

**CARBON TRADE IN KENYA: ALIGNING THE MUNICIPAL
REGULATORY FRAMEWORK WITH THE
INTERNATIONAL CLIMATE CHANGE LAW REGIME**

BY

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**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF A DEGREE OF MASTER
OF LAWS (LL.M) OF THE UNIVERSITY OF NAIROBI**

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DECLARATION

I, **Kituku Emmanuel Wambua**, do hereby declare that this is my original work and has not been submitted for a degree at any other university.

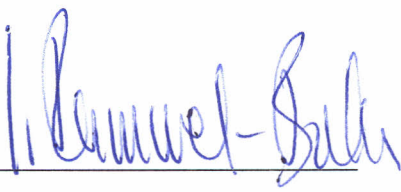
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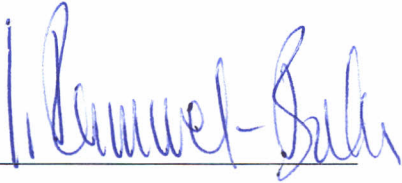
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Dedication

This work is dedicated to the memory of my teacher, the late Prof Hastings Winston Opinya Okoth-Ogendo, former Professor of Public Law University of Nairobi and among other distinguished positions formerly held, a member of the Nobel Prize- winning Inter-governmental Panel on Climate Change (IPCC). Your brilliant academic star still shines on us.

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ABSTRACT

The worsening impacts of climate change as a result of global warming prompted the international community to seek appropriate responses to stem rising concentrations of greenhouse gases in the atmosphere. Consequently, the United Nations adopted the United Nations Framework Convention on Climate Change (UNFCCC) in May 1992 and the Kyoto Protocol in 1997. These agreements sought, inter alia, to stabilize greenhouse gas emissions at 1990 levels by 2012 and in addition set up flexible market oriented mechanisms for ensuring low costs in emissions' reduction. These include the Emission Trading, Joint Implementation and Clean Development Mechanism (CDM).

The CDM supports projects carried out by proponents from developed countries in the developing world in order to obtain tradeable carbon credits which can be sold to industries (in the former) that are unable to meet statutory green houses gas emission limits. The CDM is now a multi-billion dollar carbon trade scheme which is expected to generate investment in developing countries, especially from the private sector and promote the transfer of environmentally-friendly technologies. Kenya is a state party to the UNFCCC and the Kyoto Protocol. As a developing country, Kenya also qualifies to benefit from CDM processes and has witnessed a steady rise in investments linked to the carbon trade. Kenya has already designated National Environment Management Authority (NEMA) as the national CDM regulatory body.

This study sought to inquire into the extent to which the municipal regulatory framework on carbon trade is in line with the international climate change regime and the concept of sustainable development, with a view to formulating the appropriate legal and policy proposals for reform. The study found that in spite of efforts to ensure compliance with international standards, the current regulatory framework, as evinced by the NEMA Guidelines on CDM, is of doubtful legal validity from the Kelsenian theoretical point of view. The Guidelines contradict recent changes in the international climate change legal regime as well as the concept of climate justice. The Sustainable Development Criteria developed by NEMA to assess CDM projects is inconclusive, anchored on outdated policy basis and relies on a vague definition of the concept of sustainable development. The study also analysed the forestry and energy sectoral policy and legal regimes that are linked to carbon trade and found them to have significantly integrated principles of sustainable development, thus enhancing their compatibility with the international regulatory framework of carbon trade.

ABBREVIATIONS/ ACRONYMS

AIDS.....	Acquired Immunodeficiency Syndrome
ASALs.....	Arid and Semi-Arid Lands
Cap.....	Chapter
CCX.....	Chicago Climate Exchange
CDM.....	Clean Development Mechanism
CER.....	Certified Emissions Reductions
CO ₂	Carbon dioxide
COP.....	Conference of Parties
DCC.....	Directorate of Climate Change
DG.....	Director General
DNA.....	Designated National Authorities
DOE.....	Designated Operational Entity
EIA.....	Environmental Impact Assessment
EMCA.....	Environmental Management and Coordination Act
ERB.....	Electricity Regulatory Board
ERC.....	Energy Regulatory Commission
ERPA.....	Emissions Reduction Purchase Agreements
ERS.....	Economic Recovery Strategy for Employment & Wealth Creation
ET.....	Emissions Trading
FAO.....	United Nations Food and Agriculture Organization
GDP.....	Gross Domestic Product
GHG.....	Green house gases
GNP.....	Gross National Product
HIV.....	Human Immunodeficiency Virus
ILA.....	International Law Association
IPCC.....	Intergovernmental Panel on Climate Change
JL.....	Joint Implementation
KENGEN.....	Kenya Electricity Generating Company
KFS.....	Kenya Forests Service
KPLC.....	Kenya Power & Lighting Company
kTCO ₂	Kilo Tons of Carbon Dioxide
KwH.....	Kilowatt hour

KWS.....	Kenya Wildlife Service
LULUCF.....	Land Use, Land Use Change and Forestry
MoP.....	Meeting of Parties
MoU.....	Memorandum of Understanding
Mw.....	Megawatt
NCCACC.....	National Climate Change Activities Coordination Committee
NCCFP.....	National Climate Change Focal Point
NCH.....	National Clearing House
NEMA.....	National Environment Management Authority
NEP.....	National Energy Policy
NET.....	National Environment Tribunal
NGO.....	Non- Governmental Organization
PANERECC.....	Parliamentary Network on Renewable Energy and Climate Change
REA.....	Rural Electrification Authority
REC.....	Reduction Emissions Credits
REDD.....	Reducing Emissions from Deforestation and Degradation
UK.....	United Kingdom of Great Britain and Northern Ireland
UNDP.....	United Nations Development Programme
UNEP.....	United Nations Environment Program
UNFCCC.....	United Nations Framework Convention on Climate Change
USA.....	United States of America
WHO.....	World Health Organization
WMO.....	World Meteorological Organization
WSSD.....	World Summit on Sustainable Development

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2. *Gabcikovo v Nagymaros* ICJ 1997 General List No 92
3. *North Sea Continental Shelf Cases – (Federal Republic of Germany v Denmark; Federal Republic of Germany v Netherlands)* [1969] ICJ Reports 4
4. *Dispute Concerning Article 9 of OSPAR Convention (Ireland v UK)* 2003
5. *Legality of the Threat or Use of Nuclear Weapons Advisory Opinion of the International Court of Justice, (Request for Advisory Opinion by the General Assembly of the United Nations)* ICJ Reports 1996
6. *Maritime Delimitation in the Area Between Greenland and Jan Mayen (Denmark v Norway)*
7. *R v Minister for Transport Ex Parte Waa Ship Garbage Collector and 15 Others* KLR (Environment & Land) 1
8. *R M & Another v R (2006)* eKLR

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1. 1990 Agreement establishing European Bank for Reconstruction and Development
2. 1990 Bergen Declaration of the UN Economic Commission for Europe
3. 1990 Langkawi Commonwealth Declaration
4. 1991 Beijing Declaration of Developing Countries
5. 1994 Draft Principles on Human Rights and the Environment,
6. 1998 Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters,
7. Convention on Biological Diversity of 1992,
8. Declaration of the United Nations Conference on Environment and Development of 1992 (Rio Declaration)
9. Declaration of the United Nations Conference on Human Environment of 1972 (Stockholm Declaration)
10. EU-ACP Agreement (Lome Convention of 2000)
11. International Covenant on Civil and Political Rights
12. International Law Association adopted the New Delhi Declaration of Principles on Law Related to Sustainable Development
13. Kyoto Protocol to the United Nations Convention on Climate Change
14. The 1986 UN Declaration on the Right to Development
15. United Nations Convention Law of the Sea of 1982
16. United Nations Convention on Combating Desertification of 1994
17. United Nations Framework Convention on Climate Change of 1992
18. Universal Declaration on Human Rights,
19. World Charter for Nature of 1982

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1. Forest Act (Repealed) Cap 385 of the Laws of Kenya
2. Forest Act of 2005
3. Energy Act No 12 of 2006
4. Environmental Management and Coordination Act No 8 of 1999
5. Electric Power Act Chapter 314 of the Laws of Kenya
6. Petroleum Act (repealed) Chapter 116 of the Laws of Kenya
7. Petroleum Exploration and Production Act Chapter 308 of the Laws of Kenya
8. Registered Land Act Chapter 300 of the Laws of Kenya
9. Registration of Titles Act Chapter 281 of the Laws of Kenya
10. Local Government Act Chapter 265 of the Laws of Kenya

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Problem

In the 1980s, concern over the rising global temperatures increased among environmentalists. Studies conducted traced this phenomenon to rapid rise in the accumulation of green house gases¹ (GHGs) in the earth's stratosphere. Even though some of the GHGs occur naturally, the drastic accumulation was attributed to anthropogenic emissions through combustion of fossil fuels and production of cement on one hand and destruction of forests on the other. Whereas these gases allow incoming shortwave radiation through, they however trap long-wave radiation emitted outwards by the earth thereby causing a warming effect in the atmosphere.

In 1988, the United Nations Environment Program (UNEP) and World Meteorological Organization (WMO) established an Intergovernmental Panel on Climate Change (IPCC) to provide scientific guidance on further action. The IPCC produced three reports which documented the anticipated effects of anthropogenic emissions of GHGs on climate change. The reports predicted that if emissions proceeded at the same rate prevailing in 1990, an increase in global temperatures of 2°C higher than that which occurred during the pre-industrial period would be registered by 2025 and 4 °C by 2100². This would lead to melting of sea ice and snow caps, precipitating an increase in sea level of 20cm by 2030 and 65cm by 2100³.

Concerned about the impacts of the foregoing on climate change, the international community began consultations that led to the adoption of the United Nations Framework Convention on Climate Change (UNFCCC) in May 1992. The Convention came into force in 1994. It obliges all its signatories to establish national programmes for reducing greenhouse gas emissions and to submit regular reports. It further obliges developed country parties, as opposed to their developing counterparts to stabilize their greenhouse gas emissions at 1990 levels by the year 2000⁴. This goal, however, is non-binding. The UNFCCC was styled as a framework

¹ Sands P, *Principles of International Environmental Law*, 2003 (2nd Edition), London: Cambridge University Press, pg 357 lists these as CO₂, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride

² Ibid, pg 358

³ Ibid

⁴ Memo/03/154, Brussels, 23rd July 2003 accessed from <http://ec.europa.eu/environment> on 14-04-08

convention, which was supposed to lay a basis for more consultations and negotiations on subsequent protocols with more specific binding obligations for parties.

It is worthy to note that even though the Convention attracted global support, with 155 States and the European Community appending their signatures to it, it nevertheless represented a compromise of divergent interests that were later to hamstring its smooth implementation⁵. Among the developed countries, the US objected to commitments on emissions reductions, arguing that the Convention should take a comprehensive approach on the reduction of all GHG emissions as opposed to the singular focus on CO₂⁶. On the other hand, Germany and Japan supported emissions reduction due to the opportunity this presented in terms of competitive advantages arising from the countries' unmatched capacity in clean technology. Oil producing countries also objected to firm commitments on emissions reductions due to the anticipated impact of reduced consumption of fossil fuels to their respective economies. Developing countries including China and India supported emissions reduction on condition that this would be imposed on the leading CO₂ polluters in the developed world. Most African countries and Small Island States sided with developing countries due to the fact that they were most vulnerable to extreme climate variability (floods and droughts) and increase in sea levels respectively.

Indeed, the State parties went further and adopted the Kyoto Protocol to the UNFCCC at the city of Kyoto in 1997 (thus the Kyoto Protocol), at the third meeting of the Conference of Parties. The Kyoto Protocol set out legally binding reduction limits (below 5% of 1990 emissions levels) for industrialized states within an implementation period between 2008 and 2012⁷. The Protocol set up flexible market-oriented mechanisms for ensuring low costs in emissions' reduction⁸. These include the Emission Trading (ET), Joint Implementation (JI) and Clean Development Mechanism (CDM). The Protocol entered into force in February 2005, even though the US and Australia chose to opt out of the Protocol.

Emission Trading allows industries in the developed world (Annex I Parties under the Convention, i.e. developed countries including those undergoing transition to market economies) that surpass emission targets to obtain carbon credits which can be sold to

⁵ Sands P, *Principles of International Environmental Law* supra pg 358-9

⁶ Ibid

⁷ Article 3(1) of Kyoto Protocol

⁸ Article 12 of the Kyoto Protocol

industries that are unable to do so. Joint implementation mechanism allows for Annex I Parties to establish projects that reduce emissions within the other Annex I countries, thus accruing carbon credits for exchange. The CDM, on the other hand supports projects in developing countries by Annex I countries for the same purpose. The upshot of these mechanisms is the creation of the so-called global “Carbon Trade” market. Besides the above mechanisms, the private sector players in the US and Australia have developed independent voluntary mechanisms that operate along the same lines as the CDM or Emissions Trading (hereinafter referred to as “voluntary carbon trade mechanisms” or “voluntary mechanisms”).

The CDM is expected to generate investment in developing countries, especially from the private sector, and promote the transfer of environmentally-friendly technologies in that direction. In addition, the finance and technology transfer commitments of Annex I Parties under the Convention and Kyoto Protocol are separate and remain valid. Furthermore, public funding for CDM project activities must not result in the diversion of official development assistance. The CDM was subject to the authority of the Conference of Parties and supervised by an Executive Board. The operations of the CDM were further elaborated by an Accord reached by Meeting of the Parties at Marrakesh, Morocco in 2001 (or “Marrakesh Accords”).

Kenya is a state party to the UNFCCC and the Kyoto protocol⁹. As a developing country, Kenya qualifies to engage in CDM- related carbon trade from projects that not only lower emissions but also ensure transfer of environmentally sound technology for sustainable development. To this end, the country has witnessed a steady rise in investments linked to the Carbon Trade processes¹⁰. Kenya has already designated National Environment Management Authority (NEMA) as the National CDM Designated Authority¹¹. In 2001, NEMA developed guidelines for registration of carbon markets and sustainability criteria¹² three years before Kyoto Protocol came into force.

However, NEMA guidelines have not been gazetted and therefore to date there is a weak legal regulatory framework in place to govern the design and implementation of projects funded under the carbon trade. The obligation for developing country parties to develop such

⁹ See <http://maindb.unfccc.int/public/country.pl?country=KE> (accessed on 14-04-08); Kenya signed the UNFCCC on 12th June 1992 and ratified it on 30th August 1994; Kenya ratified the Kyoto Protocol on 25th February 2005

¹⁰ See www.cd4cdm.org accessed on 14-04-08

¹¹ <http://cdm.unfccc.int> as accessed on 14-04-08

¹² *Kenya National Guidelines on Clean Development Mechanism*, 2001 February, and *Sustainable Development Benefits Derived from Clean Development Mechanism*, www.nema.go.ke (accessed on 14-08-2008)

framework arises from various reasons. Firstly, the Marrakesh Accords gives the host party (in whose territory a CDM project is being implemented) the prerogative of deciding whether or not the project in question is contributing to sustainable development. The prerogative can only be exercised judiciously if a regulatory framework is in place. Secondly, investment in CDM is equivalent to foreign direct investment. In this regard, law is an essential precondition for underpinning the environment in which these investments are made. Thirdly, law on climate change is considered a new area of international law. It is, therefore, important to institutionalize (by way of regulatory framework) the interaction between international and domestic law in this area. Fourthly, the CDM and related processes will eventually result in tradable CER units. To become thus, it is important to document the relationship between the CDM project participants in order to clearly define who is entitled to CER and how they are to be transacted.

It is against the foregoing that a study into the regulatory aspects of carbon trading in Kenya was deemed necessary. This study sought to lay a basis for development of an appropriate regulatory framework the nascent carbon trading in Kenya, underpinned by sustainable development principle.

1.2 Statement of the Problem

There is no specific law on carbon trade in Kenya. Rather the regulatory framework for carbon trade can be discerned from guidelines developed by NEMA on CDM and the various legal and policy regimes governing the environment, forestry and energy sector. Whereas Kenya is set to witness a rise in carbon trade investments, the prevailing regulatory framework is weak, legally unsound and unlikely to contribute sufficiently to realization of sustainable development.

Ideally, a strong and effective regulatory law creates authoritative institutions and clear rules of engagement between the states and private actors. Conversely, a weak regulatory framework inherently poses bureaucratic hurdles and thus is likely to pose a barrier to carbon investments hence impeding the country's potential of tapping into the ever-growing global carbon trade.

Carbon trade is a product of the international climate change legal regime. Its implementation in Kenya would therefore require a process of domestication by way of enactment of specific laws or regulations. It is not clear if the prevailing framework (in its entirety or aspects of it) suffices the domestication imperative. As such, this lends regulatory framework (or aspects of it) to legal

challenges as to its validity. Thus, this is likely to impact on the investment environment for carbon projects.

Whereas NEMA has endeavoured to develop sustainable development criteria to guide the process of approving carbon projects, it is not clear whether these criteria sufficiently embrace the salient principles of the concept as laid out by international law generally and the climate change legal regime in specific. The extent to which other sectoral laws and policies relevant to carbon regulatory framework embrace the concept of sustainable development is not clear, and this may impact on the ability of carbon investments to deliver benefits of sustainable development as envisaged by the international climate change law regime. A related issue regards the extent to which the regulatory framework espouses the notion of climate justice i.e. ensuring that those least responsible for causes of climate change are not exposed to effects of the same.

1.3 Purpose of the Study

This study seeks to inquire into the extent to which the municipal regulatory framework on carbon trade is in line with the international climate change regime and the concept of sustainable development, with a view to formulating the appropriate legal and policy proposals.

1.4 Hypothesis

Successful implementation of carbon trade in Kenya will depend on a legally- sound regulatory regime enacted with due regard to provisions of international climate change law regime and principles of sustainable development

1.5 Research Questions

The study set out to address the following questions:

- What are the theoretical and conceptual foundations of the global carbon trade?
- How have the global carbon trade and the international climate change legal regime evolved?
- What is the nature of the regulatory framework of carbon trade in Kenya and to what extent is it in line with the international climate change law regime and the concept of sustainable development?

- To what extent are the current sectoral environmental law and policy regimes in Kenya supportive of carbon trade regulation and sustainable development in Kenya?
- What should be the basic architecture and content of a legally sound regulatory framework to ensure effective and efficient governance of the Carbon trade in Kenya from a sustainable development perspective?

1.6 Justification/Significance of the Problem

Several reasons underlie the need for this particular study. First, climate change as a global phenomenon, has attracted the attention of the international community leading to enactment of a framework convention and a legally binding protocol. This notwithstanding, the effects of climate change attributable to the alarming anthropogenic GHG emissions continue to be felt worldwide. The effects of climate change¹³ are already being experienced globally and Kenya as well. High climatic variability evidenced by floods and prolonged droughts are increasingly becoming common.

The anticipated rise in sea level will inundate low lying coastal areas and islands such as Lamu. There are also fears of biodiversity loss occasioned by changes in the physical and biological systems. The impact of global warming on the hydrological cycle means that Africa is likely to see a reduction in freshwater availability by about 25% by 2100. The phenomenon has also seen an increase in desertification as temperature increases of 0.4-2 °C have been recorded. United Nations Food and Agriculture Organization (FAO) predicts a reduction of 5-8% in food production in sub-Saharan Africa by the year 2080, as a result of expansion of arid lands. Climate change is causing public health concerns. Rising temperatures are responsible for the upward movement of the altitudinal mosquito line hence reports of malaria cases in highlands that were hitherto considered disease free. The World Health Organization (WHO) reported in 2003 that the phenomenon was responsible for 150,000 deaths globally, a situation likely to double by 2030. Thus, understanding the impact of climate change on human health and environment is critical for policymaking¹⁴.

Secondly, implementation of international law primarily hinges on domestic action through legislation. The legal regime on climate change has established the carbon trade mechanisms. It

¹³ See Hunter D et al, *International Environmental Law & Policy*, New York :Foundation Press 2007, pg 641-3 for examples given herein below

¹⁴ Ibid at pg 639

is however up to state parties to the Kyoto Protocol to establish regulatory frameworks at the domestic level in order to ensure the proper functioning of the carbon trade. To maximize on the possibility of attracting CDM projects, the UNEP recommends that developing countries should strike a balance between protecting the interests of the host country and providing unwieldy or burdensome “red-tape” that may discourage such investments¹⁵.

Thirdly, regulation of development activities is one of the key governmental responsibilities and a constitutional mandate necessary to enhance the welfare of its citizens. For without this regulation, development may very well go against public and national interest. However, this mandate should be exercised constitutionally. Ojwang rightly observes, “*The primary duty of regulation and policing in respect of such activities lies within the State’s authorities as defined in public law, and must be conducted on the basis of detailed laws and regulations founded on a constitutional mandate*”¹⁶. Investments made under the carbon trade fall under the ambit of development activities. The climate change legal regime places a high premium on the centrality of sustainable development in formulation of measures and responses to combat anthropogenic emissions. The carbon trade mechanisms under the Kyoto Protocol are supposed to support sink or emission reduction projects that comply with the principle of sustainable development. However, the Protocol leaves it to the parties to establish the rules for determining the level of compliance. It is noteworthy that NEMA has developed guidelines on the sustainable development criteria which carbon trade projects should meet. However, these guidelines lack normativity associated with regulatory laws and their constitutional basis is questionable.

Fourthly, the carbon trade has elicited significant public interest in Kenya and the region. Already, there are concerns in Uganda that carbon sink projects funded under the mechanisms are being implemented unfairly, to the detriment of livelihoods of landless people inhabiting forested areas¹⁷. In Kenya, there is concern that investment in biofuel projects will lead the country into food security crises in the near future and endanger fragile ecosystems¹⁸. Concerns over transparency in the project funding & management and level of participation of the public in carbon trade are emerging. Even though the level of carbon trade in Kenya cannot be

¹⁵ UNEP, *Legal Issues Guidebook to the Clean Development Mechanism*, Risoe Center, :UNEP 2004, at pg 57

¹⁶ Ojwang J.B. *The Constitutional Basis for Environmental Management*, in Juma C. & Ojwang J. B. (eds) *In Land We Trust: Environment, Private Property and Constitutional Change*, Nairobi & London :Initiative Publishers & Zed Books, 1996, at pg 43

¹⁷ <http://www.plentymag.com/features/2008> (accessed on 24th Feb 2008)

¹⁸ At the time this paper was written, a local community with support from environmentalists had taken the government to court, seeking to halt the establishment of a sugar plantation on the Tana River Delta, ostensibly for production of biofuel.

compared with such countries as Brazil, China and India, there are indications that the trade will assume great significance in the coming years, as the industrialized countries come under pressure to reduce emissions in the post Kyoto period. Establishment of a regulatory framework may prove a decisive factor for entities keen on investing in Carbon projects in Kenya.

Fifthly, there is no country in the region as yet that has developed yet a comprehensive regulatory framework as is proposed in this study. Indeed, the World Bank, UNEP and the United Nations Development Programme (UNDP) have come up with an initiative dubbed “Nairobi Framework Capacity for Carbon Market Development in Sub-Saharan Africa”, which among other things seeks to build and enhance the capacity of Designated National Authorities (DNAs) and promote investment opportunities for projects¹⁹. These agencies note that most of the target countries require capacity in designing structures and developing necessary procedures for project approvals and complying with the sustainable development criteria. Thus, the model regulatory framework proposed in this study is a novelty. Hopefully, the findings of the study will provide researched information to guide such processes in Kenya and the region at large.

1.7 Research Objectives

This study sought to address the following objectives:

- Inquire into the legal concepts and theoretical framework underpinning the evolution of global carbon trade and international climate change law regime
- Analyse the regulatory framework for carbon trade in Kenya and the extent to which it complies with international climate change regime and the concept of sustainable development
- Examine the extent to which the prevailing sectoral environmental law and policy regime is supportive to the carbon trade projects in Kenya from a sustainable development perspective
- Formulate proposals for the establishment of a legally sound regulatory framework.

1.8 Limitations of the Study

Whereas the climate change legal regime identifies a couple of GHGs, this study will focus on projects that are primarily concerned with CO₂ emissions or sequestration. This is perhaps due

¹⁹ An Inter-Agency Program Proposal from www.cdm.unfccc.org (accessed on 1st Aug 2008)

to the fact that most carbon projects earmarked for developed countries such as Kenya are best suited to CO₂ emissions or sequestration initiatives.

This study has benefited from viewpoints and perspectives of the various stakeholders involved in carbon trade in Kenya. However, stakeholders resident outside Nairobi were not interviewed. This was due to time and financial constraints that were faced by the researcher. However, the study has extensively consulted materials on the subject.

The study would have benefitted significantly from comparative studies on regulatory frameworks from developing countries such as China, India and Latin American countries engaged in carbon trade. However, such literature was difficult to access even electronically. To this extent therefore a discussion on comparative experiences is limited and could form a basis for more research in the future.

1.9 Conceptual & Theoretical Framework

The legal framework underpinning the study is principally the Kyoto Protocol and its parent convention, the UNFCCC, i.e. the international climate change law regime. The conceptual framework of the study therefore is to be derived from the legal concepts that provide the basis for the international climate change law regime. As such, sustainable development is one of the key legal concepts of international environmental law. The definition adopted by this study is the one that was formulated by the 15th Governing Council of UNEP as “the maintenance, rational use and enhancement of natural resource base that underpins ecological resilience and economic growth and progress towards international equity”.²⁰ Other important principles of international law related to the concept of sustainable development are precautionary principles, and common but differentiated responsibilities. A detailed elaboration of these concepts is contained in Chapter Two of this report.

In addition, the notion of a carbon trade is conceptualized under the Kyoto framework, and its essential elements have been properly identified i.e. certified carbon credit as the items of trade (subject matter); Annex II countries (or private entities therefrom) and Annex III countries (or

²⁰ Decision 15/2 of May 26th 1989 quoted in Situma F, *Concepts and Principles of Environment Management, a paper presented at the Lawyers Symposium on Environmental Law and Practice in Kenya*, held at Merica Hotel in Nakuru, April 10-12 2006 (unpublished) pg 5

private entities therefrom) as traders (actors); the International CDM register or carbon exchange as the arena of trade transactions (market) and CDM rules governing transactions (trade rules).

The problematic relationship between public international law and municipal law is explained using the Kelsenian modern legal positivism. This theory is based on the basic premise that normative claims are only justified by other normative claims and therefore a legal system comprises a hierarchy of norms i.e. a higher norm authorizing or justifying another below it²¹. At the top of the hierarchy of a normative structure is the basic norm or *Grundnorm*, beyond which no further justification of a normative claim can be made. In the case of municipal law, the *grundnorm* is the constitution whereas in international law, the *grundnorm* is the principle of 'pacta sunt servada' i.e. agreements between states are to be observed in good faith²². The theory views international and national law as constituting a unified legal system (i.e. monist theory of public international law) of norms rather than two separate and mutually exclusive units (dualistic theory of public international law)²³. International law will regulate national law and the normative effect of the former is achieved through the operation of the latter. Kelsen captures this essence in the following statement:

“...Norms of international law imposing obligations or conferring rights on states require implementation by national law; for these international obligations can only be fulfilled and their international rights exercised by organs of the national state and these organs must be instituted by national law.”²⁴

It should be understood that normativity of international norms at national level does not simply arise because they have been transformed into legislative statutes. The binding nature of international norms arises from the fact that States have agreed to be bound (*pacta sunt servada*) and that transformation of these norms into statutes is just one way of implementing international law. However, where international law requires a judicial or administrative act (regulation of carbon trade) at the municipal level, then transformation is deemed as necessary because judicial or administrative organs are required constitutionally to abide by municipal laws²⁵.

²¹ Kelsen H, *The Pure Theory of Law: Translation from the Second German Edition by Max Knight*, New Jersey: The Law Book Exchange/<http://books.google.co.uk/books> 2002, 10-15 (accessed on 15-08-08)

²² *Ibid* 323-324

²³ *Ibid* 328

²⁴ Kelsen H, *Principles of International Law*, New Jersey: The Law Book Exchange Ltd/<http://books.google.co.uk/books>, 1952 & 2003, 194 (accessed on 15-08-08)

²⁵ *Ibid* pg 196

The theory of justice as propounded by Rawls is applied to evaluate the substance of laws and institutions of society, in order to establish the extent to which they secure particular social goods. According to Rawls, justice is the structural rules of society within which people who inevitably have different sets of values and goals in life can co-exist, cooperate and to some extent, compete²⁶. Justice is therefore realized by way of principles, which society agrees as the framework of securing certain social goods. The extent to which a particular law or legal system embraces these principles can therefore be used to assess its “just” nature. In expounding this theory, Rawls used the analogy of “original actors and the veil of ignorance”²⁷ and formulated two principles; Each person is to have an equal right to the most extensive system of equal basic liberties compatible with a similar system of liberty for all (referred to as “the first principle”) and; social and economic inequalities are to be arranged so that they are both to the greatest benefit of the least advantaged and attached to offices and positions open to all under conditions of fair equality and opportunity (referred to as “the second principle”)²⁸

The first principle confers equality to every individual in order to maximize the realization of social goods such as liberty and wealth. However, it should be noted that not all are able to compete equally in the process of maximization, and this leads to patent inequalities in the distribution of social goods. For this reason, the second principle comes into play, in order to safeguard those disadvantaged by particular circumstance. The first principle usually takes priority over the second principle.

Rawls theory of justice has practical application in legal analysis of municipal law as well as international law. In municipal law, the theory is useful in explaining how constitutions are negotiated followed by legislation of statutes and application of the same by judges²⁹. With regard to international law, the theory explains the concept of generational equity, common but differentiated responsibilities and international cooperation among others, which are relevant to the concept of sustainable development. Within the context of climate change regime, there is an emerging discourse on climate justice that can be explained by this theory. Climate justice recognizes the equal rights to the atmosphere for all human beings and all nations, while

²⁶ Bix B, *Jurisprudence: theory and context*, London: Sweet & Maxwell, 2006 pg 105

²⁷ Ibid 107, Rawl uses an hypothetical group (original actors) engaged in the process of formulating principles of justice, but who are not aware of their position in society, in order to ensure that their thinking is rational and not self-interested.

²⁸ Ibid 108

²⁹ McCoubrey H & White N.D. *Text book on jurisprudence*, New York: Oxford University Press 1993 pg 305-6

emphasizing on the need for the international climate change law regime to safeguard the poor populations and developing nations from harsh effects of climate change to which they have contributed very little³⁰. This theory therefore will be of significance in the evaluation of climate change law both at international and municipal level.

The concept of regulatory law is defined from a historical perspective as “*legal provisions enacted for the purpose of making the state capable of intervening in civil society and of effectively steering the public and private bodies in order to achieve pre-defined goals*”³¹. It is also defined from an analytical perspective as imperative legal provisions which officially do not provide scope for private parties to order their legal relationships themselves.³² Rather, regulatory law is viewed as a relationship between the state law and social practices of the regulators (State) and regulated (natural and legal persons).

1.10 Literature Review

Literature on Carbon trade can be divided into three categories. The first category concerns itself with raising general awareness on the CDM and carbon trade in general. This literature arose after the adoption of the Kyoto Protocol. Under this category, Prof Richard Odingo’s book *The Clean Development Mechanisms: A Framework for the Design of Sustainable Development Project* provides a comprehensive overview of the CDM and serves as a practical guidebook on developing related projects³³. It identifies some policy and legal issues that undermine the capacity of developing countries in exploiting CDM opportunities. The book has identified lack of an enabling regulatory framework to govern aspects of CDM as a capacity issue likely to limit the country’s potential in harnessing CDM. A compilation of seminal articles, *Energy in the East African Community and Multilateral Initiatives for Sustainable Development* also dedicates an entire chapter on CDM³⁴. This book also provides insights into barriers to participation by Kenya in CDM, including the absence of an enabling regulatory framework. Considering that this book was written in 2003, it will be necessary to re-appraise these issues in light of recent developments in the CDM regime. The two books however never made concrete suggestions or proposals on the kind of regulatory framework Kenya should have put in place. This study therefore attempts to address this gap.

³⁰ See for instance <http://www.globalissues.org/article/231/climate-justice-and-equity> (accessed on 23-09-08)

³¹ Lange Bettina, *Understanding Regulatory Laws: Empirical Versus Systems-theoretical Approaches?*, : London: Oxford University Press 1998 accessed from www.jstor.org (on 11/08/2008), pg 451

³² Ibid

³³ 2006 edition, Climate Network Africa, Nairobi

³⁴ 2004, Climate Network Africa, Nairobi

The second category of literature on this subject confines itself to the issues that were to be addressed in the operationalization of the Kyoto Protocol via the Marrakesh Accords. This body is multi-disciplinary in nature. Wilman and Mahendrarajah³⁵ inquire into the model of the CDM-carbon sink projects. They provide formulae for calculating the amount of carbon sequestration entailed in forestry projects, payment mechanisms and contractual issues arising thereunder. Of importance to this study are the potential injustices engendering carbon trade contracts entered by weak developing countries (or their entities) with rich and informed developed countries. Sandor Richard & others³⁶ have studied the pilot GHG markets in North America and Europe and presented a number of issues regarding incorporation of carbon sequestration into emissions trading. This study is particularly useful in describing the rationale and operations of voluntary carbon trading markets. The understanding of voluntary carbon markets is important in ensuring their proper regulation, which forms the basis of this study.

Saunders and others³⁷ inquire into key human rights issues surrounding implementation of carbon sequestration projects with regard to indigenous communities. Niesten and others³⁸ assess the possible impact of application of Kyoto Protocol regime on degradation of native forests and displacement of timber harvesting activities from Annex 1 parties to developing countries. Bettleheim and Origny³⁹ examine the various aspects of CDM legal regime that have the effect of discriminating against developing countries with special reference to carbon sinks from a sustainable development perspective. They propose specific policy issues which the CoP should take into account in order to make CDM work for developing countries. However, these issues have not been properly discussed within the Kenyan context. This study seeks to address this gap and locate the said issues within the broader discussion on climate justice.

Further, issues raised in the second category of literature on this subject are important for this research, in the sense that they provide a frame of analyzing the key policy and legal concerns from a developing country's perspective. They also assist in discerning the issues that historically

³⁵ Wilman E. A. & Mahendrarajah M.S., *Carbon Offsets*, 2002 University of Wisconsin Press published in www.jstor.org accessed on 11/08/2008

³⁶ Sandor R et al, *Green House Gas Trading Markets*, 2002, The Royal Society accessed from www.jstor.org on 11/08/2008

³⁷ Saunders R et al, *Social Capital from Carbon Property: Creating Equity for Indigenous People*, 2002, Royal Society accessed from www.jstor.org on 21/04/2008

³⁸ Niesten E. et al, *Designing a Carbon Market that Protects Forests in Developing Countries*, 2002, The Royal Society accessed from www.jstor.org on 11/08/2008

³⁹ Bettleheim E.C. & d'Origny G, *Carbon Sinks and Emissions Trading Under Kyoto Protocol: A Legal Analysis* 2002 The Royal Society accessed from www.jstor.org on 11/08/2008

shaped the Kyoto regime and their implication on the participation of developing countries such as Kenya. Approximately 5 years into the post Marrakesh period, it is important to assess the relevance of these issues will, hence this particular study is designed to undertake the same.

The third category of literature comprises materials developed in the post-Marrakesh period. These materials incorporate the experiences gained in the implementation of CDM and the Kyoto Protocol regime in the intervening period. The UNEP for instance has produced a manual that provides high level analysis of legal and risk issues involved in CDM projects, with practical examples and suggestions⁴⁰. The absence of sound regulatory framework is yet again identified as risk, yet no model of regulation is suggested.

Wang has examined how sustainable development law perspective has guided the development of climate change law, and how this has impacted on vulnerable states, with an emphasis on equity in both processes and outcomes⁴¹. The author seems to make the conclusion that developing states have not benefitted commensurately from the implementation of the climate change law and that benefits of sustainable development are yet to be realized. The writer however does not explain factors necessary for realization of sustainable development benefits under climate change law. Agerup et al have proposed a radical approach to climate change mitigation that criticises emissions control as propounded by Kyoto Protocol framework as counterproductive⁴². Instead, they propose elimination of poverty and therefore achievement of sustainable development as a more appropriate solution. The writers however have not demonstrated how sustainable development can be realized through legal initiative as an alternative or parallel to the Kyoto Protocol regime, which is what this study will attempt to analyze.

1.11 Methodology

The study was guided by various methods and techniques as discussed hereunder.

⁴⁰ UNEP (2004) supra

⁴¹ Wang X, *Sustainable International Climate Change Law*, in Segger M.C & Khalfan A eds, *Sustainable Development Law: Principles, Practices and Prospects*, 2004 Oxford University Press pg 351-362

⁴² Agerup M, Ayodele T, Corderio J et al, *Climate Change and Sustainable Development: A Blueprint from the Sustainable Development Network*, London: International Policy Network 2004

1.11.1 DATA COLLECTION

a. Data Sources

The study was a non-probability design, meaning that sampling of respondents was not based on the need to ensure a representative of the entire population from which inferences and generalizations were to be made. Instead, the author identified data sources in a biased and purposive manner in order to obtain in-depth information on a particular issue. The data sources included:

- Documents: legal texts and scholarly articles on Climate change obtained from libraries and internet-based article databases
- Key informants from institutions and entities involved in Carbon trade. These include institutions that have approached or obtained approval from NEMA for carbon trade projects.
- Media reports: sourced from UNEP's Environmental Today

b. Data Collection methods

Desktop review and content analysis of selected documents was used a method of legal analysis. This involved selecting and collecting the identified materials and reading through them.

Key informant interviews were undertaken, targeting officials of stakeholder institutions in the carbon trade. The respondents were drawn from the following institutions: Kenya Electricity Generation Company (Kengen)- a company that has developed CDM projects; National Environmental Management Agency- the designated National CDM Authority; Energy & Sustainable Development (ESD) Ltd (now CAMACO) – a consulting firm involved in development of carbon trade projects under voluntary mechanisms in the east African region; JP Morgan Climate Care; Ministry of Energy- Department of Renewable Energy; Energy Regulatory Commission; Kenya Forest Service; United Nations Environment Programme; United Nations Development Programme; Norwegian Church Aid- An International NGO that is supporting carbon projects in Lamu & Mt Kenya region under its global climate change programme

These interviews were used to obtain specific information on gaps that were identified during the desktop review. The interviews also provided more insight on basic ideas generated from pre-research inquiries and desktop reviews.

c. Instruments

An interview checklist was developed according to specific information needs identified during the desktop review. The checklist contained critical areas where information was sought from a particular respondent. The checklist was open-ended, allowing for the respondent to provide information on areas not anticipated prior to the interview.

1.11.2 Data Analysis

Qualitative methods of analysis were used to treat the data. Responses from the key informant interviews were clustered on the basis of similarity or uniqueness. These clusters were used to discern the emergent distinctive ideas. These were assessed against the information needs with a view to distilling issues that were considered in designing the regulatory framework for carbon trade in Kenya.

1.12 Report: Arrangement of Chapters

Chapter one of the paper gives an overview of the research problem and design. It is a summary rehash of the proposal.

Chapter two discusses the conceptual and theoretical framework underpinning the carbon trade. The concept of sustainable development is examined in detailed, alongside related principles of international environmental law. The chapter also examines the evolution of the global carbon trade and identifies broad regulatory issues that developing countries like Kenya need to take into account, within the context of sustainable development.

Chapter three of the paper examines existing regulatory framework for carbon trade projects and provide a critique. The analysis will focus on the existing CDM Guidelines and Sustainable Development Guidelines developed by NEMA

Chapter four contains a review sectoral environmental policy and legal regimes that impact on carbon trade. The extent to which these regimes facilitate or impede the carbon trade is discussed at length.

Chapter five contains conclusions and concrete proposals for development of a regulatory framework for carbon trade.

CHAPTER TWO

CARBON TRADE IN PERSPECTIVE: THE LEGAL AND CONCEPTUAL UNDERPINNINGS IN INTERNATIONAL LAW

2.1 Introduction

The Kyoto Protocol and its parent convention, the United Nations Framework Convention Climate Change provide the overall legal framework governing the global carbon trade regime. Like most international environmental law regimes, the Kyoto protocol is, in turn, underpinned by legal concepts of international environmental law. These concepts provide a framework of ideas for developing strategic and legal responses to the growing environmental challenges facing the world. These concepts are legal in the sense that they have gained a modicum of normativity in several ways: they indicate characteristics of international environmental law and institutions, provide guidance in interpretation of legal norms, constitute fundamental norms and fill gaps in positive law⁴⁵.

Even though the legal status of these concepts arises from their recognition by the international community as belonging to a normative order, they also influence the legal development of international and municipal environmental law. These concepts provide a framework for negotiations of treaties and resolving environmental disputes. Even where concepts have not yet become customary law, they can guide state practice in such ways that tend to harmonize practices and standards, thereby providing the uniformity and consistency of state practice that is an essential element in the development of customary law. To this end, the concepts assist in bridging international law with municipal law. These concepts also play an important role in interfacing environmental law with other disciplines. For instance, the concept of sustainable development creates linkages between economic development and environmental protection.

This chapter lays out the framework of the international climate change legal regime. The model of the carbon trade is described in depth and its distinctive elements isolated. The evolution of the trade and its status today is reviewed. The concept of sustainable development as the principal legal concept underpinning the carbon trade is explored in depth. A historical

⁴⁵ UNEP, *Training Manual on International Environmental Law* 23

perspective to evolution of the concept is explored and its application in international environmental law, with special focus on the climate change law regime is further examined.

2.2 International Climate Change Legal Regime

2.2.1 The United Nations Framework Convention on Climate Change

The United Nations Framework Convention on Climate Change (UNFCCC) was adopted in 1992 as the international community's response to the challenge posed by global warming induced by anthropogenic emissions of GHGs. The Convention was inspired by the successful negotiations and agreements that went into the adoption and implementation of the Vienna Convention for the Protection of Ozone Layer (1985) and the subsequent Montreal Protocol on Substances that Deplete the Ozone Layer (1987)⁴⁶.

The convention defines climate change as change in climate attributable to human activities that alters the composition of global atmosphere and which is in addition to natural climate variability observed over comparable time periods⁴⁷. The Convention takes the view that accumulation of GHGs in the atmosphere is responsible for extreme climate variability. The objective of the UNFCCC is to stabilize the concentrations of GHGs in atmosphere in a way that would prevent dangerous human interference with the climate system⁴⁸. The Convention is guided by several principles among them; common but differentiated responsibilities, international solidarity with state parties most vulnerable to effects of climate change, precautionary principle, right to sustainable development and promotion of supportive and open international trade system that promotes sustainable economic growth⁴⁹.

The Convention categorizes state parties into three categories namely; developed countries including those with economies that are undergoing transition to free markets (mostly former eastern Europe states and Russia) as Annex I, developed countries as Annex II and developing countries (non-Annex 1). Accordingly, the Convention sets out different obligations to different categories of state parties based on their abilities and perceived levels of contributions to the concentration of GHGs⁵⁰. The Convention also sets out broad obligations to all parties

⁴⁶ Preamble to the UNFCCC

⁴⁷ Article 1.2 of UNFCCC

⁴⁸ Article 2 of UNFCCC

⁴⁹ Article 4; these principles as discussed exhaustively in subsequent sections of this chapter

⁵⁰ Article 4.2 these include adopting national policies and programmes aimed at reducing GHG emissions.

regardless of their categorization such as technical and scientific cooperation, maintenance of GHG emissions and sinks inventories, promotion of sustainable development, technology transfer, information sharing and promotion of public awareness on the issue of climate change⁵¹. These obligations are broad and as such impose no specific commitment on reduction of GHGs, which is the primary goal of the treaty

The convention establishes the Conference of Parties (CoP) as the supreme decision making organ that is supposed to meet annually under Article 7 of UNFCCC. The CoP is open to participation by non-state parties, intergovernmental bodies and civil society representatives as observers. The Convention also establishes a secretariat and two technical organs to assist in the implementation of the treaty⁵². A financial mechanism is provided for under Article 11 of the treaty to provide resources for undertaking climate change-related programmes and technology transfer.

2.2.2 Kyoto Protocol to the United Nations Framework Convention on Climate Change

The Kyoto protocol was adopted pursuant to a decision made by the CoP of the UNFCCC on the need to come up with binding commitments on actions required to realize the objective Convention. The Protocol thus sets out specific actions which Annex I state parties are supposed to undertake such as enhancement of energy efficient, protection and enhancement of sinks, sustainable forms of agriculture, research and development in support of GHG reduction, reduction of emissions not controlled by Montreal Protocol and reduction in methane emissions⁵³. The Protocol sets a baseline for reduction of emissions i.e. reduction of emissions by 5% below the 1990 levels in the commitment period between 2008-2012⁵⁴. This means that Annex I parties are to reduce their GHG emissions to levels that are at least below 5% those emitted before 1990 (the base year). Accordingly, each concerned party would measure emissions level before 1990 and net reductions/increases recorded in the subsequent periods under consideration. Parties are allowed to meet these commitments singly or jointly (under agreements to be verified by a technical body established under the treaty).⁵⁵

The Protocol lays a framework to acquisition and transfer of certified emission reduction units (CERs) which constitute rights to emit accrued by parties that have already surpassed their

⁵¹ Article 4.1,5,6 and 12 of UNFCCC

⁵² Article 8-10 of UNFCCC

⁵³ Article 2 of Kyoto Protocol

⁵⁴ Article 3 of Kyoto Protocol

⁵⁵ Article 4 of Kyoto Protocol

reduction targets⁵⁶. These rights can be transferred to parties that are behind their emission targets. These provisions form the basis for such mechanisms as the EU-Emissions Trading System and Joint Implementation mechanism.

The Clean Development Mechanism is set up under Article 12 of the Protocol, as the mechanism allowing Annex I parties to earn CERs from emission reduction or avoidance projects in non-Annex I parties. Besides CDM, Article 11 obliges developing countries to provide financial resources to the financial mechanism (vide Article 11 of the UNFCCC) established for purpose of facilitating technology transfer and capacity building on establishment and maintenance of GHG inventories.

The Protocol establishes an institutional framework comprising Conference of Parties (CoP) as the supreme decision-making body that serves as Meeting of Parties (MoP). Non-parties, intergovernmental agencies and NGOs are allowed to attend CoP meetings as observers⁵⁷. The Secretariat and technical bodies established under UNFCCC are to serve the same purpose under the Protocol. The Protocol creates an Executive Board of CDM to supervise the mechanism subject to the guidance of the CoP⁵⁸.

It is important to note that the provisions of the Protocol have been further elaborated through subsequent decisions of the CoP/MoP. For instance, the operational details of CDM and its institutional framework were further developed by CoP as will be explained in subsequent sections.

2.3 What is Carbon Trade under the Climate Change Law?

The traditional notion of a trade will include items of trade (subject matter), traders (actors) the arena of trade transactions (market) and the rules governing the transactions (trade rules). Conceptualizing a carbon trade under the Kyoto framework, one may need to define the elements entailed in the so-called trade along the aforesaid traditional notions.

⁵⁶ Article 3.10-13, Article 6 of the protocol

⁵⁷ Article 13 of Kyoto Protocol

⁵⁸ Article 12.4 of Kyoto Protocol

The international carbon trade is based on a permit system, comprising two carbon permits; namely, CO₂ emission allowance and project-based permits⁵⁹. The former are permits to emit CO₂ issued by regulatory bodies (e.g. the EU Emissions Trading System) under cap and trade regimes. The regulatory body will usually issue permits to entities emitting CO₂ below the cap levels and thereby allowing the permit holder to sell emission rights to entities emitting CO₂ above cap levels. This permit system is to be found in the EU- Emissions Trading System regime provided under the Kyoto protocol. Project-based permits on the other hand are emission credits generated from projects that reduce GHG emissions compared with a no-project scenario⁶⁰. These permits are to be found in the Joint Implementation (JI) and Clean Development Mechanism (CDM) regimes.

Under the CDM, the emission credits are referred to as certified emission reduction (CERs) generated from carbon offset projects⁶¹. A CER is a unit issued under the CDM and is equal to one metric ton of CO₂ emissions. It forms the subject-matter of the carbon trade and constitutes a new form of tradable property rights. CER is issued by the CDM Executive Board, upon external validation of the actual CO₂ emission reduction of a particular project.

- The Kyoto Protocol and the Marrakesh Accords set out broadly the parameters for projects that qualify for under the CDM.⁶² A basic requirement is that parties engaged in the CDM must be party to the Kyoto protocol and that the project must be implemented in the Host (developing) Country by an Annex I country or private entity authorised by such a country. The specific legal criteria for projects include: Demonstrable contribution to Host Country's sustainable development; verifiable and long-term benefits that relate to climate change mitigation; and emissions reductions that are additional to any that would have occurred in the absence of certified project activity

A carbon offset project is one that either contributes to reduction or avoidance of CO₂ emission or absorption (sinking) of CO₂ through a process known as sequestration. An emission reduction/avoidance project will for instance include power generation projects that make use of non-fossil fuel sources (e.g. hydro-electric generators, geothermal plants or solar plants), energy efficiency projects and clean transport technology projects. Nuclear power plants are,

⁵⁹ Milunovich et al, *Carbon Trading: Theory and Practice*, 2007, Jassa-The Finnisia Journal of Applied Finance Issue No 3 (accessed directly from the author)

⁶⁰ Ibid

⁶¹ Article 12 of the Kyoto Protocol

⁶² Milunovich et al, *Carbon Trading: Theory and Practice*, 2007 supra pg 40

however, excluded from this category. Carbon sink projects include afforestation, reforestation and deforestation projects (forests existing before the baseline year of 1990 are excluded from CDM) as well as geological sequestration through for instance enhanced oil recovery and landfill methane recovery.

Under CDM, carbon offset projects are further classified into three principal categories⁶³: The first refers to small scale projects. These are projects that have smaller capital outlay and are intended for simpler and less rigorous approval procedures by the CDM Executive Board. They include power plants that generate not more than 15MW, energy efficiency projects that reduce consumption by up to 15GW hour per use, afforestation or reforestation projects that can sequester up to 8 kilotons of CO₂ per year and any other project that can reduce emissions by source and directly emit less than 15 Kilotons of CO₂ annually.

The second category refers to afforestation and reforestation projects. These are activities undertaken after 31st Dec 1989 are eligible for CER under CDM. They include establishment of woodlots, reforestation of native species, large scale industrial plantations, large scale biofuel projects and agroforestry⁶⁴. Crediting period for these projects last longer (20-30 years) and assignable CERs are either deemed as temporary or long-term, depending on the time when the validation process was undertaken. The last category is the unilateral projects. These are projects undertaken by non-Annex I parties without participation of Annex I parties. CERs accruing from such projects can be sold to any Annex I party (or private entity approved by such party) through the international CDM register.

The CDM Executive Board has been established within the Kyoto Protocol framework as the arena in which the CERs transactions occur. The Board is mandated to register CDM projects presented to it by parties to the Protocol, subject to validation by a Designated Operational Entity (DOE). The Board is also mandated to issue CERs upon verification by DOE. To this end, an electronic register has been created and maintained by the Board for issuance of CERs to project participants as per agreements. The agreements used in carbon trade are known as Emissions Reduction Purchase Agreements (ERPAs).

⁶³ UNEP- Riso Center, *Legal Issues Guidebook to the Clean Development Mechanism* Roskilde:UNEP 2004, pg 43

⁶⁴ Ibid, pg 44 Decision of COP Bonn 2001 which sought to limit such activities under the Land Use Land Use Change & Forestry (LULUCF) Framework

Besides the CDM, EU- Emissions Trading System and Joint Implementation mechanisms, there exists a relatively small but vibrant voluntary carbon market, which accounts for 2% of the total carbon market share⁶⁵. The market was started by small intermediary companies in UK, Europe and US⁶⁶. These companies target emission reduction projects in their respective countries and abroad, and purchase carbon credits for sale to companies. The tradable credits include CER (under CDM), Chicago Climate Exchange (CCX) Offsets and Reduction Emissions Credits- REC- (these are peculiar to the US only). The prices in these markets vary, depending on the social and environmental benefits but may sometimes exceed those offered under CDM. In its early years, the voluntary market lacked universal standards for assessing carbon credits. However, recent scientific efforts have led to the emergency of a number of acceptable standards that now command respect of the voluntary markets. This type of market is considered flexible, cost-effective and less stringent on process and procedures.

As stated elsewhere, the rules governing CDM transactions are based on the UNFCCC, Kyoto Protocol, the Marrakesh Accords, decisions of CoP and decisions of the Board. The need for regulatory framework to govern CDM projects at municipal level has been identified, and this forms the basis of this study.

2.4 Status of Global Carbon Trade Today

As stated elsewhere, the CDM was operationalised following the adoption of the Marrakesh Accords in 2001 by the 7th meeting of the Conference of Parties (CoP) of the Kyoto Protocol. However, Odingo notes that the Joint Implementation mechanism had already been on a pilot soon after the adoption of the UNFCCC⁶⁷. However, Africa completely missed out on the pilot. In 1995, the mechanism was repackaged as Activities Jointly Implemented and one project was carried out in Burkina Faso, involving forest management, provision of solar technology and energy-saving kerosene stoves. However, the project failed due to a number of reasons; emphasis on emissions reductions rather than avoidance, weak markets that could not support

⁶⁵ Source: www.greenmarkets.org accessed on 24th Sept 2008

⁶⁶ Harris E, *Working Paper on The Voluntary Carbon Market: Current & Future Market Status, and Implications for Development Benefits*, in IIED& NEF, *Can Voluntary Carbon Offsets assist Development* 2006 accessed from www.iied.org on 24th Sept 2008

⁶⁷ Odingo R, *Clean Mechanism Development Mechanism in Africa Network: A Framework for the Design of Sustainable Development Projects*, Nairobi :Climate Network Africa, 2006, pg 2

new technologies, absence of administrative and technical infrastructure, and lack of strategic vision in Africa concerning benefits thereof⁶⁸.

The Marrakesh Accords established the institutional framework of the CDM, accreditation rules for DoEs, participation requirements for Annex I & non-Annex I parties, project registration and validation procedures, monitoring, verification, certification and issuance of CERs. The CoP-7 however did not agree on the modalities of incorporating Land Use, Land Use Change and Forestry (LULUCF) in the CDM framework⁶⁹. These modalities would have made it possible for CDM to take into its approved projects' portfolio, afforestation and re-afforestation activities that operate as carbon sinks. The major concern then was the uncertainty associated with such projects due to non-permanence (forests can be easily destroyed), lack of additionality (no scientific proof that forest absorb more carbon than in a no-project scenario), leakage (through forest fires and deforestation), and socioeconomic and environmental impacts associated with projects. The issue was referred to the Intergovernmental Panel on Climate Change (IPCC) for further research and recommendations.

These recommendations from IPCC supported reintroduction of LULUCF and were later adopted during the CoP-9 held in Milan Italy in December 2003⁷⁰. The CoP-9 identified the need for modalities and procedures to govern small carbon sink projects under LULUCF. These were adopted during the CoP-10 held in Buenos Aires in December 2004⁷¹. It is important to note here that the slow inclusion of LULUCF projects under the CDM may have affected African countries negatively, considering that such projects are easily affordable and do not require stringent procedures during preparation. Such projects also offer much promise in terms of local participation and ownership and are therefore better suited for developing countries. However, forests that pre-existed the baseline year of 1990 still remained ineligible for CDM.

By 2005, it was evident from the regional distribution of CDM projects that Africa was clearly losing out⁷². This prompted the matter to be raised at the subsequent CoP/MoP-1 meeting held in Montreal Canada in Nov/Dec that year. The meeting sought views from parties on measures that could be undertaken to overcome barriers to the participation of African parties in CDM.

⁶⁸ Ibid, pg 3

⁶⁹ Decision 11/CP7 accessed from <http://unfccc.int/documentation/decisions> on 20th November 2008

⁷⁰ Decision 19/CP9 accessed from <http://unfccc.int/documentation/decisions> on 20th November 2008

⁷¹ Decision 14/CP10 accessed from <http://unfccc.int/documentation/decisions> on 20th November 2008

⁷² African Carbon Market Bulletin, Vol 15, No 1 Sept 2008 UNEP, Nairobi pg 1

The CDM Executive Board was tasked to develop recommendations for discussion at the next CoP/MoP meeting.

The next meeting CoP/MoP-2 was held in Nairobi in November 2006. The meeting considered the issues that were raised and resolved to launch the Nairobi Framework, which was designed as a program for enhancing participation of African countries in CDM, through capacity building, strengthening of Designated National Authorities (DNAs) among others. At the subsequent CoP/MoP-3 held in Bali Indonesia in December 2007, partners of the Nairobi Framework were urged to step up efforts to bring more CDM investments in the region. The meeting also resolved to suspend adaptation levy from CDM projects in least developed countries as a way of reducing barriers to CDM investments. Modalities for the Adaptation Fund were yet to be agreed upon before this decision was made⁷³.

Today, the value of carbon trade is estimated at \$64 billion, with a total volume of 1575 million metric tons of Carbon traded annually⁷⁴. CDM accounts for 33%% of the market in terms of volumes of carbon traded and \$7billion (or 9%), whereas the European Emissions Trade Market accounting for a larger 64% of the market share⁷⁵. At the Africa Carbon Forum held in Dakar September 2008, it was reported that Africa accounts for 2-3% of the market share⁷⁶. Out of the 1156 projects registered under CDM by the year 2008, only 27 were to be found in the continent.

Despite the measures undertaken in 2005, the Dakar Forum gave the following reasons to explain the marginal place of African in the global carbon trade: Weak regulatory frameworks that do not attract private sector confidence in CDM projects; Limited capacity and local expertise in project design and development, contracting and monitoring; Legal and institutional bottlenecks associated with direct foreign investments; e.g. corruption, perceptions of high political risks, lack of liberalized electricity industries; Limited availability of project finance; Weak heavy industrial base in the continent, leading to small CDM projects that are saddled with high transaction costs and lengthy approval procedures; Under-emphasis on sink projects by the CDM (Annex 1 countries have a ceiling of using 1% of sink credits) and its total exclusion in the European Emissions Trade Market, which constitutes a non-tariff trade barrier. There is also a

⁷³ Ibid pg 3

⁷⁴ Green Markets International, *The voluntary carbon markets: Status and potential to advance sustainable energy activities*, May 2007 www.green-markets.org/voluntary.htm (accessed on 17th November 2008)

⁷⁵ Ibid

⁷⁶ African Carbon Market Bulletin, supra pg 4

correspondingly low demand for CERs generated in Africa; Low awareness among policymakers on the potential of carbon trade; Uniform value of carbon means there is no higher returns for the higher CDM investments in Africa (under CDM, there is no premium attached to carbon prices unlike in the voluntary markets where social considerations e.g. human rights, poverty eradication etc attracted premiums over and above the set carbon price) and; Uncertainties facing the post-Kyoto period and the future of CDM

The above challenges notwithstanding, carbon projects in the continent are increasing. The range from renewable energy production (solar, wind, hydropower and geothermal power), rural electrification, forest sinks, biofuels, power-saving projects and introduction of clean technology, where consumption of fossil fuels is inevitable.

2.5 Key Legal Concepts Underpinning the Climate Change Legal Regime: Sustainable Development in Perspective

The climate change law regime (governing CDM) is underpinned by sustainable development as one of the key legal concepts of international environmental law. Other important principles of international law related to the concept of sustainable development are the precautionary principle, andc but differentiated responsibilities principle.

Perhaps the first internationally acclaimed definition of sustainable development was to be found in “Our Common Future”, which stated “..that sustainable development meant development that meets the needs of the present without compromising the ability of future generations to meet their own needs”⁷⁷. This definition was refined further by the 15th Governing Council of UNEP as “the maintenance, rational use and enhancement of natural resource base that underpins ecological resilience and economic growth and progress towards international equity”⁷⁸. This definition attempts to reconcile two hitherto problematic concepts namely; environmental protection and economic development. The tension between these two concepts arises from the fact that economic development is largely dependent on exploitation of

⁷⁷ Bruntland Commission on Environment and Development Report of 1987, cited in UNEP, 2006 supra at pg 25

⁷⁸ Decision 15/2 of May 26th 1989 quoted in Situma F, *Concepts and Principles of Environment Management, a paper presented at the Lawyers Symposium on Environmental Law and Practice in Kenya*, held at Merica Hotel in Nakuru, April 10-12 2006 (unpublished) pg 5

natural resources for production and consumption. If unchecked, exploitation of these resources will inevitably result in environmental degradation.

Even though “Our Common Future” gave the first authoritative definition of the concept of sustainable development, this does not mean that there were no prior notions of the term. As early as 1893, in the *Berhing Seal Fur Seals Arbitration*⁷⁹ the US asserted a right to ensure proper and legitimate use of seals and to protect them for the benefit of mankind from wanton destruction. This was also reflected in the 1946 International Convention for the Regulation of Whaling, which called for the need to conserve species for the benefit of present and future generations. In the 1958 Convention on Fishing and Conservation of the Living Resources of the High Seas, the treaty makes reference to maintenance of optimum sustainable yield by fishing nations in its Article 2. The 1968 African Convention for the Conservation of Nature and Natural Resources was perhaps the first treaty to emphasize the need to reconcile environmental issues with economic development when it extolled states to ensure that conservation and management of natural resources are treated as an integral part of national and/or regional development plans.

The principle was further enunciated at the 1972 Stockholm UN Conference on Human Environment with its expression as Principle 2 of the Stockholm Declaration. In his dissenting opinion in the *Gabcikovo v Nagymaros* case, Justice Weemantry notes that a third of the entire Stockholm declaration was devoted to the enterprise of reconciling the environmental issues and economic development without using the term, sustainable development⁸⁰. The 1980 World Conservation Strategy calling for sustainable utilization of species in State planning and management of economic activities⁸¹. This was followed by the 1982 World Charter for Nature that urged States to refrain from wasteful exploitation and utilization of living and non-renewable resources so as not to adversely affect the functioning of natural systems.⁸² The 1982 United Nations Convention Law of the Sea also mentions maximum sustainable yield (in Article 61.3). The 1985 ASEAN Agreement on Conservation of Nature and Natural Resources made the first reference to the Convention in Article 1.1 “contracting parties undertake to adopt

⁷⁹ *US v UK* (1893) 1 Moore International Arbitration 755 cited in Sands (2003) pg 253 in which the USA unsuccessfully tried to prevent British sealers from killing fur seals within Berhing Sea on the grounds that the activity was being carried out within territorial waters of the US and that the same was detrimental to the conservation of the said seals. The arbitration nevertheless resulted in the adoption of a convention by both states that sought to protect the fur seals in 1910

⁸⁰ International Court of Justice 1997 General List No 92 25th September 1997, quoted in UNEP, *Compendium of Summaries of Judicial Decisions in Environmental- Related Cases*, Nairobi: UNEP 2007 pg 233

⁸¹ Situma 2006 supra at pg 5

⁸² Ibid

measures with a view to attaining sustainable development". Since then, at least five international treaties⁸³ incorporated the term in their texts.

In the post- Rio Conference period, various treaties have incorporated the concept in either the preambular statement or main text. With the exception of the EU-ACP Agreement (Lome Convention of 2000), treaties endorsing the concept of sustainable development did not endeavor to define or explain what it means. This has led to a conclusion that the concept is merely a statement of objective or desired outcome by the international community, which is to be achieved through implementation of other legally binding obligations⁸⁴.

In Kenyan law, the Environmental Management and Coordination Act (EMCA) of 1999 has borrowed from "Our Common Future" definition of the concept which states "*development that meets the needs of the present generation without compromising the ability of future generations to meet their needs by maintaining the carrying capacity of the supporting ecosystems*"⁸⁵. To date, there has been no dispute touching on the definition of the concept of sustainable development referred to Kenyan courts for determination and as such, there is yet to be a judicial interpretation of this definition and therefore legal obligations that arising from it may remain vague for now. For now, the critique associated with the definition from "Our Common Future" (as detailed elsewhere in this report) will apply to the one contained in EMCA.

2.5.1 Legal Status of The Concept of Sustainable Development under International Environmental Law

There are two contending views about the legal status of the concept of sustainable development⁸⁶. One view, famously represented by Justice Weemantry holds that the concept has evolved into a legally binding norm of customary international law (referred to by the author as the normative view). The opposing view holds that the concept is merely a broad policy or

⁸³ 1989 Declaration of the G7 Paris Economic Summit (Pf 37-); 1990 Langkawi Commonwealth Declaration (pf 6); 1990 Bergen Declaration of the UN Economic Commission for Europe (pf 6) and 1991 Beijing Declaration of Developing Countries (Pf 2) and 1990 Agreement establishing European Bank for Reconstruction and Development at Art 2.1 (vii)

⁸⁴ French D, *International Law and Policy of Sustainable Development*, Manchester :Juris Publishing, 2005 at pg 43

⁸⁵ Section 2 of Environmental Management and Coordination Act of 1999

⁸⁶ See French(2005) *ibid* and Serger Marie-Clarie & Khalfan Ashfaq eds, *Sustainable Development Law; Principles, Practices and Prospects*, Oxford: Oxford University Press, 2004,

political statements, rather than a legal norm, to which states indicate a willingness (as opposed to acceptance) to be bound (referred to by the author as the instrumentalist view).

The normative view argues that the degree of recognition among states of a certain practice as obligatory gives the concept of sustainable development the nature of customary law. Further, the concept has developed as a norm of customary law out of necessity of reconciling the right to development and the right to environmental protection. Without this reconciliation, there would be normative anarchy. It was also argued that the normativity of the concept exists over and above the formalism of international law system, and has been exercised by early civilizations in Asia and Africa in the governance of agrarian societies⁸⁷.

The normative view has been criticized on the primary reason that there is no *opinion juris* to suggest that sustainable development is a rule of customary law. The fact that the concept has been frequently used in the various treaties is not necessarily evidence of general practice. This view is also backed the decision in *North Sea Continental Shelf Cases* (1969) in which it was held that for a legal rule to be considered as part of international customary law, it should possess “fundamentally norm-creating character”. In this case, Denmark and The Netherlands has unsuccessfully sought to have the court declare that the principle of equidistant provided for under the Article 6 of the 1958 Geneva Convention on the Continental Shelf, as a rule of customary law applicable in delimitation of continental shelf shared between the two states and (the then) West Germany. West Germany had not ratified the said Convention at the time the dispute was brought before the court. The court found that even though the rule was contained in a treaty and had been a source of state practice insofar as delimitation of continental shelf boundaries were concerned, it nevertheless lacked the fundamental norm-creating character, since its application was premised on the primary obligation to effect delimitation by agreement. For this, it cannot be used to determine legality or otherwise of a State’s action. The same can be said of sustainable development, i.e. in spite of appearing in several treaties, the concept still lacks a fundamental norm-creating characteristic⁸⁸.

The claim that sustainable development plays a critical reconciliation role is underplayed by the argument that international law has managed to progress without consistent principles of resolving conflicts.

⁸⁷ See Separate Opinion of Vice President Weeramantry in UNEP, *Compendium of Judicial Decisions in Environment Related Cases*, 2007 at pg 235

⁸⁸ French 2005 supra, pg 47

The instrumentalist view on the other hand considers the concept of sustainable development a collective term (political concept), which various legal principles (substantive, procedural and adjudicative) seeks to implement⁸⁹. As such, the concept is not legally binding and does not by itself bring about legal obligations. Inclusion of the concept in treaties as an objective reflects the intention of parties to be guided by sustainable development in their actions or in questioning the actions of others in the course of adjudication. However, they do note that the concept is a notion around which legally significant expectations regarding environmental conduct have begun to crystallize.

The view concedes that the ICJ (*In the Gabčíkovo case*) noted that the need to reconcile economic development with environmental protection was aptly expressed in the concept of sustainable development and thus gave judicial recognition to this concept and its role in international affairs as well as integrating environmental protection with other concerns⁹⁰. The Court also recognized importance of environment as a factor to be considered in international decision making broadly. However, the court did not give the sustainable development as a concept normative weight in that it did not review national action and declare it fell short of the standard of the concept. They also note that the tribunal in *Dispute Concerning Article 9 of OSPAR Convention*⁹¹ just like the ICJ in *Gabčíkovo* was making reference to material that had not become law in regard to the concept of sustainable development. In the former case, the UK and Ireland were locked in a dispute regarding disclosure of information on a nuclear waste plant that was to be set up on a coastal location fronting sea waters shared by both countries. Ireland argued that the UK was bound to disclosure as per the provisions of the 1990 Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice on Environmental Matters⁹², which was yet to come into force. Similarly, the concept of sustainable development is yet to become law and therefore cannot be invoked in the judicial assessment of state conduct.

2.5.2 Critique of the Concept of Sustainable Development

The widespread acceptance of the concept of sustainable development notwithstanding, there have emerged criticisms from various quarters. First, significant fuzziness and contradictions

⁸⁹ Ibid

⁹⁰ UNEP, *Compendium of Judicial Decisions in Environment Related Cases*, 2007 at pg 230

⁹¹ Ireland v UK

⁹² UNTS I37770 Vol 2161

surround the definition of the concept. It has been said that since the Rio Conference, 70 different definitions have been advanced on this concept.⁹³ Failure to underline a single acceptable and authoritative definition has made it difficult for the concept to gain normative character.

Secondly, by framing sustainable development in inter-generational equity terms, the concept does not clarify how non-material needs (such as freedom, peace and individual contentment) can be the subject of equity, since they are not consumable and therefore the subject of sustainable exploitation. Similarly, exploitation of natural resources today may not necessarily mean denial of the same to future generations. This is due to the fact that society's preferences for and capabilities to extract natural resources change with time due to scientific developments. For instance, the use of Uranium was discovered recently and therefore it would not be accurate to apply this concept to natural resources whose utility cannot be derived presently for lack of technology. It has also been argued that utilizing resources is inevitable (otherwise industries would be non-existent) and therefore the reasonable option is to maximize utilization of resources today and "bank" the benefits thereof so that future generations can derive enjoyment. In the same vein, the concept of the right of future generations to present-time resources is problematic. This is due to the fact that it may be difficult to predict the needs of future generations. It is possible that future generations might be better-off than current generations, if economic data on well being over the last few years is to go by⁹⁴. Advances in technology make it possible for the current generations to enjoy things (out of exploitation of resources) which previous generations could not and this casts doubt on the validity of intergenerational equity concept as a pillar of sustainable development.

Thirdly, it has been argued that the application of the concept does not question the ideology of economic growth but rather predicates the reversal of environmental degradation to sustained economic growth especially for developing countries⁹⁵. This invites the controversies attendant to economic growth discourses. In some economic models, activities that degrade the environment are calculated as positive gains to the economic growth e.g. destruction of forests is quantified as value of products generated from the forest industry. Economic growth, usually expressed in terms of Gross Domestic Product (GDP) and Gross National Product (GNP),

⁹³ Taylor Jerry, *Sustainable Development a Dubious Solution in Search of a Problem*, an Article Published in the Policy Analysis Bulletin No 449 of August 26th 2002

⁹⁴ *Ibid*, percentage of persons vulnerable to famine fell from 35% in 1970 to 18% in 1997

⁹⁵ *Ibid*

does not capture the entire state of well being of individuals. The parameter has also been accused of masking widespread inequalities prevalent in societies that consistently post positive economic growth. To this extent, therefore, the notion of inter generational equity is defeated by the primacy afforded to economic growth. There is therefore need to rethink the impact of economic growth on environmental protection by appreciating the dialectical interactions between the two concepts in realizing sustainable utilization of resources, and recognizing the intra-generational inequalities attendant to the narrow pursuit of economic growth strategies.

Fourthly, the concept can be viewed as unfairly apportioning blame to the poor for environmental degradation. The better view is that the poor are victims of local and global economic vicissitudes that compel them to degrade their environment in a bid to satisfy their pressing needs. It can for instance be argued that by denying the squatters tenure over their settlements, the landless end up treating natural resources therein as commons, resulting in unsustainable exploitation (tragedy of the commons). Thus, poor governance and sometimes market failures deny the poor the use of resources that are in abundance within their localities for economic development and well being. At the global level, unfair terms of international trade and high debt levels force poor countries to mortgage their resources for mere pittance. These countries therefore end up in an endless cycle of poverty and the accompanying environmental degradation.

Fifthly, some developing countries view the concept as an imposition by developed countries meant for dictating stricter and harsh terms of aid and trade⁹⁶. Most approval procedures for development loans given by bilateral and multilateral institutions have attached conditions on environmental protection and conservation as part of the loan package. It is argued that by imposing such conditions, the developed world fails to take into account the capacity of developing countries in ensuring sustainable management of the environment in light of the various challenges they face. Rather, development aid should be accompanied by financial support for sustainable development to developed countries and not as conditions for aid.

2.5.3 Legal Principles Underpinning the Concept of Sustainable Development

In 2002, the UN convened the World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa. The Summit formulated the Johannesburg Plan of Action as a

⁹⁶ <http://www.euractiv.com/en/sustainability/sustainable-development> accessed on 13th July 2008

blueprint of guiding states in realizing sustainable development through their policies and programmes. In the same year, the International Law Association (ILA) adopted the New Delhi Declaration of Principles on Law Related to Sustainable Development⁹⁷ (hereinafter referred to as “2002 New Delhi Principles”). The principles, though not deemed exhaustive constituted a major step towards clarifying and elaborating further the concept of sustainable development into elemental components that can form the basis of legal development. Below is a brief summary of the principles, their historical development and how they related to the international legal regime on climate change.

2.5.3.1 Principle of Integration

The principle requires that environmental protection considerations should be integrated into the development process. It is reflected in Principle 4 of the Rio Declaration which states that *“In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it”*. The principle is viewed as the backbone of sustainable development, in the sense that it provides a proximate definition of the concept while at the same time giving a practical indicator of how the same will be achieved⁹⁸.

The principle is also reflected in Principle 4 of the Stockholm Declaration which exhorts states to pay due attention to conservation issues when planning for economic development and Principle 13 which calls upon states to adopt integrated approach to development planning in order to achieve rational management of resources and improvement of the environment. It should however be noted that whereas Principle 13 focuses on states, Principle 4 of Rio declaration is unqualified and thus could be applicable to both state and non-state actors. Overtime, the principle has been incorporated in several other environmental treaties⁹⁹.

Article 2 of the UNFCCC provides that the overall purpose of the Convention is to be achieved in such a way that enables economic development to proceed in a sustainable way. Article 3.4 of the UNFCCC recognizes the right and obligations of parties to pursue sustainable development, while underscoring the importance of economic development in tackling climate change. Further, Article 4.1.(d) of UNFCCC enjoins the developed countries to promote sustainable development and cooperation in the conservation and enhancement of sinks. In this regards,

⁹⁷ ILA Resolution 3/2002

⁹⁸ French 2005 supra, pg 54

⁹⁹ Paragraph 7 of World Charter for Nature of 1982, Article 6.b of Biodiversity Convention and Article 2.2 of Desertification Convention among others

these parties are required to ensure that economic and social development and poverty eradication are overriding priorities in such cooperation i.e. under Article 4.2.g. It is however noted that the strategies and measures taken to combat climate change should not impede free international trade as defined by other treaties as stated in Article 3.5. of the UNFCCC.

However, it has been suggested that the principle should be broadened enough to incorporate social and cultural considerations which are relevant to the concept of sustainable development¹⁰⁰. The use of the principle in some texts engenders qualifiers that may limit its effective application. For instance, the 1992 UN Convention on Biological diversity (Biodiversity Convention) qualifies integration of environmental protection with development planning, with the rider “*as far as possible and as appropriate*”.¹⁰¹ This is perhaps evidence that the international community has not developed consensus on the legal status of the principle and its scope as well. This is likely to lead to inconsistencies in the application of principle, since no firm obligations arise as a result of the qualifiers.

2.5.3.2 Principle of Sustainable Use

The principle of sustainable use regards the sustainable utilization of natural resources with nature conservation¹⁰². This will require states to ensure that exploitation of natural resources does not exceed the capacity for renewal or optimal recovery. As important as it may sound, codification of the principle in international environmental law texts has been vague or unclear. Some aspects of this principle can be gleaned from Principle 7 of the Rio Declaration, which calls upon states to cooperate in order to conserve, protect and restore the health and integrity of earth’s ecosystem. Principle 8 calls upon states to reduce and eliminate unsustainable patterns of production and consumption.

However, efforts to promote the principle of sustainable use as a normative building block of the concept of sustainable development can be seen in the formulation of the 2002 ILA New Delhi Declaration of Principles. These instruments seek to realize this in two ways. Firstly, the documents try to impose a duty on States to ensure sustainable management and utilization of resources, within their territories. If adopted by the international community, this duty will rank the same manner as the “no harm” principle. Secondly, the instruments attempt to

¹⁰⁰ Ibid pg 56

¹⁰¹ Article 10 of Convention on Biodiversity

¹⁰² French Supra pg 57

internationalize the aforesaid duty by invoking the principle of common concern. This is meant to justify international interest in state's obligation to ensure sustainable use without interfering with sovereignty of states. For now though, the formulation of the principle in international law leaves discretion among states in enforcing the same at the municipal level.

The UNFCCC in its preamble calls upon States to regulate energy consumption and achieve energy efficiency through application of clean technologies, in order to control GHG emissions. The Kyoto Protocol requires State parties to protect and enhance GHG sinks, promote sustainable forms of agriculture, enhance use of renewable energy and recovery of methane through waste management¹⁰³. To this extent therefore, the climate change law regime promote the principle of sustainable use.

2.5.3.3 Principle of Equity and Poverty Eradication

The principle of equity refers to both inter-generational and intra-generational equity. The inter-generational equity principle was well articulated in the Bruntland Report. The Report noted that natural resources are inherited from preceding generations and therefore present generation have an obligation to transmit the resources in a good or better state to future generations¹⁰⁴. Intra-generation equity seeks to impose an obligation of ensuring just allocation of natural resources to human beings within the current generation¹⁰⁵. Thus the right to development ought to be implemented in a manner that ensures equity within and across generations. The obligation to address poverty as integral to sustainable development is closely tied to the notion of equity within generations. According to this principle, there is an implied duty among states to cooperate in order to alleviate global poverty in accordance with the International Covenant on Economic, Social and Cultural Rights, Millennium Development Goals Declaration and other human rights treaties. The duty of state to ensure poverty alleviation programs are in place within its jurisdiction is also suggested.

The normative status of this principle is not yet clear, despite appearing on recent international treaties¹⁰⁶. The Preamble of the UNFCCC emphasizes that responses to climate change should be coordinated with social and economic development to achieve among other things poverty

¹⁰³ Article 2 of the Kyoto Protocol

¹⁰⁴ Cited in Khalfan & Segger supra pg 124

¹⁰⁵ Ibid pg 125

¹⁰⁶ Preambles of Desertification Convention and Biodiversity Convention

eradication. Even international tribunals¹⁰⁷ have discussed the principle; substantive references on intergenerational equity are to be found in separate and dissenting opinions, an indication that judicial interpretation of the principle was not central in determination of the disputes concerned. However, this indicates a growing trend that states are willing to recognize the fact that sustainable development must be equitable and seek to eradicate poverty.

2.5.3.4 Common but Differentiated Responsibilities

Even though international law confers juridical equality to each and every State, this concept has emerged in international environmental law as recognition that solutions to international environmental problems ought to take into account the role played by each State in contributing to the problem and the capacity of each State to fulfil its obligations in regard to realizing solutions¹⁰⁸. For this reason, this concept places more responsibilities to developed countries in terms of providing solutions to some global environmental problems as opposed to developing countries. Thus, the principle comprises two elements: common general responsibility of States in the protection of the environment and; differentiated responsibilities for environmental protection taking into account the role played and capacity of each State in contributing to the problem and its solutions respectively.

Implementation of the standard entails setting of different standards for environmental protection for different categories of States depending on their circumstances. It also entails establishment of support mechanisms by rich or endowed States through which weaker or less endowed States can draw resources necessary to address environmental protection concerns.

2.5.3.5 Precautionary Principle

The precautionary principle, which is spelt out in Principle 15 of the Rio Declaration, forbids States from using scientific uncertainty as a reason for delaying or postponing cost-effective measures to prevent environmental harm, where clear threats have been established¹⁰⁹. The principle comprises the following essential elements¹¹⁰:

- Magnitude: this is the degree of harm needed to trigger the application of the principle

¹⁰⁷ See for instance the Justice Weemantry's separate opinions in *Nuclear Weapons Advisory Opinion Case* and *Maritime Delimitation in the Area Between Greenland and Jan Mayen (Denmark v Norway)* cited in Khalfan & Segger supra

¹⁰⁸ UNEP, *Training Manual on International Law*, Nairobi: UNEP 2006 pg 30

¹⁰⁹ Hunter supra at pg 511

¹¹⁰ Segger & Khalfan supra pg 146-7

- Distribution of risk: the risk rarely falls equally on those affected
- Probability of damage: possibility of harm occurring
- Proportionality between the magnitude of potential harm and its likelihood of occurring: there is an inverse relation between the two for precaution to be triggered.

This principle is based on the assumption that natural systems are vulnerable, rather than invulnerable and resilient, and hence require protection¹¹¹. Its application leads to shift of burden of proof from environmental managers to development proponents, with regard to implementation of protective measures to mitigate possible harm. Out of this principle, requirements for environmental assessments have been imposed on States for projects that are likely to have impacts on other States e.g. damming of shared waters.

Significant scientific uncertainty surrounds the issue of climate change. However, Article 3.3 of the UNFCCC calls upon states to take precautionary measures to anticipate, prevent and minimize the causes of climate change and mitigate its causes. At the same time, the Convention (Article 4.1.g.j)- urges parties to continue undertake scientific research with a view to informing better strategies for combating phenomenon. This principle is important for the CDM as it becomes the basis for inclusion, rather than exclusion, of sink projects in the absence of scientific information.

2.5.3.6 Principle of Public Participation

This principle requires States to involve the public in environmental policymaking and afford access to justice for their citizens in environmental decision-making¹¹². Most pre-Rio Conference international treaties view participation as a necessary component for sustainable development¹¹³. However, in the post-Rio period, public participation is increasingly viewed as a right, with its own intrinsic value as well as a facilitative role in the realization of other rights including right to development¹¹⁴.

¹¹¹ Ibid

¹¹² Hunter supra 534-5

¹¹³ See Article 21 of the Universal Declaration on Human Rights, Article 25 of International Covenant on Civil and Political Rights and The 1986 UN Declaration on the Right to Development.

¹¹⁴ Principle 10 of the Rio Declaration, 1994 Desertification Convention, 1994 Draft Principles on Human Rights and the Environment, 1998 Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters

The Concept of public participation comprises the following elements¹¹⁵:

- Access to information: This entails a duty on the state of providing information upon request, and to collect and disseminate information on the environment as a matter of routine.
- Participation in Decision-making: this will include representation of stakeholders in decision-making structures (including decentralization and principle of subsidiarity), duty to provide sufficient notice to the public on the proposed decisions to be made, the procedure of decision making affords opportunities for public participation, access to information for consideration during the decision-making process among others. It can also include participation in enforcement and monitoring of decisions.
- Access to justice: this means a duty on the State to afford those aggrieved by the procedures or outcomes of the process an opportunity of seeking redress.

It should be noted that the UNFCCC requires States to periodically publish information on anthropogenic emissions inventories and national programmes on climate change mitigation¹¹⁶. These actions can be construed as promoting access to information. However, the Convention is generally devoid of provisions on public participation and access to justice.

2.5.4 Principle of Good Governance

The International Law Association has identified good governance as an important principle which requires governments to ensure reliable institutions for coherent, effective decision-making and respect for the rule of law¹¹⁷. The emergence of the principle is perhaps premised on the assumption that every society seeks to realize a system of governance that promotes, supports and sustains human development and welfare¹¹⁸. Whereas the concept of good governance is difficult to define, it has nevertheless assumed great importance and recognition. The term was first used by international financial institutions such as the World Bank and International Monetary Fund, which called for improvement and reforms in public sector management, legal framework, accountability and transparency of developing countries in order to achieve sustainable economic development¹¹⁹.

¹¹⁵ Segger & Khalfan Supra, pg 158-160

¹¹⁶ Article 4 (1) (a) & (b) of the UNFCCC

¹¹⁷ Ibid pg 166

¹¹⁸ Ibid

¹¹⁹ See generally, Hirst, P & Thompson G. *Globalisation in Question: The International Economy and the Possibilities of Governance, 4th edn*, 2008, Cambridge: Polity Press

The linkage between good governance and sustainable development is stated in the Johannesburg Plan of Implementation (of the 2002 World Summit for Sustainable Development). The document lists elements of good governance as the basis for sustainable development to include; formulation of sound environmental, social and economic policies, democratic institutions responsive to the needs of the people, the rule of law, anti-corruption measures, gender equality and enabling environment for investments¹²⁰. It should be noted here that good governance is to be pursued both at domestic and international levels (in the inter-state bilateral and multi-lateral relations). Unfortunately though, the UNFCCC and Kyoto Protocol have no specific provisions on good governance as expounded hereinabove.

2.6 CONCLUSIONS

The global carbon trade has eventually matured into a multi-billion dollar industry. climate change law has influenced the evolution of the trade, by providing the enabling legal framework. Even in countries that are yet to ratify the Kyoto Protocol, carbon trade has flourished under the voluntary mechanisms, which substantially conform to the mainstream model. However, the evolution of the model has been driven largely by the developed countries and emerging economies of Asia and Latin America. As a result, the developing countries (especially African nations) have expressed their displeasure with the process, leading to establishing the Nairobi Framework Initiative which seeks to eradicate barriers faced by these nations.

In view of the rapid growth of Carbon trade at the global level, opportunities abound for developing countries to tap into existing markets in order to spur economic growth while fulfilling their obligations towards reduction of GHG gases. In the forthcoming negotiation on the post-Kyoto regime, there is need for developing countries to push for recognition of low-investment projects (especially under the lucrative EU Emissions Trading Scheme) such as agro-forestry which poor countries can initiate without facing undue investment challenges. There is also need for countries to review legal and policy barriers to investments, since carbon projects are deemed as such. In the meantime, African countries ought to focus on attracting voluntary carbon markets owing to their flexibility and possibilities for higher returns.

In development of national legal regimes to regulate carbon trade, the concept of sustainable development provides the broad conceptual basis from an environmental law perspective. In

¹²⁰ Ibid pg 169

other words, developing a municipal carbon trade law is largely legislating sustainable development. The review of existing literature reveals that the concept though widely recognized and reflected in a growing number of environmental treaties, it is yet to gain authoritative normativity associated with related concepts such as the principle of good neighbourliness or permanent sovereignty over natural resources among others.

Efforts to clarify and elaborate further the concept of sustainable development have resulted in the 2002 New Delhi Principles under the auspices of the ILA. These principles for now provide a basis for analyzing international and municipal law related to sustainable law. This paper adopts these principles as the analytical framework for interrogating the extent to which international and municipal law embraces the concept of sustainable development. A survey of the climate change law indicates that the international framework has to a large extent embraced these principles and therefore sustainable development is sufficiently mainstreamed.

In the next chapter, I will examine the national policy and legal framework governing all aspects of carbon trade in Kenya. I will analyze the sufficiency of the framework from a sustainable development point of view. I will in addition identify emerging issues in the nascent carbon trade in Kenya that merit legal intervention, in order to facilitate the growth in this area.

CHAPTER THREE:

ANALYSIS OF KENYA'S LEGAL AND POLICY FRAMEWORK RELEVANT TO CARBON TRADE

3.1 Introduction

In 2008, Kenya had one registered CDM project (i.e. Mumias Bagasse Co-generation Project) whereas 7 were still in the pipeline¹²¹. As for the registered project, a 35 MW Bagasse Co-generation project owned by Mumias Sugar Company stands to earn \$1,102,000 for generating 551 kTCO₂ by 2012. Once the pipeline projects are registered, they will rake in \$ 5,704,000 from 2852 kTCO₂ up to 2012. From these projects, Kenyan CDM projects are set to earn approx \$20M or Ksh 1.45B up to 2020. The Green Belt Movement is currently engaged in afforestation and re-forestation projects in the Mount Kenya region though under the voluntary carbon market¹²². It is therefore correct to state that the carbon trade is slowly but surely taking firm root in Kenya, with attendant financial benefits.

Among the factors of success or otherwise for CDM projects in Africa is the existence of an enabling framework specific to CDM as well those governing forestry, energy and environment. This chapter will analyse Kenya's regulatory framework relevant to carbon trade. The paper will assess the extent to which this framework is in line with the international climate change legal regime. The paper will also assess the extent to which the concept of sustainable development is embraced by the said framework.

3.2 Regulatory Framework of Carbon Trade in Kenya

There is no specific law regulating carbon trade in Kenya. However, regulatory activities of carbon trade are conducted by the National Environment Management Authority (NEMA), in its capacity as the Designated National Authority (DNA). NEMA on the other hand is a creature of the Environmental Management and Coordination Act (EMCA) of 1999. Whereas

¹²¹ See Jørgen Fenhann, *CDM pipeline projects as of 01-03-09* UNEP Risø Centre www.cd4cdm.org (accessed on 4th April 2009)

¹²² Interview with Alfred Gichu, Chief Forest Officer in Charge of Bioenergy and Carbon Project Promotion on 15th May 2009 in Nairobi

EMCA is not *per se* intended to domesticate the climate change law regime, it however confers a broad mandate of environmental management to NEMA, which can be interpreted widely enough to accommodate regulatory responsibilities relevant to carbon trade. Section 9.2.g of EMCA lists one of the functions of NEMA as being *to advise the government on regional and international conventions, treaties and agreements to which Kenya should be a party and follow up on implementation of such agreements.*” It can also be inferred from this proviso that NEMA has a role to play in the implementation of the international climate change regime. The capacity of NEMA to effectively play that role is a different matter altogether.

Pursuant to its role as DNA, NEMA published the Kenya National Guidelines on The Clean Development Mechanism (hereinafter referred to as the “CDM Guidelines”) in 2001. NEMA also published Sustainable Development Benefits Delivered by the CDM (hereinafter referred to as “the Sustainable Development Guidelines”) pursuant to Marrakesh Accords in 2003. The two documents provide the framework for guiding policymakers in making the relevant decisions regarding registration of carbon trade projects within the context of the CDM. It is noteworthy that at the time this paper was written, these guidelines were already subjected to a process of review¹²³.

3.2.1 Kenya National Guidelines on the Clean Development Mechanism of 2001¹²⁴

3.2.1.1 Overview of the CDM Guidelines

The overall objective of the CDM Guidelines is to empower policymakers in order to make decisions that are in the best national interest during negotiations and implementation of CDM projects. The Guidelines provide a background and rationale for Kenya’s involvement in the CDM and the need to build national capacity to ensure that this happens. The potential benefits of the CDM with regard to financing for sustainable development and poverty eradication are underscored.

The CDM Guidelines prioritize CDM projects focused on non-greenhouse gas emitting technologies, especially on non-carbon renewable energy technologies. Project criteria which the CDM projects are supposed to meet is also spelt out as indicated in the table below.

¹²³ Interview with Emily Massawa, Climate Change Focal Point NEMA on November 4th 2008, Nairobi

¹²⁴ NEMA, *Kenya National Guidelines on the Clean Development Mechanism* 2001, www.nema.go.ke at pg 4

Table: Project criteria of CDM projects

- Consistency of the project objectives with sustainable development and national development priorities
- Contribution to clean technology transfer and capacity building
- Public participation in all aspects of the project with corresponding equitable distribution of benefits (including economic and environmental benefits)
- Contribution to achievement of the overall objective of climate law regime with regard to stabilization of GHGs in the atmosphere
- Delinking project financing from Official Development Assistance
- Compliance with environmental laws (municipal and international).

The guidelines recognize the use of carbon offsets or emission reduction credits and adaptation levy as determined by the international climate law regime, as mechanisms for ensuring equitable sharing of proceeds.

Methodological issues that guide the entire process of registration of CDM project are described in detail¹²⁵. The Guidelines favour project-by-project baselines as opposed to sector-wide baselines for fear that some projects therein may claim emission reductions that are not attributable to their activities. Responsibilities regarding assessment of projects (against compliance with set project criteria) and verification of actual emission reduction are vested with the local entities described hereunder (3.2.1.2). Agreements on project financing are left to project proponents, though project proposals are to be approved by respective governments upon conclusion of the said agreements. The Guidelines excluded Land Use, Land Use Change and Forestry (LULUCF) projects from CDM for minimum technology transfer and lack of capacity to quantify emissions reductions potential and related scientific uncertainty.

Benefits to accrue from CDM projects were listed as job creation, poverty reduction, increased investment (over and above Official Development Aid-ODA), and promotion of environmentally cleaner technologies. Projects that were prioritized included energy efficiency, renewable energy sources, geothermal energy, energy generation through biogas and sustainable public infrastructure projects

3.2.1.2 Institutional Framework of CDM Project Approval Process

¹²⁵ Ibid pg 6

The following institutions are provided for in the CDM guidelines:

3.2.1.2.1 The National Climate Change Focal Point (NCCFP):

The NCCFP was originally based at the Ministry of Environment but was later moved to the NEMA for ease in coordination. The functions of this organ, which are exercised by an individual included defining national policy on CDM, liaison with UNFCCC Secretariat, appointment of National Clearing House and the Expert Panel and approval of CDM Projects

3.2.1.2.2 The CDM National Clearing House (NCH)

The NCH comprises individuals drawn from the public and private sector institutions, civil society and the academia. The term of office of NCH is linked to CDM project timeframe i.e. the NCH expires upon expiry of registered CDM projects. The primary functions of the NCH include appraisal and verification of CDM projects before making recommendations for approval/disapproval by NEMA. Auxiliary functions include promotion and coordination of CDM project activities and advising the government on related issues:

3.2.1.2.3 National Environment Management Authority (NEMA)

As stated elsewhere, NEMA is the DNA for CDM projects in Kenya. It plays the role of hosting the NCCFP and approval of projects. The functions of DNA at NEMA have in practice been carried out by the NCCFP.

The Director-General of NEMA signs the letter of approval for CDM projects on behalf of the Authority, upon recommendations of the NCH. The DG can also issue a letter of no-objection upon screening of project idea notes, though this is not a strict requirement.

Other institutions relevant to the CDM process include:

3.2.1.2.4 The National Climate Change Activities Coordination Committee (NCCACC)¹²⁶

This is a 25-member multi-sectoral committee with membership drawn from the government ministries, parastatals, local authorities, private sector and universities. The NCCACC was set up

¹²⁶ NEMA, *Report on Kenya's Need to Implement Article 6 of the UNFCCC, Draft Report*, 2005 accessed from www.unep.org/dec/doc/kenya.doc accessed on 15th Feb 2009

by the Inter-Ministerial Committee on the Environment (IMEC). The mandate of the NCCACC is to coordinate climate change activities of the government as well as in advising the government on policies related to the same. The NCCFP acts as the secretary to the NCCACC as well as its technical working groups.

NCCACC discharges its mandate through 4 technical working groups on: Vulnerability and adaptation, Mitigation Options, Training, Education and Public Awareness and GHG Inventory

3.2.1.2.5 Parliamentary Network on Renewable Energy and Climate Change (PANERECC)¹²⁷

PANERECC was formed as a follow-up to the CoP12 held in 2006, as a cross-party initiative for parliamentarians, with the mission of promoting renewable energy and climate change issues within and outside parliament. It seeks to create awareness and influence policymaking process relevant to renewable energy and climate change. This is to be achieved through educating MPs on issues related to climate change and renewable energy, research and critiquing policy instruments and legal frameworks meant to address the two issues.

With time however, PANERECC has evolved into an open membership network, to which members of the private sector, civil society and ex parliamentarians can belong. Institutionally, PANERECC is hosted by the Parliamentary Committee on Energy, Communications and Public Works. Its stated objectives include; To facilitate deeper understanding of climate change issues in particular Kyoto Protocol mechanisms and their relevance to national development; To strengthen understanding on the new and renewable energy technologies, challenges and opportunities related to their increased uptake and their link to climate change; and To provide information on available financial and investment opportunities for promoting adaptation to climate change

PANERECC focus is on tackling climate change and its negative impacts on development as well as promoting the accelerated development of sustainable energy from renewable sources to achieve social and economic equity, reducing fuel imports and foreign exchange drain, enhancing Kenya's domestic and the global environment, and promoting private sector growth

¹²⁷ See www.panerecc.or.ke accessed on 15th Feb 2009

and employment generation in the renewable energy sector. So far, the network has been holding seminars for its members where academic papers have been presented and debated as a way of educating MPs on the issues related to climate change and renewable energy.

Table 1: Functions of institutions relevant to carbon trade and climate change

National Climate Change Focal Point:

- Defining National Policy on CDM
- Liaison with UNFCCC Secretariat
- Appointment of National Clearing House and the Expert Panel
- Approval of CDM Projects

The CDM National Clearing House:

- Setting criteria for CDM projects
- Processing of CDM project proposals
- Monitoring and evaluation of all CDM projects
- Verification and recommendation of CDM project proposals for approval/disapproval
- Liaison with stakeholders
- Promotion of CDM projects
- Coordination of all CDM Projects activities
- Advising the Government through the NCCFP on all issues pertaining to the CDM
- Development of a national database for CDM projects

National Environment Management Authority (NEMA)

- Signing and issuance of letter of approval
- Screening project idea notes (PIN)
- Issuance of letters of no object Approval of CDM projects on recommendations by NCH

The National Climate Change Activities Coordination Committee (NCCACC)

- Advice on implications of the commitments under the UNFCCC and other international agreements related to climate change.
- Establish a networked database on climate change impacts, response strategies and research activities.
- Advice on issues pertaining to the Global Environment Facility (GEF) or any other international financial mechanisms.
- Translate the objectives of the UNFCCC and related protocols into national development priorities.
- Harness and coordinate available national expertise, sectoral initiatives, resources mobilization, and strengthen human and institutional capacities as well as develop and harmonize multi-sectoral programmes.

Parliamentary Network on Renewable Energy and Climate Change (PANERECC)

- To facilitate deeper understanding of climate change issues in particular Kyoto Protocol mechanisms and their relevance to national development
- To strengthen understanding on the new and renewable energy technologies, challenges and opportunities related to their increased uptake and their link to climate change
- To provide information on available financial and investment opportunities for promoting adaptation to climate change

3.2.2 Sustainable Development Benefits Delivered by the Clean Development Mechanism (Sustainable Development Guidelines)¹²⁸

The Sustainable Development Guidelines were developed by the NEMA pursuant to the Marrakesh Accords. Sustainable development requirements imposed on CDM arises from two issues, namely the broad objective of reduction of GHG emission and the requirement that CDM projects should meet the sustainable development criteria of non-Annex 1 host country. These guidelines set out the countries' sustainable development criteria and therefore are meant to provide an objective basis of determining whether CDM projects meet the said criteria.

The guidelines have not adopted any specific definition of the concept of sustainable development, but rather key elements underpinning policy framework relating to the term are listed. These are economic development, rational use of natural resources; preservation of ecosystem functions and enhancement of social well being and equity.

The policy basis of setting sustainable development criteria for Kenya is derived from the National Poverty Reduction Strategy (of 2001) and the Sessional Paper No 2 of 1996 on Industrial Transformation which sought to make Kenya an industrial country by 2020¹²⁹. The Guidelines conclude that the country's priorities for achieving sustainable development are poverty eradication and reduction of unemployment, which are to be achieved through industrial and agricultural development. Development of sustainable energy sources is viewed as critical for achieving industrialization, in order to wean the country from over-reliance on hydro power (which is now susceptible to adverse effects of climatic changes) and embracing environmentally sustainable options. The issue of gender equity is also tied to the priority of poverty alleviation, as recognition of the gendered nature of poverty in Kenya.

The Guidelines propose an evaluative framework of assessing CDM projects using sets of indicators clustered around social, environmental and economic development. Social development indicators focus on poverty alleviation and gender equity. The assessment therefore looks at how a project impacts on employment creation, women empowerment and equitable distribution of wealth.

¹²⁸ The Guidelines were authored by Emily Ojoo-Massawa in her capacity as the Coordinator, Climate Change Enabling Activities & National Climate Change Focal Point in NEMA

¹²⁹ Sustainable Development Guidelines at pg 5

Environmental development indicators assess the impact of the project on the global environment with regard to GHG reductions and leakages, and on the local environment with regard to improvement of local environment and equitable and efficient resource use.

Economic development indicators look at macro-economic aspects such as the projects' contribution to reduction of foreign expenditure and national debt as well as long term issues. They also consider the cost-effectiveness of a project as a micro-economic issue. Energy related indicators assess the project contribution to energy source diversification, supply security and energy efficiency/saving.

The Guidelines contain a Matrix for Assessing Sustainable Development criteria of CDM Project (or simply the Matrix). The Matrix is the tool which decision-makers will use in assessing CDM projects. The project is supposed to be assessed in all its phases (i.e. preparation, running/implementation and phase out). Side activities (i.e. any activity that is considered as spin-off and directly related with implementation of the project) are also considered. For each phase and side activity, the impact of the project is assessed against each indicator. The impact is thus categorized as positive, negative or neutral. Positive and negative impact categories are further rated as low, medium and high. The assessment is similar to the one conducted under environmental impact assessment (EIA), the only difference being that assessment on social impacts is very pronounced. The assessment is largely qualitative and the Guidelines concede some element of subjectivity could be attendant.

3.3 Critique of the Regulatory Framework

3.3.1 Legal soundness of the Regulatory approach

International treaties are implemented at the Municipal level primarily through domestication after ratification. A statute is enacted by parliament, thus giving effect to the provisions of the treaty. However, according to the Bangalore Principles of 1989¹³⁰, national courts can incorporate international treaty law in their decisions, if the country concerned has ratified the

¹³⁰130 The Bangalore Principles were released as a summary of issues discussed at a Judicial Colloquium on "The Domestic Application of International Human Rights Norms", held in Bangalore, India from 24 - 26 February 1988. Reprinted in Commonwealth Secretariat Developing Human Rights Jurisprudence vol 3 151 and in 1 African Journal of International and Comparative Law/RADIC (1989) 345

same, whether or not the same has been domesticated. This is consistent with the Kelsenian monoist theory of public international law, which holds that international law is part of the municipal legal system of a country that has ratified that law. The Bangalore Principles holds as follows:

“It is within the proper nature of the judicial process and well-established judicial functions for national courts to have regard to international obligations which a country undertakes – whether or not they have been incorporated into domestic law – for the purpose of removing ambiguity or uncertainty from national constitutions, legislation or common law”¹³¹.

However, the power of incorporation by court in this case is also severely limited in situations where national legislation goes against the international treaty law to which the state is party to and has ratified. The Bangalore Principles go on to state:

“However, where national law is clear and inconsistent with the international obligation of the state concerned, in common law countries the national court is obliged to give effect to national law. In such cases the court should draw such inconsistency to the attention of the appropriate authorities since the supremacy of national law in no way mitigates a breach of an international legal obligation which is undertaken by a country”.

The role of courts in domestication of international treaties has been accepted in Kenya¹³². Even though Kenya has ratified the UNFCCC and the Kyoto Protocol, the country has not domesticated the two regimes. No disputes have been referred to the national courts regarding the implementation of the two treaties and thus, no incident of judicial incorporation of the same has been reported. The question that arises is with regard to the legal basis on which Kenya is regulating carbon trade as part of its obligations under the two treaties.

NEMA ostensibly published the two guidelines by virtue of the mandate conferred under Section 9.2.g of the EMCA. The High Court of Kenya, in the case *R v Minister for Transport Ex Parte Waa Ship Garbage Collector and 15 Others*,¹³³ affirmed this position where the applicants were seeking to block Kenya Ports Authority from entering into agreement with other two companies over handling of sludge from ships. The applicants had contended that the said agreement was illegal, since it purported to enforce the provisions of the International Convention on Prevention of Pollution by Ships of 1973 as modified by a 1978 treaty (MARPOL 73/78), which had not been domesticated in Kenya. The court, however, held that under section 9.2.g of

¹³¹ See reprint in African Journal of International and Comparative Law/RADIC (1989) 345 and accessed from www.chr.up.ac.za on 23-03-09

¹³² See for instance *R M & Another v R* (2006) eKLR

¹³³ Miscellaneous Civil Application No 617 of 2003 reported in Kenya Law Reports (Environment & Land) 1

EMCA, NEMA is given the authority to take steps to implement the provisions of regional and international conventions and agreements to which Kenya is a party, like MARPOL 73/78, where local circumstances demand or allow. In addition, the court also cited other provisions of EMCA¹³⁴ which NEMA is empowered to control and regulate all acts, and even omissions, that are polluting or likely to pollute the environment. However, to what extent is this argument applicable to the climate change regime and carbon trade regulation for that matter?

Firstly, it is important to note that EMCA did not clearly anticipate implementation of international climate change legal regime. Even though EMCA was enacted in 1999, three years after Kenya adopted and ratified the UNFCCC, nowhere in the Act are direct references made to this convention, unlike in the case of comparable international anti-pollution, biodiversity and desertification legal regimes which are specifically mentioned and measures of implementation clearly outlined.

Secondly, closer reading of Section 9.2.g along with sections 124 and 141 reveal the proper role and mandate of NEMA in the enforcement of international regimes. Section 124 mandates NEMA to initiate legislative proposals for consideration by the Attorney General (AG) for the purpose of implementation of conventions, treaties or agreements concerning the environment. The relevant section states thus;

124.(1) Where Kenya is a party to an international treaty, convention or agreement, whether bilateral or multilateral, concerning the management of the environment, the Authority shall, subject to the direction and control of the Council, in consultation with relevant lead agencies: -

- (a) initiate legislative proposals for consideration by the Attorney-General, for purposes of giving effect to such treaty, convention or agreement in Kenya or for enabling Kenya to perform her obligations or exercise her rights under such treaty, convention or agreement; and
- (b) Identify other appropriate measures necessary for the national implementation of such treaty, convention or agreement.

It is therefore plausible to argue that with respect to the implementation of international climate change regime (which EMCA had not properly anticipated), the proper role of NEMA would have been to initiate local legislation for domestication. So far, neither has this been done, nor can one purport that the CDM or Sustainable Development Guidelines validly serve this purpose.

¹³⁴ Sections 7, 9(1), 87, 88(1), 89 and 93(1) of the Environmental Management and Co-ordination Act

In the event that one argues that provisions of Sec 9 (2) (g) remain overriding, then attention must be paid to provisions of Section 147. This section provides for the procedure of promulgation of regulations. The Minister for Environment is empowered to make regulations for giving the full effect of the Act. The role of NEMA is to recommend to the Minister the necessary regulations to be enacted. The two aforementioned Guidelines are yet to be published by the Minister and therefore can only be considered as NEMA's internal documents with doubtful legal effect.

Thirdly, according to Kelsenian theory on public international law, where international law requires domestic action through judicial and administrative acts, domestication of the said law is a prerequisite. The international climate change law regime requires Designated National Authorities (DNA), such as NEMA, to undertake regulatory functions with regard to approval of carbon projects. For this reason, proper legislation on this matter is deemed necessary.

In effect, the legal validity of the said Guidelines is, indeed, questionable and may compromise the effective regulation of carbon trade in their current legal status. The proper regulatory approach would be to enact a climate change law that contains the content of the Guidelines or publish the said Guidelines as ministerial regulations. To this extent, therefore, the current regulatory framework is inconsistent with the international climate law regime from the perspective of Kelsenian theory on public international law.

3.3.2 Scope of the Guidelines

Both the CDM and Sustainable Development Guidelines are limited to CDM projects under the Kyoto Protocol. Projects under Voluntary carbon markets are excluded. The question, however, is whether carbon projects established for voluntary markets be subject to local regulations.

Voluntary carbon market is the most dynamic. It attracts a wide range of actors including companies (wishing to buy offsets for their own operations or on behalf of their customers), events (e.g. the 2006 FIFA World Cup), intermediaries (brokers) who sell offsets to secondary markets, etc. Elsewhere in this report, it has been said that voluntary carbon markets are likely to attract higher returns on credits when compared to CDM, due to variability of project costs and the niche markets they attract. Owing to this, projects earmarked for this market are more likely to increase in the coming future. The fact that voluntary carbon market projects are usually small in size makes them attractive to developing countries. Already in Kenya, the Green Belt Movement (an NGO) is already involved in a community level project for re-forestation of Mount Kenya region as a voluntary market project¹³⁵.

As the importance of the voluntary market grows, it is important for developing countries to ensure that the said projects advance national interest, especially from a sustainable development perspective. Allowing proponents of these projects to contract directly with communities or NGOs without rigorous scrutiny of the implications of their work may undermine the potential of carbon trade contributing to sustainable development in the developing world.

3.3.3 Methodology

The CDM Guidelines advocate for use of project baselines as opposed to sector-wide baselines. This resonates with the methodological concerns that prevailed at the time the Guidelines were issued i.e. the process of ascertaining and attributing offsets to carbon projects was fraught with uncertainty. In its elaboration of CDM guidelines, the CoP/MoP 1 stated thus:

“A local/regional/national policy or standard cannot be considered as a clean development mechanism project activity, but project activities under a program of activities can be registered as a single clean development mechanism project activity provided that approved baseline and monitoring methodologies are used

¹³⁵ Interview with Alfred Gichu supra

that, inter alia, define the appropriate boundary, avoid double-counting and account for leakage, ensuring that the emission reductions are real, measurable and verifiable, and additional to any that would occur in the absence of the project activity.”¹³⁶

The CDM Guidelines embraced this thinking for understandable reasons. However, developing countries that saw opportunity in bundling projects into sectoral programmes in order to maximize offsets, began lobbying for change in approach. In a submission to the Executive Board of CDM at its 25th Meeting, Nicaragua, Costa Rica and Dominican Republic defined program activity as “*emission reductions achieved by multiple verifiable activities executed over time as a direct response to a government measure or private sector initiative*”¹³⁷. They contended that components of a programme were amenable to objective assessments both at baseline and emissions’ reduction verification levels. An example of a program applicable to the Kenyan context is the replacement of inefficient public or residential lighting system with more efficient one.

In the CoP12/MoP2 held in Nairobi in 2006, it was resolved that the Executive Board of CDM should come up with definition of project activities to be included in the program activities and modalities for the registration of the same as a single CDM project¹³⁸. The Executive Board went ahead and approved modalities which were adopted at the CoP13/MoP3 held in Bali 2007¹³⁹. The local CDM guidelines ought to take into account this development and accordingly embrace programme activities, which are applicable and relevant to the Kenyan (and developing countries’) context.

By the time CoP-10 was held in Buenos Aires in December 2004¹⁴⁰, modalities for baselines for LULUCF projects had been agreed upon and adopted. Thus, the CDM guidelines ought to reflect this change. What is more, the debate on new projects is focused on Reducing Emissions from Deforestation and Degradation (REDD). REDD seeks to provide incentives to countries with forests to avoid deforestations while at the same time conserve forests and biodiversity dependent on them. REDD is expected to include forests that pre-existed the 1990 baseline year and thus will be a welcome improvement. Financial incentives will also be required to assist countries whose economies are forest-dependent. It is for instance estimated that \$53billion is

¹³⁶ Decision 1/CMP Further Guidance to CDM at paragraph 20 accessed from www.unfccc.org on 20th Feb 2009

¹³⁷ www.wbcsd.org/web/projects/climate accessed on 29th February 2009

¹³⁸ See FCCC/KP/CMP/2006/10/Add.1 at paragraph 16 (a) accessed from www.unfccc.org on 20th Feb 2009

¹³⁹ See FCCC/KP/CMP/2007/9/Add.1, Decision 2/CMP3 at paragraph 3 *ibid*

¹⁴⁰ Decision 14/CP10 *ibid*

likely to flow to poor countries meant to assist in halving deforestation rates through REDD projects¹⁴¹. A decision on REDD is to be made at the forthcoming COP15 at Copenhagen in 2009. Therefore, the Kenyan CDM Guidelines should anticipate the possible inclusion of REDD projects in international CDM framework.

3.3.4 Prioritization of projects

The permissible projects under CDM exclude recent innovations that are now recognized for their ability to either avoid or reduce GHG emissions. These include the methane gas flaring projects and biodiesel production. These two categories constitute acceptable projects under the Marrakesh Accords that is part of the international climate change law regime.

In Kenya, the Nairobi City Council has expressed interest in initiating a methane flaring project in its vast Dandora dumpsite. However, issues regarding land tenure are threatening to derail the project due to contested claims over the land on which the dumpsite is located¹⁴².

Biodiesel production in Kenya is also attracting local and international interest. NGOs have started popularizing the cultivation of *Jatropha* plant, whose seeds have been found to yield good amounts of biodiesel¹⁴³. However, issues regarding food security have emerged, with concerns that majority of farmers (both subsistence and large scale) may be lured to abandon cultivation of food crops in favour of biodiesel plants like *Jatropha*.

3.3.5 Institutional Framework

Closer scrutiny of the institutional framework of the CDM approval process reveals several weaknesses.

Firstly, there are overlaps in the functions and mandates of some of the institutions. Whereas the NCCFP has a policy advisory role, this office is also supposed to approve CDM projects. The same power is vested with the Director General of NEMA. Under the international climate

¹⁴¹ Brown D & Bird N, REDD Road to Copenhagen; Readiness to What? Overseas Development Institute accessed from www.odi.or.uk

¹⁴² Interview with Paul Mbole, Programme Coordinator Norwegian Church Aid on 15th August 2008

¹⁴³ Ibid

change regime, NEMA is the DNA, vested with the power of approving CDM projects. To vest similar power in an institution not clearly recognized by law is problematic. It is also apparent that both NCCACC and NEMA have the same roles of advising the government on the climate change legal regime. The NCCACC is a creature of policy fiat, whereas NEMA's functions as per EMCA include providing advice to government on domestication of international treaties and conventions. Whereas one might argue that the presence of NEMA in NCCACC legitimizes the latter's role, the legal mandate of the former can easily be curtailed by an ineffective NCCACC.

Secondly, there is little clarity in the constitution of some of the institutions. The membership and terms of service of members of the NCH are not clear, and therefore, it is possible for one to serve in perpetuity, i.e. for as long as CDM projects continue running. The fact that participation of members in the NCH activities is voluntary could undermine the capacity of this organ when faced with huge projects backlog. Whereas the NCCFP is conceptualized as an organ, in practice its functions are undertaken by an individual. Considering the immense powers vested in this organ by the Guidelines, it is necessary to clarify the constitution of the NCCFP in terms of its membership and define levels of accountability as well.

Thirdly, Guidelines are less elaborate on the procedures of the institutions. For instance, the procedures on decision-making and access to justice are lacking for critical institutions like the NCH, NEMA and NCCFP insofar as approval is concerned. There are no reporting procedures defined in the Guidelines as well.

Fourthly, the approval process is dominated extensively by government functionaries. Participation by civil society which is critical in ensuring broad spectrum of views necessary for holistic decision making appears to be unstructured and token as well. It is left to the Minister for Environment to choose the representatives of civil society without clear criteria as to qualifications.

Fifthly, the role of NEMA as the DNA deserves closer scrutiny, considering that questions regarding its capacity to discharge its rather wide mandate have been raised¹⁴⁴. The Climate Change section at the Authority is thinly staffed and under-funded. Most of the DNA work has

¹⁴⁴ Interview with David Githaiga of UNDP, who is attached to a capacity building programme targeting NEMA

been undertaken by the NCCFP, betraying capacity problems as the Authority. One reason given to explain this state of affairs is that NEMA is still grappling with the immense environmental challenges which the country is facing¹⁴⁵. With the anticipated increase in projects load as a result of increasing awareness on CDM and the interest attracted by the voluntary carbon markets, perhaps it is time to reconsider the appropriateness of NEMA as the choice of DNA.

Lastly, even though PANAREC is a timely initiative that is expected to impact positively on the attitudes of MPs towards climate change issues, it lacks any clear legislative or watchdog role (i.e. a parliamentary function). This stems from the fact that PANAREC is not a committee of parliament and therefore it lacks such a mandate. Any legislative initiative by NEMA for instance is supposed to go to the Attorney General for onward transmission to parliament. However, in the absence of a specific parliamentary committee on climate change, it seems that the role of scrutinizing such piece of legislation will fall under the Parliamentary Committee on Energy, Communications and Public Works¹⁴⁶, which now hosts PANAREC. The mandate of PECPW is evidently wide and indirectly covers environmental issues under which climate change broadly falls under. Perhaps the more relevant departmental committee of the House would be Agriculture, Lands and Natural Resources¹⁴⁷. It is therefore important for the national legal regime on climate change to also give recognition to this committee, in terms of its legislative role as well as watchdog role.

3.3.6 Definition of Sustainable Development

It has been pointed out hereinabove that the Sustainable Development Guidelines do not adopt any specific definition of sustainable development. The Guidelines do not adopt the EMCA definition of the term either. This was an important opportunity missed for initiating official discourse on what sustainable development means, especially from the perspective of the developing world. This paper has adopted the UNEP's definition of the term i.e. "the maintenance, rational use and enhancement of natural resource base that underpins ecological resilience and economic growth and progress towards international equity". But this does not mean that such a definition is exhaustive.

¹⁴⁵ Interview with Ms Emily Massawa supra

¹⁴⁶ Sec 101 A of the Standing Orders of the National Assembly

¹⁴⁷ See www.bunge.go.ke

The definition can be improved to suit local circumstances. For instance, the definition fails to take into account the cultural and aesthetic values of natural resource base, but rather emphasizes the physical uses of the same. Sustainable development for a group of forest dwellers would mean that their livelihoods are not compromised by the economic activities that may be undertaken in the extraction of forest resources. It will also mean that the cultural values associated with their forest habitat (e.g. shrines) are not desecrated. Thus, cultural significance attached to natural resource base should accompany ecological resilience and economic growth as the underpinnings of exploitation of natural resources within a sustainable development context.

The UNEP definition only talks about equity at the international plane. Going by the ILA New Delhi Declaration of Principles on Law Related to Sustainable Development (referred to as “New Delhi Principles of 2002”), the concept needs to be expanded to embrace two parameters. The first relates to equity at the national level. Exploitation and preservation of natural resources should result in patterns of benefits that exhibit equity within and between groups within a country. Secondly, the equity should be viewed in intra and inter-generational terms as per the New Delhi Principles of 2002.

The above reformulations of the UNEP definitions have implications for the carbon trade. Inclusion of cultural significance as a construct of the concept would mean that the evaluation of carbon projects against a sustainable development criteria ought to take into account the contribution (or otherwise) of the said projects towards satisfying the cultural values of the beneficiaries. A project that desecrates cultural landscapes in pursuit of offset credits ought therefore to be frowned upon. In the same vein, the benefits accruing from carbon projects should ideally address all (if not most) aspects of equity, both at national and international as well as inter and intra-generational dimensions.

By giving an authoritative definition of the concept of sustainable development, the aforesaid Guidelines would have contributed to *opinion juris* as to what the term means and thus lay a solid basis for setting standards of conduct at the municipal level.

3.3.7 Policy basis of SD criteria

The CDM Guidelines are premised on the National Poverty Reduction Strategy (2001) and Sessional Paper No 2 of 1996 on Industrial Transformation. These were (at that time) the key policy documents relating to national priorities relevant to implementation of CDM from a sustainable development perspective. The key sustainable development issues raised from these documents are poverty eradication, gender equality and equity and energy security with environmentally sustainable development options. Since 2001, several changes have taken place in Kenya's policy environment.

The poverty reduction strategy was transformed into the Economic Recovery Strategy for Employment and Wealth Creation of 2003 (ERS). This document was used as a basis for the crafting a development strategy with a time frame of 3 years. The ERS was implemented until 2006, after which the government began the process of developing a long-term development blueprint. This blueprint was later launched as Vision 2030, which is currently under formulation¹⁴⁸. Under the environment section, the Vision 2030 underscores global warming as a major constraint to economic development while noting that the country has done little to contribute to the problem¹⁴⁹. Kenya's vulnerability to climate-induced natural disasters (especially in arid and semi-arid lands- ASALs) is well analyzed, and the country's focus on disaster response as opposed to disaster risk mitigation is deplored.

In order to respond to these challenges, Vision 2030 envisages a people living in a clean secure and sustainable environment. The document alludes to the principle of sustainable development as the inspiration behind the formulation of the aforementioned vision, even though it does not endeavor to define the principle. The strategic thrusts of the Vision with regard to the environment put emphases on conservation, pollution and waste management, ASAL disaster mitigation and environmental planning and governance. These strategic thrusts could provide additional sustainable development issues for consideration in the expansion of the CDM sustainable development criteria. With specific regard to carbon trade, the document seeks to increase forest cover by 50% and attract 5 CDM projects annually up to 2012 among other goals¹⁵⁰. These two provide an outright policy justification for proper regulatory framework for carbon trade in Kenya.

¹⁴⁸ GoK, *Vision 2030: A Globally Competitive and Prosperous Kenya*, Oct 2007, Government Printers, Nairobi

¹⁴⁹ *Ibid* 126-7

¹⁵⁰ *Ibid* pg 128

Vision 2030 has identified energy as one of the key foundations of the national development plan. Currently, the national energy needs are met as follows; wood and biomass (68%), petroleum (22%), electricity (9%) and others (1%)¹⁵¹. The current sources of electrical power generation are hydro 3,025 GWh (51.2%), thermal oil 1,819 GWh (30.8%), geothermal 1,046 GWh (17.7%), cogeneration 6 GWh (0.09%), wind 0.3 GWh (0.01%) and imports 11 GWh (0.2%). The Vision proposes to increase electricity consumption by connecting more households into the grid, enhance the use of liquefied petroleum gas, promote coal mining in Eastern Province, promote use of solar in 74 public institutions in the ASALs, intensify geothermal power generation, promote co-generation in the sugar industry and increase efficiency in the existing power distribution network among others. These measures underscore the need to diversify energy sources by adopting new sources that are sustainable in terms of cost and environment- friendly.

Besides Vision 2030, efforts have been made towards formulating policy in the energy, forest, land and environment sectors. It is therefore plausible to conclude that the policy basis for developing sustainable development criteria generally has and is continually expanding. For this reason, the NEMA CDM Guidelines and Sustainable Development Guidelines are policy developments. More thorough assessment of these policies will be the focus of the next chapter.

3.3.8 Sufficiency of Sustainable Development Indicators

The scope of projects envisaged under the existing guidelines had not anticipated new categories of projects permissible under the CDM framework. The inclusion of biodiesel projects and the increased demand for safe and cheaper alternatives to fossil fuels are starting to impact on global food security. In the US for instance, corn farmers have begun selling their crop to companies manufacturing biofuels, thereby drastically reducing maize available for export to countries facing food deficits¹⁵². The effect has been a global increase in food prices, with net importer countries such as Kenya feeling the pinch. The increased focus on re-forestation and afforestation projects under LULUCF and REDD could also have similar impacts if not analyzed properly. Therefore one indicator on food security ought to be included in the sustainable development guidelines.

¹⁵¹ Ibid, pg 16

¹⁵² Interview with Paul Mbole supra

The indicators suggested in the Sustainable Development Guidelines appear to embrace the key principles outlined in the New Delhi Principles of 2002. However, the Guidelines have not sufficiently covered the principle of good governance. Good governance is identified by the New Delhi Principles as critical to the realization of the sustainable development, owing to the fact that a system that espouses good governance supports human development and welfare generally. Perhaps the only indicator the Guidelines have incorporated under this principle is gender equality and equity (social indicators). In this regard, the following elements of good governance need to be taken into account when analyzing potential impacts of the carbon projects;

Table 2: Indicators on Governance

- | |
|--|
| <ul style="list-style-type: none"> • Sound environmental, social and economic policies: is the project complying with the stated policies; to what extent is the project enabling beneficiaries to comply with sound environmental, social and economic policies? • Democratic institutions responsive to the needs of the people; is project fostering democratic decision-making among the beneficiaries or creating/supporting institutions capable of securing this end? • The rule of law: is the project enhancing the capacity of beneficiaries to respect the rule of law; is the project promoting and protecting human rights and freedoms • Anti-corruption measures; what is the level of integrity (transparency and accountability) associated with the project • Enabling environment for investments; is the project likely to improve the investment environment for the target beneficiaries? |
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3.3.9 Benefits- Sharing and Climate Justice

Carbon trade projects are usually financed by proponents from Annex-I parties or financial intermediaries who then sell certified emission reduction credits to entities from the said parties. Emissions Reductions Purchase Agreement (ERPA) is the instrument used to define the rights and obligations of the project proponent and developers. The ERPA will contain the price of CERs and the terms of payment. It is evident that the neither the International CDM rules nor CDM Guidelines and Sustainable Development Guidelines prescribe the formats for ERPAs. It is therefore up to the parties to negotiate and agree on the terms to be spelt out by the ERPA.

From this, several issues arise with respect to benefit- sharing from a climate justice perspective. First, there is need to clarify the status of the property in the carbon credits. Whereas it may

seem straightforward that the project developer is entitled to the property in carbon credit, there are situations where this may appear problematic. For instance, in energy efficiency projects, the project developer provides the capital and technical inputs whereas the consumers chose to abandon wasteful consumption in order to guarantee the project's success. Thus, entitling the carbon credits to the project developer entirely would rather be unfair, since the consumers' choice of energy consumption patterns contributed to the realization of the said credits. It is high time promoters of carbon trade began to consider the public interest inherent in carbon property and consider ways of reflecting this in the sharing of benefits arising from carbon projects.

Secondly, with the suspension of adaptation levy by the Executive Board of CDM, developing countries with vulnerable communities will find it hard to access financial assistance for mitigation and adaptation programmes. In the absence of such programmes, these vulnerable communities will stand to suffer from the vagaries of climate change of which they played little or no part in causation. From a climate justice point of view, benefits accruing from carbon projects should in the first instance assist these communities in order to enhance their capabilities in absorbing climate change-induced environmental shocks.

Thirdly, the pricing of carbon credits is based on a present value¹⁵³. The supply of the CER however continues deep into the mid-term future. Failure by project proponents and developers to agree on future values of CERs is likely to disentitle the original owners of carbon property benefits that accrue from future appreciation of the CER.

Fourthly, ERPA negotiations occur under very unfair conditions. The buyers of CER are usually multinational corporations. With vast resources at their disposal, these buyers engage services of expert consultants to carry out negotiations with sellers. The sellers of CER on the other hand do not have such resources or expertise to engage in the process effectively. Due to this, the resultant terms of ERPA will be skewed in favour of the buyers¹⁵⁴.

¹⁵³ According to Tom Owino of JP Morgan Climate Care, Mumias Sugar has signed an ERPA that gives a constant price of CER way up to the end of the first commitment period (interview held on 18th May 2009 in Nairobi).

¹⁵⁴ Interview with Tom Owino *ibid*

3.3.10 Process of Sustainable Development Criteria Evaluation vis-à-vis EIA process

All CDM Projects are subject to the Environment Impact Assessment requirements as stipulated under EMCA. The Sustainable Development Guidelines provide for a process of project evaluation which is separate from the Environmental Impact Assessment (EIA) that is required for projects as per the EMCA. Several issues are pertinent to this arrangement.

Firstly, there is potential for overlaps in the collection and analysis of data on assessment of sustainable development indicators and the anticipated impacts of the project. Under the Environment (Impact Assessment & Audit) Regulations of 2003¹⁵⁵, an EIA report is required from a project proponent before the approval of a project and issuance of an EIA licence. The report is supposed to include among other things, the environmental effects of the project including the social and cultural effects and the direct, indirect, cumulative, irreversible, short-term and long-term effects anticipated¹⁵⁶. In analyzing these effects, it is highly likely that the indicators listed under the Sustainable Development Guidelines will be considered (e.g. environmental development indicators) as well, thus posing a risk of duplication or overlap.

Secondly, the cost and time involved in the two processes is likely to be viewed as a barrier to carbon trade investments owing to the attendant bureaucracy.

Thirdly, the final decision is rendered by the Director General (DG) of NEMA for both evaluation processes. However, there is no order or sequence attached to the issuance of approvals for the said processes. It is therefore possible to start with an assessment under the CDM & Sustainable Development Guidelines followed by an EIA and vice-versa. Whereas the denial of approval for EIA is legally secured, the same under the NEMA CDM Guidelines and Sustainable Development Guidelines is unclear. It is therefore highly unlikely that the DG of NEMA can issue an approval under CDM and Sustainable Development Guideline to a project proponent who has been denied an EIA license.

From the foregoing, it therefore makes little sense to have the evaluation and approval processes under the two regimes running parallel. Perhaps a better scenario would have been to have sustainable development indicators included in an EIA process. However for this to happen, the

¹⁵⁵ Legal Notice 101 of 2003

¹⁵⁶ Regulation 18 (h) of Environment (Impact Assessment & Audit) Regulations of 2003

EIA regulations ought to be amended to accommodate a more elaborate assessment of CDM process.

3.4 Conclusions

In this chapter, I have examined the regulatory framework of carbon trade as provided for under the CDM and Sustainable Development Guidelines of 2001 published by NEMA. It is commendable that Kenya put significant efforts towards fulfilling its obligations under Article 6 and 11 of the Kyoto Protocol by developing and applying these guidelines¹⁵⁷. However, the legal soundness of the regulatory approach applied by NEMA is doubtful in accordance with the Kelsenian legal theory of public international law. The Guidelines are vulnerable to legal challenge with regard to their validity since they cannot purport to implement an international legal regime that is yet to be domesticated. The proper approach is for NEMA to submit the Guidelines to the Minister for Environment for promulgation as regulation under EMCA or propose the enactment of a municipal climate change law.

The analysis of the Guidelines has revealed that the guidelines are indeed outdated. The scope of the guidelines does not include voluntary carbon projects which are gaining significance locally and globally. The effect of this is to exclude this important category of projects from the ambit of regulatory law. From a climate justice point of view, failure by law to regulate the conduct of parties under the voluntary carbon trade is likely to result in capitalistic market anarchy, resulting in a situation where stronger players taking undue advantage of the weaker ones. The methodologies described in the Guidelines are way behind the decisions of the Conference of Parties/Meeting of Parties (CoP/MoP) and the Executive Board of the CDM, with regard to sectoral programmes and incorporation of LULUCF. The Guidelines have been overtaken by recent innovations in carbon projects, e.g. methane-flaring and biodiesel.

The institutional framework of the CDM approval process is weak in its architectural design (in terms of creating duplicitous structures) and in many ways falls short of the concept of regulatory law. As such, overlaps in mandates for approval of projects can be gleaned from the functions and powers of some of the critical institutions, thus making it difficult for the institutions to perform their regulatory functions. By failing to define the constitution of some

¹⁵⁷ According to Emilly Massawa *supra*, the immediate former NCCFP, Kenya was the first country in Africa to develop national guidelines on CDM

of the institutions, the Guidelines fail to create juridical persons with lawful rights and obligations relevant to their regulatory functions. Without clear access to justice provisions, the Guidelines make it difficult for the regulated to engage effectively with the regulators especially where redress is sought for wrong or unjust decisions.

Regulation of carbon trade is supposed to be anchored on clear sustainability criteria as per the Marrakesh Accords that is part and parcel of the international climate change law regime. From the Sustainable Development Guidelines, it has emerged that the sustainable development issues contained therein are not comprehensive and as such, the resultant indicators used for assessment of carbon projects is not conclusive. Basing the Guidelines on an authoritative definition of the concept and a wider policy basis is likely to provide more comprehensive sustainable development criteria. The process of assessing the sustainable development criteria requires rethinking in light of the existing EIA process, perhaps with a view to merging the two processes.

The interrogation of Kenya's regulatory framework of carbon trade has revealed critical benefit sharing issues from a climate justice point of view. There is need for recognition of public interest in CERs accruing from projects where the public makes a contribution in the realization of the same by, for instance, adopting consumptive options that lead to realization of carbon offsets. The suspension of adaptation levy had denied developing countries a facility for meeting their mitigation and adaptation needs. The need therefore for alternative means to ensure proceeds from carbon projects directly meet this challenge is evident. The pricing of CER ought to reflect the future appreciation of CERs as is the nature of property generally. Sellers of CERs require protection in law from unscrupulous buyers during negotiations.

In the next chapter, I will examine the relevant sectoral policy and legal regime relevant to carbon trade, with a view to broadening the sustainable development criteria and identifying the necessary changes that will facilitate better regulation of the trade.

CHAPTER FOUR:

SECTORAL ANALYSIS OF POLICY AND LEGAL REGIMES PERTINENT TO CARBON TRADE IN KENYA

4.1 Introduction

The success of carbon regulation cannot be wholly predicated on enactment of a single body of regulatory law, but rather on the nature of legal and policy regimes of the sector within which the project carbon projects operate. For instance, a geothermal project will be conditioned by the energy law and policy prevailing in a particular country. The same can be said of forestry sectoral regime when it comes to Land Use- Land Use Change and Forestation (LULUCF) projects. The success, therefore, will depend on how well sectoral laws and policies are formulated and coordinated to ensure minimal barriers to implementation of carbon trade.

This chapter analyzes two key sectoral policy and legal regimes that are critical to carbon trade in Kenya, namely forestry and energy. It makes a brief exposition of the identified sectoral regimes, identifies critical issues pertinent to carbon trade from a sustainable development perspective (i.e. linkages, coordination problems and sustainable development issues) and provides suggestions for enhancing sectoral coordination and improvement of the existing sustainable development criteria from a sectoral perspective.

4.2 Forest Policy and Legal Regime

4.2.1 Introduction

The importance of forests in addressing the global challenge of climate change needs no restatement here. The role of forests as carbon sinks for trapping and therefore reducing concentrations of carbon dioxide in the atmosphere has been explained. In Chapter Three the growing importance of forestry in carbon trade under the permissible Land Use Land Use Change (LULUCF) projects has been discussed extensively. In the same vein, forest products can be used in the development of low-carbon emitting fuels (biodiesel), thus providing an ideal substitute to the fossil fuels. On the other hand, degradation of forests through logging and forest clearance (to pave way for agriculture and human settlements) leads to release of CO₂ into the atmosphere, and is, thus a key area of concern regarding emissions reduction strategies in line with the proposed Reduced Emissions through Degradation and Deforestation (REDDs)

initiative. Kenya has no CDM forestry project, because the state forests in the country pre-existed the 1990 baseline year. However, there are quite a number of forestry projects coming up under the voluntary market carbon projects¹⁵⁸.

With the above in mind, the policy and legal regimes regarding forestry in a country can contribute to the success of carbon trade by providing for an enabling environment for protection and enhancement of forest cover (hence CO₂ sinks), development of agro-forests as sources of biofuels, and prevention of degradation of forests in order to avoid CO₂ release. The extent to which the Kenyan policy and legal regimes contribute to these ends is the subject of the analysis below.

4.2.2 Policy Overview

The Forests (Repealed) Act¹⁵⁹ laid out government policy on management of forest during colonial and in the independence period until 2005 when it was repealed. The repealed forests law was modelled on the command and control approach, exhibiting a meshwork of prohibitions and penal sanctions that exposed a determination by the State to preserve forests either in their pristine state or curb human activities within forests. The stated purpose of the Act was to provide for the establishment, control and regulation of central forests, forests and forest areas in the Nairobi Area and on unalienated government lands¹⁶⁰.

The law had three key hallmarks. First, the definition of a forest was by way of executive fiat, exercisable by the minister for the time being in charge of forests. Thus, the minister could create various categories of forests and nature reserves, alter their boundaries and issue a declaration that terminated the existence of a forest or nature reserve¹⁶¹. There was no requirement for public participation in the exercise of this power. The categories of forests that could be created were limited in scope in that they were entirely government-controlled. This excluded communities and the private sector from establishing and managing forests outside government control. The exercise of the Minister's power in altering boundaries or declaring the cessation of a forest were unfettered and unchallengeable.

¹⁵⁸ According to Alfred Gichu of the Kenya Forests Service, other carbon projects in the pipeline include agroforestry in Meru, Kakamega and Kiambu (on the escarpment of Rift Valley).

¹⁵⁹ Cap 385 of the Laws of Kenya, enacted in 1942 and repealed in 2005

¹⁶⁰ See Preamble of the Act

¹⁶¹ Ibid Section 4

Secondly, the Act laid out a wide range of prohibitions targeting communities and persons residing within or next to forests¹⁶². Access to and extraction of forest resources and products was only by way of a licence. Penal sanctions (i.e. fines and jail terms) attended to these prohibitions with the burden of proof tilted heavily against those suspected of committing offences. However, given the capacity of the Forests Department, coercive enforcement of these prohibitions turned out to be a big challenge as illegal harvesting of forest resources flourished, besides the uncontrolled human encroachment into forests protected under this law. The only incentive for community participation in enforcement was the provision for rewarding informers using proceeds from fines imposed on offenders¹⁶³.

Thirdly, management of forests was the preserve of the government. The law empowered the Minister to promulgate regulations on management of indigenous forests devoid of the concept of public participation. Even where this power was exercised, control over forests was vested in Forest Department and Provincial Administration officials. The law did not envisage the value of tapping into traditional knowledge in management of forest resources that reposed in local communities.

Owing to the aforementioned challenges and increased advocacy for adoption of sustainable development principles in the management of forests, the government initiated the process of formulating a new policy and legal regime for the forest sector, which culminated in the adoption of the Forest Policy 2005¹⁶⁴ and Forest Act of 2005.

The Forest Policy of 2005 had the stated goal of enhancing the contribution of forest sector in the provision of social and environmental goods and services¹⁶⁵. The policy identifies various challenges related to sustainable management of forests such as inadequate data to support planning and resource allocation and valuation in the sector, poor governance, exclusion of communities in management of forests and poor forest management techniques and practices. It sets out policy statements regarding management of a wider scope of forests such as, indigenous, farm, plantations, drylands, local authority and private forests (including roadside trees).

¹⁶² See Sections 8 to 14 of Cap 385

¹⁶³ Ibid Section 11

¹⁶⁴ Sessional Paper No 9 of 2005 on Forest Policy

¹⁶⁵ Ministry of Environment & Natural Resources, *Sessional Paper No. 9 of 2005 on Forest Policy*, GoK, Nairobi: Government Printers, 2005, pg 2

The Policy also lays down measures for promoting the efficient and sustainable production and utilization of wood and non-wood forest products. It proposes the enactment of the Forest Act 2005, establishment of institutions provided for under the Act and recommends financial arrangements to support implementation of the Policy and the Act. The Policy acknowledges cross- sectoral linkages between forest sector and others (water, energy mining, lands, wildlife and agriculture) and proposes institutions and strategies for addressing the same. The Policy has also mainstreamed issues relating to livelihoods promotion, gender and youth participation, involvement of non-state actors and HIV& AIDS. Of special note is the stated commitment of the government to honour and implement international obligations relating to sustainable forest management (including those pertinent to climate change).

The Forests Act of 2005 purpose is stated as to provide for the establishment, development and sustainable management, including conservation and rational utilization of forest resources for the socio-economic development of the country. In a clear departure from its predecessor, the 2005 Act incorporates modern forestry management principles such as public participation, recognition of customary rights of forest communities, recognition of international obligations for promotion of sustainable management of forests and biodiversity and improved governance of the sector.

The Act has expanded the scope of forests covered thereunder to include State, local authority and private forests. The powers of a Minister to create or declare cessation of a forest are retained with regard to State forests, but are restricted in that such an action requires a recommendation from the KFS Board¹⁶⁶. The Minister is also empowered to create local authority forests, subject to recommendation of local forest conservation committee the Board of KFS and the local authority under whose jurisdiction the forest falls¹⁶⁷. Private forests can be registered under the Act upon submission of an application to the KFS. The owner of a registered private forest is entitled to some benefits such as provision of technical services by KFS, financial support and fiscal (tax) incentives. This is meant to promote community and private sector participation in forest conservation, and thus, a significant departure from the command and control approach of the repealed Act. Where the KFS establishes that a particular private or local authority forest is being mismanaged, the Minister may declare such as a

¹⁶⁶ Section 23 of Forest Act 2005

¹⁶⁷ Ibid Section 24

provisional forest (upon recommendation by the KFS) and thus place it for a limited period of three years under the management of the Service.

The first part of the Act lays out the institutional framework for management of the sector¹⁶⁸. The Kenya Forests Service (KFS) is created with the mandate of policy formulation and management of forests. The KFS is governed by a multi-sectoral Board and its operations are headed by a Director. The financial autonomy and sustainability of KFS is secured through provision for appropriations from parliament and the establishment of Kenya Forests Conservation Fund¹⁶⁹. The pervasive powers of the Minister in running the sector are severely circumscribed, as the Board is empowered to make vital decisions and critical appointments within the KFS without reference to the Minister.

The Act introduces the use of management agreements and plans as new tools for the management of forests. The KFS and local authorities are empowered to enter into agreements with private persons for the purpose of ensuring sustainable management of forests and forest resources. The use of licences and concessions, as mechanisms for regulating exploitation of forest resources, is retained. The law imports the use of environmental impact assessment (EIA) under the Environment Management & Coordination Act (EMCA) as preconditions for granting concessions and allowing mining operations within forests. The Act invokes presidential powers in the protection of endangered species¹⁷⁰.

The Act has embraced community participation in various ways. First, the composition of various decision-making bodies at local and national levels includes members of the civil society. Secondly, the Act provides for establishment of forest community associations that play an active role in management and conservation of forests¹⁷¹. Thirdly, the Act recognizes customary rights of forest communities with regard to the use of forest products, which can be enforced by way of management agreements. Fourthly, the Act permits community participation in enforcement of the Act by providing for access to the High Court for persons who may have reason to show that particular provisions of the Act are being violated¹⁷². Fifthly, the Act

¹⁶⁸ See Ibid Section 4-12

¹⁶⁹ Ibid Section 14-20 . However the Fund is yet to be operationalized

¹⁷⁰ Ibid Section 34

¹⁷¹ Ibid Section 46& 47

¹⁷² Ibid Section 58

provides for access to public information on forests which is critical for quality community participation¹⁷³.

The Act retains most of the prohibitions that were contained in the repealed Act. It, at the same time, enhances penal sanctions for breach of provisions in light of changed economic circumstances and to deal with new criminal challenges (e.g. use of forests to produce narcotics)¹⁷⁴. Enforcement of the prohibitions is mainly done through forest officers and the Director. Forest officers are granted powers to use firearms and prosecutorial powers as well, subject to the authority and control of the Attorney General¹⁷⁵. Disputes under the Act are to be referred to the National Environment Tribunal (NET) as provided for under EMCA.

The Act takes into cognizance the existence of EMCA and integrates to a good extent, institutional mechanisms and processes that are relevant for environmental conservation and management through sustainable forest management¹⁷⁶. The Act also envisages the need for cross-boundary coordination in the management of transboundary forests within the region¹⁷⁷. It also acknowledges Kenya's international obligations with regard to sustainable forest management and provides for mechanisms for addressing the same¹⁷⁸. To this extent, the coordinational importance of the statute at municipal and international levels of law is evident.

4.2.3 Evaluation of the Forest policy and legal regime from a Carbon Trade Perspective

The forest policy and law are well set in the sustainable development principles and thus makes the regime compatible with the international regime on climate change. Principles such as public participation, good governance, integration of economic, social and environmental considerations in policy development, inter and intra-generational equity are evident. The forests regime at the level of principle is likely to foster and/or integrate well with national regulatory regime for carbon trade. However, some commentators have taken the view that the new Forest Act has not sufficiently adopted and entrenched principles of environmental management such as public participation and inter/intra generation equity¹⁷⁹. This writer takes the contrary view

¹⁷³ Ibid Section 60

¹⁷⁴ Ibid Section 52-54

¹⁷⁵ Ibid Section 56

¹⁷⁶ Ibid

¹⁷⁷ Ibid Section 62

¹⁷⁸ Ibid Section 61

¹⁷⁹ See Situma F.D. *Forestry Law and the Environment* in Eds Okidi C.O Kameri-Mbote P. & Akech M, *Environmental Governance in Kenya; Implementing the Framework Law*, 2008 EAEP Nairobi at pg 258

after having laid out in the previous section, provisions that support public participation principle.

By expanding and expounding on the concept of a forest, the forests regime makes it possible for a wide variety of actors outside the State to participate in the development of forests as projects permissible under carbon trade. The concept of a private forest and the provision for community forest associations to manage state or local authority forests by way of management agreements makes it possible for community-driven forestry projects to be implemented with state support. These projects can be integrated with the carbon trade, with the imprimatur of State-protection and guarantee. The provisions for provisional forests further ensure State guarantee in proper management and protection of private and community- managed forest projects. This will address the concerns that community forestry projects constitute risky carbon assets or investments. However, it has been argued that there is potential for conflict between the implementation of provisional forest provisions and the constitutional protection of private property available to landowners¹⁸⁰. It is possible for a landowner to argue that the takeover of his/her private forest by the KFS contravenes the aforesaid constitutional protection. It is thus important for the Act to ensure that registration of private forests constitutes permissible overriding interests under the relevant land registration laws, to which ownership rights are indeed subject.

The institutions under the forests regime have a clear legal mandate in giving effect to Kenya's international obligations relevant to the carbon trade. One of the functions of KFS is to manage forests for carbon sequestration among other things. KFS is also mandated to promote national interests in relation to international forest-related conventions and principles¹⁸¹. This therefore gives the KFS an entitlement to sit in the institutional framework for regulating carbon trade in Kenya. It can also be argued that the framework of the Forest Management and Conservation Fund also allows for its use as a repository of levies imposed on carbon projects or funds available at the international level for sequestration of greenhouse gases, with a view to promoting the development of forestry in drylands (for bio-fuels) and coastal areas which would otherwise miss out from carbon trade¹⁸².

¹⁸⁰ Ibid pg 245

¹⁸¹ Section 5 of Forest Act of 2005

¹⁸² See Policy Statement 3.3.5 contained in Forest Policy of 2005

Forest management and conservation tools, such as forest management plans and EIA, could play an important role in forest carbon projects. Already, the EIA is an indispensable requirement for carbon projects. Forest management plans could also be introduced as requirements for approval and subsequent monitoring of carbon projects. Similarly, provisions on community participation could be used to develop indicators to determine the sustainable development criteria for forest carbon projects.

The elaborate enforcement machinery provided for in the Act can be used by the State as leverage in promotion of forest carbon project especially to wary investors who view forestry in the developing world as risky due to poor policing. These provisions, together with access to justice mechanisms provided for in the Act, can be prescribed as additional safeguards to investors, which are effective enough for enforcing contracts entered into with forest owners for carbon forestry projects. A specific policy on promotion of forest carbon projects by the KFS is, however not in place¹⁸³.

One of the critiques of forest carbon projects mentioned in the previous chapter is that in a low forest cover country such as Kenya, it is difficult to aggregate meaningful carbon offset credits through conservation of the few existing forests. One possible way out of this problem is by developing transboundary carbon projects with extensive coverage between and among states within the same region. Thus, Kenya can undertake such projects with its neighbours (Kilimanjaro area with Tanzania and Mt Elgon with Uganda). The Forest Act provisions on cross-boundary cooperation in management of forests and forest produce can make this possible. However, it would be ideal if a related policy or law is adopted at the East African Community level and effected locally.¹⁸⁴

A general challenge in sustainable conservation of forests is the problem of reconciling opportunity costs incurred in conservation vis-a-vis the economic benefits gained from exploitation of the same to offset population pressures and endemic poverty in developing countries. The problem of unregulated charcoal trade perhaps best underlines this dilemma. On one hand, charcoal easily provides the most affordable energy source to households and small businesses and a source of livelihoods to those who engage in its trade. On the other hand, unregulated charcoal production and trade pose a threat to forest conservation, considering that

¹⁸³ According to Alfred Gichu supra, KFS has not yet developed such a policy even though it is necessary

¹⁸⁴ vide Section 62 of the Forests Act

Kenya is a low forest cover country. However, the Forests Policy and Act of 2005 have taken a bold step towards resolving this dilemma. The Policy recognizes charcoal as a legitimate wood fuel source and calls for the regulation of its production and marketing. The Act goes a step further and empowers the Minister to promulgate rules regulating production, transportation and marketing of charcoal¹⁸⁵. The underlying assumption is that a regulated charcoal industry will curb excessive production, make it more amenable to strict monitoring and reduce official corruption associated with illicit trade. This way, charcoal trade is more likely to be compatible with forest conservation goals. However, to date these rules have not been made. Thus, the prevailing state of affairs is likely to jeopardize forest carbon projects, by making them easy targets for unscrupulous charcoal dealers.

Closely related to the above, the promise borne by LUCUCF and proposed REDDs projects under the Kyoto Protocol regime presents a solution to this dilemma. Under these projects, it is possible to enable communities see the benefits of conserving the environment through afforestation or refraining from deforestation while at the same time gaining the proceeds from the sale of carbon offset credits. However, to bring the communities to appreciate the diminished opportunity cost for forest conservation, the State can play a proactive role by making use of provisions under the Forests Act, which allow it to acquire private land for conversion into forests and facilitate state-owned carbon projects¹⁸⁶. If successful, these projects can be handed back to the community through the exchange of forest area with private land under the provisions of the Forest Act¹⁸⁷. However, the failure by the Act to incorporate other environment management tools, such as environmental easements and conservation orders under EMCA that can serve similar purposes could be a lost opportunity in this regard.

It has been pointed out that in 1991, the defunct Forest Department entered into a Memorandum of Understanding (MoU) with the Kenya Wildlife Service (KWS) for the purpose of joint management of several forests for a period of 25 years¹⁸⁸. This MoU is binding on the new KFS. If the KFS is to agree to initiate carbon projects (especially if the REDD is adopted) within the said forests, there is need to ensure concurrence between the two parties to the MoU and agree on the implications of such a project on the rights and obligations of each party. For now however, there is nothing to show that KWS would object to such arrangements now or in

¹⁸⁵ Section 59 (2) (r) of Forests Act 2005

¹⁸⁶ Section 23 (b)

¹⁸⁷ Section 24

¹⁸⁸ Situma *Supra*, pg 256

the near future. However, it would be much better if the MoU is revised to secure this concurrence now rather than later.

4.3 The Energy Policy and Legal Regime

4.3.1 Introduction

The already registered CDM project and the other 7 pending registration are energy-related. The importance therefore of the energy legal and policy regime to carbon trade cannot be overstated. Kenya's main energy sources are three, i.e. wood (68%), petroleum (22%) and electricity (9%)¹⁸⁹. Wood energy is the most popular and affordable among the poor and is available as firewood or charcoal. An estimated 90% and 85% of urban and rural households depend on it¹⁹⁰. Charcoal production is estimated at 2.4 Million tonnes annually and supplies 46% of Kenya households' energy needs¹⁹¹. However, unsustainable consumption of wood fuel is most likely to lead to catastrophic environmental consequences on the limited forest cover in the country and the associated impacts on soil cover, water resources and climate change.

Petroleum is the most important source of fuel for the commercial, transport and industrial sectors. Kenya imports fuel for all its domestic needs, at an average of 3,579.7Mt in 2008¹⁹². Kerosene is also consumed at the household level for cooking and lighting purposes. Consumption of petroleum products is a major contributor to the country's overall GHG emissions and thus, strategies to reverse the prevailing situation are necessarily geared towards addressing this vital energy source. High consumption of these products also increases the import bill and places inordinate pressure on Kenya's foreign exchange reserves and contributes to rising widening balance of payments. However, consumption of kerosene is also seen as critical in tackling unsustainable consumption of wood fuel especially in the rural areas.

Electric energy is sourced from hydro, thermal and renewable (geothermal, wind, solar and biomass) sources. Hydro power is the largest source, with an installed capacity of 723MW¹⁹³. Thermal sources (petroleum and geothermal) contribute 400MW whereas renewable sources 30MW. Geothermal source is viewed as having the highest potential, with estimates showing

¹⁸⁹ UNEP, Kenya: Integrated Assessment of the Energy Policy, with Focus on Transport and Household Energy Sector, 2006 accessed from www.unep.org on 14th April 2009 at pg 11

¹⁹⁰ Ibid pg

¹⁹¹ Ibid

¹⁹² See Economic Survey 2009

¹⁹³ KENGEN, Annual Report of 2008, Nairobi: KENGEN 2009 at pg 78

that Kenya can produce 3000MW through this source¹⁹⁴. Except for oil thermal power, all the other sources are considered carbon free and thus are attractive for carbon trade related projects.

4.3.2 Policy Overview

The earliest policy framework on energy sector was contained in the Sessional Paper No 10 of 1965, which provided for the enactment of the Electric Power Act (Cap 314 of the Laws of Kenya)¹⁹⁵. The Act provided for establishment of Kenya Power & Lighting Company (KPLC) as a parastatal mandated to produce and distribute electric power in the country. Regulation of petroleum sector was contained in the Petroleum Act (Cap 116 of the Laws of Kenya) and Petroleum Exploration and Production Act¹⁹⁶. Following liberalization of the economy in the early 1990s, the government was under pressure to liberalize the energy sector. As a consequence, the Electric Power Act of 1997 was enacted to replace Electric Power Act. The new Act unbundled the power generation and distribution functions, with the creation of Kenya Electricity Generating Company (Kengen) to undertake the former, while KPLC retained the latter. The Act also created the Electricity Regulation Board (ERB) with broad regulatory functions in the sector. The Act also provided for private sector participation in generation of power, through licensing of Independent Power Producers (IPPs).

Following the severe power shortages that were experienced between 1998 and 2000, the government initiated a process of formulating a new energy policy. The Ministry of Energy established a sector working group to handle the process comprising the representatives drawn from the Department of Renewable Energy, Kengen, KPLC, and National Oil Corporation of Kenya (NOCK), Kenya Pipeline Company (KPC) and the ERB. The process brought on board stakeholders from the public and private sectors for the lengthy consultations that took place between 2001 and 2004. The final policy document- Sessional Paper No 4 of 2004 (or simply “The National Energy Policy”) was produced in that year. The policy was presented in parliament in 2005. This was followed by the enactment of Energy Act No. 12 of 2006.

The National Energy Policy (NEP) lays the legal framework upon which cost-effective, affordable and adequate quality energy services will be made available over the period 2004-

¹⁹⁴ Ministry of Energy, *Sessional Paper No 4 of 2004 on Energy*, 2004 Government Printers Nairobi pg 27

¹⁹⁵ UNEP Supra at pg 16

¹⁹⁶ Chapter 308 of the Laws of Kenya

2023¹⁹⁷. The policy sought to address critical problems identified in the energy sector such as; weak power transmission and distribution infrastructure due to low investment, high system power losses (estimated at 20% of net generation), inadequate regulation of liquefied petroleum gas and domestic production of motor oils, insufficient legal and regulatory framework governing petroleum subsector in line with international standards pertinent to health, environmental and safety considerations and the need for enhanced and sustainable exploitation of renewable energy sources. These challenges were manifested in low per capita power consumption at 121kWh and low national electricity access rate of 15.3% (with 3.8% for rural population), which is below the 32% average access rate for developing economies¹⁹⁸.

In general terms, several thrusts can be discerned from the policy. The first regards the consolidation of the energy's legal and regulatory framework. Towards this end, the Policy recommended for the enactment of an Energy Act to replace the Electric Power Act and Petroleum Act as the consolidated legal framework for the two subsectors. It also proposed for the establishment of a single independent energy regulator. Secondly, the policy sought to unbundle functions in generation, transmission and distribution of power hitherto held by government or state monopolies. For instance, development of geothermal power is to be taken over from KENGEN by a new entity- Geothermal Development Company- that will exploit and sell steam to power generating companies. Functions of KPLC are also split with the State monopoly retaining transmission whereas distribution is to be vested with a new private-sector owned entity. Rural electrification is to be delinked from the Ministry of Energy and a separate parastatal established to oversee the function.

Thirdly, the policy sought to promote private investment in the energy sector. The government is supposed to divest from entities within the sector such as KENGEN, KPLC, KPC and the Kenya Petroleum Refinery Ltd to allow for more involvement of private sector. The government is also expected to concession isolated power stations currently being run by KPLC. Participation of the private sector and local communities in power generation is to be encouraged through integration of small scale power plants into the national transmission network. The policy also seeks to promote exploration of fossil fuels by attracting more oil prospecting companies, through subdivision of acreage of exploration blocks and availing necessary data for that purpose.

¹⁹⁷ Ministry of Energy (supra) at pg XV

¹⁹⁸ Ibid

Fourthly, the policy seeks to diversify the country's energy supply sources through wider adoption and use of renewable energy technologies and enhance their contribution to the country's overall energy supply. Lastly, the policy seeks to integrate environmental considerations in the generation, distribution and consumption of energy sources, through promotion of energy efficiency and conservation as well as prudent environmental, health and safety practices.

The Energy Act was passed by parliament in 2006 and received presidential assent on 30th December that year. However, the Act came into operation on 11th July 2007 after issuance of the requisite Gazette Notice by the Minister for Energy¹⁹⁹. In line with National Energy Policy, the Act establishes the Energy Regulatory Commission (ERC) with the mandate to regulate all aspects of energy production, distribution and consumption. The Act repeals the Electric Power Act and the Petroleum Act. However, the Act does not govern the upstream petroleum activities (i.e. exploration and extraction) which remain under the Petroleum Exploration and Production Act. The ERC has ancillary functions of promoting interests of stakeholders, ensuring observance of fair competition principles within the energy sector, energy planning and information management²⁰⁰. The composition of ERC includes private sector representatives besides government appointees, and its autonomy is secured in law²⁰¹.

The Act largely imports the provisions of the repealed Electric Act into Part III, which deal with electrical energy regulation. Critical new features include relaxed licensing requirements for power producers below 3MW capacity²⁰², integration of environmental considerations (e.g. environmental impact assessment) in the permit-granting process²⁰³ and the establishment of the Rural Electrification Authority to promote access to electricity for the rural population²⁰⁴. The Act also imports the provisions of the repealed Petroleum Act to govern downstream undertakings. Significant changes however include the elaboration of licensing requirements (now placed under the ERC)²⁰⁵, enhanced environmental, health and safety standards in

¹⁹⁹ www.kenyalaw.org accessed on 14th April 2009

²⁰⁰ Section 5 of Energy Act

²⁰¹ Ibid Section 10-13

²⁰² Ibid Section 27

²⁰³ Ibid Section 30

²⁰⁴ Ibid Section

²⁰⁵ Ibid Section 80-82

transportation and storage of petroleum stocks²⁰⁶ and incorporation of the principle of “Polluter Pays” with the enforcement provisions of the Act²⁰⁷.

The Act provides for measures to be undertaken by the Minister in promoting renewable energy and energy efficiency and conservation (Part V of the Act). Sources of renewable energy identified (though not exhaustively) are biomass, biodiesel, bioethanol, charcoal, fuel wood, solar, wind, tidal waves, hydropower, biogas and municipal waste²⁰⁸. The promotion of development and use of renewable energy is to be realized through formulation of a strategy to coordinate research, development of relevant regulatory framework, implementation of specific promotional programmes, international cooperation and harnessing of opportunities presented by Clean Development Mechanism (CDM). The Minister is required to develop and manage a national energy efficiency & conservation programme and promote such measures as raising awareness and education on conservation issues and standards, consultancy services and research, implementation of pilot projects, financial support and incentives to institutions and regulating importation of energy saving technologies²⁰⁹. In the same vein, the ERC is empowered to implement a variety of energy conservation measures in factories and buildings²¹⁰.

The Act establishes the Energy Tribunal as the appellate body with regard to decisions made by the ERC. The Tribunal comprises 4 persons, i.e. a chairperson qualified to be a High Court Judge and appointed by the President; and three experts appointed by the Minister in consultation with the Attorney General.

The Act empowers the Minister to promulgate rules and regulations pursuant to the necessary and relevant provisions of the Act, following recommendations from the ERC or petitions from stakeholders in the industry²¹¹. These provisions have incorporated public participation clauses to ensure that a consultative process is followed in the regulations-making process. Roles and powers of the Minister are clearly enumerated and this helps in preventing jurisdictional conflicts between the Minister and other stakeholders.

²⁰⁶ Ibid Section 98-99

²⁰⁷ See for instance Section 98 (2) and 101 (4) Ibid, where persons responsible for oil spills will be required to pay for the costs of clean ups and environmental restoration in case of damage

²⁰⁸ Ibid Section 103

²⁰⁹ Ibid section 104

²¹⁰ Ibid Section 105 & 106

²¹¹ Ibid Part VI

4.3.3 Evaluation of the Policy and Legal Regime

The Act gives specific policy basis for harnessing of CDM opportunities through exploitation of renewable energy in the energy sector. This is important, considering that the Act was developed around the time Kyoto Protocol came into force. To this extent, one can say that the drafters of the Act were sensitive to the developments in the international carbon trade regime.

The policy thrust in favour of renewable energy sources lays down a wide basis for implementation of energy projects that fall squarely under the CDM. The lessening of licensing requirements for small scale power generating stations is likely to encourage community level projects permissible under the CDM. It should be noted that the estimated potential for power generation under this subsector is 3000MW²¹². The Policy has also done well to anticipate the growing importance of biofuels (biodiesel, biogas and bioethanol) and has provided for measures to be taken in order to promote the development and use of the same. The Act has also recognized the potential of municipal solid waste in the generation of electricity, which constitutes permissible landfill flaring activities under CDM. The types of renewable energy sources listed in the Act should therefore be used to update the list of permissible CDM projects under the NEMA- CDM Guidelines.

The ERC is the key institutional entity for realizing the strategies to be pursued through the Act. For this reason, the ERC will be an important stakeholder in the framework of carbon trade regulation in Kenya. The Rural Electrification Authority (REA) is also another institution that can play a critical CDM- related implementation role in electrification projects that abate CO₂ emissions. For now, ERC is a member of the National Climate Change Activities Coordination Committee (NCCACC) and is currently tasked with the role of coming up with a mechanism of computing emissions for purposes of updating the national GHG inventory²¹³. However neither is the ERC nor REA is included in the membership of the CDM National Clearing House which approves CDM projects. Curiously though, the energy law (unlike the Forests Act) does not include in the mandate of these two institutions, a provision for promoting national interest in the implementation of international treaties on energy. Instead, this mandate is vested with the Minister for Energy who can have the discretion of delegating it to the two entities. If such provisions existed, the two entities would have had a clear mandate to engage in carbon regulatory frameworks.

²¹² Ministry of Energy (Supra)

²¹³ Interview with Peter Kaigwara, ERC on 20th May 2009

The Act mandates the Minister to lay down a regulatory framework for sustainable production, distribution and marketing of renewable resources, including charcoal. On one hand, this broad mandate can be used to develop a carbon trade framework compatible with other sectoral regimes. In the alternative, the regulatory power of the Minister can be deployed in the formulation of supplementary frameworks to support the existing (nascent) carbon trade regulatory regime under EMCA. On the other hand, it can be argued that the exercise of this mandate is likely to bring about conflict with other sectoral regimes that attempt to regulate renewable resources. For instance, whereas the Act empowers the Minister to develop a framework for the production, distribution and marketing of charcoal and cultivation of woodlots, it also grants the ERC licensing powers for charcoal production²¹⁴. However, similar powers are bestowed upon the Minister in charge of forests and Kenya Forest Service (with regard to charcoal and woodlots). The same can be said of the jurisdiction of local authorities over municipal solid waste. These are likely to result in jurisdictional conflicts in the absence of a framework for collaboration for such cross-sectoral issues.

The Act is viewed as a major step in ensuring that production, distribution and consumption of energy does not endanger the environment²¹⁵. In this regard, the Act has substantially incorporated environmental protection and promotion concerns in its provisions. The requirement for EIA in approvals for energy related projects points to this. The fact that ERC is mandated to set environmental, health and safety standards to govern the sector also supports this position. If implemented well, there is no doubt that the Policy and Act will contribute substantially to realization of sustainable development goals in Kenya. To this extent therefore, it is arguable that the energy policy and legal regime are compatible with the carbon trade regime. However, for the Act to become fully operational, it will be necessary for the Minister to promulgate various regulations, strategies and plans. Unless these are done, it might be too early to valorise the contribution of the policy regime to realization of sustainable development.

Even though the legal and policy framework, has to some extent, embraced the principle of public participation, the energy sector's institutional framework is still dominated by the

²¹⁴ According to Eng Kiva of Ministry of Energy, the KFS has already initiated the process of formulating the Charcoal Regulations. The Ministry of Energy intends to get involved in the process at a latter date. However, a better role for the Ministry is to develop guidelines on consumption of charcoal, rather than duplicate what the KFS is mandated to do (interview held on 14th May 2009).

²¹⁵ Kindiki K, *Synchronizing Kenya's Energy Law with the Framework Environmental Law* in Okidi et al (Supra) at pg 389

government. The Minister and President play a dominant role in appointing commissioners to the ERC and members of the Rural Electrification Authority (REA). This is likely to stifle meaningful participation of stakeholders in the decision-making processes within these two institutions. The value-added presence of stakeholders (especially the expertise they bring) into public sector management will be lost due to their omission. This outcome can be attributed to the evolution process of the National Energy Policy, where it was noted that stakeholders were only invited to comment on the draft policy twice²¹⁶. The process was driven by bureaucrats in the Ministry of Energy and its parastatals. Even a critical entity like NEMA was only invited to participate in consultative workshops rather than having its nominees sitting in the Working Group that drafted the document²¹⁷. This notwithstanding, it may be necessary for the Minister to initiate changes to the Act in order to allow defined stakeholders to nominate their representatives to these critical institutions. This is the nomination process which for instance the Forests Act of 2005 has adopted with respect to appointment of its Board members²¹⁸.

The establishment of the Energy Tribunal is a departure from the Forest Act's approach of converging access to justice mechanisms under the National Environmental Tribunal (NET) which is established under the EMCA. Since it has been demonstrated that Kenya's energy law is integrated with environmental law, the access to justice provisions thereunder ought to take this into account. In the listed qualifications of the members of the Energy Tribunal, there is no requirement for expertise in environmental matters²¹⁹. In addition, there is no provision for reference of environmental questions arising from ERC decisions to the NET. There is therefore a risk that conflicting jurisprudence on environmental law might arise through conflicting decisions made by the two Tribunals thus provoking normative chaos in environmental governance.

4.4 Conclusion

Kenya has made laudable efforts in reviewing its policy and legal regimes governing forests and energy sectors in view of changing circumstances both at local and international levels. It is

²¹⁶ UNEP Supra pg 14

²¹⁷ Ibid

²¹⁸ Section 6 of Forests Act

²¹⁹ Section 108 (2) of the Energy Act provides that members of the Tribunal shall be appointed from among persons with a university degree and not less than fifteen years relevant experience in matters related to electricity, petroleum, finance, economics, engineering, energy or law

evident that the review has taken cognizance of and incorporated principles of sustainable development. The resultant laws attempt better coordination of their respective sectors by creating institutions with wider mandates. There are greater linkages between the sectoral laws and the environmental framework laws, which further promotes environmental conservation and protection within each sector. There is also linkage between national and international legal regimes governing the sectoral statutes and the environment generally, thus laying a good basis for municipal implementation of international laws on the subjects. The said laws and policies therefore provide modern regimes for sectoral management and coordination and thus are more capable of dealing with new and complicated global phenomena on sustainable development like carbon trade.

The Forests Act and Policy evidently embrace the international legal regime on carbon trade, perhaps as a reflection of the heightened awareness of Kenya’s obligations at the time the law and policy were adopted. The sectoral regime is likely to promote greater investments in forestry carbon project by expanding the notion of a forest to include private and community-owned forests. The institutional framework established for managing the sector is compatible with the national framework for regulation of carbon trade. The sectoral regime embraces EIA as a tool for managing forest projects and thus integrate well with provisions of EMCA. The Act provides for elaborate mechanisms of community/public participation in forest management, which can be used to expand the sustainability criteria of forest projects. By providing for cross-boundary management of shared forest resources among countries, the sectoral regime allows for pooling of such resources into viable larger scale carbon projects. They also seek to reduce pressure on forests through degradation by regulating charcoal industry, thereby providing greater security to forestry carbon projects.

However, there are challenges within the said sectoral regimes that may pose barriers to successful implementation of carbon trade in Kenya. Under the forest sectoral regime, the following challenges have been identified in the table below:

Table 3: Summary of critical issues on forests legal and policy regime

- | |
|--|
| <ul style="list-style-type: none"> • Provisions governing the circumscribing of landowners rights by the Kenya Forest Service (KFS) when it takes over the management of private forests (as provisional forests) can be adjudged a violation of constitutionally secured property rights. The conditions attached to registration of private forests do not constitute permissible overriding interests under the relevant land registrations laws and these cannot therefore be used to circumscribe land owners’ rights. • In spite of their critical importance in the forest sector, the KFS and Kenya Forest |
|--|

Management Conservation Fund are absent in the existing institutional framework for approving carbon projects.

- KFS is yet to develop a specific policy on promotion of forestry carbon projects as required by the law. In the absence of such a policy, the participation of the KFS in carbon trade will remain ad hoc.
- Cross boundary cooperation on transboundary forest resources will require reciprocal laws in the EAC countries as there is no Community law on the subject.
- The Charcoal industry is yet to be regulated and this may facilitate continued destruction of forests and thereby jeopardise forestry carbon projects.
- The Forest Act has not incorporated environmental management tools (found in EMCA) such as environmental easement and conservation orders which can be used in securing forestry carbon project investments.
- The 1991 Memorandum of Understanding (MoU) entered into by the defunct Forest Department with the Kenya Wildlife Service for the purpose of joint management of several forests for a period of 25 years is not synchronized with the Forest Act 2005. This might therefore hamper implementation of forestry carbon projects within the said forests.

The energy sectoral regime is also well integrated with international legal regime for carbon trade. It lays a clear basis for harnessing carbon trade opportunities through exploitation of renewable energy sources in Kenya. The regime also lays a broader basis for a wide range of energy project options that fit within the carbon trade (ranging from *inter alia* hydro power, biofuel, co-generation, wind, solar and municipal wastes). Like in the forestry regime, the institutional framework of energy law is compatible with the international regulatory framework of carbon trade. The energy law can be used as a legal basis for establishing a regulatory framework for carbon trade or in the alternative, it can provide a supplementary framework. The sectoral regime integrates environmental protection and conservation considerations, which is supportive of the sustainable development concept and this enhances its compatibility with the international regime for carbon trade.

However, the energy sectoral regime manifests certain weaknesses that can hinder successful implementation of a carbon trade regime in Kenya. These can be summarized as below:

Table 4: Summary of critical issues on Energy Legal and Policy regime

- Whereas the ERC as the sector's independent regulator has a justifiable role in the regulatory framework of carbon trade, the Energy Act does not categorically provide for this in the objects and functions of the ERC. Participation of ERC in carbon trade activities will depend on the goodwill of the Minister.
- The regulatory powers of the Minister and ERC over cross-sectoral energy resources (charcoal, woodlots, municipal waste) are likely to conflict with the jurisdiction of other institutions such as Ministry of Forestry, Kenya Forest Service and local authorities. A cross-sectoral framework for collaboration in the exercise of these regulatory powers is absent.
- The full implementation of the Energy Act is dependent on promulgation of various regulations, national strategies and plans that are yet to be formulated²²⁰. This might delay the accruing of benefits contained in the Act to carbon trade regulation.
- The institutions of the energy sector are highly dominated by the Minister and the President. This waters down the independence of ERC. Such government domination with corresponding low level of community/private sector participation is likely to increase political risk associated with the overall management of the energy sector and thus adversely affect the carbon trade.
- The access to justice provisions under the Energy Act does not integrate environmental considerations and this may affect the overall compatibility of the sectoral regime with sustainable development agenda of the carbon trade.

In the next chapter, we will make recommendations on the nature and content of the national carbon regulatory framework and the necessary adjustments required in the forestry and energy sectoral regimes.

²²⁰ According to Engineer Kiva of Ministry of Energy, the Ministry has drafted a Biofuel policy which is still being discussed by stakeholders.

CHAPTER FIVE:

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

In chapter one, we gave a background to the study and laid down its theoretical framework. The Kelsenian theory on public international law, Rawls theory of justice and the concept of regulatory law provide the overall framework for this study.

In chapter two, we discussed extensively the concept of carbon trade as laid down by the international climate change legal regime and the status of the global carbon trade since the coming into force of the Kyoto Protocol. we therefore concluded that the carbon trade had evolved on a global scale into a multi-billion dollar enterprise, even though African countries had largely missed out due to investment barriers and the tendency by developed countries to eschew forest-related carbon projects that are more suited for the continent. we also explored in detail, the concept of sustainable development and its legal underpinnings in environmental law generally. Consequently, we concluded that the concept of sustainable development was yet to acquire the normativity associated with comparable concepts like “good neighbourliness” principle. However, efforts at international level (following the formulation of the New Delhi Principles) aimed at clarifying the concept further, are still ongoing. At the municipal level, it is through legislating regulatory frameworks for environmental issues (including carbon trade) that State practice on sustainable development may evolve into internationally-binding legal principles.

In chapter three, we gave an exposition of the national regulatory regime of carbon trade as provided for under the NEMA- Kenya Guidelines on CDM and provided a critique of the same. we concluded that the CDM Guidelines are outdated and therefore an urgent review is overdue. The regulatory approach used by NEMA as evinced by Guidelines is of doubtful legal validity from Kelsenian theoretical point of view and therefore are devoid of any legal effect and the architecture of the institutional framework is weakly designed. We also examined the sustainable development criteria used in approving carbon projects. We found the criteria to be inconclusive and anchored on outdated policy basis and definition of the concept of sustainable development. We also found that the indicators used in the evaluation are inadequate and that

the process of assessing sustainable development criteria is not synchronized with the EIA process.

In chapter four, we analysed the legal and policy regimes governing sectors that are critical for the successful implementation of carbon projects i.e. forestry and energy. In conclusion, we found the two sectoral regimes to have significantly integrated principles of sustainable development, thus enhancing their compatibility with the regulatory framework of carbon trade. We also found the regimes to have sufficiently anticipated the evolution of carbon trade and thus lay down a firm policy setting. However, the regimes still requires a few changes to ensure synchrony.

In this chapter, specific recommendations are made on the regulatory framework of carbon trade, as well as the necessary changes required on the forestry and energy sectoral regimes. Options for a legally sound regulatory approach, the institutional framework (regulatory bodies) and improvements to the sustainable development criteria and the methodological approach in assessing the criteria are provided.

5.2 Recommendations on Carbon Trade Regulatory Framework

5.2.1 Regulatory Approach

It is important that the regulatory framework adopted by Kenya conforms to municipal and international law. The Kenya National CDM Guidelines analyzed in chapter three were found to have a doubtful legal validity. To remedy this, two options are proposed herein. The first option would be for National Environment Management Authority (NEMA) review and present the CDM Guidelines for promulgation by the Minister for Environment as Regulations under Part XIV of the Environmental Management and Coordination Act (EMCA)- this will be referred to hereinafter as “the first regulatory option”. The second option would be for NEMA to prepare a Climate Change Bill for submission the Minister for Environment under Part XI of EMCA- this will be referred to hereinafter as “the second regulatory option”.

The first option is much easier and convenient, considering that the process for promulgation of subsidiary legislation is less rigorous. However, considering that Kenya has not passed a national legislation to domesticate international law on climate change this approach is also fraught with

legal challenges. The constitutionality of the subsidiary legislation can be challenged on the basis that it is not based on any particular principal law.

The second option provides a legislative basis for domestication of the international legal regime on climate change. The Climate Change Bill would lay down a framework for not only regulating carbon trade but also ensure the country is able to meet its current and future obligations under the UNFCCC, Kyoto Protocol and any subsequent agreements.

5.2.2 Scope of Regulatory Law

Whichever option is chosen, the scope of the regulatory framework should expand the ambit of projects and programmes as well as methodologies permissible under existing NEMA CDM Guidelines. The following table summarizes the exact scope of the proposed law:

Table 5: Scope of Regulatory Framework

<ul style="list-style-type: none">• Both CDM and Voluntary Carbon projects should fall under the regulatory ambit of the proposed law• The projects permissible under the carbon trade should include;<ul style="list-style-type: none">○ forestry projects under land use land use change & forestation (LULUCF) & the proposed Reduced Emissions from Deforestation and Forest Degradations (REDDs)○ Use of Biomass fuels; i.e. biodiesel, bioethanol, bagasse○ Hydro-electric projects i.e. both small and large scale programmes○ Gas flaring and power generation from municipal solid wastes○ Energy conservation programmes○ Laws and national standards established by the government to achieve emissions reductions• Cross-boundary projects as well as permissible programmes involving two or more countries within the region.• Under methodology, both project as well as sector-wide baselines will be permissible. This means that projects and programmes will be registrable Carbon activities in Kenya

5.2.3 Institutional Framework

The proposed architecture of the regulatory framework is as follows:

5.2.3.1 Designated National Authority (DNA):

The role of DNA would basically be the approval of carbon projects, based on recommendations of the National Clearing House. In addition, the DNA would perform other tasks related to implementation of climate change law such as, maintenance of GHG inventories, promotion of awareness on climate change, information exchange and advising government on climate change policies.

Under the first regulatory approach option, NEMA can continue playing the DNA role. However, the capacity of NEMA especially in terms of human resource, budgetary allocations and physical infrastructure should be enhanced to overcome the already identified weaknesses plaguing the Authority. A department on carbon trade should be established in order to maintain a sharp focus on this growing industry. With a well resourced NEMA, there would be no need for a National Focal Point on Climate Change as provided for under the existing CDM Guidelines.

Under the second regulatory approach option, a Directorate of Climate Change (DCC) which would take over the DNA role is recommended. The DCC would be established as an autonomous state agency, with a structure that borrows from NEMA. It should be governed by a multi-sectoral board representing state agencies involved in climate change, private sector, civil society organizations and academia (see the composition of National Clearing House below). A director general (DG) would head its secretariat and act as secretary to the Board. It would have divisions/departments formulated according to the various thematic areas of climate change. Carbon trade therefore would be one of the departments of the DCC. The funding of DCC should come from appropriations approved by parliament and other permissible sources (e.g. donations, levies imposed on carbon trade projects etc). To enhance autonomy of the DCC, the members of the Board should be nominated by stakeholders and appointed by the Minister, whereas the DG should be recruited by the Board.

Table 6: The specific roles of the DNA

- | |
|---|
| <ul style="list-style-type: none">• Approval of Carbon projects |
|---|

- Development of criteria for evaluation of projects by NCH
- Monitor projects and prepare evaluation reports
- Maintain a database of experts to assist DNA (and National Clearing House) in discharging its obligations
- Promotion of carbon investments
- Advice the government on policies relevant to Climate Change
- Representation of the country in climate change processes at regional and international levels
- Maintain inventory of GHG as per the UNFCCC
- Promote research on Climate Change
- Prepare government reports and communications to the relevant organs of the UNFCCC and Kyoto Protocol
- Oversee financial arrangements established for supporting carbon projects
- Liaison with the UNFCCC Secretariat and other international bodies involved in Climate Change activities

5.2.3.2 National Clearing House

Under the first regulatory approach option, the membership of the NCH needs to be expanded in order to bring on board stakeholders in Carbon trade. The membership should also be clearly defined and properly listed in the Guidelines. The following list is indicative of the proposed membership: Representatives from Ministry of Environment, Forestry, Energy, Industry and Finance; Representatives from State Agencies such as Energy Regulatory Commission, Kenya Forest Service, Kenya Investment Authority, NEMA, Kenya Forest Conservation and Management Fund; Private Sector representatives from Petroleum Institute of East Africa, Kenya Association of Manufacturers, Cement Manufacturers Association, KENGEN, KPLC; Civil Society Organizations representatives from Community Forest Association, National Council of NGOs, PANERECC and NGOs involved in Carbon trade activities and; Academia representatives from Kenya Institute of Public Policy Research & Analysis, public and private universities.

The NCH would play the roles of reviewing carbon projects proposals against an established criteria and recommending successful project for approval by NEMA and Reviewing monitoring and evaluation reports from approved projects and provide advice on termination of projects that are no longer viable.

Under the second regulatory approach option, the Board of the DCC would play the role of the NCH. The functions of the NCH as elaborated above would apply to the functions of the Board of DCC.

5.2.3.3 The National Climate Change Activities Coordination Committee (NCCACC)

With a strengthened DNA, the role of NCCACC should be limited to cross- ministerial and multi-sectoral coordination of government's response to climate change. The DNA should provide secretariat support to the NCCACC

5.2.3.4 Parliament:

The DNA, through the Minister for Environment should present its reports to parliament as a way of enhancing accountability. Considering the multi-sectoral nature of climate change, a joint parliamentary committee should be established with membership drawn from the committees on Energy, Communications & Public Works and the committee on Agriculture, Lands and Natural Resources. This committee should scrutinize ministerial report from the DNA and legislations initiated by the Minister on climate change issues.

5.2.4 Benefit Sharing and Climate Justice

In recognition of the public interest in carbon property, the regime should provide for a national adaptation levy on carbon projects. Levies from forest projects should be channelled to the Kenya Forest Conservation Fund. Levies from the energy related projects should be channelled to ERC and Rural Electrification Authority. The use of the funds should be restricted to projects and programmes that enhance the mitigation and adaptation capacities of vulnerable groups and communities in Kenya.

There is need to regulate the voluntary carbon trade through prescribing the forms and contents of contractual arrangements entered into between project proponents and local beneficiaries.

The proposed law should prescribe (as a schedule) a contract format for the carbon trade projects.

Table 7: Proposed contents of a standard carbon contract

- The offset credits to be generated from the project based on the baseline methodology adopted for that particular project
- The value of carbon offset credits and the period of accrual. There should be provision for variation of prices as a reflection of increased valuation of carbon market owing to appreciation. A minimum price bar should be set to safeguard the sellers from exploitation²²¹.
- Technology transfer (capacity building benefits to accrue to beneficiary)
- Disclosure of levies to be imposed on proceeds of sale of carbon offsets at national and international level
- Any corporate social responsibility programme to be initiated by the project proponents.

5.3 Recommendation on Sustainable Development Criteria²²²

5.3.1 Definition of Sustainable Development

Revisions to the Sustainable Development Criteria Guidelines should provide opportunity for an authoritative review of the definition of the concept. I would propose for an improvement on the UNEP definition, which should state thus “the maintenance, rational use and enhancement of natural resource base that underpins ecological resilience& renewal, promotion of social & cultural values, economic growth and progress towards intra & inter-generational equity”

5.3.2 Policy Basis for Sustainable Development

The Vision 2030 with its aspiration for “a people living in a clean and health environment” should provide the overall policy basis for developing sustainable development criteria. The document provides sustainable development goals for the country with regard to energy and forestry sectors which are foundational to carbon projects. Besides, the recently adopted Energy

²²¹ According to Tom Owino (supra), China has set a minimum bar price below which CERs cannot be sold

²²² The applicable guidelines are contained in NEMA, *Sustainable Development Benefits Delivered by Clean Development Mechanism*

and Forest Policies will provide additional policy bases, with the EMCA providing a coordination framework for sectoral policies and laws.

The Sustainable Development Criteria is to be guided by sustainable development issues contained in the table below:

Table 8: Proposed sustainable development issues

- Diversification of energy sources with a view to reduce over-reliance on hydropower which is now highly vulnerable to climate change- induced shocks
- Promotion of clean energy production from renewable sources and the need to reduce over-reliance on hydrocarbons its impact on Kenya's balance of payments and economic growth generally.
- Preservation and conservation of fragile or endangered ecosystems, with special focus on forests with the aim of increasing its coverage to the internationally acceptable 10%
- Management of pollution and solid municipal waste (as sources of renewable energy) and its impact on quality of the urban environment.
- Impact of climate change on food security and the need to safeguard vulnerable populations from rising global food prices partly attributed to pursuit of clean energy in the developed countries.
- Impacts of climate change on the vulnerable populations and ecosystems, particularly in the Arid and Semi- Arid Lands (ASAL) and the capacity for disaster mitigation and adaptation
- Population growth, poverty and inequality as major driving factors behind environmental degradation, unsustainable energy choices among rural populations and destruction of forests.
- The need for improvement in environmental planning and governance in order to realize sustainable development goals.

5.3.3 Sustainable Development Indicators:

The indicators listed in the existing Sustainable Development Guidelines should be interpreted in line with the above mentioned sustainable development issues in order to make them more relevant and comprehensive. However, the following indicators should also be considered:

Table 9: Proposed sustainable development indicators

- Impact of project on food security at local and national level
- Compliance of project with sound environmental, social and economic policies
- Compliance of project with democratic decision-making, the rule of law, integrity (transparency and accountability), promotion and protection of human rights and freedoms and empowerment of target beneficiaries
- Impact of the project on investment environment (both local and national)
- Contribution of the project to of climate change disaster mitigation measures for vulnerable populations especially in ASAL
- Percentage (%) increase in forest cover (through reduced deforestation and reforestation) attributable to the project

5.3.4 The Evaluation Approach

To avoid duplication of efforts, the sustainable development criteria should be integrated into the Environmental Impact Assessment format. This would mean that project proponents should include an assessment of the sustainable development indicators over and above other criteria provided for under the applicable EIA regulations. The upshot is that an EIA report would also include a chapter on the assessment of the sustainable development which is to be reviewed by the DNA before approval.

Merging the two evaluation processes into EIA necessitate a review of The EMCA and the Environment (Impact Assessment & Audit) Regulations of 2003 in order to take into account the inclusion of sustainable development indicators as additional basis of conducting EIA for projects earmarked for carbon trade. Further, the project proponent should be required to submit an EIA report to the NCH or DCC as one of the lead agencies for recommendations on approval before the report is presented to NEMA. The upshot is that recommendations by NCH or DCC on the basis of evaluation of sustainable development criteria component of the EIA report ought to influence NEMA's final decision on the issuance of EIA licence to a project proponent.

An alternative option if the second regulatory approach option is adopted, both the EMCA and the EIA Regulations should be amended to grant the Directorate of Climate Change power to consider, approve and issue EIA licences. This would reduce the bureaucracy attached to

consideration of the sustainable development criteria by the DCC and issuance of EIA licence by NEMA as per the current law.

5.4 Recommendation on Sectoral Regimes

5.4.1 On Forestry Sectoral Regime

The table below contains specific proposals on review of the forestry legal and policy regime

Table 10: Forests legal and policy proposals

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| <ul style="list-style-type: none">• Section 26 of the Forest Act of 2005 should be amended to make a declaration of a provisional forest have the same effect as overriding interests permissible under section 30 (c) of Registered Land Act (Cap 300) and Section 23 (1) of Registration of Titles Act (Cap 281)• Kenya Forest Service (KFS) should develop and publish a policy document on promotion of forestry carbon projects• Lobby the East African Community to develop a law on management of transboundary forest resources and products• Promulgation of regulatory framework on charcoal industry• Inclusion (by way of amendment) to the Forest Act environmental management tools such as environmental easements and conservation orders, aimed at further securing carbon investments.• Review of the 1991 Memorandum of Understanding between the KFS and Kenya Wildlife Service on the joint management of several forests to ensure synchrony with Forest Act of 2005 and carbon projects promotion policy |
|--|

5.4.2 On Energy Sectoral Regime:

Specific legal and policy review proposals on energy sector are contained in the table below.

Table 11: Energy legal and policy proposals

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|---|
| <ul style="list-style-type: none">• Review Section 5 of the Energy Act to include in the mandate of ERC, the function of promoting Kenya's interest in the implementation of international treaties on energy |
|---|

- Amend Section 103 (2) (b) to provide as one of the powers of the Minister for Energy in developing framework for regulation of charcoal industry, promulgation of guidelines on consumption of charcoal. There should be a requirement for consultation with the Minister in charge of Forestry when developing these rules to avoid duplication and overlaps in mandate.
- Promulgation by the Minister of regulations (on petroleum undertakings), national strategies and plans for exploitation of renewable resources. The ERC should speed up this process by developing draft policy documents through consultative processes before the Minister can consider them for promulgation
- Review the institutional framework of the ERC by enhancing community/private sector participation in the decision-making organs and securing further autonomy of these institutions by allowing stakeholders to nominate their representatives into the ERC and ERA.
- Amend the Energy Act to either include environmental experts to be appointed as members of the Energy Tribunal or refer energy disputes that have an environmental dimension to the National Environment Tribunal established under EMCA.

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