within the project may be offset by carbon emissions in the adjoining forest.[50] Ordinarily, leakage should not invalidate a project unless, of course, it clearly emerges that projections of emissions are sufficiently substantial to negate estimated carbon offsets. This notwithstanding, project analysis should show how such eventualities will be minimised.

Certification

Certification is the last stage before emission reduction certification is issued by the CDM executive board. It deals with the review and approval of project procedure. Prior to this, the CDM rules require that the measurements, reality or concreteness of the project and its long term characteristics be verified independently by a designated operational entity (DOE), a third party accredited by the CDM executive board. The CDM project phase must pass three tests. These are discussed below.

The validation stage

This stage involves the process of independent evaluation of the proposed project as evidenced in the project designed document and as required by the CDM. The end result of this stage is the registration of the project which is the formal acceptance by the executive board of the validated project.[51] In fact, registration is the prerequisite for verification, certification and issuance of certified emission reductions relating to the project activity.

The verification stage

This is a crucial and complicated stage as it entails an independent review process of monitoring reduction or sequestration that has occurred since the registration of the project activity. It has to be done within a timeline and after project implementation has started. The objective is to actually assess the extent to which carbon offsets have been attained.

Certification stage

The certification stage is where the DOE gives a written confirmation of the emission reduction or sequestration achieved by the project during a specific period. The outcome is the issuance of certified emission reduction. Thus, to meet the CDM

requirement of certification under the Kyoto Protocol, all African countries must go through the review and approval procedures. In Cameroon, for instance, the review and approval procedures for CDM projects are contained in a Ministerial Decision.[52] The review and approval procedures are done by the DNA, i.e. *Comite National MDP Cameroun*. The ministry has reviewed and approved more than 300 community forestry applications based on the regulatory framework,[53] although, in some instances, with difficulty.[54] As the government is currently reviewing and updating the community forestry regulatory framework, this may eventually facilitate review and approval processes, and the DNA could learn some lessons to eventually use in reviewing and approving CDM forestry projects.

TRENDS, CHALLENGES AND OPPORTUNITIES RELATED TO THE ATTAINMENT OF CDM REQUIREMENTS IN AFRICAN FORESTRY PROJECTS

Trends

The Kyoto Protocol, through its CDM, offers potential for the development of carbon forestry projects in Africa. Unfortunately, the CDM's potential for carbon forestry development sometimes appears too difficult for African countries to realise. This view has also been taken by other writers stating that trends in African participation in CDM projects are especially grim.[55] This may explain why, to date, only one of about 30 CDM forestry projects has been approved.[56] There is concern that Africa may lose out on opportunities. However, there are quite a number of CDM energy projects in Africa. The crucial question is: why are carbon projects not being mounted in Africa and in Cameroon despite the potential from CDM? Put another way, what are the opportunities for and constraints or challenges facing effective uptake of CDM forestry projects in Cameroon?

Challenges

Non-consideration of local realities

The African continent, particularly Cameroon, is characterised by various indigenous and traditional realities. These realities range from knowledge institutions, customs, forest types and policy frameworks, to name but a few. The

challenge is greater for Africa when we adopt a uniform solution to the world's problems, for instance the modalities for CDM forestry projects. Therefore, indigenous and traditional knowledge institutions of the people, the forest types, and the type of national policy orientation are tremendous challenges which ought to have been addressed in the Kyoto Protocol and should be addressed in future agreements.

Community forestry reforms

As already demonstrated above, there is a paucity of CDM forestry projects in Africa and in Cameroon. Why is this so? Perhaps there is a need to encourage community forestry projects through legal and institutional frameworks at national level that simplify the procedures, application, registration and approval.[57] There is a need to re-orientate community forestry applications towards those that prioritise afforestation and reforestation programmes because the technology to grow trees in such programmes is simple and therefore facilitates access to the resource.[58] In fact, emphasis on community forestry projects is explained by the fact that the CDM is basically a bottom-up process,[59] i.e. initiated and implemented at the local community level.

Nongovernmental organisation involvement

NGOs have been involved in various forest projects involving local people in African countries. They are inevitable partners in this process, providing expertise and, in some cases, financial assistance to local people.[60] However, their involvement has always lacked legal legitimacy, especially in Cameroon forestry projects, where legislation does not spell out the terms of their responsibilities. Therefore, to tap the CDM potential, better NGO involvement in carbon forestry project requires a legal tone which of course also would be contingent on the government's political will to facilitate a strong partnership between NGOs and local communities.

Capacity building

The designation and uptake of CDM projects requires finances, skills and data on forests. A major challenge for African countries in general and Cameroon in particular, is to build the capacity of persons to research and reinforce skills necessary for the process. Fortunately, various efforts are already underway in Cameroon in this respect, for example, the increased involvement of government

in capacity-building programs for the initiation of CDM project and mobilisation of funds through the Special Forestry Development Fund.

Creation of the Designated National Authority (DNA)

The DNA required by the Kyoto Protocol is the national structure in charge of CDM activities at national level which should ensure a link between the host country and the CDM process at the international level. It is still a constraint in CDM projects, as many African countries have not yet established these structures. Stehr,[61] for example, reports that only 26 African countries have DNAs. This may be a significant constraint in efforts to fully realise the CDM potential.

Benefits

CDM forestry projects could import the following advantageous and beneficial results.

Carbon forestry benefit rights

A clear definition of ownership and access rights to land and forest resources will trigger interest of communities in initiating and implementing CDM projects. Local communities will be curious to ascertain their benefits from involvement in carbon forestry projects, whether under the current community forestry project, its review, or again in an entirely new CDM dispensation. This issue revolves around the question on how the emerging paradigm-payment for environmental services (PES) would be used to compensate land and resource users contributing to environmental services.[62] Once communities are guaranteed of their carbon rights and how the same would be equitably distributed, this would arguably constitute an incentive for long-term investment in carbon sequestration projects such as CDM forestry projects.

Sustainable development benefits

Besides the mandatory provisions on sustainable development enumerated in Article 12 (2) of the Kyoto Protocol, CDM projects, if properly implemented, should lead to sustainable livelihoods and the socioeconomic development of the host country. Local communities are aptly placed to realise the ideals of sustainable development since they are actively involved in social, economic and

conservation activities. Moreover, CDM projects which are properly executed should increase the chances of achieving these objectives.

LEGAL RESPONSES AND PROGRESS MECHANISMS

Given the trends and challenges of CDM forestry projects in Africa discussed above, what then would be the appropriate legal responses and progress mechanisms to address, especially, the challenges associated with the CDM and forestry projects?

The appropriate response to the Kyoto regime for African countries would be to create an enabling environment for CDM project initiation and continuance in their respective countries. It is true that there are various CDM projects across Africa,[63] but few forestry projects, which are important as they have high capacity to reduce CO_2 emissions. What this means is that African countries should embed the Kyoto CDM-related provisions at the national level through a deliberate policy approach which is proactive in nature. This will entail a holistic approach involving but not limited to: creation of a DNA, provision of financial assistance to design CDM forestry projects; clarification of sustainable development criteria; clarification and communication to the executive board of the CDM of the definition of forest; and enhancing integrated land-use planning.

At regional level, one important response and progress mechanism would be the creation of a continental network that could constitute *inter alia*, a think tank with the sole mission of identifying and cataloguing difficulties encountered in initiation and implementation of CDM projects in general, and forestry projects in particular, so that they could be presented to the Conference of the Parties. There are likely to be some particularities, as the continent is diverse. There would, however, also be numerous commonalities. It is expected that similar developments will be discussed *en bloc*[64] at future climate change meetings aimed at redesigning a post-2012 legal framework that encapsulates all these concerns.

At the global level, the Conference of the Parties may also have to review a number of issues. Under the Kyoto Protocol, only afforestation and reforestation projects are eligible for the CDM forestry projects. This is an extremely limited view. The reason is that tropical deforestation accounts for 20–25 per cent of annual global CO_2 emissions.[65] The Kyoto Protocol ignores these statistics, which is evident in its exclusion from eligibility of tropical forest conservation

and prevention of deforestation as an action for mitigating climate change. The bulk of African forest is of a tropical nature and is found in Central Africa and in countries such as Cameroon.[66] These tropical forests are, however, disappearing at an alarming rate. There is need for compliance and enforcement mechanisms as these tropical forests are important not only for climate change mitigation but for various other ecological reasons.[67] It has, for example, been demonstrated that reducing tropical deforestation can make substantial contributions to CO_2 emission reduction.[68] For the above reasons, forest conservation should be included in the Kyoto Protocol and future mechanisms. It should accordingly be one of the primary issues for inclusion in a post-2012 legal framework.[69]

Another important consideration would also be for the post-2012 regime to provide opportunities for financial support that would enable low income countries, such as Cameroon, to meet the financial additionality criterion for CDM forestry projects.

One principal problem which has been identified as a challenge to the CDM is the lack of participation of African delegates in climate change negotiations. The Kyoto Protocol bears testimony to this fact.[70] A broader representation and active participation will enable delegates to sell African local realities and provide a place for these in final binding documents.[71] Such a broad-spectrum approach and active participation may also facilitate the crafting of commitments that are environmentally effective, cost-effective, equitable and institutionally feasible.[72]

CONCLUSION

This chapter has principally focused on the potential which international binding agreements have in respect to governing climate change at the local level. It has been demonstrated that the Kyoto Protocol, as an international legal governance instrument, has, *inter alia*, provided CDM mechanisms that enhance partnerships between Annex 1 and non-Annex 1 countries as defined under the protocol. The initiation and management of CDM forestry projects in Africa in general, and in Cameroon in particular, is low compared to Asia and Latin America. Some constraints or challenges in this respect have been explored in this chapter and the question now is whether the CDM is the panacea for addressing climate change challenges. In other words, what other governance mechanisms could be employed to add to CDM forestry projects in Africa?

The promotion and enforcement of human rights has emerged as one governance mechanism for addressing climate change systems in different countries across the world. Another is climate change litigation. Climate change litigation is now increasingly based on the grounds that the negative impact of climate change, usually from poor governance, affects human rights.[73] African countries, Cameroon inclusive, are caught up in the tenuous web of poor governance and it seems that litigation may provide an answer to this challenge. Of course, the basic question remains that of *locus standi*. Therefore, Cameroon and many African countries must soften *locus standi* requirements to allow climate change litigation in this regard.[74] Potential plaintiffs would include individuals, groups, environment and social responsibility groups (NGOs), governments, foresters and biofuel producers in the case of significant land-use changes.[75] The motivating factors to the litigation mechanism of addressing climate change are based on increasing scientific certainty, emerging legal precedent and growing public awareness of climate change, its causes and impacts.

Cumulatively, these and the other proposals suggested above, may work in tandem to ameliorate the current dire situation caused by climate change in Africa.

NOTES

1 See D Hunter, J Salzman and D Zaelke, *International environmental law and policy*, New York: Foundation Press, 1998, 69.

2 See IPCC Report, IPCC-XX/Doc.1, 2000.

3 P Sands, *Principles of international environmental law* (2nd ed), Cambridge: Cambridge University Press, 2003, 358.

4 The other two mechanisms are Emission Trading and Joint Implementation.

5 For more, see Art. 12 (1–10) of the Kyoto Protocol.

6 See in particular, Art. 12(2) of the protocol.

7 See for instance, Art. 3(3) and (4), 6 and 12.

8 Such decisions include mainly Decision 11/CP.7- FCCC/CP2001/13/Add.1 on Land Use, Land Use Change and Forestry; Decision 14/CP.10-FCCC7CP2001/13/Add.2 on Small Scale Afforestation and reforestation projects; Decision 17/CP.7-FCCC/CP2001/13/Add.2 para 7 on Modalities and Procedures for the CDM as defined in Art. 12 of the protocol, Decision 19/CP.9, FCCC/CP2003/6/Add.2 on Modalities and procedure for smallscale afforestation and

reforestation projects, and the Marrakech Accords. The latter are a package of measures that enable the Kyoto Protocol to start operations and contain 262 pages and 39 decisions. They were formally adopted by the COP/MOP1in Montreal in December 2005, providing the much-needed framework of Guidelines, Modalities and Rules for moving forward with the implementation of the protocol.

9 See, generally, P V Desanker, The Kyoto Protocol and CDM in Africa. A good idea but ... http://www.fao.org/docrep/009/a0413e/a0413E05.htm; Sedjo et al, Renting carbon offsets: the question of permanence, [http:/www.weathervane.rff.org/pdffiles/roger3.pdf]

10 See, in particular, Decision 11/CP.7 Annex on Definitions, modalities, rules and guidelines relating to land use, land use change and forestry activities under the Kyoto Protocol, 58, and Decision 19/CP.9, Annex on Modalities and procedure for afforestation and reforestation project activities under the Clean Development Mechanisms, 16.

11 See Art. 3.3 of the Kyoto Protocol.

12 Law No 94/01 of 20 January 1994, called 'the new forestry law'.

13 See Forestry Law, s.2

14 Cameroon, for instance, is comprised of six agro-ecological zones that span from the dense, humid tropical forests in the southern parts, through the savannah type vegetation in the middle, to the Sahelian type vegetation in the northern parts. It is partly for this reason that the country has been termed 'Africa in miniature'.

15 See, generally, L V Verschot et al, Implications of country-level decision on the specifications of crown cover in the definition of forests for land area eligible for afforestation and reforestation in the CDM, Joanneaum research, Graz, Austria, 2005.

16 See FCCC/CP/2003/6/Add.1, Decision 19/CP.9 on Modalities and procedures for afforestation and reforestation project activities under the CDM.

17 See, G J Nabuurs, O Masera, K Andrasko et al, Forestry, in B Metz, O R Davidson, P R Bosch et al (eds), *Climate change 2007: mitigation, contribution of Working Group III to the Fourth Assessment Report of the IPCC*, Cambridge and New York: Cambridge University Press and York Press, 2007, 565–66.

18 See in particular, s 1(b) of the annex to Decision 11/CP.7

19 See s 1 (c) annex to Decision 11/CP.7

20 See Nabuurs, G P, Forestry, See also P.V. Desanker., The Kyoto protocol and CDM in Africa.

21 See, generally, C F. Tamasang, Community forest management entities as effective tools for local-level participation under Cameroonian law: a case study of *Kilum/Ijim* mountain forest (Unpublished Ph.D. dissertation, Faculty of Laws and Political Science, University of Yaounde II), 2008.

22 See Decree No 95-531-PM of 23 August 1995 to determine the conditions of implementation of Forestry Regulations, s. 29 (2)(b).

23 It implies that any other entity that acquires and manages the forest other than the local communities will not qualify for CDM. In Cameroon, there are what we call disguised community forest projects where wealthy elites have funded community forestry projects under the name of a community and reaping the benefits of exploitation but without the community having been the initiators nor have any benefits in terms of carbon rights as the forest is immediately exploited for commercial ends.

24 See s 39.

25 See in particular paragraphs 43-52.

26 For details, see Decision 19/CP.9, paragraphs 18-22.

27 See generally the 1974 Land Tenure Ordinances, Ordinances No 74/1, 74/2, 74/3, July 6 1974 on land tenure and state lands as modified by Ordinance No 77/1 and 77/2, January 10, 1977.

28 Notably P. A. Minang, H. Th. A. Bressers, M.M. Skutch et al, National forest policy as a platform for biosphere carbon management: the case of community forestry in Cameroon, *Environmental Science and Policy* 10(3), (2007), .204-218.

29 See s. 37(5).

30 See s. 9(1)

31 See s. 9(2)

32 See Tamasang, Community forest management entities, 321–324

33 See Tamasang, Community forest management entities, 228

34 Ibid.

35 Ibid.

36 See Decree No 95-531-PM, ss 6–8 on the role of ministry of forestry staff to determine modalities for safe and control fire, and ministry of territorial administration and decentralisation to issue permits to start fires after consultation with local forestry staff.

37 See in particular, articles 2.1 and 12.2.

38 See Decision No 19/CP.9

39 For more on the sustainable development, see C F Tamasang, Sustainable development: some reflections with regard to the new constitutional dispensation in Cameroon, *The African Law Review*, 5(1) (2008), 145–165.

40 See H Barton, Sustainable communities: the potential for eco-neighbourhoods, London: Earthscan Publication, 2000, 7. But see the argument and position taken by C F Tamasang, Community forest management entities, 7–8

41 For details, see Annex 1 of Decision No 00008/MINEP/CAB of January 2006 which spells out 11 criteria with 26 indicators overall. An interesting thing to note is that the criteria all span through the three pillars of sustainable development (social, economic and environmental pillars) although not equally distributed.

42 P A Minang, H T A Bressers, M M Skutch et al, National forest policy as a platform, 214

43 T Fomete, La Fiscalité Forestière et Implications des Communautés locales à la Gestion Forestière au Cameroun, *Overseas Development Institute*, (2001), 11-21

44 Fore more, see J Sathaye, A Najam, C Cocklin et al, Sustainable development and mitigation, in B Metz, O R Davidson, P R Bosch et al (eds), *Climate change 2007, mitigation*, contribution of Working Group III to the Fourth Assessment Report of the IPCC, New York: Cambridge University Press, 2007, 696.

45 Sabonet news, Invasive alien plants: Asteraceae, *The Southern African Botanical Diversity Network*, 7(1) (2002), 32–33.

46 See the Conservation of Agricultural Resources Act, Act 43, 1983 as amended in 2001.

47 See, generally, the Ecosystem Assessment Report (2005).

48 See s.16.

49 See the 1995 Forestry Decree prescribing impact assessment, Art. 110(1); Decree No 2005-0577-PM of 23 February 2005 laying down modalities for realising impact assessment, and Arrêté No 0070/MINEP du 22 Avril 2005 laying down the different categories of operation requiring impact assessment.

50 K M Chomitz, Baseline leakage and measurement issues: how do forestry and energy projects compare?, *Climate Policy*, 2 (2002), 35–49

51 See, in particular, Part G, paragraphs 11of the annex to Decision 19/CP.9

52 See Ministerial Decision No 0008/IMINEP/CAB of January 2006, Annex 2.

53 The Manual of procedure and norms for the attribution and management of community forests

54 See Tamasang, Community forest management entities, 174–187.

55 See Desanker, The Kyoto Protocol and CDM in Africa, 2.

56 P A Minang, Implementing global environmental policy at local level: community carbon forestry perspectives in Cameroon, Unpublished PhD thesis, University of Tuente, Maastricht, 2007, 4–5.

57 For more on this, see Tamasang, Community forest management entities, 371 et seq. .

58 See Desenker, The Kyoto Protocol and CDM in Africa.

59 See H J Stehr, The clean development mechanism: evolving to meet climate and development challenges, in *Climate Action*, London: Sustainable Development International and UNEP, 2007, 109.

60 See, generally, F Ekoko, Balancing politics, economics, and conservation: the case of the Cameroon forestry law reforms, *Development and Change*, 2000.

61 H J Stehr, The Clean Development Mechanism, 110.

62 Other environmental services from which payment may be expected to compensate land users for environmental services and which give market reasons for actors to consider such services in decision-making processes include water protection, biodiversity protection, and beauty and esthetical view. An additional reason for PES relates to environmental justice, e.g. industrialised polluting countries make compensation to non-polluting countries for the impacts of their pollution-polluter pay principle.

63 Solar thermal plant in Botswana; hydro in Congo; natural gas cogeneration in Egypt; landfill gas to electricity, palm oil biomass, and aerobic digestion in Ghana; hydro CCGT in Mozambique; and solar water heaters, and industrial energy efficiency landfill gas to electricity in South Africa. For more, see B Kinkead, Undertaking CDM projects in Africa – challenges, trends and opportunities, DNA forum, Addis Ababa: Eco-securities, 2007.

64 See, generally, D Kaniaru, International environmental negotiation blocs, *International Environmental law-making and Diplomacy Review*, University of Joensuu – UNEP Course series 4, University of Joensuu, (2006), 3–15.

65 IPCC report (2000).

66 See generally C F Tamasang, Legislation for sustainable forest management in the Central African sub-region: what prospects for effective implementation, paper presented at the 4th Colloquium of IUCN Academy of Environmental law, NY, (2006), forthcoming, New York: Edward Elgar Publishers.

67 Tamasang, Legislation for sustainable forest management, 13.

68 M Santilli, P Moutinho, S Schwartzmans, S Nepstad et al, Tropical deforestation and Kyoto Protocol, *Climate Change*, 71(3) (2005), 274.

69 P Moutinho, M Santilli, S Schwartzmans, L Rodrigues, Why ignore tropical deforestation? A proposal for including forest conservation in the Kyoto Protocol, http://www.fao.org/docrep/009/a0413e/oa413EO5.htm

70 See D Hunter, J Salzman and D Zaelke, International environment law and policy, 645–648.

71 See, generally, UNEP, University of Joensuu, and Canadal, *Multilateral environmental agreements: negotiators handbook*, UNEP Course Series 5, (2nd ed), Finland: University of Joensuu, 2007.

72 For more, see S Gupta, D A Tirpak, N Burger et al, Policies instruments and cooperative arrangements, in B Metz, O R Davidson, P R Bosch et al (eds) *Climate change 2007: mitigation*, contribution of Working Group III to the Fourth Assessment Report of the IPCC, 2007, 790:

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74 There are already successful litigation claims on climate change in the USA, Australia, New Zealand and Nigeria.

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