

Nurturing Our Environment for Sustainable Development

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Nurturing Our Environment for Sustainable Development

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Typesetting by:

New Edge Solutions Ltd,
P.O. Box 60561 - 00200,
Tel: +254 721 262 409/ 737 662 029,
Nairobi, Kenya.

Printing by:

Mouldex Printers
P.O. Box 63395,
Tel: +254 723 366 839,
Nairobi, Kenya.

Published by:

Glenwood Publishers Limited
P.O. Box 76115 - 00508
Tel: +254 221 0281,
Nairobi, Kenya.

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ISBN 978-9966-046-11-6

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Dedication

Dedicated to
Those who are committed to
Nurturing Our Environment
For Sustainable Development
For the sake of Today
And Tomorrow

And to those who dare to dream big
In the face of adversity
Pain and discouragement
Take Solace in knowing
That in the end
The vision you hold dear
In your hearts
Will become a reality

Acknowledgments

I am grateful to all the persons and organisations that I had the honour to work with in the course of my research.

I appreciate the family members, colleagues, mentors and friends who believe in me and always give me support and encouragement.

I salute the team that has made this publication possible. Special thanks go to Ngararu Maina, James Njuguna, Dorcas Endoo, Faith Nguti, Anne Kiramba, the staff of Kariuki Muigua & Co. Advocates and Glenwood Publishers Ltd.

Sages have advanced the view that whatever is conceivable in the mind is achievable. I see the world in this light.

I also believe that massive success is available to those who are ready to burn midnight oil, work persistently and never give up.

This book is a gift to those who search for knowledge and to those who are committed to nurturing the environment for sustainable development.

Thank you all for making what was once a dream turn into reality.

Author's Note
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The central themes in this book revolve around environmental resources management with the aim of achieving sustainable development. It is based on the idea that environment and its natural resources are a heritage that should be managed, conserved and protected not only for the sake of the current generation, but also for future generations. The book argues that due to its critical role in the human, social and economic development of the country, the environment is one of the most important elements necessary for the existence of the human life. Environment affects all the life on earth in various ways, be it directly or indirectly. The environment and the resources therein must be carefully nurtured to make sure that their health is not sacrificed at the altar of national development.

This book explores the various principles that inform the sustainable development approach to environmental protection and conservation. The key principles that inform the book include: the principle of international co-operation in the management of environmental resources shared by two or more states; the principles of intergenerational and intragenerational equity; the polluter-pays principle; reasonable use and equitable utilization and precautionary principle, amongst others. The discourse also explores the place of the cultural and social principles traditionally applied by any community in Kenya for the management of the environment or natural resources in so far as the same are relevant to the debate on sustainable development. These inform the discussion across all the chapters of this book. This is particularly important considering that sustainable development aims at ensuring that the current human generation plays a role in guaranteeing that future generations will have enough of the environmental resources to sufficiently support their needs, while also having sufficient to pass on to the subsequent generations.

While much of the available literature is based on promoting sustainable development in order to satisfy human needs, making such an approach mainly anthropocentric, this book also explores the alternative arguments that are ecocentric in nature. The discourse, therefore, adopts and emphasises that both approaches can play a key role in facilitating sustainable management of environment and its resources. Some of the running themes that are informed by the anthropocentric approach to environmental management include Poverty

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Eradication, Food Security, Environmental Democracy, Environmental Justice, Environmental Security, Public Participation, Gender Equity, Access To Information, Conflicts Management, amongst others. All these themes are discussed within the broader theme of human rights while emphasising the special relationship between human rights and the environment. This is particularly important in light of the new Constitutional provisions on governance and in the Bill of Rights including Articles of the Constitution that touch on environment and natural resources.

Ecocentric arguments also inform the discussion on themes such as combating climate change, impact of resource extraction, environmental health, and environmental conservation for the sake of the Mother Nature. However, promoting such rights as the right to a clean and healthy environment has both anthropocentric and ecocentric benefits and should therefore be pursued.

The author affirms the need for sustainable management of the environment and environmental resources to secure the life of both flora and fauna now and in future while benefiting from these resources for national development. Thus, the book explores the above themes in the context of the sustainable development goals (United Nations 2030 Agenda for Sustainable Development) for purposes of facilitating environmental protection and conservation.

To achieve the foregoing, the discussions in this book range from the International, Regional and National legal and regulatory frameworks on sustainable development and management of environment and natural resources. The Best Practices in environmental management and efforts towards nurturing the environment around the globe are discussed in the context of Kenya and the obligations that lie on individual countries.

While the book highlights the role of law in facilitating environmental protection, there is also an emphasis on the need to move beyond the law in looking for answers to the challenges facing sustainable environmental management. This is also brought out in every chapter and alternative approaches to achievement of sustainable environmental management are discussed. The argument is that there should be a paradigm shift from over-reliance on natural resources to curb environmental degradation and resource depletion. This may be achieved through such ways as scientific innovation and creativity, amongst other means

Author's Note

of supporting community livelihood which should be encouraged. Easing the pressure on the environment through diversification of livelihood means is essential to facilitate protection, conservation and replenishment of the environment and the resources therein. This is however, not meant to downplay the crucial role that natural resources can play in eliminating poverty, being one of the major hindrances to achieving sustainable development. As such, the book also explores the various elements of environmental security and how they relate to sustainable development. Unless the food insecurity problem is adequately addressed, any efforts to achieve environmental protection and sustainability in the country will be futile. That is why the use of resources, fair trade practices and technology for food security is important.

Kenya has launched a roadmap to guide the process of achieving the sustainable development goals. The discourse is therefore relevant both in the broader arena and the Kenyan context.

The book targets the general reader, scholars, government agencies, Non-Governmental organisations and all stakeholders who have an interest in the environment and sustainable development. The environment is a heritage that belongs to all. Human beings have a duty to take care of the environment. The book thus explores the broad theme of "Nurturing Our Environment for Sustainable Development." It is an ideal that is achievable.

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List of Abbreviations

List of Abbreviations

ADR- Alternative Dispute Resolution

ASALs- Arid and Semi-Arid Areas

BTFP- BioTrade Facilitation Programme

CAADP- Comprehensive Africa Agriculture Development Programme

CBD- Convention on Biological Diversity

CBNRM- Community based natural resource management

CEDAW-Convention on the Elimination of All Forms of Discrimination against Women

CEL-Commission on Environmental Law

CFAs- Community Forest Associations

CMDRR-Community Managed Disaster Risk Reduction

COMESA- Common Market for Eastern and Southern Africa

COP- Conference of the Parties

DRC- Democratic Republic of Congo

DRR-Disaster Risk Reduction

EA- Environmental Auditing

EAC ARDP- East African Community Agriculture and Rural Development Policy

EAC- East Africa Community

EEC- European Economic Community

EIA- Environmental Impact Assessment

EITI- Extractive Industries Transparency Initiative

List of Abbreviations

EMCA-Environmental Management and Coordination Act
EOLSS- Encyclopedia of Life Support Systems
FAO- Food and Agriculture Organization
FCPF- Forest Carbon Partnership Facility
FITs- Feed-in tariffs
GATT- General Agreement on Tariffs and Trade
GBs- Green Bonds
GCF- Green Climate Fund
GDP- Growth Domestic Product
GEI- Green Economy Initiative
GHG- Greenhouse gas
HCFCs-Hydro chlorofluorocarbons
ICCPR- International Covenant on Civil and Political Rights
ICEL-International Council on Environmental Law
ICESCR- International Covenant on Economic, Social and Cultural Rights
IE- Implementing Entity
IFC- International Finance Corporation
IK- Indigenous knowledge
ILO- International Labour Organization
IMF- International Monetary Fund
IMO- International Maritime Organization
IPCC- Intergovernmental Panel on Climate Change

List of Abbreviations

IUCN- International Union for Conservation of Nature

KACP- Kenya Agricultural Carbon Project

KCCAP- Kenya Climate Change Adaptation Programme

KRDP- Kenya Rural Development Programme

LDC- Least Developed Countries

MDGs- Millennium Development Goals

NAAIAP- National Accelerated Agricultural Input Access Program

NASEP- National Agricultural Sector Extension Policy 2012

NDC- Nationally determined contribution

NDMA- National Drought Management Authority

NEMA- National Environmental Management Authority

NEPAD- New Partnership for Africa Development

NGOs- Non-Governmental Organisations

NIE- National Implementing Entity

NRM-Natural Resource Management

ODS- Ozone depleting substances

OECD- Organisation for Economic Co-operation and Development

OHCHR- Office of the High Commissioner on Human Rights

PDRA- Participatory Disaster Risk Assessment

PRI- Principles for Responsible Investment

RES- Renewable Energy Sources

SADC- Southern African Development Community

List of Abbreviations

- SDGs- Sustainable Development Goals
- SEA- Strategic Environmental Assessment
- SESA- Strategic Environmental and Social Assessment
- SSE- Sustainable Stock Exchanges
- TCE- Traditional Cultural Expressions
- TDRMs-Traditional Dispute Resolution Mechanisms
- TEK- Traditional Ecological Knowledge
- TK- Traditional knowledge
- UDHR- Universal Declaration of Human Rights of 1948
- UN CESCR- United Nations Committee on Economic, Social and Cultural Rights
- UN NGLS- United Nations Non-Governmental Liaison Service
- UN- United Nations
- UNCCD- United Nations Convention to Combat Desertification
- UNCED- United Nations Conference on Environment and Development
- UNCTAD- UN Conference on Trade and Development
- UNCTAD XIV- Fourteenth session of the United Nations Conference on Trade and Development
- UNDP- United Nations Development Programme
- UNEA- United Nations Environment Assembly
- UNECE- United Nations Economic Commission for Europe
- UNEP FI- UN Environment Program Finance Initiative
- UNEP- United Nations Environment Programme

List of Abbreviations

UNESCO – United Nations Educational, Scientific and Cultural Organization

UNFCCC- United Nations Framework Convention on Climate Change

UN-REDD- United Nations Programme on Reducing Emissions from
Deforestation and Forest Degradation

UNTS- United Nations Treaty Series

WBG- World Bank Group

WHO- World Health Organization

Environment and Sustainable Development

1.0 Introduction

The term 'environment' is defined as all the physical, chemical and biological factors external to a person, and all the related behaviour.¹ The *Draft International Covenant on Environment and Development*² defines environment to mean "the totality of nature and natural resources, including the cultural heritage and infrastructure essential for social-economic activities."³ Environment has also been defined as "...the whole complex of climatic, adaptic and biotic factors that act upon an organism or an ecological community and ultimately determine its form or survival; the aggregate of social and cultural conditions that influence the life of an individual or a community..."⁴ The European Commission also proffered a definition of 'environment' as 'the combination of elements whose complex inter-relationships make up the settings, the surroundings and the conditions of life of the individual and of society as they are and as they are felt'.⁵ Close to home, the *Environmental Management and Coordination Act* (EMCA)⁶, defines "environment" to include; the physical factors of the surroundings of human beings including land, water, atmosphere, climate, sound, odour, taste, the biological factors of animals and plants and the social factor of aesthetics and includes both the natural and the built environment.⁷

¹ World Health Organization, "Preventing disease through healthy environments," (World Health Organization, Geneva, 2006).

² International Union for Conservation of Nature and Natural Resources Environmental Policy and Law, *Draft of the Joint Working Group convened by the Commission on Environmental Law (CEL) of the World Conservation Union (IUCN) and the International Council on Environmental Law (ICEL)*, Paper No. 31 Rev. 3, 4th Ed., 2010.

³ Draft of the Joint Working Group convened by the Commission on Environmental Law (CEL) of the World Conservation Union (IUCN) and the International Council on Environmental Law (ICEL), 1991; See also *Environment and Land Court Act, 2011*, No 19 of 2011, Laws of Kenya, s.2.

⁴ Webster's *New World Dictionary* 3rd ed (Cleveland College, Cleveland, 1998), p.454; See also Birnie, P. et al, *International Law & the Environment*, (3rd ed., Oxford University Press, Oxford, 2009), p. 3.

⁵ Council Regulation (EEC) No. 1872/84 on Action by the Community Relating to the Environment, OJL 176 (1984) 1. (As quoted in Birnie, P. et al, *International Law & the Environment*, (3rd ed., Oxford University Press, Oxford, 2009), p. 5).

⁶ *Environmental Management and Coordination Act* (EMCA), Act No. 8 of 1999, Laws of Kenya; See also *Environmental Management and Coordination (Amendment) Act, 2015*).

⁷ *Ibid*, s.2.

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'Surroundings' can be placed into three categories as follows: the combination of physical conditions that affect and influence the growth and development of an individual or community; the social and cultural conditions that affect the nature of an individual or community; and the surroundings of an inanimate object of intrinsic social value.⁸ This is definition of what constitutes 'surroundings' may illustrate the close relationship that exists between environment and human beings, especially within the African context. It has been observed that since environmental problems have risen in importance, it has been necessary to develop a body of law more specifically aimed at protection of the environment, thus giving rise to international environmental law which is a branch of the general international law.⁹

The World Bank rightly points out that different countries have different priorities in their development policies and, therefore, any attempt at comparison of their development levels, would require one to first decide what development really means to them, and what it is supposed to achieve.¹⁰ It has also been argued that while economic progress is an essential component, it is not the only component since development is not purely an economic phenomenon.¹¹ It must encompass more than the material and financial side of people's lives and as such, development should therefore be perceived as a multidimensional process involving the reorganization and reorientation of entire economic and social systems.¹² Indeed, it has been suggested that development has several dimensions which include: Economic development, that is, improvement of the way endowments and goods and services are used within (or by) the system to generate new goods and services in order to provide additional consumption and/or investment possibilities to the members of the system; Human development, that is, people-centred development, where the focus is put on the improvement of the various dimensions affecting the well-being of individuals

⁸ Gilpin, A., *Environmental Impact Assessment (EIA): Cutting Edge for the 21st Century*, (Cambridge University Press, 1994) (ebook). Available at <http://ebooks.cambridge.org/chapter.jsf?bid=CBO9781139166539&cid=CBO9781139166539A011> [Accessed on 31/08/2016].

⁹ Birnie, P. et al, *International Law and the Environment*, (3rd Ed., Oxford University Press, New York, 2009), p. 2.

¹⁰ The World Bank, 'What Is Development?' pp. 7-10 at p.10. Available at http://www.worldbank.org/depweb/beyond/beyondco/beg_01.pdf [Accessed on 02/09/2016].

¹¹ Todaro, M.P., 'Chapter four: Theories of Development: A Comparative Analysis,' pp. 110-144 at p. 110. Available at http://www.aw-bc.com/info/todaro_smith/Chapter4.pdf [Accessed on 02/09/2016].

¹² Ibid, p. 110.

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and their relationships with the society (health, education, entitlements, capabilities, empowerment etc.); Sustainable development, that is, development which considers the long term perspectives of the socio-economic system, to ensure that improvements occurring in the short term will not be detrimental to the future status or development potential of the system. In other words, development will be “sustainable” on environmental, social, financial and other grounds; and Territorial development, that is, development of a specific region (space) achievable by exploiting the specific socio-economic, environmental and institutional potential of the area, and its relationships with external subjects.¹³

While sustainable development forms the fulcrum of this book, there is reference to the other forms of development throughout the book, for purposes of promoting an integrated approach to the development agenda. The discussion in this book also incorporates all the elements of environment as captured in the foregoing definitions of the term, and specifically, in the context of the human surroundings made up of all the three categories as highlighted above. Discussions on the link between environment and development also rely on the broader conceptualizations of the term development. However, they mainly dwell around three dimensions namely economic, human and sustainable development.

Notably, the relationship between development and environment gave birth to the sustainable development concept, whose central idea is that global ecosystems and humanity itself can be threatened by neglecting the environment.¹⁴ Scholars have observed that since environmental economists are concerned that the long-term neglect of the environmental assets is likely to jeopardize the durability of economic growth, and sustainable development therefore “involves maximizing the net benefits of economic development, subject to maintaining the services and quality of natural resources over time”.¹⁵ Its concern is about balancing the objectives of economic growth and attending

¹³ Bellù, L.G., ‘Development and Development Paradigms: A (Reasoned) Review of Prevailing Visions,’ (Food and Agriculture Organization of the United Nations, May 2011), p.3. Available at http://www.fao.org/docs/up/easypol/882/defining_development_paradigms_102EN.pdf [Accessed on 02/09/2016].

¹⁴ ‘Theories of Economic Development,’ p. 14. Available at www.springer.com/cda/content/document/cda_downloaddocument/9789812872470-c2.pdf?SGWID=0-0-45-1483317-p177033406 [Accessed on 02/09/2016].

¹⁵ Ibid.

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to environmental considerations. Sustainable development aims to improve the quality of life in a comprehensive manner, including economic prosperity, social equity and environmental protection. Economic, social, environmental and cultural aspects must be integrated in a harmonious manner to enhance the intergenerational well-being.¹⁶

It is therefore, in recognition of the central role of the environment in human wellbeing that the global community has, for the last several decades, been putting in place frameworks that are aimed at facilitating effective environmental governance that balances the foregoing aspects. The basis of this is that while development in all its dimensions is necessary, it should not be carried out at the expense of the environment. For instance, as early as 1972, the World Governments were already deliberating on how resources can be used in a way that benefits people but ensures conservation and protection of natural resources for the sake of future generations. This was discussed in depth at the United Nations Conference on the Human Environment, held in Stockholm, from 5 to 16 June 1972. The Declaration of the United Nations Conference on the Human Environment (*Stockholm Declaration of 1972*)¹⁷ was adopted during this Conference, where the discussion revolved around what later came to be known as *sustainable development* (emphasis added).¹⁸ Noteworthy was the *Declaration's* assertion that man is both the creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth.

The *Declaration* was a confirmation of the Conference call upon Governments and peoples to exert common efforts for the preservation and improvement of the human environment, for the benefit of all the people and for their posterity.¹⁹

¹⁶ Ibid; See also generally, Chambers, R., *Sustainable Livelihoods, Environment and Development: Putting Poor Rural People First*, IDS Discussion Paper 240, Brighton: IDS, 1987. Available at <https://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/875/rc279.pdf?sequence=1&isAllowed=y>

¹⁷ U.N. Doc. A/Conf.48/14/Rev. 1(1973); 11 ILM 1416 (1972), the United Nations Conference on the Human Environment, Stockholm, 5 to 16 June 1972. This became the first global document outlining the general principles for the management of natural resources and the environment.

¹⁸ This has been defined as the Development that meets the need of the present without compromising future generations to meet their needs. The term 'sustainable development' was popularised by the Brundtland Commission in its 1987 report *Our Common Future*, United Nations, 1987. "Report of the World Commission on Environment and Development," General Assembly Resolution 42/187, 11 December 1987.

¹⁹ Article 3, *Stockholm Declaration 1972*.

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Further, the *Declaration* proclaimed that man has to constantly sum up experience and go on discovering, inventing, creating and advancing. This was captured in the proposition that 'in our time man's capability to transform his surroundings, if used wisely, can bring to all peoples the benefits of development and the opportunity to enhance the quality of life'. The Declaration was however cautious to point out that 'wrongly or heedlessly applied, the same power can do incalculable harm to human beings and the human environment.'²⁰ Sustainable development agenda is thus driven by the need to avert such an eventuality but instead promote positive development that balances the various interests.

1.2 Need for Sound Environmental Governance

Principle 2 of the *Stockholm Declaration* of 1972 is to the effect that the natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate. Also important to this discussion is Principle 5 which asserts that the non-renewable resources of the earth must be employed in such a way as to guard against the danger of their future exhaustion and to ensure that benefits from such employment are shared by all mankind. Principle 21 thereof further provides that States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

Therefore, even as this declaration recognises people and Governments' right to use natural resources for improvement of the quality of life, it calls for use and management that will ensure their conservation and preservation. Indeed, this is well articulated under Principle 13 which observes that in order to achieve a more rational management of resources and thus to improve the environment, States should adopt an integrated and coordinated approach to their development planning so as to ensure that development is compatible with the need to protect and improve environment for the benefit of their population.

²⁰ Ibid, Article 3.

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The *World Charter for Nature*²¹, in its preamble, recognises that one of the reasons for the adoption of this charter was the conviction that the benefits which could be obtained from nature depends on the maintenance of natural processes and on the diversity of life forms and that those benefits are jeopardized by the excessive exploitation and the destruction of natural habitats.²² General Principle 1 thereof is to the effect that nature should be respected and its essential processes should not be impaired. Further, Principle 7 provides that in the planning and implementation of social and economic development activities, due account should be taken of the fact that the conservation of nature is an integral part of those activities. Principle 8 of the Charter is to the effect that in formulating long-term plans for economic development, population growth and the improvement of standards of living, due account should be taken of the long-term capacity of natural systems to ensure the subsistence and settlement of the populations concerned, recognizing that this capacity may be enhanced through science and technology.

Principle 9 of the Charter is also to the effect that allocation of areas of the earth to various uses should be planned, and due account should be taken of the physical constraints, the biological productivity and diversity and the natural beauty of the areas concerned. Principle 10 asserts that natural resources should not be wasted, but used with a restraint appropriate to the principles set forth in the Charter, in accordance with the following rules: Living resources should not be utilised in excess of their natural capacity for regeneration; and the productivity of soils should be maintained or enhanced through measures which safeguard their long-term fertility and the process of organic decomposition, and prevent erosion and all other forms of degradation.

The foregoing principles are just but a few of the many provisions in the *Charter* which advocate for sustainable use and management of natural resources. This Charter thus imposes a duty on all persons and States to use natural resources in a way that ensures their conservation and protection.²³ It therefore follows that although each state has exclusive jurisdiction within its territory and people and permanent sovereignty over the natural resources therein, as far as international law is concerned, the use and management of such resources should not be done

²¹ UN General Assembly, *World Charter for Nature*, 28 October 1982, A/RES/37/7.

²² *Ibid*, Preamble.

²³ Principle 24, *World Charter for Nature*.

in ways blind to the need for environmental conservation but the same should go hand in hand. Sustainable management and governance of world resources can only be achieved through the concerted efforts of each state taking care of the environmental resources falling within the confines of their sovereign territory.

1.2.1 Environmental Sustainability and Sustainable Development: The Framework

There are a number of international and regional legal and regulatory instruments within international environmental law that are geared towards promoting environmental sustainability, and sustainable development, in general. Some of the major ones have been highlighted in this section.

The *Ramsar Convention (1973)*²⁴ is an intergovernmental treaty whose mission is the conservation and wise use of all wetlands through local, regional and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world.²⁵ It is the overarching international legal instrument that should inform state parties' legal framework on wetlands conservation and use.

Wetlands play an important role in ensuring environmental stability and health and thus, this Convention is important in helping countries come up with measures on how to counter impending threats to these resources. As reservoirs for water and nutrients, wetlands serve the human beings, animals and plants. It therefore, follows that improved health of the wetland resources is necessary in achieving environmental health and security for both anthropocentric and ecocentric reasons. Member States have obligations under the Ramsar Convention relating to promotion of sustainable management and utilisation of wetlands resources.

Another important international instrument on environment is the 1992 *Rio Declaration on Environment and Development*.²⁶ This Declaration sought to balance the interests of states in exploiting their natural resources for development and

²⁴ Convention on Wetlands of International Importance especially as Waterfowl Habitat, 996 UNTS 245; TIAS 11084; 11 ILM 963 (1972).

²⁵ Ramsar Convention Secretariat, 2013. *The Ramsar Convention Manual: a guide to the Convention on Wetlands* (Ramsar, Iran, 1971), 6th ed. Ramsar Convention Secretariat, Gland, Switzerland.

²⁶ UN Doc. A/CONF.151/26 (vol. I) / 31 ILM 874 (1992).

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environmental conservation with the aim of achieving sustainable development. Principle 2 thereof recognises that states have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. Principle 3 is to the effect that the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations. The *Rio Declaration* sought to promote the usage of natural resources for development but within the practices that promote sustainable development.

*Agenda 21*²⁷ was adopted in 1992 with the aim of combating the problems of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which the human race depend for their well-being. Further, it sought to deal with the integration of environment and development concerns and greater attention to them which would lead to the fulfillment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future.²⁸ The aim was to achieve a global consensus and political commitment at the highest level on development and environment cooperation.

Chapter 3 of the *Agenda 21* deals with combating poverty. Clause 3.2 thereof provides that while managing resources sustainably, an environmental policy that focuses mainly on the conservation and protection of resources must take due account of those who depend on the resources for their livelihoods. Otherwise, it could have an adverse impact both on poverty and on chances for long-term success in resource and environmental conservation.²⁹ *Agenda 21* recognises that integral to poverty eradication is, together with international support, the promotion of economic growth in developing countries that is both sustained and sustainable and direct action in eradicating poverty by strengthening employment and income-generating programmes.³⁰ Clause 4.5

²⁷ (A/CONF.151/26, vol.II), United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992, Agenda 21.

²⁸ *Ibid*, Preamble.

²⁹ *Ibid*, Clause 3.2.

³⁰ *Ibid*, Clause 3.3.

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thereof notes that special attention should be paid to the demand for natural resources generated by unsustainable consumption and to the efficient use of those resources, consistent with the goal of minimizing depletion and reducing pollution.³¹ *Agenda 21* basically seeks to enable all people to achieve sustainable livelihoods through integrating factors that allow policies to address issues of development, sustainable resource management and poverty eradication simultaneously.³²

The *Convention on Biological Diversity*³³ was negotiated with the objective of promoting the conservation of biodiversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising out of the utilization of genetic resources.³⁴

Article 6 of the *Convention on Biological Diversity* provides that each Contracting Party should, in accordance with its particular conditions and capabilities: develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which should reflect, inter alia, the measures set out in the Convention relevant to the Contracting Party concerned; and integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies. An integrated approach to conservation and sustainable use of biological diversity holds a key to ensuring that all the relevant stakeholders in member states get to work together to achieve biological resource conservation and restoration. With such guidelines as provided by the Convention, it is possible for the international community to collaborate in biological diversity conservation and use, especially in the case of transboundary resources.

Article 7 thereof also states that each Contracting Party should identify components of biological diversity important for its conservation and sustainable use, and monitor those components, particularly those requiring urgent conservation measures and those which offer the greatest potential for sustainable use. They should also identify and monitor processes and activities

³¹ Ibid, Clause 4.5.

³² Ibid, Clause 3.4.

³³ 1992 Convention on Biological Diversity, [1993] ATS 32 / 1760 UNTS 79 / 31 ILM 818 (1992).

³⁴ Article 1.

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likely to have significant adverse impacts on the conservation and sustainable use of biological diversity, and maintain and organise data derived from monitoring. In identifying such components, states are able to ensure the conservation and sustainable use of those resources. However, for them to do so, they ought to bring on board all the relevant stakeholders, namely, communities, scientists, and regulators, amongst others to make the work easier and comprehensive. International cooperation in such projects is also important for purposes of sharing scientific knowledge and research outcome. The net effect would be enhanced environmental security, not only for the good of the concerned people but also for improved environmental health.

The provisions of this Convention should generally inform domestic laws on genetic resources conservation and benefit sharing framework on the accruing benefits in the member states, with the aim of ensuring that communities participate in conservation measures but also benefit from such resources.

The *United Nations Conference on Sustainable Development* ("Rio+20")³⁵ which took place in Rio de Janeiro, Brazil in June 2012, saw governments *inter alia* 'renew their commitment to sustainable development and to ensure the promotion of an economically, socially and environmentally sustainable future for the planet and for present and future generations. This would involve eradicating poverty which they recognised as the greatest global challenge facing the world today and an indispensable requirement for sustainable development. In this regard they therefore, committed themselves to freeing humanity from poverty and hunger as a matter of urgency.'³⁶

The conference resulted in a focused political outcome document³⁷ which contains clear and practical measures for implementing sustainable development.³⁸ The document was out of the recognition that poverty eradication, changing unsustainable and promoting sustainable patterns of

³⁵ United Nations, *Report of the United Nations Conference on Sustainable Development*, Rio de Janeiro, Brazil 20–22 June 2012, A/CONF.216/16.

³⁶ *Ibid*, Article 1.2.

³⁷ United Nations, *Future We Want - Outcome document*, Resolution adopted by the General Assembly on 27 July 2012 [without reference to a Main Committee (A/66/L.56)], A/RES/66/288.

³⁸ United Nations Department of Economic and Social Affairs, 'United Nations Conference on Sustainable Development, Rio+20.'

Available at <https://sustainabledevelopment.un.org/rio20> [Accessed on 24/10/2015].

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consumption and production and protecting and managing the natural resource base of economic and social development are the overarching objectives of and essential requirements for sustainable development. The participants also reaffirmed the need to achieve sustainable development by promoting sustained, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion, and promoting the integrated and sustainable management of natural resources and ecosystems that supports, inter alia, economic, social and human development while facilitating ecosystem conservation, regeneration and restoration and resilience in the face of new and emerging challenges.³⁹

Under Article 1.6, the Rio+20 Report reiterated that people are at the centre of sustainable development and in this regard, it urges state parties strive for a world that is just, equitable and inclusive. They also committed to work together to promote sustained and inclusive economic growth, social development and environmental protection and thereby to benefit all. Further, under Article 1.8 thereof, State parties also reaffirmed the importance of freedom, peace and security, respect for all human rights, including the right to development and the right to an adequate standard of living, including the right to food, the rule of law, gender equality, women's empowerment and the overall commitment to just and democratic societies for development. The two main themes at the Conference were: how to build a green economy to achieve sustainable development and lift people out of poverty; and how to improve international coordination for sustainable development.⁴⁰

The implication of the foregoing assertions is that sustainable development agenda may not be achieved as long as states approach the same in a disintegrated manner, especially by creating governmental departments that do not work together. The discussion is one that transcends sectoral approach to issues and requires issues of development and environmental conservation be treated as mutually inclusive.

³⁹ Ibid, Clause 4.

⁴⁰ What is "Rio+20"? Available at <http://www.un.org/en/sustainablefuture/about.shtml> [Accessed on 22/02/2014].

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The Conference and the resultant document were for purposes of achieving sustainable development. All that is required now is political goodwill from the state parties to ensure that their national frameworks and efforts towards sustainable development are in line with the spirit of Rio+20 as a way of guaranteeing sustainable production, consumption and conservation of the environmental resources for both the present and future generations. By ensuring that everyone is on board and meaningfully engaged, the hope for a sustainably developed world becomes realizable for all.

The *Convention on the Non-Navigational Use of Watercourses*⁴¹ applies to uses of international watercourses and of their waters for purposes other than navigation and to measures of protection, preservation and management related to the uses of those watercourses and their waters.⁴² There is an obligation under the Convention for the Watercourse States to, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.⁴³ There is also a general obligation for the Watercourse States to cooperate on the basis of sovereign equality, territorial integrity, mutual benefit and good faith in order to attain optimal utilisation and adequate protection of an international watercourse.⁴⁴

It is important to recognise the need for joint efforts in conserving and protecting international watercourses since any negative effects would also be transnational and would affect different states. Although the Convention does not have binding effect on the parties, it provides a good framework within which parties can collaborate in ensuring environmental health of the international watercourses for the sake of both present and future generations.

The *Forest Principles*⁴⁵ state in the preamble that the subject of forests is related to the entire range of environmental and development issues and opportunities,

⁴¹ *Convention on the Non-Navigational Use of Watercourses*, Adopted by the General Assembly of the United Nations on 21 May 1997. Entered into force on 17 August 2014. See General Assembly resolution 51/229, annex, Official Records of the General Assembly, Fifty-first Session, Supplement No. 49 (A/51/49).

⁴² *Convention on the Non-Navigational Use of Watercourses*, Article 1.1.

⁴³ *Ibid*, Article 7.1.

⁴⁴ *Ibid*, Article 8.1.

⁴⁵ United Nations, *The Non-legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests (Forest Principles) A/CONF.151/26 (Vol. III)*.

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including the right to socio-economic development on a sustainable basis. The guiding objective of these principles is to contribute to the management, conservation and sustainable development of forests and to provide for their multiple and complementary functions and uses.⁴⁶ According to these principles, forestry issues and opportunities should be examined in a holistic and balanced manner within the overall context of environment and development, taking into consideration the multiple functions and uses of forests, including traditional uses, and the likely economic and social stress when these uses are constrained or restricted, as well as the potential for development that sustainable forest management can offer.⁴⁷

The Principles require countries to ensure that forest resources and forest lands are sustainably managed to meet the social, economic, ecological, cultural and spiritual needs of present and future generations. These needs are for forest products and services, such as wood and wood products, water, food, fodder, medicine, fuel, shelter, employment, recreation, habitats for wildlife, landscape diversity, carbon sinks and reservoirs, and for other forest products. As a result, appropriate measures should be taken to protect forests against harmful effects of pollution, including air-borne pollution, fires, pests and diseases, in order to maintain their full multiple value.⁴⁸

Notably, the Principles state that the vital role of all types of forests in maintaining the ecological processes and balance at the local, national, regional and global levels through, inter alia, their role in protecting fragile ecosystems, watersheds and freshwater resources and as rich storehouses of biodiversity and biological resources and sources of genetic material for biotechnology products, as well as photosynthesis, should be recognised.⁴⁹

The Principles also provide that national forest policies should recognize and duly support the identity, culture and the rights of indigenous people, their communities and other communities and forest dwellers. Further, appropriate conditions should be promoted for these groups to enable them to have an economic stake in forest use, perform economic activities, and achieve and

⁴⁶ Ibid, Preamble.

⁴⁷ Preamble.

⁴⁸ Principle 2 (b).

⁴⁹ Principle 4.

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maintain cultural identity and social organization, as well as adequate levels of livelihood and well-being through, inter alia, land tenure arrangements which serve as incentives for the sustainable management of forests.⁵⁰

The *Forests Principles*, though non-legally binding, provide minimum guidelines on the efficient management, conservation and sustainable utilisation of forest resources for the current and future generations. Owing to their many uses, forest conservation and protection is important for the realisation of a healthy environment and eradication of poverty.

At the United Nations Sustainable Development Summit on 25 September 2015, world leaders adopted *the 2030 Agenda for Sustainable Development*, which includes a set of 17 Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, and tackle climate change by the year 2030.⁵¹ The 2030 Agenda for Sustainable Development⁵² is a plan of action for people, planet and prosperity. It also seeks to strengthen universal peace in larger freedom and was formulated in recognition that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development.⁵³

According to the United Nations Development Programme (UNDP), the Sustainable Development Goals, otherwise known as the Global Goals, would build on the Millennium Development Goals (MDGs), eight anti-poverty targets that the world committed to achieving by 2015.⁵⁴ The MDGs, adopted in 2000, aimed at an array of issues that included slashing poverty, hunger, disease, gender inequality, and access to water and sanitation. The new SDGs, and the broader sustainability agenda, go much further than the MDGs, addressing the root causes of poverty and the universal need for development that works for all people.⁵⁵

⁵⁰ Principle 5 (a).

⁵¹ United Nations Development Programme, 'Sustainable Development Goals (SDGs),' available at <http://www.undp.org/content/undp/en/home/mdgoverview/post-2015-development-agenda.html> [Accessed on 24/10/2015].

⁵² *Transforming our world: the 2030 Agenda for Sustainable Development*, Resolution adopted by the General Assembly on 25 September 2015, [without reference to a Main Committee (A/70/L.1)], Seventieth session, Agenda items 15 and 116, 21 October 2015.

⁵³ *Ibid*, Preamble.

⁵⁴ *Ibid*.

⁵⁵ *Ibid*.

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In order to end hunger, achieve food security and improved nutrition and promote sustainable agriculture, the SDGs require that by 2030, countries double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.⁵⁶

It has rightly been argued that the regional approach to environmental governance through regional environmental agreements has an advantage over global agreements, as there is greater similarity of interests, norms, perceptions, and values at the regional level that fosters international cooperation.⁵⁷ It is perhaps in recognition of this assertion that there exist a number of regional legal and regulatory frameworks on environmental governance.

As far as natural resources and environmental governance within the African region is concerned, there is the *African Convention on the Conservation of Nature and Natural Resources*⁵⁸ which seeks: to enhance environmental protection; to foster the conservation and sustainable use of natural resources; and to harmonize and coordinate policies in these fields-with a view to achieving ecologically rational, economically sound and socially acceptable development policies and programmes.⁵⁹

There is also the *Bamako Convention*⁶⁰ which is an African region Convention aimed at preventing environmental pollution by hazardous wastes. The Convention obligates its member Parties to take appropriate legal, administrative and other measures, within the area under their jurisdiction, to prohibit the

⁵⁶ Ibid, Goal 2.3.

⁵⁷ Momanyi, A., *WIO Regional State of Coast Report*, 'Chapter 33: Governance: Legal and Institutional Frameworks,' p. 446. Available at <http://www.unep.org/NairobiConvention/docs/WIO%20Regional%20State%20of%20Coast%20Report%20%20Chapter%2033.%20GOVERNANCELEGAL%20AND%20INSTITUTIONAL%20FRAMEWORKS.pdf> [Accessed on 31/08/2016].

⁵⁸ African Union, *African Convention on the Conservation of Nature and Natural Resources*, OAU, 1001 UNTS 3.

⁵⁹ Ibid, Article I

⁶⁰ African Union, *Bamako Convention on the ban on the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa*, 1991. Available at <http://www.jus.uio.no/lm/hazardous.waste.ban.afrian.import.bamako.convention.1991/portrait.pdf>

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import of all hazardous wastes, for any reason, into Africa from non-Contracting Parties.⁶¹ This is a Convention that is meant to ensure that even as African countries engage in development projects and international trade with countries outside the region, they do not engage in activities that adversely affect the environment. Generally, the Convention's purpose is to: prohibit the import of all hazardous and radioactive wastes into the African continent for any reason; minimize and control transboundary movements of hazardous wastes within the African continent; prohibit all ocean and inland water dumping or incineration of hazardous wastes; ensure that disposal of wastes is conducted in an "environmentally sound manner"; promote cleaner production over the pursuit of a permissible emissions approach based on assimilative capacity assumptions; and establish the precautionary principle.⁶²

Chapter nineteen (Articles 111⁶³, 112⁶⁴ and 114⁶⁵) of the *East Africa Community Treaty*⁶⁶ provides for co-operation in environment and natural resources. The East Africa Community Treaty (EAC) Partner States are to take joint effort to co-operate in efficient management of these resources, with key priorities of the sector including climate change adaptation and mitigation, natural resource

⁶¹ Ibid, Article 4(1).

⁶² UNEP, 'First Conference Of Parties To The Bamako Convention,' available at <http://www.unep.org/delc/BamakoConvention> [Accessed on 31/08/2016].

⁶³ Article 111: Environmental Issues and Natural Resources

'The Partner States recognise that development activities may have negative impacts on the environment leading to the degradation of the environment and depletion of natural resources and that a clean and healthy environment is a prerequisite for sustainable development.'

⁶⁴ Article 112: Management of the Environment. 1. 'For purposes of Article 111 of this Treaty, the Partner States undertake to cooperate in the management of the environment and agree to: (a) develop a common environmental management policy that would sustain the eco-systems of the Partner States, prevent, arrest and reverse the effects of environmental degradation; (b) develop special environmental management strategies to manage fragile ecosystems, terrestrial and marine resources, noxious emissions and toxic and hazardous chemicals; (c) take measures to control transboundary air, land and water pollution arising from developmental activities; (d) take necessary disaster preparedness, management, protection and mitigation measures especially for the control of natural and man-made disasters. These include oil spills, bio-hazards, floods, earthquakes, marine accidents, drought and bush fires; and (e) integrate environmental management and conservation measures in all developmental activities such as trade, transport, agriculture, industrial development, mining and tourism in the Community.'

⁶⁵ Article 114: Management of Natural Resources. 1. For purposes of Article 111 of this Treaty, the Partner States agree to take concerted measures to foster co-operation in the joint and efficient management and the sustainable utilisation of natural resources within the Community for the mutual benefit of the Partner States.'

⁶⁶ East African Community, *the Treaty for the Establishment of the East African Community*, Arusha. EAC: 2002 xiv, 111p: 230mm (EAC Publication, No.1) ISBN: 9987 - 666-01-9 (amended 2006).

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management and biodiversity conservation, disaster risk reduction and management, and pollution control and waste management.⁶⁷

The foregoing legal instruments are meant to guide states in their efforts to achieve environmental sustainability, for the realisation of the bigger goal of attaining sustainable development. However, it is important to point out that these are just a few of the many legal and regulatory instruments, which are mostly sectoral, selected for illustration purposes.

1.3 National Obligations on Environment and Sustainable Development

As already pointed out, it is noteworthy that most of the main international and regional legal and regulatory instruments on environment have spelt out mandatory obligations as well as non-binding guidelines on the international best practices in environmental matters. While some of these obligations and guidelines are meant to be applied directly, especially in relation to international environmental relations, others are meant to be incorporated into the domestic laws on environment or at least offer guidelines on the substantive and procedural contents of the domestic laws.

This can be exemplified using the Constitution of Kenya 2010, which provides that the general rules of international law should form part of the law of Kenya.⁶⁸ It also provides that any treaty or convention ratified by Kenya should form part of the law of Kenya under this Constitution.⁶⁹ In light of this, it is noteworthy that Kenya is a signatory to a number of international and regional legal and regulatory instruments on environment. The international community thus expects Kenyan authorities and people in general, to promote and implement the internationally agreed best practices in environmental governance. These are the same expectations and obligations placed on other countries around the world,

⁶⁷ EAC, 'Environment and Natural Resources,' *EAC's Environment Agenda: A Healthy Natural Environment for Present and Future Generations*. Available at <http://www.eac.int/sectors/environment-and-natural-resources> [Accessed on 31/08/2016].

⁶⁸ Constitution of Kenya, 2010, Article 2(5).

⁶⁹ *Ibid*, Article 2(6); See also the *Treaty Making and Ratification Act, No. 45 of 2012*, which is an Act of Parliament to give effect to the provisions of Article 2(6) of the Constitution and to provide the procedure for the making and ratification of treaties and connected purposes. Notably, This Act applies to – (a) multilateral treaties; (b) bilateral treaties which deal with, inter alia, the environment and natural resources (s. 3(2)).

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the only differences being special frameworks put in place for particular types of natural resources and environmental conditions.

Agenda 21 tasks governments to do all that is necessary in giving communities a large measure of participation in the quest for sustainable management and protection of the local natural resources, in order to enhance their productive capacity.⁷⁰ Governments, with the assistance of and in cooperation with appropriate international, nongovernmental and local community organizations, are obligated to establish measures that will directly or indirectly, *inter alia*, rehabilitate degraded resources, to the extent practicable, and introduce policy measures to promote sustainable use of resources for basic human needs.⁷¹

The *2030 Agenda for Sustainable Development* provide that by 2030, countries should ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.⁷² Further, by 2020, countries are to maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilisation of genetic resources and associated traditional knowledge, as internationally agreed.⁷³

With regard to planet sustainability, the State parties agreed to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.⁷⁴ In relation to peace sustainability, the Agenda states that countries are determined to foster peaceful, just and inclusive societies which are free from fear and violence. There can be no sustainable development without peace and no

⁷⁰ Agenda 21, Clause 3.7(d).

⁷¹ Agenda 21, Clause 3.8.

⁷² Goal 2.4.

⁷³ Goal 2.5.

⁷⁴ *Ibid*, Preamble.

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peace without sustainable development.⁷⁵ Going by this assertion, security becomes an indispensable part of sustainable development.

The participants also resolved, between 2015 and 2030, to end poverty and hunger everywhere; to combat inequalities within and among countries; to build peaceful, just and inclusive societies; to protect human rights and promote gender equality and the empowerment of women and girls; and to ensure the lasting protection of the planet and its natural resources. They resolved also to create conditions for sustainable, inclusive and sustained economic growth, shared prosperity and decent work for all, taking into account different levels of national development and capacities.⁷⁶

The Agenda also envisages a world in which every country enjoys sustained, inclusive and sustainable economic growth and decent work for all. To this end, it seeks to promote realisation of a world in which consumption and production patterns and use of all natural resources – from air to land, from rivers, lakes and aquifers to oceans and seas – are sustainable. Further, state parties committed to create a world in which democracy, good governance and the rule of law, as well as an enabling environment at the national and international levels, is essential for sustainable development, including sustained and inclusive economic growth, social development, environmental protection and the eradication of poverty and hunger. They also committed to realize a world in which development and the application of technology are climate-sensitive, respect biodiversity and are resilient. This is one in which humanity lives in harmony with nature and in which wildlife and other living species are protected.⁷⁷

Through full implementation of the goals and principles set out in the Agenda, it is possible to achieve a clean and healthy environment both for the sake of a secure future for the human beings and the wildlife and other living species. It incorporates both anthropocentric and ecocentric approaches to environmental conservation and protection, since it seeks to protect both the humans and the planet as a whole.

⁷⁵ Ibid, Preamble.

⁷⁶ Ibid, Agenda No. 3.

⁷⁷ Ibid, Agenda No. 9.

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The SDGs ought to inform the efforts of member states in achieving sustainable development, poverty eradication, and environmental conservation and protection. They offer an integrated approach, which is environmentally conscious, to combating the various problems that affect the human society as well as the environmental resources. It is expected that states efforts will be informed by the SDGs in the economic, social, political and environmental decisions. The Goals also provide an elaborate standard for holding countries accountable in their development activities. This way, environmental health is not likely to be sacrificed at the altar of economic development but will be part of the development agenda.

Article VIII of the *African Convention on the Conservation of Nature and Natural Resources* is to the effect that the Parties should take all necessary measures for the protection, conservation, sustainable use and rehabilitation of vegetation cover through *inter alia*: adopting scientifically-based and sound traditional conservation, utilization and management plans for forests, woodlands, rangelands, wetlands and other areas with vegetation cover, *taking into account the social and economic needs of the peoples concerned* (emphasis added), the importance of the vegetation cover for the maintenance of the water balance of an area, the productivity of soils and the habitat requirements of species.

Further, Article XX thereof which deals with capacity building, education and training, is to the effect that the Parties should, *inter alia*, promote environmental education, training and awareness creation at all levels in order to enhance their peoples' appreciation of their close dependence on natural resources and their understanding of the reasons and rules for the sustainable use of these resources. Notably, this Convention provides that in taking action to achieve the objectives of this Convention and implement its provisions, the Parties should be guided by the following principles: the right of all peoples to a satisfactory environment favourable to their development; the duty of States, individually and collectively to ensure the enjoyment of the right to development; and the duty of States to ensure that developmental and environmental needs are met in a sustainable, fair and equitable manner.⁷⁸

⁷⁸ *African Convention on the Conservation of Nature and Natural Resources*, Article III.

1.4 Conclusion

This chapter has highlighted the salient features of the main international regional and national legal and regulatory frameworks relating to sustainable management of environment and natural resources. It also alludes to the role of law in facilitating environmental protection especially at the global level, the impact of globalisation and trade development in international environmental law and sustainable development. Some of these issues have been revisited in a more comprehensive manner in other chapters within this book.

While the various instruments may vary in their applicability depending on the region, types of resources or environmental and climatic conditions, the bottom line is that countries are supposed to promote and ensure sustainable utilisation of the available resources for present and future generations, within the framework of sustainable development. To appreciate the differences that may exist due to varying group interests, different players, different types of resources, sustainable development agenda is informed and driven through a number of basic principles. These principles underlie and guide the formulation of the various international, legal and regulatory instruments on environmental matters, especially in relation to the substantive and procedural aspects therein. It is worth mentioning that while the principles are expressly mentioned in some of the instruments, in others, they just inform the ideas behind the framework and can only be inferred from the application.

As already pointed out, the foregoing obligations and guidelines, as set out in various instruments, are meant to be implemented or assist states in coming up with substantive framework for sustainable environmental governance. The principles of sustainable development become relevant as far as implementation of these obligations is concerned. They help states meet their various needs, but within the sustainable development framework. The basic principles of sustainable development, are useful in establishing the link between environment and developmental matters within the context of human society. Chapter two of this book is dedicated to these principles as well as the elements contained in the sustainable development agenda. However, they have been revisited throughout the book in light of the international obligations relating to environmental governance and sustainable development.

CHAPTER TWO

Environmental Protection and the Principles of Sustainable Development

2.1 Introduction

This chapter offers brief background to select principles that inform sustainable development including: the principle of international co-operation in the management of environmental resources shared by two or more states; the principles of intergenerational and intragenerational equity; the polluter-pays principle; reasonable use and equitable utilisation and precautionary principle.

The chapter also briefly looks at the place of the cultural and social principles traditionally applied by communities in Kenya for the management of the environment or natural resources in so far as the same are relevant to the debate on sustainable development. The main aim of this chapter is to establish the link between the international principles of sustainable development and environmental management through a discussion on how they inform efforts towards nurturing the environment around the globe.

2.2 Definition and Elements of Sustainable Development

It has been observed that the structures of imperial and colonial power which dominated the world in the nineteenth and early twentieth centuries made little provision for economic and social advance in what is now called the developing world.¹ This is because colonial regions functioned primarily to supply imperial powers with raw materials and cheap labour – including slave labour as late as the mid-nineteenth century.

However, by the end of the Second World War, perceptions and policy had changed drastically where economic and social improvement for the majority had become a major preoccupation of governments, and with the crumbling of colonial power relations this goal was extended to the poorer nations of the

¹ Harris, J.M., Basic Principles of Sustainable Development, Global Development and Environment Institute, Working Paper 00-04, June 2000, p.1. Available at http://www.ase.tufts.edu/gdae/publications/working_papers/Sustainable%20Development.PDF [Accessed on 25/08/2016]

world.² Thus, economic development, human development, amongst other forms of development gained popularity the world over.

Sustainable development is believed to be one of a series of innovative concepts—following such antecedents as human development, equitable development, or appropriate development—that seek to broaden the scope of development theory from its narrow focus on economic growth.³ It has been documented that the idea of “sustainable development” was born in 1713 when Carlowitz, while editing the first book on forest sciences, argued that timber would be “as important as our daily bread” and that it should be “used with caution in a way, that there is a balance between timber growth and lumbering”. This would allow forever a continuous, perpetual use.⁴ The concept is also attributed to the International Union for Conservation of Nature and Natural Resources (IUCN) in 1980.⁵

The concept of sustainable development however, received increased international attention after the release of the *Report of the World Commission on Environment and Development: Our Common Future*.⁶ The World Commission defined sustainable development as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’.⁷ It has been observed that the definition by the Commission is anthropocentric (the “needs” refer to human needs not ecological needs), a stance that was reaffirmed in the Rio Declaration of the United Nations Conference on

² Ibid, p.2.

³ Working Group III (WGIII) of the Intergovernmental Panel on Climate Change (IPCC), ‘Setting the Stage: Climate Change and Sustainable Development,’ (IPCC, 2001). Available at <http://www.ipcc.ch/ipccreports/tar/wg3/index.php?idp=60> [Accessed on 25/08/2016]

⁴ Keiner, M., ‘History, Definition(s) and Models of “Sustainable Development”’, p. 1. Available at <http://e-collection.library.ethz.ch/eserv/eth:27943/eth-27943-01.pdf> [Accessed on 25/08/2016]

⁵ See ‘Chapter: 2 History of Sustainability, in *Sustainability and the U.S. EPA* (The National Academies Press, 2011), available at <http://www.nap.edu/read/13152/chapter/4> [Accessed on 25/08/2016]; See also Schwass, R.D., Introduction To Sustainable Development - *World Conservation Strategy of the International Union for the Conservation of Nature and Natural Resources (IUCN)*, (UNESCO - Encyclopedia of Life Support Systems (EOLSS), p.2. Available at <http://www.eolss.net/sample-chapters/c13/e1-45-02-05.pdf> [Accessed on 25/08/2016]

⁶ World Commission on Environment and Development, *Our common future*. Oxford, (Oxford University Press, 1987).

⁷ Ibid, para. 27.

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Environment and Development (UNCED; 1992) which stated that “human beings are the centre of concerns for sustainable development”.⁸

It has correctly been observed that sustainability concerns manifest as resource depletion or absence, resource degradation, the deliberate or accidental damage of resources for short term gain, or as a misunderstanding of the complex interrelationships between resources.⁹ Indeed, the need for sustainable development was well captured in the assertion that sustainable development is primarily a social justice project focusing on equitable development to meet human needs while still recognizing that the preservation of natural resources is necessary to fulfill these needs.¹⁰ It is, therefore, arguable that the best approaches to sustainable development should establish a connection between the anthropocentric and ecocentric approaches in environmental matters.

Sustainable Development was defined by the *Brundtland Commission* in 1987, as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.¹¹ This is mainly an anthropocentric approach to sustainable development. There is also another definition, which emphasizes the ecological dimensions of sustainability: Sustainability as a relationship between human economic systems and larger dynamic, but normally slower-changing ecological systems, in which (1) human life can continue indefinitely, (2) human individuals can flourish, and (3) human cultures can develop; but in which effects of human activities remain within bounds, so as not to destroy the diversity, complexity and function of the ecological life support system.¹²

⁸ Principle 1, 1992 *Rio Declaration on Environment and Development*, UN Doc. A/CONF.151/26 (vol. I) / 31 ILM 874 (1992). Adopted at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil from 3-14 June 1992.

⁹ Thatcher, A., ‘Theoretical definitions and models of sustainable development that apply to human factors and ergonomics,’ in Broberg, N. O., et al, (eds), *Human Factors In Organizational Design And Management – Xi, Nordic Ergonomics Society Annual Conference – 46*, 2014, pp. 747-752 at p. 747.

¹⁰ *Ibid*, p. 747.

¹¹ *Our Common Future*, Report of the World Commission on Environment and Development, 1987 (Brundtland Report).

¹² Faucheux, S., *Principles of Sustainable Development - Vol. III – ‘Summary Principles for Sustainable Development,’* p.2.

Available at <http://www.eolss.net/Sample-Chapters/C13/E1-46-06.pdf> [Accessed on 27/08/2016].

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The 2002 World Summit on sustainable Development in Johannesburg adopted a plan of implementation reiterating the Rio principles and establishing poverty eradication, sustainable consumption and production patterns and protection of the natural resource base for economic and social development as the three prime objectives (Johannesburg Plan).¹³ It has been contended that that human needs cannot be sufficiently met just by providing an ecologically stable and healthy environment, but that - if a society is indeed committed to sustainability - the equally legitimate social and cultural needs ought to be taken care of as well.¹⁴ Economic, social, and cultural conditions, efforts, and values are deemed to be resources that also need to be preserved for future generations.¹⁵

Sustainable development, as defined in the *Brundtland Commission* Report, includes human development.¹⁶ One of the ways of addressing poverty is focusing on human development which empowers people, both men and women, to contribute positively towards eradication of poverty without solely relying on the Government to do so. This World Summit thus helped in establishing the link between sustainable development and social development and showing that they must be mutually inclusive if development is to be considered effective.

It is also important to point out that poverty affects males and females in varying ways and as such, any efforts geared towards its eradication should bring on board all the affected parties in order to come up with effective mechanisms that will not only reflect and address the needs of all sections of the society, but will also facilitate participation of all. This is also important as it helps generate social acceptance of the government's policies while are geared towards addressing the real issues affecting its people.

¹³ World Summit on Sustainable Development, *Johannesburg Declaration on Sustainable Development*, A/CONF.199/20, Annex: Plan of Implementation of the World Summit on Sustainable Development.

¹⁴ Littig, B. & Griefßler, E., 'Social sustainability: a catchword between political pragmatism and social theory,' *Int. J. Sustainable Development*, Vol. 8, Nos. 1/2, 2005, pp. 65-79 at p.67.

¹⁵ Ibid, p.67.

¹⁶ Costantini, V. & Monni, S., "Measuring Human and Sustainable Development: an integrated approach for European Countries," *Working paper No. 41*, 2004. p. 8.

Available at <http://host.uniroma3.it/dipartimenti/economia/pdf/WNP41.pdf> [Accessed on 15/04/2015].

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At the Rio+20 Conference, world leaders, participants from governments, the private sector, NGOs and other groups, deliberated on how they can reduce poverty, advance social equity and ensure environmental protection.¹⁷ According to the Rio+20 outcome document,¹⁸ member States agreed that sustainable development goals (SDGs) must *inter alia*: be based on *Agenda 21* and the Johannesburg Plan of Implementation; fully respect all the Rio Principles; contribute to the full implementation of the outcomes of all major summits in the economic, social and environmental fields; focus on priority areas for the achievement of sustainable development, being guided by the outcome document; address and incorporate in a balanced way all three dimensions of sustainable development and their inter-linkages; be coherent with and integrated into the United Nations development agenda beyond 2015; not to divert focus or effort from the achievement of the Millennium Development Goals; and include active involvement of all relevant stakeholders, as appropriate, in the process.¹⁹

It is worth noting that one of the main outcomes of the Rio+20 Conference was the agreement by member States to launch a process to develop a set of Sustainable Development Goals (SDGs), which would build upon the Millennium Development Goals and converge with the post 2015 development agenda.²⁰ The sustainable development goals focus on inequalities, economic growth, decent jobs, cities and human settlements, industrialization, energy, climate change, sustainable consumption and production, peace, justice and institutions.²¹

Indeed, it has been asserted that people are at the centre of sustainable development and, in this regard, Rio+20 delegates promised to strive for a world that is just, equitable and inclusive, and committed to work together to promote

¹⁷ United Nations Conference on Sustainable Development, available at <http://www.uncsd2012.org/about.html> [Accessed on 17/05/2015].

¹⁸ The Rio+20 Outcome Document, *The Future We Want* (Resolution 66/288, July 2012).

¹⁹ United Nations Department of Economic and Social Affairs, Division for Sustainable Development.

²⁰ United Nations Department of Economic and Social Affairs, "Sustainable development goals," available at <https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals> [Accessed on 20/05/2015].

²¹ United Nations General Assembly, "The Road to Dignity By 2030: Ending Poverty, Transforming All Lives and Protecting the Planet," *Synthesis report of the Secretary-General on the post-2015 Sustainable development agenda*. A/69/700. para.45.

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sustained and inclusive economic growth, social development and environmental protection and thereby benefit all, in particular the children of the world, youth and future generations of the world without distinction of any kind such as age, sex, disability, culture, race, ethnicity, origin, migratory status, religion, economic or other status.²² This is an all-inclusive approach that does not create any distinction between male and female but focuses on humanity as a whole.

The *Sustainable Development Goals, Agenda 2030* (SDGs) define sustainable development broadly to cover issues such as poverty, inequality, gender equality, health, education, governance, climate change and environmental protection.²³ In this regard, much of the global debate on sustainable development has identified three core elements of sustainability which include:²⁴ Economic: An economically sustainable system must be able to produce goods and services on a continuing basis, to maintain manageable levels of government and external debt, and to avoid extreme sectoral imbalances which damage agricultural or industrial production; Environmental: An environmentally sustainable system must maintain a stable resource base, avoiding over-exploitation of renewable resource systems or environmental sink functions, and depleting non-renewable resources only to the extent that investment is made in adequate substitutes. This includes maintenance of biodiversity, atmospheric stability, and other ecosystem functions not ordinarily classed as economic resources; and Social: A socially sustainable system must achieve distributional equity, adequate provision of social services including health and education, gender equity, and political accountability and participation.²⁵

It has been observed that sustainable development, although a widely used phrase and idea, has many different meanings and therefore provokes many different responses. In broad terms, the concept of sustainable development is an attempt to combine growing concerns about a range of environmental issues, socio-economic issues to do with poverty and inequality and concerns about a healthy future for humanity. It strongly links environmental and socio-economic

²² United Nations, 'Open Working Group proposal for Sustainable Development Goals,' *op cit*.

²³ See United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, A/RES/70/1, Resolution adopted by the General Assembly on 25 September 2015.

²⁴ Harris, J.M., *Basic Principles of Sustainable Development*, Global Development and Environment Institute, Working Paper 00-04, June 2000, *op cit*, pp.5-6.

²⁵ *Ibid*, p.6.

Environmental Protection and the Principles of Sustainable Development issues.²⁶ The key principle of sustainable development underlying all others is the integration of environmental, social, and economic concerns into all aspects of decision making.²⁷

2.3 Basic Principles of Sustainable Development

The Rio Declaration on Environment and Development lists the main principles of sustainability as far as environment is concerned. However, it has been acknowledged that there exists diversity of interpretations of the main principles of sustainable development in terms of indicators, of decision-making processes and of models of sustainable development policies, and this has partly been attributed to the variability of scientific knowledge across different problem domains.²⁸ Therefore, the discussion in this chapter is not and cannot be purported to be exhaustive on these principles. The chapter is limited to just a number of these principles, which are relevant to the discourse in this book.

2.3.1 Sovereign Right to Exploit Natural Resources

Principle 2 of the *Rio Declaration on Environment and Development* provides that States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

International law prohibits states from conducting or permitting activities within their territories, or in common spaces, without regard for the rights of other states or for the protection of the global environment.²⁹ It comes with the obligation to

²⁶ Hopwood, B., *et al*, "Sustainable development: mapping different approaches," *Sustainable Development*, Vol. 13, Issue 1, February 2005, pp.38-52,p.39.

²⁷ Emas, R., "The Concept of Sustainable Development: Definition and Defining Principles," *Brief for GSDR 2015*, p.3. Available at https://sustainabledevelopment.un.org/content/documents/5839GSDR%202015_SD_concept_definiton_rev.pdf [Accessed on 2/06/2016].

²⁸ Faucheux, S., *Principles of Sustainable Development - Vol. III - 'Summary Principles for Sustainable Development'*, p.2. Available at <http://www.eolss.net/Sample-Chapters/C13/E1-46-06.pdf> [Accessed on 27/08/2016].

²⁹ Birnie, P., *et al*, *International Law and the Environment*, (3rd ed., Oxford University Press, New York, 2009), p. 137.

take appropriate measures to prevent or minimise as far as possible the risk of significant harm, not merely a basis for reparation after the event.³⁰

2.3.2 The User Pays Principle

The "*User Pays Principle*" centres around the idea that the user of a public facility, or consumer of a public good, pays for the environmental good or service or the damages which may arise from that use.³¹ The OECD observes that the User Pays Principle is part of the overall internalisation of environmental costs, which involves consumers paying directly for use of environmental assets as well as having producer costs passed through product prices.³²

This principle is in recognition of the need for concerted efforts by all persons and states in nurturing the environment, for the sake of the present as well as future generations. It is meant to ensure that someone or a state is held liable for any loss attributable to their negative actions that affect the environment especially where the goods in question fall within common heritage of mankind by way of having incentives or disincentives.

2.3.3 Principle of International Co-operation in the Management of Shared Environmental Resources

Principle 7 of the *Rio Declaration on Environment and Development* provides that States should cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. Furthermore, in view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The *Declaration* further states that developed countries also acknowledge the responsibility that they bear in the international pursuit to sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

The principle of cooperation is also captured under principle 5 of the *Rio Declaration* which states that all States and all people should cooperate in the essential task of eradicating poverty as an indispensable requirement for

³⁰ Ibid, p. 143.

³¹ OECD, *Environmental Principles and Concepts*, (Organisation For Economic Co-Operation And Development, Paris, 1995), op cit., Para. 42.

³² Ibid.

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sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world.

The concept of "*common but differentiated responsibilities*" is defined to refer to the shared responsibilities of countries for the protection of shared resources, with the caveat that these responsibilities may be different depending on the contribution of the country to the environmental problem and its capability for addressing the environmental problem.³³ This is based on differing contribution to environmental degradation and probability of greater financial and technical resources.³⁴

2.3.4 The Principles of Intergenerational and Intragenerational Equity

These principles may have been informed by Principle 1 of *Declaration of the United Nations Conference on the Human Environment* (Stockholm Declaration) which states that 'man bears a solemn responsibility to protect and improve the environment for present and future generations.' Principle 2 thereof also categorically states that the natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate. Further, Principle 3 of the *Rio Declaration on Environment and Development* provides that the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations. It is also noteworthy that one of the guiding principles of the 1992 *United Nations Framework on Climate Change*³⁵ is that the Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.³⁶

The foregoing provisions, amongst many others contained in various international legal instruments on environment, form the basis of the principles

³³ OECD, *Environmental Principles and Concepts*, (Organisation For Economic Co-Operation And Development, Paris, 1995), Para. 16. OCDE/GD (95)124. Available at <http://www.oecd.org/trade/envtrade/39918312.pdf> [Accessed on 26/08/2016].

³⁴ Ibid.

³⁵ UN General Assembly, *United Nations Framework Convention on Climate Change: resolution / adopted by the General Assembly*, 20 January 1994, A/RES/48/189.

³⁶ 1992 *United Nations Framework on Climate Change*, Article 3(1).

of intragenerational and intergeneration equity in sustainable development agenda.

The United Nations has defined intergenerational equity as the issue of sustainable development referring, within the environmental context, to fairness in the intertemporal distribution of the endowment with natural assets or of the rights to their exploitation.³⁷ It has gone further to describe intergenerational justice as a related but broader concept that involves, apart from distributive dimensions, procedural, restorative and retributive dimensions.³⁸

It has been contended that sustainable development is inherently an intergenerational as well as an intragenerational question, which relies on a commitment to equity with future generations.³⁹ This, it is postulated, is both an ethical and philosophical commitment which acts as a constraint on a natural inclination to take advantage of our temporary control over the earth's resources, and to use them only for our own benefit without careful regard for what we leave to our children and their descendants.⁴⁰ The United Nations has already declared that fairness between generations is embedded in the concept of sustainable development; satisfying the needs of the present generation should not come at the expense of generations to come. That is, generally, the pursuit of welfare by the present generation should not diminish the opportunities of succeeding generations for pursuing a good and decent life.⁴¹

The theory of intergenerational equity states that we, the human species, hold the natural environment of our planet in common with other species, other people, and with past, present and future generations.⁴² The concept of intragenerational equity is believed to be as a result of the recognition that the lessening of

³⁷ United Nations, *Intergenerational Solidarity and the needs of future generations- Report of the Secretary-General*, A/68/322, Sixty-eighth session, Item 19 (a) of the provisional agenda, para. 10.

³⁸ *Ibid.*

³⁹ Weiss, E.B., "In Fairness to Future Generations and Sustainable Development," *American University International Law Review*, Vol. 8, No. 1, 1992, pp. 19-26 at p. 19.

⁴⁰ *Ibid.*, p. 19.

⁴¹ United Nations, *Intergenerational Solidarity and the needs of future generations- Report of the Secretary-General*, A/68/322, Sixty-eighth session, Item 19 (a) of the provisional agenda, para. 10.

⁴² Weiss, E.B., "In Fairness to Future Generations and Sustainable Development," *op cit.*, p. 20.

economic inequality in the current generation must be seen as a primary goal of development rather than as a secondary or separate process.⁴³

There has been proffered three normative principles of intergenerational equity namely: Each generation must conserve options, which means conserving the diversity of the natural and cultural resource base, so that each generation does not unduly restrict the options available to future generations in solving their problems and satisfying their own values; each generation should be required to maintain the quality of the planet so that it is passed on in a condition no worse than that in which it was received; and finally, each generation should provide its members with equitable rights of access to the legacy of past generations and conserve this access for future generations.⁴⁴

It has rightly been argued that what makes intragenerational equity a key principle of sustainable development is that inequities are a cause of environmental degradation. This is because poverty deprives people of the choice about whether or not to be environmentally sound in their activities.⁴⁵ This was also well articulated in the *1987 Brundtland Commission Report* which stated: 'Those who are poor and hungry will often destroy their immediate environment in order to survive: They will cut down forests; their livestock will overgraze grasslands; they will overuse marginal land; and in growing numbers they will crowd into congested cities. The cumulative effect of these changes is so far-reaching as to make poverty itself a major global scourge.'⁴⁶

2.3.5 The Polluter-Pays Principle

Principle 16 of the *Rio Declaration on Environment and Development* states that national authorities should endeavour to promote the internalization of

⁴³ OECD, *Environmental Principles and Concepts*, (Organisation For Economic Co-Operation And Development, Paris, 1995), Para. 15. OCDE/GD (95)124. Available at <http://www.oecd.org/trade/envtrade/39918312.pdf> [Accessed on 26/08/2016].

⁴⁴ Weiss, E.B., "In Fairness to Future Generations and Sustainable Development," *op cit.*, pp. 22-23.

⁴⁵ Beder, S, 'Costing the Earth: Equity, Sustainable Development and Environmental Economics,' *New Zealand Journal of Environmental Law*, Vol. 4, 2000, pp.227-243 at p.230; See also generally, Emas, R., 'The Concept of Sustainable Development: Definition and Defining Principles,' Brief for GSDR 2015, p3. Available at https://sustainabledevelopment.un.org/content/documents/5839GSDR%202015_SD_concept_definiton_rev.pdf [Accessed on 26/08/2016].

⁴⁶ *1987 Brundtland Commission Report*, *op cit.* (As quoted in Beder, S, 'Costing the Earth: Equity, Sustainable Development and Environmental Economics,' *op cit.* at p.230).

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environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.

The "Polluter Pays Principle", essentially believed to be a principle of economic policy rather than a legal principle, states that the polluter should bear the expenses of carrying out pollution prevention measures or paying for damage caused by pollution.⁴⁷ This was also captured in the 1972 OECD *Guiding Principles on the International Economic Aspects of Environmental Policies*, which stated: "The principle to be used for allocating costs of pollution prevention and control measures to encourage rational use of scarce environmental resources and to avoid distortions in international trade and investment is the so-called 'Polluter Pays Principle.' This principle means that the polluter should bear the expenses of carrying out the above mentioned measures decided by public authorities to ensure that the environment is in an acceptable state. In other words, the costs of these measures should be reflected in the cost of goods and services which cause pollution in production and/or consumption. Such measures should not be accompanied by subsidies that would create significant distortions in international trade and investment."⁴⁸

In the *Trail Smelter Arbitration (United States v. Canada)*,⁴⁹ the Tribunal held that it is the responsibility of the State to protect other states against harmful acts by individuals from within its jurisdiction at all times. No state has the right to use or permit the use of the territory in a manner as to cause injury by fumes in or to

⁴⁷ OECD, *Environmental Principles and Concepts*, (Organisation For Economic Co-Operation And Development, Paris, 1995), op cit., Para. 37.

⁴⁸ 1972 OECD Guiding Principles on the International Economic Aspects of Environmental Policies, OECD, C (72)128 (As quoted in OECD, *Environmental Principles and Concepts*, (Organisation For Economic Co-Operation And Development, Paris, 1995), op cit., Para. 33).

⁴⁹ Arbitral Trib., 3 U.N. Rep. Int'l Arb. Awards 1905 (1941). The Trail Smelter located in British Columbia since 1906, was owned and operated by a Canadian corporation. The resultant effect of air pollution from the sulfur dioxide from Trail Smelter resulted in the damage of the state of Washington between 1925 and 1937. This led to the United States (P) suit against the Canada (D) with an injunction against further air pollution by Trail Smelter. The decision made by the Tribunal established the concept of Trans Boundary Harm and the principle of the "polluter pays" to ensure sovereignty. (Prunella, C., 'An International Environmental Law case study: The Trail Smelter Arbitration,' December, 2014. Available at

<http://intlpollution.commonsworld.org/an-international-environmental-law-case-study-the-trail-smelter-arbitration/> [Accessed on 27/08/2016]

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the territory of another or the properties or persons therein as stipulated under the United States (Plaintiff) laws and the principles of international law.

These principles were also the subject of Case concerning *the Gabčíkovo-Nagymaros Project (Hungary/Slovakia)*, Judgment of 25 September 1997⁵⁰ where the International Court of Justice concluded that both Parties committed internationally wrongful acts, and that those acts gave rise to the damage sustained by the Parties; consequently, Hungary and Slovakia were both under an obligation to pay compensation and were both entitled to obtain compensation.

The OECD Council's *Recommendation on Guiding Principles Concerning International Economic Aspects of Environmental Policies* is believed to have been the first formulation of the Polluter-Pays Principle at the international level, and it sought to encourage sound environmental management and to harmonise methods for allocating the cost of pollution to avoid distortions in prices for products entering international trade.⁵¹

While the Polluter-Pays Principle was adopted by the OECD Council in 1972 as an economic principle for allocating the costs of pollution control, it has been observed that it may already have developed into a legal principle, also although not yet been codified because its contents have been changing and continue to change.⁵² The Polluter-Pays Principle is also seen not as a principle of equity; rather than to punish polluters, it is designed to introduce appropriate signals in the economic system so as to incorporate environmental costs in the decision-making process and, consequently, to arrive at sustainable, environment-friendly

⁵⁰ International Court of Justice, Communiqué (unofficial) No. 97/10 bis of 25 September 1997 and Judgement. Both available from the ICJ Internet Home Page (<http://www.icj-cij.org/docket/files/92/7375.pdf>) [Accessed on 27/08/2016]

⁵¹ Vicha, O, The Polluter-Pays Principle In OECD Recommendations And Its Application In International And EC/EU Law, *Czech Yearbook of Public & Private International Law*, Vol. 2, 2011, pp. 57-67. Available at files.cyil.eu/200000043-87d4c88ce6/%C4%8CSMP_2011_05_vicha.pdf [Accessed on 27/08/2016]

⁵² Ibid, p. 67; See also OECD, *Recommendation of the Council concerning the Application of the Polluter-Pays Principle to Accidental Pollution*, 7 July 1989 - C(89)88/FINAL.

Environmental Protection and the Principles of Sustainable Development development.⁵³ The aim is to avoid wasting natural resources and to put an end to the cost-free use of the environment as a receptacle for pollution.⁵⁴

2.3.6 Principle of Reasonable Use and Equitable Utilisation of Natural Resources

This principle is mainly used in relation to international or transboundary water resources. In this regard, the UN Watercourses Convention User's Guide points out that the principle of equitable and reasonable utilisation is the cornerstone of the UN Watercourses Convention⁵⁵ and the fundamental doctrine guiding water-sharing for international watercourses. It entitles a watercourse State to an equitable and reasonable share of the uses and benefits of the particular watercourse, and also creates the reciprocal obligation not to deprive other States of their respective rights in this regard.⁵⁶

Scholars observe that this is the most widely recognised and practiced principle in the resolution of water related problems, a principle based on equity, fairness and norms of distributive justice in which the interests of every contestant country are taken into consideration.⁵⁷

⁵³ Ibid, p. 67; See also Nicoleta, D.D., 'The Polluter-Pays Principle- -Expression Of Tort Liability For Environmental Protection,' *Analele Universităţii din Oradea, Fascicula Protecţia Mediului* Vol. XVIII, 2012, pp. 295-302 at p. 301. Available at http://protmed.uoradea.ro/facultate/anale/protectia_mediului/2012A/im/11.%20Dascalu%20Diana.pdf [Accessed on 27/08/2016].

⁵⁴ Ibid, p. 67.

⁵⁵ *Convention on the Law of the Non-navigational Uses of International Watercourses*, 1997 Adopted by the General Assembly of the United Nations on 21 May 1997. Entered into force on 17 August 2014. See General Assembly resolution 51/229, annex, Official Records of the General Assembly, Fifty-first Session, Supplement No. 49 (A/51/49). Article 5-Equitable and reasonable utilisation and participation.

1. Watercourse States shall in their respective territories utilise an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and sustainable utilisation thereof and benefits therefrom, taking into account the interests of the watercourse States concerned, consistent with adequate protection of the watercourse. 2. Watercourse States shall participate in the use, development and protection of an international watercourse in an equitable and reasonable manner. Such in participation includes both the right to utilise the watercourse and the duty to co-operate in the protection and development thereof, as provided in the present Convention.

⁵⁶ Equitable and Reasonable Utilisation, *UN Watercourses Convention User's Guide Fact Sheet Series: Number 4*, p.1. Available at <http://www.unwatercoursesconvention.org/documents/UNWC-Fact-Sheet-4-Equitable-and-Reasonable-Utilisation.pdf> [Accessed on 27/08/2016].

⁵⁷ 'Chapter- Three: Equitable Utilisation' p. 108 (*International Water Law*). Available at <http://www.internationalwaterlaw.org/bibliography/Articles/general/Part-%203.pdf> [Accessed on 27/08/2016]; See also HE, Y., "On the Performance of the Principle of Equitable and Reasonable

2.3.7 Precautionary Principle

Principle 15 of the *Rio Declaration on Environment and Development*⁵⁸ states that in order to protect the environment, the precautionary approach should be widely applied by States according to their capabilities. Further, it states that where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

The precautionary principle is believed to provide guidance for governance and management in responding to uncertainty.⁵⁹ It also provides for action to avert risks of serious or irreversible harm to the environment or human health in the absence of scientific certainty about that harm and it is now widely and increasingly accepted in sustainable development and environmental policy at multilateral and national levels.⁶⁰

The emergence of the precautionary principle marked a shift from post-damage control (civil liability as a curative tool) to the level of a pre-damage control (anticipatory measures) of risks.⁶¹ It originated in environmental risk management to provide regulatory authority to stop specific environmental contaminations without waiting for conclusive evidence of harm to the environment (i.e., while there was still “uncertainty” about the evidence).⁶² It has been suggested that the precautionary principle might be described both

Utilization in the Practice of the Utilization of Transboundary Water Resources," *iBusiness*, Vol. 1 No. 1, 2009, pp. 40-45. Available at http://file.scirp.org/pdf/IB20090100013_63621513.pdf [Accessed on 27/08/2016]; See also United Nations, *Environmental Law Guidelines and Principles on Shared Natural Resources*, Principle 1. Available at

http://www.unep.org/training/programmes/Instructor%20Version/Part_2/Activities/Interest_Groups/Decision-Making/Supplemental/Enviro_Law_Guidelines_Principles_rev2.pdf [Accessed on 27/08/2016].

⁵⁸ Principle 15, 1992 *Rio Declaration on Environment and Development*, UN Doc. A/CONF.151/26 (vol. I) / 31 ILM 874 (1992). Adopted at the United Nations Conference on Environment and Development in Rio de Janeiro, Brazil from 3-14 June 1992.

⁵⁹ Cooney, R., *The Precautionary Principle in Biodiversity Conservation and Natural Resource Management: An issues paper for policy-makers, researchers and practitioners*, (IUCN, Gland, Switzerland and Cambridge, 2004), UK. xi + 51pp at p. 1. Available at <http://www.sehn.org/pdf/PrecautionaryPrincipleissuespaper.pdf> [Accessed on 27/08/2016].

⁶⁰ *Ibid*, p.1.

⁶¹ World Commission on the Ethics of Scientific Knowledge and Technology (COMEST), *The Precautionary Principle*, (United Nations Educational, Scientific and Cultural Organization, Paris, 2005), p.7. Available at <http://www.eubios.info/UNESCO/precprin.pdf> [Accessed on 27/08/2016]

⁶² Hathcock, J.N., "The Precautionary Principle—An Impossible Burden Of Proof for New Products," *AgBioForum*, Vol. 3, No. 4, 2000, pp. 255-258, p.255.

in terms of the level of uncertainty that triggers a regulatory response and in terms of the tool that will be chosen in the face of uncertainty (as in the case of technological requirements or prohibitions).⁶³

2.3.8 Principle of Public Participation

Principle 1 of the *Rio Declaration on Environment and Development* affirms that human beings are at the centre of concerns for sustainable development and are as such entitled to a healthy and productive life in harmony with nature. This means that apart from addressing the human needs, human beings must actively participate in the sustainable development agenda, if the same is to be meaningfully achieved. It is noteworthy that Principle 1 does not discriminate against men or women as it contemplates a society where both gender participate in the sustainable development efforts for a healthy and sustainable environment for everyone. This implies that all should equally and meaningfully participate in efforts towards achieving sustainable development.

This is affirmed in Principle 20 of the *Rio Declaration on Environment and Development* which states that women have a vital role in environmental management and development and their full participation is, therefore, essential to achieve sustainable development. The youth also form part of the community and Principle 21 advocates for their participation by providing that the creativity, ideals and courage of the youth of the world should be mobilized to forge a global partnership in order to achieve sustainable development and ensure a better future for all. These Principles, thus, advocate for the equal and meaningful participation of all persons in promotion of sustainable development agenda.

Further, Principle 10 of the *Rio Declaration* states that environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual should have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. According to the *Declaration*, States are to facilitate and encourage public awareness and participation by making information widely available. It also

⁶³ Sunstein, C.R., 'Beyond the Precautionary Principle,' University of Chicago Public Law and Legal Theory Working Paper No. 38, January 2003, p.11. Available at http://www.law.uchicago.edu/files/files/38.crs_precautionary.pl-lt.pdf [Accessed on 27/08/2016].

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provides that effective access to judicial and administrative proceedings, including redress and remedy, should be provided.

The *Declaration on the Right to Development*⁶⁴ in its preamble partly states that development is a comprehensive economic, social, cultural and political process, which aims at the constant improvement of the well-being of the entire population and of all individuals on the basis of their active, free and meaningful participation in development and in the fair distribution of benefits resulting therefrom. The *Declaration* also states that right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized.⁶⁵

It is also noteworthy that the foregoing *Declaration* does not discriminate against women or men and it envisages equal, active and meaningful participation of *all individuals* (emphasis added). The Declaration is particular about equality of all and requires that States should undertake, at the national level, all necessary measures for the realization of the right to development and should ensure, *inter alia*, equality of opportunity for all in their access to basic resources, education, health services, food, housing, employment and the fair distribution of income. Specifically, it states that effective measures should be undertaken to ensure that women have an active role in the development process. As such, it advocates for appropriate economic and social reforms to be carried out with a view to eradicating all social injustices.⁶⁶

Elimination of social injustices entails promoting gender equity as a way of ensuring that both men and women get fair opportunities for the realisation of their right to self-determination and contribution towards national development. The *UN Conference on Environment and Development, Agenda 21*⁶⁷ under chapter 23 calls for full public participation by all social groups, including women, youth, indigenous people and local communities in policy-making and decision-

⁶⁴ United Nations, *Declaration on the Right to Development*, A/RES/41/128.

⁶⁵ *Ibid*, Article 1.

⁶⁶ Article 8(1).

⁶⁷ United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992.

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making. It is in recognition of the fact that unless all these groups are equitably and meaningfully involved in the decision making policies, especially those on sustainable development, then the Government efforts would either fail or prove inadequate. This recognition of the important roles of various groups is important as it creates a chance for the government to appreciate and address the particular needs of these groups, considering that, needs as envisaged in the Brundtland Commission Report may vary from society to society.

This principle is revisited throughout the book considering that public participation is a principle that has gained international relevance in governance matters, in a world that promotes democratic governance, including in natural and environmental matters. There is also a chapter that is dedicated to a discussion on gender equity and sustainable development.

2.3.9 Cultural Issues in Sustainable Development

Principle 22 of the 1992 *Rio Declaration on Environment and Development* states that indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. In light of this, States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.

It has been argued that many, if not all of the planet's environmental problems and certainly all of its social and economic problems, have cultural activity and decisions – people and human actions – at their roots.⁶⁸ As such, solutions are likely to be also culturally-based, and the existing models of sustainable development forged from economic or environmental concern are unlikely to be successful without cultural considerations.⁶⁹ Culture in this context, has been defined as: culture as the general process of intellectual, spiritual or aesthetic development; culture as a particular way of life, whether of people, period or group; and culture as works and intellectual artistic activity.⁷⁰

⁶⁸ Dessein, J. et al (ed), 'Culture in, for and as Sustainable Development: Conclusions from the COST Action IS1007 Investigating Cultural Sustainability,' (University of Jyväskylä, Finland, 2015), p. 14. Available at <http://www.culturalsustainability.eu/conclusions.pdf> [Accessed on 27/08/2016].

⁶⁹ Ibid, p.14.

⁷⁰ Ibid, p. 21.

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The United Nations Educational, Scientific and Cultural Organization (UNESCO) asserts that 'culture is who we are and what shapes our identity. No development can be sustainable without including culture.'⁷¹ The Agenda 2030 for Sustainable Development captures the states' pledge to foster intercultural understanding, tolerance, mutual respect and an ethic of global citizenship and shared responsibility, and their acknowledgement of the natural and cultural diversity of the world and recognition that all cultures and civilizations can contribute to, and are crucial enablers of, sustainable development.⁷²

African States and other stakeholders, in the *Ngorongoro Declaration*⁷³ have acknowledged that Sustainable development can ensure that appropriate efforts are deployed to protect and conserve the cultural and natural resources of a region faced with the challenges of climate change, natural and human-made disasters, population growth, rapid urbanization, destruction of heritage, and environmental degradation for present and future generations.⁷⁴ As such, they declared that on the one hand, African heritage is central to preserving and promoting African cultures thereby uplifting identity and dignity for present and future generations in an increasingly globalised world, and on the other hand, heritage, including World Heritage properties, is a driver of sustainable development and critical for achieving regional socio-economic benefits, environmental protection, sustainable urbanization, social cohesion and peace.⁷⁵

The Constitution of Kenya 2010 states that it recognises culture as the foundation of the nation and as the cumulative civilization of the Kenyan people and nation.⁷⁶ In light of this, it obligates the State to, inter alia, promote all forms of national and cultural expression through literature, the arts, traditional celebrations, science, communication, information, mass media, publications, libraries and other cultural heritage; and recognise the role of science and indigenous technologies in the development of the nation.

⁷¹ United Nations Educational, Scientific and Cultural Organization (UNESCO), 'Culture for Sustainable Development,' available at <http://en.unesco.org/themes/culture-sustainable-development> [Accessed on 27/08/2016]

⁷² United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, A/RES/70/1, Resolution adopted by the General Assembly on 25 September 2015, para. 36.

⁷³ The Ngorongoro Declaration on Safeguarding African World Heritage as a Driver of Sustainable Development, adopted in Ngorongoro, Tanzania on 4 June 2016

⁷⁴ Ibid, p.2.

⁷⁵ Ibid, p. 3.

⁷⁶ Article 11 (1), Constitution of Kenya, 2010.

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These are some of the initiatives that highlight the existing relationship between culture and sustainable development, thus affirming the fact that cultural issues cannot be wished away in the discussion and efforts towards achieving sustainable development in Kenya and the world over. This book has dedicated a chapter on the place of indigenous knowledge, being a cultural issue, in the quest for sustainable development.

2.4 General Approaches to Sustainability and Sustainable Development Debate

It is noteworthy that various groups define sustainability differently, where some restrict it to environmental sustainability and others include broader issues affecting human life. However, it has been observed that while definitions slightly differ, the most common one sees sustainability as the requirement to maintain the capacity to provide non-declining well-being over time.⁷⁷ There are generally two approaches to sustainability namely: weak and strong sustainability.

Strong sustainability regards natural capital as providing some functions that are not substitutable by man-made capital.⁷⁸ These functions, labeled 'critical natural capital', are stressed by defining sustainability as leaving the future generations a stock of natural capital not smaller than the one enjoyed by the present generation.⁷⁹

Weak sustainability has been described as involving the replacement of natural resources and environmental assets—that are currently freely available to everyone — with human-made resources that have to be bought and may only be accessible to some people in the future.⁸⁰ The argument is that the depletion of natural capital can lead to irreversible losses such as species and habitats, which

⁷⁷ Neumayer, E., 'Sustainability and Well-being Indicators,' Research Paper No. 2004/XX, (UNU World Institute for Development Economics Research (UNU-WIDER), March 2004, p.1. Available at <http://www.lse.ac.uk/geographyAndEnvironment/whosWho/profiles/neumayer/pdf/SustainabilitywellbeingArticle.pdf> [Accessed on 27/08/2016].

⁷⁸ Gutes, M.C., 'Commentary: The concept of weak sustainability,' *Ecological Economics* Vol. 17, 1996, pp.147-156 at p.147.

⁷⁹ *Ibid*, p. 147.

⁸⁰ Beder, S, 'Costing the Earth: Equity, Sustainable Development and Environmental Economics,' *op cit*, p.230.

once lost cannot be recreated through man-made capital.⁸¹ As such, intergenerational equity is not compatible with the concept of weak sustainability, a concept that assumes that future generations will not suffer from environmental losses as long as it is compensated for this loss by wealth creation.⁸²

The very weak sustainability approach asserts that natural and manufactured capital can substitute perfectly for one another, where the substitutability of different types of capital implies that the preservation of an aggregate level of natural plus manufactured capital, rather than the preservation of natural capital in particular, is crucial.⁸³ The sustainability of ecological systems is viewed as important only as far as required for the sustainability of the human component.⁸⁴ The fundamental debate regarding sustainable development is, therefore, whether to adopt a strong or a weak conception of sustainability.⁸⁵

2.5 Conclusion

It has rightly been argued that despite continuing disagreement about the meaning of 'sustainable development', what is referred to as the triple-bottom-line trajectory – which would see economic advancement being achieved alongside social equity and environmental security – is viewed as one of the

⁸¹ Ibid, p. 229; See also Humphrey, M., "Three conceptions of irreversibility and environmental ethics: some problems," *Environmental Politics*, Vol.10, No. 1, 2001, pp. 138-154; See also generally, Spash, C.L. & Clayton, A.M.H., 'The Maintenance of Natural Capital: Motivations and Methods,' in Light, A. & Smith, J.M. (eds), *Place and Environmental Ethics*, Series Philosophy and Geography, Vol. 1 (Lanham: Rowman & Littlefield Pub. Inc., 1997) pp. 143-173). Available at http://www.clivespash.org/wp-content/uploads/2015/04/1997-Spash_Clayton-Natural-Capital-Maintenance.pdf [Accessed on 27/08/2016].

⁸² Ibid, p. 230; See also Padilla, E., "Intergenerational equity and sustainability." *Ecological Economics* Vol.41, 2002, pp. 69-83; See also Hediger, W., (1999) "Reconciling "weak" and "strong" sustainability", *International Journal of Social Economics*, Vol. 26 Iss: 7/8/9, pp.1120 – 1144; See also Beckerman, W., "How Would you Like your 'Sustainability', Sir? Weak or Strong? A Reply to my Critics." *Environmental Values*, Vol.4, No. 2, (1995), pp.169-179.

⁸³ Gallopín, G., 'A systems approach to sustainability and sustainable development,' United Nations Sustainable Development and Human Settlements Division ECLAC/ Government of the Netherlands Project NET/00/063 "Sustainability Assessment in Latin America and the Caribbean" Santiago, Chile, March, 2003, p.13. Available at http://repositorio.cepal.org/bitstream/handle/11362/5759/1/S033119_en.pdf [Accessed on 27/08/2016].

⁸⁴ Ibid, p.13.

⁸⁵ Pelenc, J., 'Weak versus Strong Sustainability,' *Technical Report · March 2015*, Brief for GSDF 2015, p.1. Available at https://www.researchgate.net/publication/280979919_Weak_versus_Strong_Sustainability [Accessed on 27/08/2016].

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promises for future progress regionally, nationally and globally.⁸⁶ The concept of sustainable development represents an attempt to go beyond the simple assertion of physical limits to economic-growth, and to explore how, in what terms, and to what extent, the socioeconomic objectives traditionally linked to growth can be reconciled with the concern for environmental quality and inter-temporal equity.⁸⁷

The sustainable development of the environment is also seen as a way to enhance the long term economic, social and environmental wellbeing of people and communities by: promoting social justice and equality of opportunity; and enhancing the natural and cultural environment.⁸⁸ It is, therefore, suggested that the key principle of sustainable development underlying all others is the integration of environmental, social, and economic concerns into all aspects of decision making.⁸⁹ That is to say, in practice, sustainable development requires the integration of economic, environmental, and social objectives across sectors, territories, and generations. It requires the elimination of fragmentation; that is, environmental, social, and economic concerns must be integrated throughout decision making processes in order to move towards development that is truly sustainable.⁹⁰

The quest for sustainability and sustainable development requires integrating economic, social, cultural, political, and ecological factors.⁹¹ It has been argued that sustainability is a property of a system open to interactions with its external world and not a fixed state of constancy, but a dynamic preservation of the

⁸⁶ Lawrence, G., 'Promoting Sustainable Development: The Question of Governance,' in Buttel, F.H. & McMichael, P. (ed.), *New Directions in the Sociology of Global Development*, (Research in Rural Sociology and Development, Volume 11) Emerald Group Publishing Limited, 2006, pp.145 - 174. Available at

[http://www.emeraldinsight.com/doi/abs/10.1016/S1057-1922\(05\)11006-3](http://www.emeraldinsight.com/doi/abs/10.1016/S1057-1922(05)11006-3) [Accessed on 27/08/2016]

⁸⁷ Faucheux, S., *Principles of Sustainable Development - Vol. III - 'Summary Principles for Sustainable Development'* op cit, p.4.

⁸⁸ Environmental Advisory Council, 'Principles of Sustainable Development,' March 2013, p. 2. Available at

https://www.princeedwardisland.ca/sites/default/files/publications/principles_of_sustainable_development.pdf [Accessed on 27/08/2016]

⁸⁹ Emas, R., 'The Concept of Sustainable Development: Definition and Defining Principles,' Brief for GSDR 2015, op cit., p3.

⁹⁰ Ibid, p. 3.

⁹¹ Gallopín, G., 'A systems approach to sustainability and sustainable development,' op cit., p.7; See also Goodland, R., 'The Concept of Environmental Sustainability,' *Annual review of ecology and systematics*, Vol. 26, 1995, pp.1-24, at p. 4.

essential identity of the system amidst permanent change.⁹² On the other hand, sustainable development is not a property but a process of directional change by which a system improves through time in a sustainable way.⁹³

While there may be differences between sustainability and sustainable development, it is clear from the discussion that there are resources and players that are constant in both. For instance, human beings have been placed within the context of both processes, considering that development is meant to improve the quality of human life (be it at the expense of the environment or while ensuring environmental sustainability) while sustainability is mainly concerned with the continued availability and supply of the resources that are meant to facilitate such development. The issues of strong or weak sustainability as well as anthropocentrism or ecocentrism approaches to sustainable development narrow down to striking the balance between meeting human needs (present and future generations) and environmental sustainability.

The principles highlighted in this chapter inform these discussions, the only differences being that while some of the principles are anthropocentric others are ecocentric in their approach. It has rightly been pointed out that principles provide flexible and context-specific guidance: they may be of variable importance in different contexts, can be in conflict with other principles, and they allow discretion for decision-makers to balance them and be guided by those they find to be most important.⁹⁴ With this in mind, it is noteworthy that the principles of sustainable development are meant to offer guidelines to states on policy

⁹² Ibid, p. 35; See also Hattingh, J.P., "Conceptualizing Ecological Sustainability and Ecologically Sustainable Development in Ethical Terms: Issues and Challenges," (2011). Available At <http://s3.amazonaws.com/academia.edu.documents/44180384/Hattingh.pdf?AWSAccessKeyId=AKIAJ56TQJRTWSMTNPEA&Expires=1472743455&Signature=dRj4ImH1ml5nltlgC4YSfWhKJZU%3D&response-content-disposition=inline%3B%20filename%3DHattingh.pdf> [Accessed on 31/08/2016].

⁹³ Ibid, p.35; See also *Our Common Future, Chapter 2: Towards Sustainable Development*, From A/42/427. Our Common Future: Report of the World Commission on Environment and Development; See also Hjorth, P. & Ali, B., "Navigating towards sustainable development: A system dynamics approach," *Futures*, Vol.38, No. 1, 2006, pp. 74-92; See also Berke, P.R., "Does Sustainable Development Offer a New Direction for Planning? Challenges for the Twenty-First Century." *Journal of Planning Literature*, Vol. 17, No. 1, 2002; See also Kemp, R., et al, "Transition management as a model for managing processes of co-evolution towards sustainable development." *Perspectives on Radical Changes to Sustainable Consumption and Production (SCP)* Vol.20, 2006, p. 387.

⁹⁴ Cooney, R., *The Precautionary Principle in Biodiversity Conservation and Natural Resource Management: An issues paper for policy-makers, researchers and practitioners*, op cit, p5.

formulation. The succeeding chapters in this book incorporate these principles and discuss them in the context of various environmental issues.

A key feature of sustainable development is that it comprises three elements: Environment, Society and Economy.⁹⁵ There are different approaches to sustainability and sustainable development which include environmental sustainability, economic sustainability, and social sustainability. This book touches on all these approaches in the various chapters. The 1987 *Brundtland Commission Report* observed in the foreword that “what is needed now is a new era of economic growth – growth that is forceful and at the same time socially and environmentally sustainable.” The implication of this is that even as sustainable development efforts focus on economic development, regard has to be had on the aspects of environment and social development so as to ensure that economic development is not achieved at the expense of all these.

However, when these principles are incorporated into domestic law, then more often than not they become binding and obligatory on state organs and all persons. For instance, in Kenya’s domestic laws, these principles have been incorporated and in an obligatory manner and are binding on state organs, law makers, interpreters and implementers.⁹⁶ The principles are thus highlighted and discussed where relevant in the next chapters of this book in the context of economic, social and environmental sustainability.

⁹⁵ Shell Livewire, “Elements of Sustainable Development: Environment, Society and Economy,” available at <http://shell-livewire.org/business-library/employing-people/management/sustainable-development/Sustainable-development/> [Accessed on 3/04/2015].

⁹⁶ See Article 10, Constitution of Kenya 2010. (1) The national values and principles of governance in this Article bind all State organs, State officers, public officers and all persons whenever any of them-- (a) applies or interprets this Constitution; (b) enacts, applies or interprets any law; or (c) makes or implements public policy decisions. (2) The national values and principles of governance include-- (a) patriotism, national unity, sharing and devolution of power, the rule of law, democracy and participation of the people; (b) human dignity, equity, social justice, inclusiveness, equality, human rights, non-discrimination and protection of the marginalised; (c) good governance, integrity, transparency and accountability; and (d) sustainable development.

Human Rights, Sustainable Development and the Environment

3.1 Introduction

Over the last three decades or so, the debate on the relationship between human rights and environmental protection has raged on, especially in environmentalist circles and among generalist international lawyers.¹ The Constitution of Kenya 2010 expressly outlines that every person has a right to a clean and healthy environment, lending the thought that the Kenyan legal regime recognizes the relationship between the environment and human rights.² The question then arises as to the nature of the relationship between the environment and human rights. This chapter discusses the special relationship between the environment, human rights and the sustainable development debate. The chapter addresses such questions whether Environmental rights are human rights; whether it is human rights that informed the formal recognition of environmental rights or are the latter justiciable on their own. It also discusses the place of such rights as the right to a clean and healthy environment and what informs environmental rights-anthropocentric or ecocentric approaches to environmental protection and conservation. While gender issues in environmental management are also discussed, the theme of gender also features in other chapters.

3.2 Environmental Protection and Human Rights

Human rights have been defined as universal, inalienable rights inherent to all human beings, which they are entitled to without discrimination.³ Environmental protection should be treated as a human rights issue because a human rights perspective directly addresses environmental impacts on the life, health, private life, and property of individual humans, thereby serving to secure higher

¹ Boyle, A., 'Human Rights and the Environment: Where Next?' *The European Journal of International Law*, Vol.23, No. 3 (Oxford University Press, 2012); See also Anton, D. & Shelton, D., *Environmental Protection and Human Rights* (2011); Francioni, 'International Human Rights in an Environmental Horizon', 21 *EJIL* (2010) 41; D. Bodansky, J. Brunnée, and E. Hey (eds), *The Oxford Handbook of International Environmental Law* (2007), at chs 28 and 29; Boyle, 'Human Rights or Environmental Rights? A Reassessment', 18 *Fordham Environmental L Rev* (2007) 471; A.E. Boyle and M.R. Anderson (eds), *Human Rights Approaches to Environmental Protection* (1996).

² The Constitution of Kenya 2010, Article 42.

³ www.ohchr.org/EN/Issues/pages/WhatareHumanRights.aspx [Accessed 10/08/2016].

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standards of environmental quality, based on the obligation of states to take measures to control pollution affecting health and private life.⁴

The environment and its states affect a wide (if not the whole) spectrum of human life, which is protected by human rights. There is, thus, a direct co-relation between the environment and the right to life⁵, human dignity⁶, the right to reasonable standards of sanitation⁷, the right to food⁸ and the right to clean and safe water in adequate quantities.⁹ The Constitution of Kenya 2010 goes further to expressly state the right to a clean and healthy environment, which effectively lays to rest the question of the question of the environment and human rights in Kenya. On an international plane, however, there is no recognised right to a healthy environment.

The discussion on human rights and the environment cannot be conducted without consideration of the concept of sustainable development. Sustainable development has been defined as a combination of elements, such as environmental protection, economic development, and most importantly social issues.¹⁰

Human rights are inextricable from sustainable development, since human beings are at the centre of concerns for sustainable development.¹¹ Human rights depend upon having a liveable planet. The right to life as espoused in Article 26 of the Constitution would not be fully enjoyed without due consideration being paid to the planet on which such a right is to be enjoyed.

Certain rights such as the right to water and food and sanitation show the link between environment protection and sustainable development, as they are

⁴ Boyle, A., 'Human Rights and the Environment: Where Next?' *The European Journal of International Law*, Vol.23, No. 3, 2012.

⁵ Constitution of Kenya 2010, Article 26.

⁶ *Ibid*, Article 28.

⁷ *Ibid*, Article 43(b).

⁸ *Ibid*, Article 43(c).

⁹ *Ibid*, Article 43(d).

¹⁰ Fitzmaurice, M., 'The Principle of Sustainable Development in International Development Law' *International Sustainable Development Law*, Vol. 1 ISBN: 978-1-84826-314-7 (eBook).

¹¹ 1992 Rio Declaration, Principle 1, which reads in full: "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature."

necessary for these rights to be achieved.¹² The right to water, for example, is necessary for poverty eradication, empowerment of women and maintenance of human health (which in turn, is an indicator of sustainable development). It is, thus, logical for human rights to be integrated into sustainable development.

The human rights-based approaches provide a powerful framework of analysis and basis for action to understand and guide development, as they draw attention to the common root causes of social and ecological injustice.¹³ Human rights standards and principles then guide development to more sustainable outcomes by recognizing the links between ecological and social marginalization, stressing that all rights are embedded in complex ecological systems, and emphasizing provision for need over wealth accumulation.¹⁴

3.3 International Framework on Human Rights approach to Environmental Protection

The *Universal Declaration of Human Rights of 1948*¹⁵ (UDHR) set the stage for the recognition, protection and promotion of human rights the world over. In its Preamble, the Declaration captured important concepts that include *inter alia*: recognition of the inherent dignity and the equal and inalienable rights of all members of the human family as the foundation of freedom, justice and peace in the world; faith in fundamental human rights, in the dignity and worth of the human person and in the equal rights of men and women and determination to promote social progress and better standards of life in larger freedom; States co-operation with the United Nations, the promotion of universal respect for and observance of human rights and fundamental freedoms; and a common understanding of these rights and freedoms is of the greatest importance for the full realization of this pledge.¹⁶

The Declaration places an obligation on all states to employ progressive measures to ensure recognition of human rights provided therein. Notably, the Declaration

¹² Horn, L., 'Reframing Human Rights in Sustainable Development' *Journal of the Australasian Law Teachers Association*, 2013.

¹³ Fisher, A.D., 'A Human Rights Based Approach to the Environment and Climate Change' *A GL-ESCR Practitioner's Guide*, March 2014.

¹⁴ Ibid.

¹⁵ UN General Assembly, *Universal Declaration of Human Rights*, 10 December 1948, 217 A (III), available at: <http://www.refworld.org/docid/3ae6b3712c.html> [Accessed 10/08/2016].

¹⁶ Ibid, Preamble.

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recognises the need for mobilization of resources by States so as to ensure realization of these rights. Article 22 thereof provides that everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality.

The UDHR created a basis for the formulation of *International Covenant on Civil and Political Rights*, (ICCPR) 1966¹⁷ and *International Covenant on Economic, Social and Cultural Rights* (ICESCR) 1966.¹⁸ ICCPR on its part provides under Article 47 that nothing in that Covenant should be interpreted as impairing the inherent right of all peoples to enjoy and utilize fully and freely their natural wealth and resources. Further, ICESCR under Article 1.2 provides that all peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence.

It is important to take cognisance of *Draft Principles on Human Rights and the Environment of 1994*,¹⁹ (1994 Draft Principles) an international instrument that comprehensively addresses the linkage between human rights and the environment. The 1994 Draft Principles provide for the interdependence between human rights, peace, environment and development. Principle 1 thereof declares that human rights, an ecologically sound environment, sustainable development and peace are interdependent and indivisible.

The *World Summit for Social Development* held 6-12 March 1995 in Copenhagen, Denmark, saw world Governments adopt a Declaration and Programme of Action which focused on the consensus on the need to put people at the centre of development. The world leaders pledged to make the conquest of poverty, the

¹⁷ UN General Assembly, *International Covenant on Civil and Political Rights*, 16 December 1966, United Nations, Treaty Series, vol. 999, p. 171.

¹⁸ *International Covenant on Economic, Social and Cultural Rights*; adopted 16 Dec. 1966, 993 U.N.T.S. 3, G.A. Res. 2200 (XXI), U.N. GAOR, 21st Sess., Supp. No. 16, U.N. Doc. A/6316 (1966) (entered into force 3 Jan. 1976).

¹⁹ Draft Principles On Human Rights And The Environment, E/CN.4/Sub.2/1994/9, Annex I (1994).

goal of full employment and the fostering of stable, safe and just societies their overriding objectives.²⁰

The world's leaders agreed on what are commonly referred to as the ten commitments and these include to *inter alia*: eradicate absolute poverty by a target date to be set by each country; support full employment as a basic policy goal; promote social integration based on the enhancement and protection of all human rights; achieve equality and equity between women and men; accelerate the development of Africa and the least developed countries; ensure that structural adjustment programmes include social development goals; increase resources allocated to social development; create "an economic, political, social, cultural and legal environment that will enable people to achieve social development"; attain universal and equitable access to education and primary health care; and strengthen cooperation for social development through the United Nations.²¹

There is a multiplicity of international instruments on environment protection, dating as far back as the Stockholm Declaration of 1972. While the language of Article 1 of both the Stockholm Declaration and the Rio Declaration seem to connote a human right approach to the environmental conservation, during the conferences, various proposals for a direct and thus unambiguous reference to an environmental human right were rejected²². It is arguable that the conferences created an oxymoronic circumstance, in denying what would only be in the nature of 'the right to adequate conditions of life in *an environment of a quality that permits a life of dignity and well-being*'.²³ This inaction towards the recognition of an enforceable right to a healthy environment is mirrored in the European Union. Numerous recommendations have been made by the Parliamentary Assembly of the Council of Europe to the Council's Committee of Ministers to draw up a

²⁰ World Summit on Social Development, Copenhagen 1995: A Brief Description, *Gateway to Social Policy and Development*, Available at <http://www.un.org/esa/socdev/wssd.htm> [Accessed on 15/02/2014].

²¹ Ibid.

²² Handl, G., 'Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration), 1972 and the Rio Declaration on Environment and Development, 1992' (United Nations Audiovisual Library of International Law, 2012).

²³ 1972 Stockholm Declaration Principle 1. It reads in full: "Man has the fundamental right to freedom, equality and adequate conditions of life in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations".

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protocol on this right (as recently as in 2010), but it seems to have fallen on deaf ears. The European Commission on Human Rights seems, however, to be listening keenly²⁴. This is seen in the decisions it has rendered over the course of time. This was first seen in the case of *Lopez Ostra v Spain*²⁵, where the Court interpreted Article 8 of the European Convention for the Protection of Human Rights and Fundamental Freedoms²⁶ to include the right to a clean environment. The court simply stated: “*Naturally, severe environmental pollution may affect individuals’ well-being and prevent them from enjoying their homes in such a way as to affect their private and family life adversely....*”

The court also held that though Spain did not cause direct harm, the inaction by a State could be a ground for liability. In interpreting Article 8 of the Convention, the Court stated that “*regard must be had to the fair balance that has to be struck between the competing interests of the individual and of the community as a whole.*” Though acknowledging that a pecuniary award could not be established for the loss suffered by the applicant, the Court awarded Mrs Lopez four million Spanish pesetas.²⁷

From the foregoing, it is noteworthy that the main objective of all the major international legal instruments on human rights is the alleviation of human suffering and to promote the total wellbeing of all. The absence of such wellbeing is usually perceived to be poverty. Although at times it is viewed in a narrow manner, poverty can be conceptualized in a broad manner and indeed it has been posited as the recognition that it is not limited to lack of income only, but comprises of deprivations in areas of health, education, participation and security.²⁸ Further, human poverty has been said to be a denial of human rights as it arguably infringes on, *inter alia*, human freedom and destroys human

²⁴ Kravchenko, S. & Bonine, J.E., ‘Interpretation of Human Rights for the Protection of the Environment in the European Court of Human Rights’ Presented in March 2011 at the University of the Pacific, McGeorge School of Law Symposium on The Global Impact and Implementation of Human Rights Norms.

²⁵ *López Ostra v. Spain*, 303 Eur. Ct. H.R. 41 (1994).

²⁶ Nov. 4, 1950, 213. S. 1 of Article 8 reads: “Everyone has the right to respect for his private and family life, his home and his correspondence.”

²⁷ Kravchenko, S. & Bonine, J.E., ‘Interpretation of Human Rights for the Protection of the Environment in the European Court of Human Rights’ op cit.

²⁸ Gordon, D., Chapter 1, ‘Definitions of Concepts for the Perceptions of Poverty and Social Exclusion’ www.bris.ac.uk/poverty/downloads/.../pse/99-Pilot/99-Pilot_1.doc [Accessed 15/02/ 2014].

dignity. It is viewed as an intrusion into human dignity.²⁹ Basic human rights are an integral part of human rights and their violation has been seen as sabotage of human dignity.³⁰

Since the aforementioned international legal instruments place the human rights implementation obligations on the states, it therefore follows that they are also under the obligation to use their state resources in ensuring the protection and promotion of such human rights and ultimately eradicating poverty amongst their peoples. Indeed, Principle 5 of the *Rio Declaration on Environment and Development 1992*³¹ is to the effect that all States and all people should cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world. Poverty eradication is at the heart of achieving sustainable development in the world, and unless it is dealt with, then attaining sustainable development remains a mirage.

3.4 Poverty as a Human Rights issue in Africa

Some scholars have argued that achieving genuine respect for human rights may constitute the greatest challenge facing Africans in the new millennium.³² It has been posited that more than seventy-five percent of the African continent's 700 million people live below the poverty line, and ten of the world's thirteen poorest countries are in Africa.³³ This poverty has a direct link with lack of the necessary resources required to enable people achieve self-determination in terms of catering for their basic needs of food, shelter, health and education to mention but a few. This consequently makes them lead lives devoid of the human dignity as contemplated under international and regional human rights instruments.³⁴

²⁹ Rukooko, A.B., 'Poverty and human rights in Africa: historical dynamics and the case for economic social and cultural rights', *The International Journal of Human Rights*, Vol. 14, Iss. 1, 2010.

³⁰ *Vienna Declaration and Programme of Action*, Article 25, Adopted by the World Conference on Human Rights in Vienna on 25 June 1993.

³¹ UN Doc. A/CONF.151/26 (vol. I) / 31 ILM 874 (1992).

³² Magnarella, P.J., "Achieving Human Rights in Africa." 4(2): 2. [online]URL: <http://web.africa.ufl.edu/asq/v4/v4i2a2.htm> [Accessed on 15/02/2014].

³³ Ibid.

³⁴ "All human beings are born free and equal in dignity and rights." Article 1, *Universal Declaration of Human Rights* (UDHR), 1948.

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The World Bank defines poverty as “the economic condition in which people lack sufficient income to obtain certain minimal levels of health services, food, housing, clothing and education generally recognized as necessary to ensure an adequate standard of living.”³⁵

It is estimated that about 40 per cent of the world’s population live with the reality or the threat of extreme poverty, and that one in every five persons are living in a state of poverty so abject that it threatens survival.³⁶

Human rights are basically divided into three groups namely: Civil and political rights, Social, economic and cultural rights and Collective rights or ‘solidarity rights’. Collective rights include *inter alia*, the right to development and self-determination. The right to self-determination requires access to resources. Human rights ideas lie at the core of theories of distributive justice.³⁷ Distributive justice is said to concern itself with the fair allocation of resources among the members of a community.³⁸ These resources extend to all dimensions of social life and assume all forms, including income, economic wealth, political power, work obligations, education, shelter and health care.³⁹ Absence of distributive justice can only engender poverty in any given society. It is generally agreed that no one measure can capture all aspects of poverty.

The *Commonwealth Human Rights Commission’s Report*, 2001 conceived poverty in three different ways. Firstly, it defined poverty as a situation in which there is shortage of essential facilities, resulting from inadequate income’. Secondly, there is the definition of poverty based on basic or fundamental needs, that is, a failure to meet the basic human needs; or to remain deprived from such needs is a state

³⁵ World Bank, *Handbook on Measuring Poverty*, Chapter 2. Available at http://siteresources.worldbank.org/INTPA/Resources/4299661259774805724/Poverty_Inequality_Handbook_Ch02.pdf Accessed on 15th February, 2014.

³⁶ United Nations Development Programme (UNDP), *Human Development Report 2005: International cooperation at a crossroads: Aid, trade and security in an unequal world* (New York, United Nations, 2005), p. 24.; See also generally United Nations High Commissioner for Human Rights, *Principles And Guidelines For A Human Rights Approach To Poverty Reduction Strategies*, HR/PUB/06/12.

³⁷ Austin, M.J.(Eds.), ‘Understanding Poverty From Multiple Social Science Perspectives’, A Learning Resource for Staff Development In Social Service Agencies, p.136, *Bay Area Social Services Consortium*, Available at <http://cssr.berkeley.edu/bassc/public/CompletePovertyReport082306.pdf> [Accessed on 15/02/ 2014].

³⁸ Distributive Justice, Beyond Intractability, Available at <http://www.beyondintractability.org/essay/distributive-justice>, [Accessed on 15/02/2014].

³⁹ Ibid.

of poverty. The third and final way of defining poverty is in respect of lack of opportunities.⁴⁰

It has been observed that poverty does not merely mean lack of adequate income or inability to meet basic human needs. Some people have good health and can live a productive life but are deprived of suitable opportunities.⁴¹ Further, the implied denial of opportunities pushes them into unemployment resulting in loss of income and finally inability to meet the basic human needs.⁴² Consequently, lack of opportunity in economic and political life is the root cause of poverty and therefore should not be neglected while defining poverty.

Poverty is generally conceived as the lack of necessities which include basic food, shelter, medical care, and safety and are seen as necessary based on shared values of human dignity. People are said to be in poverty when they live below a standard which their society recognises as a reasonable minimum.⁴³ This is also referred to as poverty line which is that level of income below which an individual or household cannot afford on a regular basis the necessities of life.⁴⁴

3.5 Greening of Human Rights versus Third Generation Rights

There have generally been two types of approaches to human rights and the environment, which are the greening of already existing human rights and the introduction of a third generation of human rights.

3.5.1 Greening of Human Rights

This is a popular approach, whereby the right to a healthy environment is 'gleaned' from the already existing body of human rights, rather than the addition of new rights to existing treaties. This is taking place in the European

⁴⁰ See generally, Khanna, G., "Poverty: A Violation of Human Rights or Not?." Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2264371 (2013).

⁴¹ See 'Amartya Sen's Theory of Poverty', *From the Selected Works of Mubashshir Sarshar*, January 2010.

⁴² Ibid.

⁴³ Veit-Wilson, J., *Poverty*, John Veit-Wilson's Papers on Concepts, Definitions and Measures of Poverty, On Income Adequacy and on Minimum Income Standards, p.1, *Routledge International Encyclopaedia of Social Policy* (2006), Available at <http://www.staff.ncl.ac.uk/j.veit-wilson/documents/povertyriesp.pdf> [Accessed on 15/02/2014].

⁴⁴ *Our Common Future*, Chapter 2: Towards Sustainable Development, From A/42/427. *Our Common Future: Report of the World Commission on Environment and Development*, (Oxford, Oxford University Press, 1987).

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Human Rights Court related to Article 8 Right to privacy and home⁴⁵, in the Interamerican Commission on Human Rights (*Yanomani Indians v Brazil* (Life and health)) and in the African Commission on Human Rights (*Ogoniland v Nigeria* (Article 24 and several others)).

This also seems to be the stance adopted by the United Nations⁴⁶ as indicated by a 2009 report for the Office of the High Commissioner on Human Rights (OHCHR) that 'while the universal human rights treaties do not refer to a specific right to a safe and healthy environment, the United Nations human rights treaty bodies all recognize the intrinsic link between the environment and the realization of a range of human rights, such as the rights to life, to health, to food, to water, and to housing'.⁴⁷

While the relationship between certain human rights and the environment has been clearly illustrated, acknowledged and accepted, there are certain disadvantages to having these rights being the vehicles to protect the environment. For one part, environmental rights do not fit neatly into one generation of human rights.

Existing civil and political rights can be used to give individuals the right to environmental information and judicial processes, which is a role of facilitating participation in decision making and forcing the government to meet minimum standards for protection of life and property from environmental harm.⁴⁸

This approach is however anthropocentric, as humans are considered the central concern while the environment is considered secondary.⁴⁹ This is unlikely to

⁴⁵ Kravchenko, S. & Bonine, J.E., 'Interpretation of Human Rights for the Protection of the Environment in the European Court of Human Rights' op cit: This is seen in the decisions rendered by the European Commission on Human Rights. Cases such as *Guerra*, *Lopez Ostra*, *Öneryildiz*, *Taskin*, *Fadeyeva*, *Budayeva*, and *Tatar* show how the right to private life, or the right to life, can be used to compel governments to regulate environmental risks, enforce environmental laws, or disclose environmental information.

⁴⁶ UNHRC Resolution 2005/60 (2005) also recognized the link between human rights, environmental protection, and sustainable development.

⁴⁷ Ibid; UN HRC, *Report of the OHCHR on the Relationship Between Climate Change and Human Rights*, UN Doc. A/HRC/10/61, 15 Jan. 2009, at para. 18.

⁴⁸ Alan Boyle, 'Human Rights and the Environment: A reassessment' *First Preparatory Meeting of the World Congress on Justice, Governance and Law for Environmental Sustainability* (12 - 13 October 2011 - Kuala Lumpur, Malaysia).

⁴⁹ Horn, L., 'Reframing Human Rights in Sustainable Development' op cit.

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provide adequate protection to the environment, as the intrinsic value of the environment is not recognized. Instead it is viewed as instrumental to the intrinsic value of human beings. It is suggested that the domination of the anthropocentric approach has resulted to the lack of success in protecting the environment.

On the other end of the spectrum is the ecocentric approach, whereby there is a moral concern for nature. Through it, there is the adoption of a new land ethic, where a thing is right when it intends to preserve the integrity, stability and beauty of the biotic community, and is wrong if it intends to otherwise.⁵⁰ A dual rights-based approach, where the intrinsic value of humans and nature co-exist in an interconnected manner is hoped to pool the benefits of both approaches. A clean environment may also be regarded as a social and economic right, giving it such status as rights to development and would be largely programmatic, with weak implementation mechanisms.⁵¹

Another issue with this approach is that some environmental rights are not contained in human rights instruments. A key example is of the Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters.⁵² It asserts that every person has the right to live in an environment adequate to their health and well-being, and the duty, both individually and in association with others, to protect and improve the environment for the benefit of present and future. It was, however, procedural in nature, restricting itself to issues of public participation, access to justice and information.⁵³

3.5.2 Third Generation Classification of Human Rights

Human rights proponents have been particularly reluctant to recognize a third generation of human rights. Third-generation rights are described as solidarity rights that, and are attributed as group rights or collective rights⁵⁴. It has been argued that these rights devalue the concept of human rights, and divert attention

⁵⁰ Barouskaya I., 'Anthropocentrism & Ecocentrism: Finding Balance for Environment Protection' *A presentation at the University of Limerick.*

⁵¹ Boyle, A., 'Human Rights and the Environment: A reassessment' op cit.

⁵² UN Doc. ECE/CEP/43. Adopted at the 4th UNECE Ministerial Conference, Aarhus, 25 June, 1998.

⁵³ Boyle, A., 'Human Rights and the Environment: A reassessment' op cit.

⁵⁴ Horn, L., 'Reframing Human Rights in Sustainable Development' op cit.

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from the need to implement existing civil, political, economic and social rights fully.⁵⁵ On the flip side, rights herein include the right to development, the right to peace, the right to a healthy environment and the right to intergenerational equity.⁵⁶

Recognition of the relationship between abuse of human rights of various vulnerable communities and related damage to their environment is found in the concept of environmental justice. Environmental justice theory recognizes how discrimination and marginalization involves expropriating resources from vulnerable groups and exposing these communities to the ecological harms that result from use of those resources. Environmental justice is based on the human right to a healthy and safe environment, a fair share to natural resources, the right not to suffer disproportionately from environmental policies, regulations or laws, and reasonable access to environmental information, alongside fair opportunities to participate in environmental decision-making.⁵⁷

Some human rights lawyers opine that the recognition of third generation rights will devalue the concept of human rights and divert attention from the already recognised first and second-generation rights.⁵⁸ The right to a clean and healthy environment, as is with all environmental rights, has for a long time been grouped under the 'third generation rights' or 'solidarity rights'. However, the right to clean and healthy environment is not a 'third generation right' but a *fundamental right*; (emphasis added) a prerequisite for full enjoyment of all the other rights. It is a right, crucial for the realisation of the so-called first and second generation rights. Indeed, it has been rightly argued that when people must struggle to obtain the basic necessities of life, political freedoms and human rights may appear meaningless to them.⁵⁹ This is because the destruction of life-

⁵⁵ Boyle, A., 'Human Rights and the Environment: A reassessment' *op cit*.

⁵⁶ Ruppel, O.C., 'Third Generation Human Rights and the Protection of the Environment in Namibia.

⁵⁷ Scottish Executive Social Research, *Sustainable Development: A Review of International Literature*, (Scottish Executive Social Research, 2006), p.8.

Available at <http://www.gov.scot/resource/doc/123822/0029776.pdf> [Accessed on 15/08/2016].

⁵⁸ See Olenasha, W.T., 'The Enforcement Of Environmental Rights: A Case Study Of The New South African Constitutional Dispensation,' *Thesis (LLM (Human Rights and Democratisation in Africa) (University of Pretoria, 2001)*, available at http://repository.up.ac.za/bitstream/handle/2263/969/olenasha_wt_1.pdf?sequence=1&isAllowed=y [Accessed on 28/08/2015].

⁵⁹ Downs, J.A., 'A Healthy and Ecologically Balanced Environment: An Argument for A Third Generation Right,' *Duke Journal of Comparative & International Law*, Vol. 3, 1993, pp. 351-385 at p. 351.

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sustaining ecosystems, the pollution of the world's water, land, and air, the inability to control the world's wastes, and other related environmental problems prevent people from securing the minimum requisites for health and survival, thereby impeding and even prohibiting the effective exercise and enjoyment of human rights for much of the world's population.⁶⁰

It is against this background that there emerged recognition of the right to a clean and healthy environment, as a distinct right, owing to the importance of the environment for the realisation of the other human rights especially the socio-economic rights.

There is need to redefine the right to clean and healthy environment as a fundamental right, and classify it with the other basic rights as opposed to the existing notion that it is a third generation right. This is because the right to a clean and healthy environment can be equated to the right to life. A further discussion on the right to clean and healthy environment is to found in chapter nine of this book.

⁶⁰ Ibid.

CHAPTER FOUR

Environment and Sustainable Development in Kenya

4.1 Introduction

As already pointed out in the preceding chapters, international legal and regulatory framework on environment and sustainable development tasks national governments of member states to adopt and implement the international best practices and the principles of sustainable development in their domestic legal and regulatory frameworks on environmental governance.

Kenya's approach to environmental governance has largely been sectoral. However, this chapter generally looks at the existing natural resources and environmental legal and regulatory framework meant to promote realisation of sustainable development in the country. It is also important to point out that the international best practices in sustainable development envisage an integrated approach to economic, social and economic dimensions of development. The chapter, therefore, takes a holistic approach, without necessarily focusing on specific sectors, an approach based on the need for environmental management for sustainable development.

4.2 Domesticating Principles of Sustainable Development

As already pointed, sustainable development contains both substantive and procedural elements, where substantive elements include the integration of environmental protection and economic development; the right to development; the sustainable utilisation of natural resources; the equitable allocation of resources both within the present generation and between present and future generations, while procedural elements include public participation in decision making; access to information; and environmental impact assessment.¹ These issues are therefore interrogated in the context of Kenya.

It has been suggested that the most potentially far-reaching aspect of sustainable development is that for the first time it makes a state's management of its own domestic environment a matter of international concern in a systematic way.²

¹ Birnie, P. et al, *International Law & the Environment*, op cit, p. 116.

² Ibid, p. 124.

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Nonetheless, it is still a contentious issue as to whether states should be held internationally accountable for achieving sustainability, whether globally or nationally, and also the specific formula to be used in deciding the 'acceptable standard of sustainable development.'³ Thus, states retain substantial discretion in interpreting and giving effect to sustainable development.⁴

While acknowledging the foregoing dilemma, it is arguable that national requirements to meet the needs of their people may be an incentive for such countries to uphold the principles of sustainable development and even set standards for the same. This is well evidenced in the laws and the jurisprudence emanating from Kenyan courts. The Constitution stipulates that sustainable development is one of the national values and principles of governance that must bind all State organs, State officers, public officers and all persons whenever any of them--applies or interprets the Constitution; enacts, applies or interprets any law; or makes or implements public policy decisions.⁵ The implication of these constitutional provisions is that both national and county levels of government are tasked with promoting sustainable development especially with regard to natural resources and environmental management.

Further, the EMCA provides that in exercising the jurisdiction conferred upon it under subsection (3), the High Court of Kenya should be guided by the following principles of sustainable development: the principle of public participation in the development of policies, plans and processes for the management of the environment; the cultural and social principle traditionally applied by any community in Kenya for the management of the environment or natural resources in so far as the same are relevant and are not repugnant to justice and morality or inconsistent with any written law; the principle of international co-operation in the management of environmental resources shared by two or more states; the principles of intergenerational and intragenerational equity; the polluter-pays principle; and the pre-cautionary principle.

In the Kenyan case of *Peter K. Waweru v Republic*,⁶ the High Court had to deal with a contention by the applicants that they could comply with the health

³ Ibid, pp. 125-126.

⁴ Ibid, p. 126.

⁵ Constitution of Kenya, Article 10(2) (d).

⁶ *Peter K. Waweru v Republic* [2006] eKLR, Misc. Civil Application No. 118 of 2004.

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requirements concerning the waste water and that the cost of having treatment works in their respective plots would be out of reach of the individual property owners – and that the costs would be prohibitive. The court rejected the argument firstly because sustainable development has a cost element which must be met by the developers and secondly because they had not stated that they had thought of other alternatives which could be more environmentally friendly to deal with the problem.⁷ The Court went on to state as follows:

...As regards the township itself this court is concerned on whether or not in the circumstances described the development is ecologically sustainable.... We are also concerned that the situation described to us could be the position in many other towns in Kenya especially as regards uncoordinated approval of development and the absence of sewerage treatment works. As a Court we cannot therefore escape from touching on the law of sustainable development although counsel from both sides chose not to touch on it although it goes to the heart of the matter before us.... Section 3 of EMCA demands that courts take into account certain universal principles when determining environmental cases. Apart from the EMCA it is our view that the principles set out in s 3 do constitute part of international customary law and the courts ought to take cognizance of them in all the relevant situations.⁸

The foregoing statutory and constitutional provisions as well as the case law cited confirm Kenya's position as far as recognition, promotion and implementation of the principles of sustainable development are concerned. Thus, the debate as to whether the various stakeholders may be held accountable for violation of the elements of sustainable development in the course of their duties seems to have been settled in Kenya and may safely be answered in the affirmative.

The next section evaluates the framework put in place to facilitate the implementation of the foregoing position. It examines the extent to which select existing legislation on management of environmental and natural resources reflect the spirit of Article 69 and the Constitution in general, as far as environmental management and sustainable development is concerned. Policies and laws on natural resources and environment in Kenya should be aligned to reflect the requirements and spirit of the Constitution.

⁷ Ibid, para. 4.

⁸ Ibid, p. 7.

It is arguable that some of the current laws on natural resources management in Kenya still adopt approaches that defeat any efforts aimed at achieving sustainable development. The next section briefly interrogates some of these laws and the specific approaches that they adopt.

4.3 Legal and Regulatory Framework on Environmental Governance and Sustainable Development in Kenya

Constitutionalisation of environmental rights is now one of the universally accepted approaches to environmental conservation and management.⁹ It has become the norm worldwide for the duties of the state in respect of the environmental management and conservation to be spelt out in the Constitution. It is against this background that the Constitution of Kenya 2010 outlines the obligations of the State in respect of the environment as including the duty to: ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources¹⁰, and ensure the equitable sharing of the accruing benefits; work to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya; protect and enhance intellectual property in, and indigenous knowledge of, biodiversity¹¹ and the genetic resources of the communities; encourage public participation in the management, protection and conservation of the environment; protect genetic resources and biological

⁹ See generally, Boyd, D.R., 'The Effectiveness of Constitutional Environmental Rights,' *Yale UNITAR Workshop*, April 26/27, 2013, available at <https://environment.yale.edu/content/documents/00003438/Boyd-Effectiveness-of-Constitutional-Environmental-Rights.docx?1389969747> [Accessed on 23/07/2016]; See also Daly, E. & May, J.R., 'Comparative environmental constitutionalism,' *Jindal Global Law Review*, April 2015, Volume 6, Issue 1, pp 9-30; See also, Mwenda, A. & Kibutu, T.N., 'Implications of the New Constitution on Environmental Management in Kenya,' *Law, Environment and Development Journal*, Vol. 8, No. 1, 2012, p. 78.

¹⁰ The Constitution interprets "natural resources" to mean the physical non-human factors and components, whether renewable or non-renewable, including – sunlight; surface and groundwater; forests, biodiversity and genetic resources; and rocks, minerals, fossil fuels and other sources of energy (Article 260).

¹¹ Generally, biodiversity is defined to include the variability among living organisms, from all sources including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems (Article 2, United Nations Environment Programme, 1760 UNTS 79; 31 ILM 818 (1992); The Convention on Biological Diversity, adopted during the Earth Summit in Rio de Janeiro, promotes biodiversity, sustainable use, and the sharing of benefits arising out of the utilization of genetic resources. The Convention provides for national reporting of efforts to implement the provisions of the Convention).

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diversity¹²; establish systems of environmental impact assessment, environmental audit and monitoring of the environment; eliminate processes and activities that are likely to endanger the environment; and utilise the environment and natural resources for the benefit of the people of Kenya.¹³

The Preamble to the Constitution of Kenya captures the need for concerted efforts of all, in the duty to conserve and sustainably manage the environment, since the same does not only lie against the State but also every individual person.¹⁴ In relation to the foregoing obligations, the Constitution places a duty on every person to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.¹⁵ Article 69(2) of the Constitution of Kenya places a duty on every person to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.

The Constitution goes a step further to provide for active involvement of communities in sustainable environmental and natural resources matters through seeking court's intervention. Citizenry have a right of ensuring that their rights in relation to the environment are not violated, by way of litigation.¹⁶ This

¹² The Convention on Biological Diversity (CBD) adopted at the Earth Summit in Rio de Janeiro, Brazil, is a global convention which aims to achieve three objectives: the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of benefits from the use of genetic resources. Kenya is a signatory to this Convention and it is therefore bound by its provisions in promoting the realisation of the three objectives.

¹³ Constitution of Kenya, Article 69(1).

¹⁴ We, the people of Kenya—.....Respectful of the environment, which is our heritage, and determined to sustain it for the benefit of future generations...Committed to nurturing and protecting the well-being of the individual, the family, communities and the nation:....

¹⁵ Constitution of Kenya, Article 69(2).

¹⁶ Article 22(1) provides that every person has the right to institute court proceedings claiming that a right or fundamental freedom in the Bill of Rights has been denied, violated or infringed, or is threatened; Article 70(1) provides that if a person alleges that a right to a clean and healthy environment recognised and protected under Article 42 has been, is being or is likely to be, denied, violated, infringed or threatened, the person may apply to a court for redress in addition to any other legal remedies that are available in respect to the same matter. Furthermore, on application under clause (1), the court may make any order, or give any directions, it considers appropriate-- to prevent, stop or discontinue any act or omission that is harmful to the environment; to compel any public officer to take measures to prevent or discontinue any act or omission that is harmful to the environment; or to provide compensation for any victim of a violation of the right to a clean and healthy environment (Article 70(2). For the purposes of this Article, an applicant does not have to demonstrate that any person has incurred loss or suffered injury (Article 70(3). The right to seek

is also captured in the various statutes such as the *Environmental Management and Co-ordination Act*.¹⁷ The Constitution also recognises the right of every person to a clean and healthy environment.¹⁸

As already observed, active participation of citizens makes them appreciate and support government efforts and also take part in conservation measures. However, there has not been meaningful participation of the public in environmental and natural resource management matters, since majority of the sectoral laws only provide for public participation as a mere formality, and not as an empowerment tool as envisaged in international human rights instruments.¹⁹

Considering that the Constitution is the supreme law of the land, all the other sectoral laws on environment and natural resources management ought to be aligned to the constitutional provisions. The reality however, is that some of the laws are yet to be aligned and thus making it difficult to achieve the constitutional objectives on environment and natural resources governance. A good example is the *Environmental Management and Co-ordination Act 1999* (EMCA), which is the environmental framework law, meant to provide for the establishment of an

legal redress is also guaranteed under s. 3(3) of the *Environmental Management and Co-ordination Act*, No. 8 of 1999.

¹⁷ No. 8 of 1999, *Laws of Kenya*, s. 3(3); See also *Environmental Management and Co-ordination (Amendment) Act, 2015* which expands the provisions to include the right to clean and healthy environment and also the right of a person to file suit on his behalf or on behalf of a group or class of persons, members of an association or in the public interest (s. 3).

¹⁸ Article 42. This right includes the right— to have the environment protected for the benefit of present and future generations through legislative and other measures, particularly those contemplated in Article 69; and to have obligations relating to the environment fulfilled under Article 70

¹⁹ See Principle 10 of the *Rio Declaration*, which affirms that environmental issues are best handled with participation of all concerned citizens, at the relevant level. The *Aarhus Convention* also establishes a number of rights of the public (individuals and their associations) with regard to the environment. The Convention provides for *inter alia*: the right of everyone to receive environmental information that is held by public authorities ("access to environmental information"); the right to participate in environmental decision-making ("public participation in environmental decision-making"); and the right to review procedures to challenge public decisions that have been made without respecting the two aforementioned rights or environmental law in general ("access to justice") (*Aarhus Convention*, Article 4, 5, 6 & 9 respectively. Although the *Aarhus Convention* is a European region legal instrument, its provisions have gained international recognition and approval especially considering the fact that it reflects Principle 10 of the *Rio Declaration on Environment and Development*); See also *Access to Information Act, 2016* which deals with disclosure of information including information on dangers of public health, safety and the environment.

appropriate legal and institutional framework for the management of the environment and for the matters connected therewith and incidental thereto. An interpretation of the current wording of EMCA shows that where the framework law provides for consultations, the same are only meant to be between the state agencies charged with environmental governance. Even where a decision is likely to affect the interests of communities, the Act only provides for unilateral decision by the Cabinet Secretary in charge to ensure that such welfare is well taken care of.²⁰ Thus, it is possible to have a scenario where the protectionist approaches adopted in most of these sectoral laws end up undermining efforts towards achieving sustainable development instead of boosting the same.

4.3.1 Equitable Benefit Sharing for Social Sustainability

The proposed legislation *Natural Resources (Benefit Sharing Bill)*²¹ seeks to establish a system of benefit sharing in resource exploitation between resource exploiters, the national government, county governments and local communities, to establish the natural resources benefit sharing authority and for connected purposes. The law is to apply with respect to petroleum and natural gas, among other natural resources. It also provides for guiding principles which include transparency and inclusivity, revenue maximization and adequacy, efficiency and equity and accountability.²²

There is need to actively involve communities in the implementation of this law, if enacted, to ensure that they are not left out as far as benefit sharing is concerned. The approach should be one that ensures that communities feel part of the resource management strategies and not mere spectators where they are not consulted even on the best approaches to benefit sharing.

The *Community Land Act, 2016*²³ gives effect to Article 63 (5) of the Constitution; provides for the recognition, protection and registration of community land rights; management and administration of community land; and provides for the role of county governments in relation to unregistered community land.²⁴ The

²⁰ See also the *Environmental (Impact Assessment and Audit) Regulations, 2003*, Legal Notice 101 of 2003, Regulation 17 which provides for public participation albeit inadequately.

²¹ *Natural Resources (Benefit Sharing Bill)*, 2015 (Government Printer, Nairobi, 2015).

²² *Ibid*, clause 4.

²³ Act No. 27 of 2016, Laws of Kenya.

²⁴ Preamble, *Community Land Act, No. 27 of 2016* (Government Printer, Nairobi, 2016).

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Act provides that subject to any other law, natural resources found in community land should be used and managed – sustainably and productively; for the benefit of the whole community including future generations; with transparency and accountability; and on the basis of equitable sharing of accruing benefits.²⁵ This provision thus requires all those charged with administration of such jointly owned resources to not only ensure equitable sharing of accruing benefits but also sustainable and productive use and management of the same. The requirement for transparency and accountability is meant to give the community channels of ensuring that the resources are not wasted or mismanaged.

Where need for concessions arise, the Act provides that an agreement relating to investment in community land should be made after a free, open consultative process and should contain provisions on the following aspects – an *environmental, social, cultural and economic impact assessment* (emphasis added); stakeholder consultations and involvement of the community; continuous monitoring and evaluation of the impact of the investment to the community; payment of compensation and royalties; requirement to re-habilitate the land upon completion or abandonment of the project; measures to be put in place to mitigate any negative effects of the investment; capacity building of the community and transfer technology to the community; and any other matters necessary for determining how local communities will benefit from investments in their land.²⁶

It is important to point out that if the concerned communities are to benefit through the ways contemplated above, they must be willing to take up opportunities that would be brought their way. They must be made to understand that the expected benefits will not only come in monetary terms and must be made aware of the various non-monetary forms that benefits may accrue to them, for instance, such as those envisaged under the *Nagoya Protocol*.²⁷ The

²⁵ Ibid, s. 36.

²⁶ Ibid, s. 37.

²⁷ Annex to the *Nagoya Protocol* provides for both monetary and non-monetary forms of benefits. It envisages monetary benefits which may include, but not be limited to: access fees/fee per sample collected or otherwise acquired; up-front payments; milestone payments; payment of royalties; licence fees in case of commercialization; special fees to be paid to trust funds supporting conservation and sustainable use of biodiversity; salaries and preferential terms where mutually agreed; research funding; joint ventures; and joint ownership of relevant intellectual property rights (*Annex to the Nagoya Protocol on Access and Benefit-sharing*).

various means of accessing benefit sharing are also captured under the *Legal Notice 160 of 2006 on the Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006* which makes provisions for benefit sharing on genetic resources.²⁸ These Regulations may therefore offer useful guidelines on how to ensure that genetic resources are conserved and also benefit concerned groups of people, as envisaged under the Constitution. Some of the forms of benefits would only be made possible through concerted efforts from both sides, that is, the concerned community and the investor and possibly with assistance from the county or national governments.²⁹

²⁸ Regulation 20 (1) without prejudice to the generality of the foregoing, the holder of an access permit shall facilitate an active involvement of Kenyan citizens and institutions in the execution of the activities under the permit. (2) The facilitation by the holder of an access permit shall include enjoyment of both monetary and non-monetary benefits arising from the right of access granted and the use of genetic resources. (3) Monetary benefits include – (a) access fees or fee per sample collected or acquired; (b) up-front payments; (c) milestone payments; (d) payment of royalties; (e) license fees in case genetic resources are to be utilized for commercial purposes; (f) fees to be paid to trust funds supporting conservation and sustainable use of biodiversity; (g) salaries and preferential terms where mutually agreed; (h) research funding; (i) joint ventures; (j) joint ownership of relevant intellectual property rights; (4) Non-monetary benefits include – (a) sharing of research and development results; (b) collaboration, co-operation and contribution in scientific research and development programmes, particularly biotechnological research activities; (c) participation in product development; (d) admittance to ex situ facilities of genetic resources and to databases by participating institutions; (e) transfer to Kenya of genetic resources of knowledge and technology under fair and most favourable terms, including concessional and preferential terms where agreed, in particular, knowledge and technology that make use of genetic resources, including biotechnology, or that are relevant to the conservation and sustainable utilization of biological diversity; (f) strengthening capacities for technology transfer to Kenya; (g) institutional capacity building; (h) human and material resources to strengthen the capacities for the administration and enforcement of access regulations; (i) training related to genetic resources with the full participation of Kenya and where possible, in Kenya; (j) access to scientific information relevant to conservation and sustainable use of biological diversity, including biological inventories and taxonomic studies; (k) institutional and professional relationships that can arise from access and benefit sharing agreements and subsequent collaborative activities; (l) joint ownership of relevant intellectual property rights.

²⁹ The Genetic Resources Research Institute (GeRRI), under the Kenya Agricultural and Livestock Research Act of 2013, a semi-autonomous research Institute, is responsible for conserving plant genetic resources, animal and microbial genetic resources. Genetic resources are essential basic building blocks utilized in research to develop improved technologies for enhanced agricultural production. This Institution should work closely with communities and other stakeholders in order to promote effective conservation and use of resources for food security assurance, agricultural resilience and economic growth, besides achieving sustainable development.

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The International Finance Corporation (IFC) suggests practical processes for sharing benefits with communities.³⁰ One of the ways that this can be achieved is through maintaining active relationships built on trust with communities through appropriate and effective communication. This implies that genuine consultations and participation in decision-making will happen whenever possible and that perceptions and expectations are closely aligned with reality. They also propose carrying out comprehensive, participatory baseline studies of the community's socioeconomic, cultural heritage, and socio-environmental context before project development, agreeing to joint objectives for the project's community programs, monitoring outcomes (including community feedback), and responding as needed. This, according to IFC, helps address misconceptions, manage expectations, and assuage fears or concerns.³¹

There is also the suggestion on establishing robust grievance mechanisms that are understood, accessible and linked directly to project performance measures. Where justified, third party mediation may be required.³² Foundations and other long-term approaches may also be good vehicles to achieve community development objectives if they ensure broader stakeholder participation and helping identify areas of focus and consistency of priorities across actors, such as company, governments, donors, and communities. Finally, integrating project development and community development plans as effectively as practicable

³⁰ Lohde, L.A., *The Art and Science of Benefit Sharing in the Natural Resource Sector*, (International Finance Corporation, February 2015), p. 61. Available at http://www.ifc.org/wps/wcm/connect/8e29cb00475956019385972fbd86d19b/IFC_Art+and+Science+of+Benefits+Sharing_Final.pdf?MOD=AJPERES&CACHEID=8e29cb00475956019385972fbd86d19b [Accessed on 13/07/2016].

³¹ *Ibid*, p. 61.

³² Article 47(1) of the Constitution of Kenya guarantees that every person has the right to administrative action that is expeditious, efficient, lawful, reasonable and procedurally fair (See also *Fair Administrative Action Act*, No. 4 of 2015). Further, Article 48 obligates the State to ensure access to justice for all persons and, if any fee is required, it shall be reasonable and shall not impede access to justice. Article 60(1) (g) provides that one of the principles of land policy in Kenya is encouragement of communities to settle land disputes through recognised local community initiatives consistent with this Constitution. Furthermore, one of the functions of the National Land Commission include to encourage the application of traditional dispute resolution mechanisms in land conflicts (Article 67(2) (f). Also relevant is Article 159(2)(c) which requires that in exercising judicial authority, the courts and tribunals should be guided by the principles which include, inter alia – promotion of alternative forms of dispute resolution including reconciliation, mediation, arbitration and traditional dispute resolution mechanisms, subject to clause (3). The foregoing provisions provide a good platform upon which communities and other stakeholders can enjoy grievance mechanisms that are easily understood, accessible and linked directly to project performance measures.

with local and national government planning to support development aspirations and balance the expectations and demands of different communities may be useful.³³

There is a need to ensure that the any model that is put in place guarantees a fair and equitable benefit-sharing, with the terms and provisions which clearly spell out the model to be used in determining the accruing benefits and the associated costs, in order to determine the investments (and compromises) from all parties and stakeholders involved.³⁴

4.3.2 Devolution and Sustainable Development in Kenya: Challenges and Prospects

The United Nations Development Programme (UNDP) recommends adoption of decentralised governance of natural resources, which concerns the ownership and control of, access to and use of resources, and involves decision making and the exercise of the powers over others.³⁵ It entails the process of transferring some of the decision-making powers and responsibilities (fiscal, administrative, legal and technical) to sub-national institutions at the grassroots' levels.³⁶ According to UNDP, decentralised governance of natural resources is considered one of the key strategies for promoting sustainable management, equitable decision-making, promoting efficiency, participatory governance and equitable sharing of benefits accrued from exploitation of natural resources at the local levels.³⁷

The Constitution provides for the role of devolved governance system in the management of natural resources and the environment. The Fourth Schedule to the Constitution³⁸ provides for the distribution of functions between the National Government and the County Governments. With regard to the environment and natural resources, the National Government obligations include protection of the environment and natural resources with a view to establishing a durable and sustainable system of development, including, in particular – fishing, hunting

³³ Lohde, L.A., *The Art and Science of Benefit Sharing in the Natural Resource Sector*, (International Finance Corporation, February 2015), op cit. p. 61.

³⁴ See generally, Jonge, B.D., 'What is Fair and Equitable Benefit-sharing?' *Journal of Agricultural and Environmental Ethics*, Vol. 24, 2011, pp.127-146.

³⁵ United Nations Development Programme, *Decentralized Governance of Natural Resources*, available at <http://web.undp.org/drylands/decentralized-governance.html> [Accessed on 14/07/2016].

³⁶ Ibid.

³⁷ Ibid.

³⁸ (Article 185 (2), 186 (1) and 187 (2)), Constitution of Kenya.

and gathering; protection of animals and wildlife; water protection, securing sufficient residual water, hydraulic engineering and the safety of dams; and energy policy.³⁹ On the other hand, the functions and powers of the county are, inter alia: implementation of specific national government policies on natural resources and environmental conservation, including— soil and water conservation; and forestry; and ensuring and coordinating the participation of communities and locations in governance at the local level and assisting communities and locations to develop the administrative capacity for the effective exercise of the functions and powers and participation in governance at the local level.⁴⁰

It has rightly been observed that Governments in many developing countries have discovered the need for a decentralised approach to human development.⁴¹ This is usually achieved through ceding a certain degree of authority, by way of devolution, on the local and regional levels in order to address the common difficulty in responding to local needs which may arise due to lack of information as well as bureaucratic incapacity.⁴² This is well captured in the constitutional obligation of County Governments to ensure and coordinate the participation of communities and locations in governance at the local level, and assisting them to develop the administrative capacity for the effective exercise of the functions and powers and participation in governance.⁴³

(i) State Department of Devolution

According to the Ministry's mandate as stipulated in Executive Order no. 2 of 2013⁴⁴, the Ministry of Devolution and Planning is now organized into two State Departments. These are State Department of Planning and State Department of Devolution. The State Department for Planning is to play the role of formulating and coordinating national development, mainstreaming youth into development and empowering them, building fairer gender equality, and tracking of

³⁹ Constitution of Kenya 2010, Fourth Schedule, Clause 22.

⁴⁰ Constitution of Kenya 2010, Fourth Schedule, clauses 10 & 14.

⁴¹ Alaedini, P. & Namazi, S., 'Decentralization and Sustainable Human Development: An Analysis of Local and Municipal Councils in Iran,' *Encyclopedia of Life Support Systems* (EOLSS), p. 1. Available at www.eolss.net/Eolss-sampleAllChapter.aspx { Accessed on 10/07/2016}

⁴² Ibid.

⁴³ See Constitution of Kenya, Schedule four (*Article 185 (2), 186 (1) and 187 (2)*), Part 2.

⁴⁴ Republic of Kenya, Executive Order No 2 of 2013 on the Organization of Government of Kenya, (Government Printer, 2013, Nairobi).

development results in the economy to ensure the Ministry and the government as a whole achieve their strategic objective.⁴⁵

The State Department of Devolution, on the other hand, is responsible for overall coordination of implementation of devolution policies, sustainable development policy for Northern Kenya and other Arid Lands (ASALs) and implementation of programmes and projects to provide relief to the vulnerable groups and communities in our arid and semi-arid lands.⁴⁶ To enable Kenya to meet the SDGs, the Strategic Plan requires the Government to set up a Sustainable Development Goals Planning Department in order to ensure alignment of the SDGs with the national development plans and to support accelerated implementation of the goals.⁴⁷

(ii) National Drought Management Authority

It has been documented that in Kenya, the ASAL occupy 89% of the country and are home to about 36% of the population, 70% of the national livestock herd and 90% of the wild game that supports the country's tourism industry.⁴⁸ The National Drought Management Authority (NDMA) is a public body established by the National Drought Management Authority (NDMA) Act, 2016.⁴⁹ It is an agency of the Government of Kenya mandated to establish mechanisms which ensure that drought does not result in emergencies and that the impacts of climate change are sufficiently mitigated.

The Act gives the NDMA the mandate to exercise overall coordination over all matters relating to drought management including implementation of policies and programmes relating to drought management.⁵⁰ The NDMA provides a platform for long-term planning and action, as well as a mechanism for solid

⁴⁵ Republic of Kenya, *Ministry of Devolution and Planning Strategic Plan 2013/14-2017/18*, (Government Printer, 2014, Nairobi), p. viii-ix.

⁴⁶ *Ibid*, p.30.

⁴⁷ *Ibid*, p. 32.

⁴⁸ Para. 1.1, *Draft National Policy for the Sustainable Development of Northern Kenya and other Arid Lands 2015: Unlocking Our Full Potential for Realization of the Kenya Vision 2030*, (Government Printer, Nairobi, July 2015).

⁴⁹ See National Drought Management Authority Website. Available at <http://www.ndma.go.ke/index.php/features/about-ndma>. It previously operated under the State Corporations Act (Cap 446) of the Laws of Kenya by Legal Notice Number 171 of November 24, 2011.

⁵⁰ S. 5, National Drought Management Authority (NDMA) Act, No. 4 of 2016.

coordination across Government and with all other stakeholders. The Authority has established offices in 23 ASAL counties considered vulnerable to drought.⁵¹ The NDMA has been supporting Disaster Risk Reduction (DRR) initiatives in arid and semi-arid counties mainly based on community participatory approaches. For instance, NDMA has been implementing, with the support of the Kenya Rural Development Programme (KRDP), ASAL Drought Management project, whose main focus has been on building capacity of community planning structures to allow mainstreaming of drought risk reduction strategies in the local planning process through a Community Managed Disaster Risk Reduction (CMDRR) approach.⁵² The CMDRR approach is meant to bring together a community to enable it to collectively address a common disaster risk and pursue disaster risk reduction measures. It includes implementation of Participatory Disaster Risk Assessment (PDRA) and development of local disaster risk reduction and response plans.⁵³

The approach allows communities to analyse the impact of droughts on their livelihoods, identify possible preparedness and response activities to enhance resilience, and mainstream disaster risk reduction into long-term development plans.⁵⁴ Furthermore, the NDMA provides investment resources to implement some of the strategic DRR projects identified and prioritised by communities to enhance local resilience to drought. These projects may include, inter alia, livestock restocking and dairy goats for breed improvement.⁵⁵

4.3.3 National Courts and Sustainable Development

It has rightly been argued that there are other regulatory approaches to achieving environmental protection and public health that are not rights-based. These include economic incentives and disincentives, criminal law, and private liability

⁵¹ See National Drought Management Authority Website.

⁵² CMDRR: Investing in participatory approaches to community empowerment, available at <http://www.ndma.go.ke/index.php/success-stories/93-cmdrr-investing-in-participatory-approaches-to-community-empowerment> [Accessed on 09/09/2016]; See also Agenda 2030 for Sustainable Development Goals, Goal 11.b which requires that by 2020, countries should have substantially increased the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels.

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Ibid.

regimes which have all formed part of the framework of international and national environmental law and health law.⁵⁶ For instance, the *Environmental Management and Co-ordination (Amendment) Act, 2015*⁵⁷ amends section 48 of EMCA by inserting subsection (3) to the effect that where a forested area is declared to be a protected area under section 54(1), the Cabinet Secretary may cause to be ascertained, any individual, community or government interests in the land and forests and should *provide incentives to promote community conservation* (emphasis added).⁵⁸ Such an approach can boost the State's efforts in sustainable development.

In *Peter K. Waweru v Republic*,⁵⁹ the Court observed that '...environmental crimes under the Water Act, Public Health Act and EMCA cover the entire range of liability including strict liability and absolute liability and ought to be severely punished because the challenge of the restoration of the environment has to be tackled from all sides and by every man and woman....' It went further to state, —...In the name of environmental justice water was given to us by the Creator and in whatever form it should never ever be the privilege of a few – the same applies to the right to a clean environment.⁶⁰ The Court also affirmed the broad scope of the right to clean and healthy environment by stating, *inter alia*, that 'the right of life is not just a matter of keeping body and soul together because in this modern age that right could be threatened by many things, including the environment. The right to a clean environment is primary to all creatures including man; it is inherent from the act of creation, the recent restatement in the Statutes and the Constitutions of the world notwithstanding.'⁶¹

Kenyan Courts' position in the foregoing case is also reflected in the practice by Indian Courts. The Supreme Court of India held in *Subhash Kumar v. State of Bihar*,⁶² that the "right to life guaranteed by Article 21 of the Constitution includes the right of enjoyment of pollution-free water and air for full enjoyment of life."

⁵⁶ Shelton, D., 'Human Rights, Health and Environmental Protection: Linkages in Law and Practice: A Background Paper for the WHO,' p. 3. Available at http://www.who.int/hhr/information/Human_Rights_Health_and_Environmental_Protection.pdf [Accessed on 20/07/2016].

⁵⁷ *Environmental Management and Co-ordination (Amendment) Act*, No. 5 of 2015, Laws of Kenya.

⁵⁸ S. 31, *Environmental Management and Co-ordination (Amendment) Act, 2015*.

⁵⁹ [2006] eKLR, Misc. Civ. Applic. No. 118 of 2004.

⁶⁰ p.14.

⁶¹ *Ibid*, p.8.

⁶² AIR 1991 SC 420, 1991 (1) SCC 598.

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Further, in the case of *Dr. Mohiuddin Farooque v. Bangladesh, represented by the Secretary, Ministry of Irrigation, Water Resources and Flood Control and Others*⁶³, the Supreme Court interpreted the right to life to include the protection and preservation of the environment and ecological balance free from pollution of air and water. In another Indian case of *K. Ramakrishnan and Others v State of Kerala and Others* (smoking case), the Court stated that “*The word ‘life’ in the Constitution has not been used in a limited manner. A wide meaning should be given to the expression ‘life’ to enable a man not only to sustain life but also to enjoy it in a full measure. The sweep of right to life conferred by Article 21 of the Constitution is wide and far-reaching so as to bring within its scope the right to pollution free air and the “right to decent environment.”* (Emphasis added)⁶⁴

Therefore, in the enforcement of other Constitutional rights such as economic and social rights and the right to life under the Constitution, courts should accord such provisions broad interpretations so as to address any environmental factors that impede access to the resources necessary for enjoyment of the right in question. These include *inter alia*, right to the highest attainable standard of health, which includes the right to health care services, including reproductive health care; to accessible and adequate housing, and to reasonable standards of sanitation; to be free from hunger, and to have adequate food of acceptable quality; and to clean and safe water in adequate quantities.⁶⁵

In addition to the active role taken up by national courts, India also has the National Green Tribunal, commonly referred to as green courts, established in October 2010 under the *National Green Tribunal Act 2010*,⁶⁶ for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto.⁶⁷ It is a specialised body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues.⁶⁸

⁶³ 48 DLR 1996 (SC Bangladesh, 1996).

⁶⁴ AIR 1999 Ker 385, p.11.

⁶⁵ Constitution of Kenya, Article 43(1).

⁶⁶ No. 19 of 2010, Laws of India.

⁶⁷ National Green Tribunal, available at <http://www.greentribunal.gov.in/> [Accessed on 28/07/2016].

⁶⁸ Ibid; Pradeep, B. & Madhur, Y., ‘New Judicial Roles and Green Courts in India,’ available at http://inece.org/conference/9/papers/Bakshi_India_Final.pdf [Accessed on 28/07/2016].

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The advantage with the green tribunal of India is that it is administered by persons with specialised knowledge and experience in environmental matters and they may not necessarily be judicial officers. It thus combines expert members with judicial officers. This is arguably a better approach than the Kenyan one where the Environment and Land Court comprises exclusively judicial officers, albeit with judicial training.⁶⁹ Having on board non-judicial members with specialised knowledge in environmental matters may help come up with better approaches to environmental and natural resource management. Access to environmental justice also becomes easier.⁷⁰ They can work more closely with mainstream courts to promote sustainable development.

The Court should step in and protect the environment without necessarily looking for immediate proof of likely violation of the right to a clean and healthy environment. To facilitate the same, the Constitution gives courts the power to make any order, or give any directions, it considers appropriate – to prevent, stop or discontinue any act or omission that is harmful to the environment, or to any public officer to take measures to prevent or discontinue any act or omission that is harmful to the environment, or to provide compensation for any victim of a violation of the right to a clean and healthy environment.⁷¹ An applicant seeking such orders from courts does not have to demonstrate that any person has incurred loss or suffered injury. The Constitution provides that an applicant does not have to demonstrate that any person has incurred loss or suffered injury.⁷² However, to succeed in their plea one must demonstrate that their Right under Article 42 has been or is likely to be denied, violated, infringed or threatened.⁷³

The *suo moto* powers of the Court in environmental matters is also reflected under provisions of the *Environment and Land Act*.⁷⁴ It is also important to point out that

⁶⁹ Persons with specialised training can only appear as witnesses or to furnish in writing or otherwise, and to confirm on oath or affirmation, such expert opinion as may be relevant to any of the issues in the proceedings. (S. 19(4), *Environment and Land Court Act, 2011*).

⁷⁰ Desai, B.H. & Sidhu, B., 'On the Quest for Green Courts in India,' *Journal of Court Innovation*, Vol.3, No. 1, 2010, pp. 79-111.

⁷¹ Constitution of Kenya, 2010, Article 70(2).

⁷² Constitution of Kenya, 2010, Article 70(3); See also s. 3(1) of Environment (Management and Conservation) Act, 1999 (EMCA)

⁷³ *Joseph Owino Muchesia & another v Joseph Owino Muchesia & another* [2014] eKLR, para. 34.

⁷⁴ No 19 of 2011, Laws of Kenya. S. 20(1)-Nothing in this Act may be construed as precluding the Court from adopting and implementing, on its own motion, with the agreement of or at the request of the parties, any other appropriate means of alternative dispute resolution including conciliation,

the Courts are under a constitutional obligation under Article 10 to uphold the principles of sustainable development. This includes protecting the environment for the sake of future generations. The Court should, like in the case of *Peter K. Waweru (supra)*, be proactive in promoting environmental protection and conservation for sustainable development. Courts can take proactive measures to ensure conservation and protection of the environment for sustainable development. They can ensure that communities and other private persons enjoy environmental democracy especially where such communities approach courts seeking justice and access to environmental information, and demand enforcement of environmental laws or compensation for damage. Courts can work closely with such local bodies to adequately and peaceably address conflict or disputes. Where state decision makers or such local bodies or tribunals attempt to bypass the legal requirements on public participation in decision-making in matters that greatly affect the livelihoods of a particular group of people, courts can use its constitutional powers to enforce and uphold the law.

4.3.4 Community Empowerment for Sustainable Use and Management of Natural Resources

Empowerment of the citizenry is important to enable them carry out their duties towards environmental management effectively. The fact that the Constitution of Kenya⁷⁵ and EMCA⁷⁶ have already dispensed with the need to prove locus standi in environmental matters litigation presents a good opportunity for the citizenry, through relevant support, to hold government and private entities accountable as far as management of environmental resources is concerned.

In the case of *Joseph Leboo & 2 others v Director Kenya Forest Services & another*⁷⁷ the Learned Judge observed that "...in my view, any person is free to raise an issue that touches on the conservation and management of the environment, and it is

mediation and traditional dispute resolution mechanisms in accordance with Article 159(2) (c) of the Constitution.

(2) Where alternative dispute resolution mechanism is a condition precedent to any proceedings before the Court, the Court shall stay proceedings until such condition is fulfilled.

⁷⁵ For the purposes of this Article, an applicant does not have to demonstrate that any person has incurred loss or suffered injury (Article 70(3)).

⁷⁶ S.3 (4) A person proceeding under subs. (3) of this s. shall have the capacity to bring an action notwithstanding that such a person cannot show that the defendant's act or omission has caused or is likely to cause him any personal loss or injury provided that such action - (a) is not frivolous or vexatious; or (b) is not an abuse of the court process.

⁷⁷ [2013] eKLR, Environment and Land No. 273 of 2013.

not necessary for such person to demonstrate, that the issues being raised, concern him personally, or indeed, demonstrate that he stands to suffer individually. Any interference with the environment affects every person in his individual capacity, but even if there cannot be demonstration of personal injury, such person is not precluded from raising a matter touching on the management and conservation of the environment....Any person, without the need of demonstrating personal injury, has the freedom and capacity to institute an action aimed at protecting the environment. The plaintiffs have filed this suit as representatives of the local community and also in their own capacity. The community, of course, has an interest in the preservation and sustainable use of forests. Their very livelihoods depend on the proper management of the forests. Even if they had not demonstrated such interest that would not have been important, as any person *who alleges a violation of any law touching on the environment is free to commence litigation to ensure the protection of such environment....*⁷⁸ (emphasis added)

However, such suits require that the particular persons be first empowered through the relevant information, acquired either through formal, informal or non-formal education or general awareness on the relevant matters. The right to information must therefore be realized to facilitate enjoyment of environmental rights. This can be achieved through implementation of Article 35 of the Constitution, and other enabling laws, which guarantee the right to information.⁷⁹

It has rightly been argued that citizens are one of a nation's greatest resources for enforcing environmental laws and regulations. This is because they know the country's land and natural attributes more intimately than a government ever will.⁸⁰ Further, their number makes them more pervasive than the largest

⁷⁸ Ibid, Paras 25 & 28.

⁷⁹ Article 35(1) states that every citizen has the right of access to – (a) information held by the State; and (b) information held by another person and required for the exercise or protection of any right or fundamental freedom. Also relevant is the *Access to Information Act, 2015*, which is intended to give effect to Article 35 of the Constitution; to confer on the Commission on Administrative Justice the oversight and enforcement functions and powers and for connected purposes. It classifies environmental information as part of the information that falls under information affecting public interest.

⁸⁰ Roberts E. & Dobbins J., 'The Role of the Citizen in Environmental Enforcement,' (Environmental Law Institute. 1616 P Street. N.W. Washington. DC 20036, USA).

Available at <http://www.inece.org/2ndvol1/roberts.htm> [Accessed on 21/07/2016]

government agency, and because citizens work, play, and travel in the environment, each has a personal stake in its beauty, health, and permanence.⁸¹ Agenda 21 also tasks the Government to do all that is necessary in giving communities a large measure of participation in the sustainable management and protection of the local natural resources in order to enhance their productive capacity.⁸²

Thus, it is important to ensure that the principle of public participation is well captured in the policy and legal framework to facilitate sustainable management and conservation of environmental resources through approaches that are inclusive, participatory and deliberative as contemplated under the international environmental law. The need for involvement of citizens in the environmental enforcement process has been recommended for several reasons. First, citizen participation in environmental enforcement taps the direct, immediate connection between individuals and their environment. This is because citizens are uniquely knowledgeable about their own communities. Their day-to-day observations give them access to information about environmental conditions that the government could never obtain. Involving citizens in environmental enforcement encourages productive use of this information.⁸³ Second, the injection of varied, non-institutional perspectives and information sources into the enforcement process may improve the quality of enforcement decisions. Allowing and encouraging views from different groups to affect the outcome, may increase compliance, deter violations, and contribute to a more realistic and responsive environmental enforcement strategy.⁸⁴

Finally, public involvement in enforcement is believed to be a logical next step for democratic political systems that have encouraged public participation in the creation of environmental statutes and regulations.⁸⁵ Allowing citizens to have a concrete role in implementing the regime they helped to design strengthens

⁸¹ Ibid.

⁸² Agenda 21, clause 3.7(d).

⁸³ Roberts E. & Dobbins J., 'The Role of the Citizen in Environmental Enforcement,' op cit.

⁸⁴ Ibid.

⁸⁵ Ibid; See also generally Rondinelli, D.A. (ed.), 'Public Administration And Democratic Governance: Governments Serving Citizens,' *7th Global Forum on Reinventing Government Building Trust in Government* 26-29 June 2007, Vienna, Austria, (United Nations, ST/ESA/PAD/SER.E/, United States of America, 2006).

public support for and awareness of environmental goals.⁸⁶ If citizens are denied a role in enforcement, or if they are not educated about and encouraged to assume a permitted role, even the most sophisticated system of environmental protection laws may exist only on paper. As such, developing and nurturing a role for the citizens in enforcement efforts could provide the missing ingredient necessary to make countries' environmental protection goals a reality.⁸⁷

In her acceptance speech, Nobel Laureate, the late Prof. Wangari Maathai, summarised the importance of environmental resources to livelihood sustenance and the central role that citizenry can play in solving environmental problems by stating that: *“.....So, together, we have planted over 30 million trees that provide fuel, food, shelter, and income to support their children's education and household needs. The activity also creates employment and improves soils and watersheds. Through their involvement, women gain some degree of power over their lives, especially their social and economic position and relevance in the family....Initially, the work was difficult because historically our people have been persuaded to believe that because they are poor, they lack not only capital, but also knowledge and skills to address their challenges. Instead they are conditioned to believe that solutions to their problems must come from 'outside'. Further, women did not realize that meeting their needs depended on their environment being healthy and well managed. They were also unaware that a degraded environment leads to a scramble for scarce resources and may culminate in poverty and even conflict....In order to assist communities to understand these linkages, we developed a citizen education program, during which people identify their problems, the causes and possible solutions. They then make connections between their own personal actions and the problems they witness in the environment and in society.... (Emphasis added).”⁸⁸*

To facilitate more equitable distribution of accruing benefits among local, often subsistence, and indigenous peoples, there are those who advocate for approaches incorporating community based natural resource management (CBNRM) and other approaches that protect the interests of the local people. The CBNRM approach is built upon three assumptions: management responsibility

⁸⁶ Ibid; See also Casey-Lefkowitz, n et al, 'The Evolving Role Of Citizens In Environmental Enforcement,' *Fourth International Conference On Environmental Compliance And Enforcement*, available at <http://www.inece.org/4thvol1/futrell.pdf> [Accessed on 16/07/2016]

⁸⁷ Ibid.

⁸⁸ The Norwegian Nobel Institute, 'Wangari Maathai: The Nobel Lecture (Oslo, December 10, 2004),' available at http://nobelpeaceprize.org/en_GB/laureates/laureates-2004/maathai-lecture/ [Accessed on 16/07/2016].

over the local natural resources that is devolved to community level will encourage communities to use these resources up to sustainable levels; the “community” represents the interests of all its members; and communities are keen to accept management responsibility because they see the (long-term) economic benefits of sustainable utilisation, and they are willing to invest time and resources in natural resource management.⁸⁹

Decisions on policies and programs for resource management need to be based on broad citizen participation and the engagement of rural communities that have often been disenfranchised or marginalized.⁹⁰ Some of the main features of the revised policy framework for forest conservation and sustainable management include, inter alia: the devolution of community forest conservation and management, implementation of national forest policies and strategies, deepening the community participation in forest management through elaborate strategies of strengthening of community forestry associations, and the introduction of benefit-sharing arrangements; the adoption of an ecosystem approach for the management of forests, and recognition of customary rights, the vulnerable and marginalized groups, and user rights that support sustainable forest management and conservation; and the establishment of national programmes to support community forest management and afforestation/reforestation on community and private land.⁹¹

4.3.5 Environmental Impact Assessment, Environmental Audit and Monitoring of the Environment

The Constitution of Kenya requires the State to establish systems of environmental impact assessment, environmental audit and monitoring of the environment.⁹² The *Environment (Management and Coordination) Act* (EMCA)⁹³ tasks National Environmental Management Authority (NEMA) with the responsibility of carrying out Environmental Audit of all activities that are likely

⁸⁹ Shackelton, S. & Campbell, B. (eds), 'Empowering Communities to Manage Natural Resources: Case Studies from Southern Africa,' Center for International Forestry Research, March 2000, p. 10. Available at http://www.cifor.org/publications/pdf_files/Books/Empowering.pdf [Accessed on 20/07/2016].

⁹⁰ InterAction, *Environment & Climate: Overview-Our Work*, available at <https://www.interaction.org/project/environment/overview> [Accessed on 6/07/2016].

⁹¹ Draft National Forest Policy, 2015, pp. i-ii.

⁹² Constitution of Kenya, 2010, Article 69(1) (f).

⁹³ No. 8 of 1999, Laws of Kenya (Government Printer, Nairobi, 1999), s.68.

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to have significant effect on the environment. While Environmental Impact Assessment is conducted before commencement of any new development to minimise negative environmental impacts, for ongoing activities, an Environmental Audit ascertains if the activities in question have significant environmental effects.⁹⁴

In Kenya, an environmental impact assessment study preparation is generally required to take into account environmental, social, cultural, economic, and legal considerations, and should – identify the anticipated environmental impacts of the project and the scale of the impacts; identify and analyze alternatives to the proposed project; propose mitigation measures to be taken during and after the implementation of the project; and develop an environmental management plan with mechanisms for monitoring and evaluating the compliance and environmental performance which should include the cost of mitigation measures and the time frame of implementing the measures.⁹⁵

Principle 17 of the *Rio Declaration on Environment and Development*, states that environmental impact assessment, as a national instrument, should be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority. Effective Environmental Impact Assessment (EIA) has been described as ‘a process for identifying and considering the impacts of an action’. It is ‘not about rejecting development; rather it is about making sure that development proceeds with full knowledge of the environmental consequences’.⁹⁶ EIA may provide an opportunity for public scrutiny and participation in decision-making; introduce elements of independence and impartiality; and facilitate better informed judgments when balancing environmental and developmental needs.⁹⁷ Public participation is believed to be an integral part of the environmental impact

⁹⁴ FAO, ‘Environmental Impact Assessment (EIA) and Environmental Auditing (EA),’ available at <http://www.fao.org/docrep/005/v9933e/v9933e02.htm> [Accessed on 20/07/2016].

⁹⁵ Regulation 16, *Environmental (Impact Assessment and Audit) Regulations, 2003*, Legal Notice 101 of 2003.

⁹⁶ Ingelson, A., et al, ‘Philippine Environmental Impact Assessment, Mining and Genuine Development,’ *Law, Environment and Development Journal*, Vol. 5, No. 1, 2009, p. 7.

⁹⁷ Birnie, P. & Boyle, A., “*International Law and the Environment*”, (2nd ed. Oxford University Press, 2002), p.131-132; See also Muigua, K., ‘Environmental Impact Assessment (EIA) in Kenya,’ available at <http://www.kmco.co.ke/attachments/Article/109/A%20Paper%20on%20Environmental%20impact%20assessment.pdf>

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assessment process as it creates an opportunity for concerned citizens to express their views on natural resource development.⁹⁸ Public participation is also encouraged under EIA because, after stakeholders have had the opportunity to express their opinions, they may be more inclined to accept the final outcome decided by the regulators, as they have had the opportunity to express their views.⁹⁹

The mandatory requirements for Environmental Impact Assessment, Strategic Environmental Assessment¹⁰⁰ and Strategic Environmental and Social Assessment (SESA) also present viable channels through which communities can actively participate in sustainable development agenda in the country.¹⁰¹ They can participate in averting environmental degradation or help stop development projects that are likely to water down efforts towards achieving sustainable development. Section 115 of the *County Government Act 2012*¹⁰² provides that Public participation in the county planning processes should be mandatory and should be facilitated through— mechanisms provided for in Part VIII¹⁰³ of the Act; and provision to the public of clear and unambiguous information on any matter under consideration in the planning process, including—clear *strategic environmental assessments* (emphasis added); clear environmental impact assessment reports; expected development outcomes; and development options and their cost implications.

⁹⁸ Ingelson, A., et al, 'Philippine Environmental Impact Assessment, Mining and Genuine Development,' op cit, p. 6; See also Okello, N., et al, 'The doing and un-doing of public participation during environmental impact assessments in Kenya,' *Impact Assessment and Project Appraisal*, Vol. 27, No.3, 2009, pp.217-226.

⁹⁹ Ibid, p. 6.

¹⁰⁰ "strategic environmental assessment" means a formal and systematic process to analyse and address the environmental effects of policies, plans, programmes and other strategic initiatives (s.2, *Environmental Management and Co-ordination (Amendment) Act*, No. 5 of 2015); S. 57A, EMCA, No. 8 of 1999; See also the *Environmental (Impact Assessment and Audit) Regulations, 2003*, Legal Notice 101 of 2003, Regulations 42 & 43.

¹⁰¹ One of the Policy Statements in the *National Environment Policy 2013* is that the Government will ensure Strategic Environmental Assessment (SEA), Environmental Impact Assessment, Social Impact Assessment and Public participation in the planning and approval of infrastructural projects (para. 5.6).

¹⁰² An Act of Parliament to give effect to Chapter Eleven of the Constitution; to provide for county governments' powers, functions and responsibilities to deliver services and for connected purposes.

¹⁰³ Ibid, Ss. 87-92.

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Involving communities in identifying and eliminating processes and activities that are likely to endanger the environment is recommended since communities are conscious of such activities that can compromise their livelihoods. This may be informed by the *principle of subsidiarity*, where, arguably, the local communities are the best placed to address the burning environmental issues such as pollution, degradation and over-utilisation (emphasis added).¹⁰⁴ They only need technical support from the Government and through collaboration, they can come up with lasting solutions. Where they are not well informed, public awareness through civic education and agricultural field trainings can help them identify the issues. Where funds are allocated for environmental protection, the local people should adequately be represented in deciding the most urgent issues that ought to be addressed. The various sectoral laws, including wildlife, water, forests and wetlands have come up with special kitty to facilitate conservation and effective management of resources. Communities ought to be evidently and adequately represented in committees dealing with such kitty to curb corruption and improve management.

There is also need to establish efficient systems of Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA), Strategic Environmental and Social Assessment (SESA) and Environmental Audit and Monitoring of the environment and Environmental Security Assessment (ESA). Strategic Environmental Assessment (SEA) is defined as the process by which environmental considerations are required to be fully integrated into the preparation of *policies, plans and programmes* and prior to their final adoption (emphasis added).¹⁰⁵ The objectives of the SEA process are to provide for a high level of protection of the environment and to promote sustainable development

¹⁰⁴ See the *East African Community Protocol on Environment and Natural Resources Management*, 2005. Article 4 (2) (p). One of the principles of environment and natural resources management is: the principle of subsidiarity in the management of the environment and natural resources; See also generally, *Protocol (No 2) on the application of the principles of subsidiarity and proportionality*, annexed to the Treaty on European Union and the Treaty on the Functioning of the European Union by the Treaty of Lisbon of 13 December, 2007; See also Article 5 of the Treaty on European Union, C 326/1.

¹⁰⁵ Environmental protection Agency, 'Strategic Environmental Assessment,' Available at <http://www.epa.ie/monitoringassessment/assessment/sea/#.Vi5tmGuJ2CA>. S. 57(2), EMCA, provides that for the avoidance of doubt, the plans, programmes and policies (referred to in the Act) are those that are- (a) subject to preparation or adoption by an authority at regional, national, county or local level, or which are prepared by an authority for adoption through a legislative procedure by Parliament, Government or if regional, by agreements between the governments or regional authorities, as the case may be; (b) determined by the Authority as likely to have significant effects on the environment.

by contributing to the integration of environmental considerations into the preparation and adoption of specified policies, plans and programmes.¹⁰⁶ Environmental impact assessment means a systematic examination conducted to determine whether or not a programme, activity or project will have any adverse impacts on the environment.¹⁰⁷ Environmental audit means the systematic, documented, periodic and objective evaluation of how well environmental organisation, management and equipment are performing in conserving or preserving the environment.¹⁰⁸ Strategic Environmental and Social Assessment (SESA) is a more effective tool since it integrates the social issues that are likely to emerge and not just the environmental considerations.¹⁰⁹

These exercises should not be just a matter of formality and paper work.¹¹⁰ The affected communities should be afforded an opportunity to meaningfully

¹⁰⁶ Ibid; See also the *Environmental (Impact Assessment and Audit) Regulations, 2003*, Legal Notice 101 of 2003, Regulations 42 & 43.

¹⁰⁷ *Environmental Management and Co-Ordination Act*, No 8 of 1999 (Government Printer, Nairobi, 1999), s.2.

¹⁰⁸ Ibid.

¹⁰⁹ Notably, the proposed law, *Energy Bill, 2015*, requires under clause 135 (1) (2)(d) that a person who intends to construct a facility that produces energy using coal shall, before commencing such construction, apply in writing to the Authority for a permit to do so. Such an application must be accompanied by, inter alia, a Strategic Environment Assessment and Social Impact Assessment licenses. Also notable are the provisions of s. 57A(1) of the *Environmental Management Co-ordination (Amendment) Act 2015* which are to the effect that all policies, plans and programmes for implementation shall be subject to Strategic Environmental Assessment.

¹¹⁰ See generally, United Nations, *Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach*, (UNEP, 2004). Available at <http://www.unep.ch/etu/publications/textONUbr.pdf> [Accessed on 20/07/2016];

See also The World Bank, 'Strategic Environmental Assessment,' September 10, 2013. Available at <http://www.worldbank.org/en/topic/environment/brief/strategic-environmental-assessment> [Accessed on 26/10/2015]. The World Bank argues that policy makers in are subject to a number of political pressures that originate in vested interests. The weaker the institutional and governance framework in which sector reform is formulated and implemented, the greater the risk of regulatory capture. The World Bank observes that in situations such as these, the recommendations of environmental assessment are often of little relevance unless there are constituencies that support them, and with sufficient political power to make their voices heard in the policy process. While strong constituencies are important during the design of sector reform, they are even more important during implementation. It follows that effective environmental assessment in sector reform requires strong constituencies backing up recommendations, a system to hold policy makers accountable for their decisions, and institutions that can balance competing and, sometimes, conflicting interests. The World Bank thus affirms its recognition of the strategic environmental assessment (SEA) as a key means of integrating environmental and social considerations into policies, plans and programs, particularly in sector decision-making and reform.

participate and give feedback on the likely effects on social, economic and environmental aspects of the community.

4.3.6 Addressing Climate Change for Sustainable Development

The Bali Principles of Climate Justice of 2002 (Bali Principles)¹¹¹ acknowledge that if consumption of fossil fuels, deforestation and other ecological devastation continues at current rates, it is certain that climate change will result in increased temperatures, sea level rise, changes in agricultural patterns, increased frequency and magnitude of "natural" disasters such as floods, droughts, loss of biodiversity, intense storms and epidemics. Further, deforestation contributes to climate change, while having a negative impact on a broad array of local communities.

The Bali Principles also affirm the fact that the impacts of climate change are disproportionately felt by small island states, women, youth, coastal peoples, local communities, indigenous peoples, fisherfolk, poor people and the elderly. Also noteworthy is the assertion that the local communities, affected people and indigenous peoples have been kept out of the global processes to address climate change. The Principles also acknowledge that unsustainable production and consumption practices are at the root of this and other global environmental problems. The impacts of climate change also threaten food sovereignty and the security of livelihoods of natural resource-based local economies. They can also threaten the health of communities around the world—especially those who are vulnerable and marginalized, in particular children and elderly people. More importantly, the *Bali Principles* acknowledge in the preamble that combating climate change must entail profound shifts from unsustainable production, consumption and lifestyles, with industrialized countries taking the lead.¹¹²

¹¹¹ Available at <http://www.ejnet.org/ej/bali.pdf> [Accessed on 28/07/2016].

¹¹² Though non-binding, the *Bali Principles* give some recommendations that can boost efforts to achieve sustainable development. These include, inter alia: the need to reduce with an aim to eliminate the production of greenhouse gases and associated local pollutants; the rights of indigenous peoples and affected communities to represent and speak for themselves; Governments' responsibility for addressing climate change in a manner that is both democratically accountable to their people and in accordance with the principle of common but differentiated responsibilities; fossil fuel and extractive industries be held strictly liable for all past and current life-cycle impacts relating to the production of greenhouse gases and associated local pollutants; clean, renewable, locally controlled and low-impact energy resources in the interest of a sustainable planet for all living things; the right of all people, including the poor, women, rural and indigenous peoples, to have access to affordable and sustainable energy; the need for solutions to climate change that do not externalize costs to the environment and communities, and are in line with the

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It has rightly been argued that forest and landscape restoration is about more than just trees. It goes beyond afforestation, reforestation, and ecological restoration to improve both human livelihoods and ecological integrity. Key characteristics include the following: Local stakeholders are actively engaged in decision making, collaboration, and implementation; whole landscapes are restored, not just individual sites, so that trade-offs among conflicting interests can be made and minimized within a wider context; landscapes are restored and managed to provide for an agreed, balanced combination of ecosystem services and goods, not only for increased forest cover; a wide range of restoration strategies are considered, from managed natural regeneration to tree planting; and continuous monitoring, learning, and adaptation are central.¹¹³

Further, a restored landscape can accommodate a mosaic of land uses such as agriculture, protected reserves, ecological corridors, regenerating forests, well-managed plantations, agroforestry systems, and riparian plantings to protect waterways. Restoration must complement and enhance food production and not cause natural forests to be converted into plantations.¹¹⁴

principles of a just transition; the need for socio-economic models that safeguard the fundamental rights to clean air, land, water, food and healthy ecosystems; the rights of communities dependent on natural resources for their livelihood and cultures to own and manage the same in a sustainable manner, and avoiding the commodification of nature and its resources; recognition of the right to self-determination of Indigenous Peoples, and their right to control their lands, including sub-surface land, territories and resources and the right to the protection against any action or conduct that may result in the destruction or degradation of their territories and cultural way of life; the right of indigenous peoples and local communities to participate effectively at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation, the strict enforcement of principles of prior informed consent, and the right to say "No"; the need for solutions that address women's rights; the right of youth as equal partners in the movement to address climate change and its associated impacts; education of present and future generations, emphasising on climate, energy, social and environmental issues, while basing itself on real life experiences and an appreciation of diverse cultural perspectives; the need for we, as individuals and communities, to make personal and consumer choices to consume as little of Mother Earth's resources, conserve our need for energy; and make the conscious decision to challenge and reprioritize our lifestyles, re-thinking our ethics with relation to the environment and the Mother Earth; while utilizing clean, renewable, low impact energy; and ensuring the health of the natural world for present and future generations; and the rights of unborn generations to natural resources, a stable climate and a healthy planet.

¹¹³ World Resources Institute, 'Atlas of Forest and Landscape Restoration Opportunities,' available at <http://www.wri.org/resources/maps/atlas-forest-and-landscape-restoration-opportunities> [Accessed on 13/07/2016].

¹¹⁴ Ibid.

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Principle 8(a) of the *Forest Principles of the United Nations Conference on Environment and Development (UNCED)*¹¹⁵ affirm that efforts should be undertaken towards the greening of the world. Thus, all countries, including developed countries, should take positive and transparent action towards reforestation, afforestation and forest conservation, as appropriate. Furthermore, Principle 8(b) provides that efforts to maintain and increase forest cover and forest productivity should be undertaken in ecologically, economically and socially sound ways through the rehabilitation, reforestation and re-establishment of trees and forests on unproductive, degraded and deforested lands, as well as through the management of existing forest resources.

*Draft National Forest Policy, 2015*¹¹⁶ provides for a framework for improved forest governance, resource allocation, partnerships and collaboration with the state and non-state actors to enable the sector contribute in meeting the country's growth and poverty alleviation goals within a sustainable environment.¹¹⁷ The overall goal of the Policy is sustainable development, management, utilisation and conservation of forest resources and equitable sharing of accrued benefits for the present and future generations of the people of Kenya.¹¹⁸

The *Draft National Forest Policy, 2015* acknowledges that to achieve the national forest cover target of 10% of land area, the major afforestation effort will have to be in community and private lands. It also states that at present, tree cover on farms is increasing, especially in more densely populated with higher agricultural potential areas. This, according to the Policy, demonstrates that farmers recognize the benefits of tree growing in improving land productivity.¹¹⁹ The Policy also recommends that to achieve the foregoing target, the Government should: promote partnerships with land owners to increase on-farm tree cover and to reduce pressure on reserved forests; promote investment in farm forestry through provision of economic and non-economic incentives; promote on-farm

¹¹⁵ *Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests*, Report Of The United Nations Conference On Environment And Development (Rio De Janeiro, 3-14 June 1992), Annex III: Non-Legally Binding Authoritative Statement Of Principles For A Global Consensus on The Management, Conservation and Sustainable Development of All Types of Forests, A/CONF.151/26 (Vol. III).

¹¹⁶ *Forest Policy, 2015* (Government Printer, Nairobi, 2015).

¹¹⁷ *Ibid*, para. 1.1.9.

¹¹⁸ Para. 3.1.

¹¹⁹ Para. 4.5.

species diversification; promote development of forest based enterprises; promote processing and marketing of farm forestry products; promote forestry development through irrigation; and promote forestry extension and technical services.¹²⁰

Further, the Policy emphasizes that participatory forest management and sound conservation practice has potential to improve forest protection, management and growth by involving relevant non-state actors and local communities in planning and implementation. Consequently, it recommends that the Government should: support non-state actors and local communities to undertake forest-related development activities and investments; promote stakeholders participation at all levels in forest sector planning, implementation and decision making; develop and implement strategies for forest resource conflict resolution and management; and strengthen linkages between forest research, education, industry and management institutions; develop institutional framework and mechanisms for effective participation of stakeholders in forest management; develop and implement an equitable benefits sharing scheme in the forest sector; and support communities, commercial tree growers and land owners to invest in forestry as a viable land use option; promote partnerships in afforestation and reforestation programmes on public, private and community lands; and provide incentives to communities, commercial tree growers and landowners for forest management and conservation, and encourage voluntary conservation easements.¹²¹

The *Draft National Land Use Policy 2016* requires that to address the low vegetation cover with other competing land uses, the government should: carry out an inventory of all land cover classifications; establish mechanisms to ensure protection and improvement of vegetation cover over time; incorporate multi stake holder participation in a forestation programmes and initiatives; develop a framework for incentives to encourage maintenance of forest cover; promote the use of alternatives and efficient production methods to reduce demand on forest products; and ensure public participation in stakeholder forums in the determination of planning zones.¹²²

¹²⁰ Ibid.

¹²¹ Para. 8.2.

¹²² Draft National Land Use Policy 2016, para. 3.8.3.

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It has been asserted that land users require long-term secure rights to use and harvest a piece of land before they will invest time and effort in sustaining its long-term productivity.¹²³ As a result of past land alienation policies, a significant portion of much of the developing world's forest lands now falls within the public domain, and has become a de facto open access resource.¹²⁴ If the people using these resources have no enforceable legal or customary rights (to cultivate, graze or collect forest products) they have no incentive to conserve the productive potential of the resources (soil, water, vegetation and animals). Tenurial systems are therefore important in any aspect of natural resource management.¹²⁵ Therefore, in many countries it is unlikely that any real progress can be made toward sustainable forest management or forest landscape restoration until tenure issues are addressed and resolved. Arguably, resolution will only come by engaging key interest groups in a participatory and constructive dialogue with a commitment to an equitable outcome.¹²⁶

In a bid to deal with some of the highlighted challenges, the *Forest Conservation and Management Act, 2016*¹²⁷ was enacted to give effect to Article 69 of the Constitution with regard to forest resources; to make provision for the conservation and management of forests; and for connected purposes. The Act applies to all forests on public, community and private lands.¹²⁸ The guiding principles of the law include: public participation and community involvement in the management of forests; and consultation and co-operation between the national and county governments. The Act also requires the Cabinet Secretary, in consultation with the relevant stakeholders, develop a national forest management policy for the sustainable use of forests and forest resources, and which must be reviewed at least once in every five years.¹²⁹

¹²³ Lamb, D. & Gilmour, D., *Rehabilitation and Restoration of Degraded Forests*. IUCN, Gland, Switzerland and Cambridge, UK and WWF, Gland, Switzerland, 2003. x +110 pp. at p. 66. Available at http://cmsdata.iucn.org/downloads/rehabilitation_and_restoration_of_degraded_forests.pdf [Accessed on 13/07/2016].

¹²⁴ Ibid.

¹²⁵ Ibid; see generally, *Rethinking Forest Partnerships and Benefit Sharing: Insights on Factors and Context that Make Collaborative Arrangements Work for Communities and Landowners*, Report No. 51575-GLB, (The International Bank for Reconstruction and Development / The World Bank, Washington, DC, 2009).

¹²⁶ Ibid, pp. 66-7.

¹²⁷ No. 34 of 2016 (Government printer, Nairobi, 2016).

¹²⁸ Ibid, s.3.

¹²⁹ Ibid, s.5.

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The Act notably retains provisions for formation and registration of a community forest association in accordance with the provisions of the Societies Act.¹³⁰ The management agreement between the Kenya Forest Service and the community forest association may permit the association to – collect medicinal herbs in the forest; harvest honey in the forest; harvest fuel wood in the forest; harvest grass in the forest or graze livestock in the forest; collect forest produce for community-based industries; carry out ecotourism or recreational activities in the forest; carry out scientific research or education activities in the forest; establish a plantation in the forest; develop community wood and non-wood forest based industries; and enjoy other benefits which, may from time to time, be agreed upon between an association and the Service: provided that – none of the activities specified above should be carried out so as to conflict with the conservation of biodiversity; and the Director-General may, in consultation with the association, prescribe rules for the conduct of the activities specified above.¹³¹ Such forest user rights may, with the approval of the Director-General, be assigned either partly or all under a management agreement to a suitably qualified agent on mutually agreed terms.¹³²

The Act also provides that subject to Article 66¹³³ of the Constitution, investors in forests must share the benefits of their investment with local communities by applying various options including but not limited to infrastructure, education and social amenities.¹³⁴ This provision is in recognition of the fact that "benefits" mean quantifiable and non-quantifiable goods and services provided by forest ecosystems.¹³⁵ The other mechanism for benefit sharing as envisaged under this

¹³⁰ Ibid, s.47(1).

¹³¹ Ibid, s.48.

¹³² Ibid, s.49.

¹³³ Article 66(1)- The State may regulate the use of any land, or any interest in or right over any land, in the interest of defence, public safety, public order, public morality, public health, or land use planning. (2) Parliament shall enact legislation ensuring that investments in property benefit local communities and their economies.

¹³⁴ Ibid, s.52.

¹³⁵ Ibid, s.2. *Legal Notice 160 of 2006 on the Environmental Management and Co-Ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006* under Regulation 20 (1) provides that without prejudice to the generality of the foregoing, the holder of an access permit shall facilitate an active involvement of Kenyan citizens and institutions in the execution of the activities under the permit. (2) The facilitation by the holder of an access permit shall include enjoyment of both monetary and non-monetary benefits arising from the right of access granted and the use of genetic resources. (3) Monetary benefits include – (a) access fees or fee per sample collected or acquired; (b) up-front payments; (c) milestone payments; (d) payment of royalties; (e) license fees in case genetic resources are to be utilized for commercial

law is through joint management agreement. Section 2 thereof interprets joint management agreements to mean authorization where the Service or the County Department responsible for forestry agrees to enter into partnership with other persons for the joint management of a specified forest area, specifying the contribution, rights and obligations of each party and setting out the methods of sharing the costs and benefits accruing from the forest so managed.¹³⁶

Proposals for any concession on national and county public forests can only be approved where there is proof of, inter alia: preparation of environmental and social impact assessments as may be required under any other written law; and preparation of a concession area forest management plan that should include inventories, reforestation or replanting programmes, annual operation plans and community user rights and benefits.¹³⁷

While the Act has attempted to create opportunities for community participation, the same falls short of constitutional threshold of active community participation in decision making. It also largely adopts the protectionist approach of its predecessors, where communities are only to receive instructions from the state

purposes; (f) fees to be paid to trust funds supporting conservation and sustainable use of biodiversity; (g) salaries and preferential terms where mutually agreed; (h) research funding; (i) joint ventures; (j) joint ownership of relevant intellectual property rights; (4) Non-monetary benefits include - (a) sharing of research and development results; (b) collaboration, co-operation and contribution in scientific research and development programmes, particularly biotechnological research activities; (c) participation in product development; (d) admittance to ex situ facilities of genetic resources and to databases by participating institutions; (e) transfer to Kenya of genetic resources of knowledge and technology under fair and most favourable terms, including concessional and preferential terms where agreed, in particular, knowledge and technology that make use of genetic resources, including biotechnology, or that are relevant to the conservation and sustainable utilization of biological diversity;

(f) strengthening capacities for technology transfer to Kenya; (g) institutional capacity building; (h) human and material resources to strengthen the capacities for the administration and enforcement of access regulations; (i) training related to genetic resources with the full participation of Kenya and where possible, in Kenya; (j) access to scientific information relevant to conservation and sustainable use of biological diversity, including biological inventories and taxonomic studies; (k) institutional and professional relationships that can arise from access and benefit sharing agreements and subsequent collaborative activities; (l) joint ownership of relevant intellectual property rights.

¹³⁶ S.20 (1) thereof provides that the county executive committee member responsible for forestry in each county may enter into joint management agreements with communities or individuals for the management of community forests or private forests.¹³⁶ Clause 41(3) is also to the effect that the Service may enter into a joint management agreement for the management of any indigenous forest or part thereof with any person, institution, government agency or forest association.

¹³⁷ Ibid, clause 43.

organs and also receive some of the forest resources as mere incentives and not benefits adequate to make them appreciate conservation agenda of the state. Unilateral efforts to achieve at least ten percent tree cover may not bear much fruits since communities may feel used by the State organs without necessarily benefiting from the same.

Deforestation contributes to climate change and thus, it must be tackled as one of the means of achieving the sustainable development agenda. Kenya's efforts towards climate change mitigation are commendable. In March 2012, NEMA obtained accreditation as a National Implementing Entity (NIE) by the Adaptation Fund Board of the United Nations Framework Convention on Climate Change (UNFCCC)¹³⁸. This accreditation gave NEMA the mandate to offer vetting, approval and supervision of projects financed by the Adaptation Fund.¹³⁹ Later on, NEMA submitted the Kenya Climate Change Adaptation Programme (KCCAP) Proposal to the AF Board for its consideration. The Proposal was approved and NEMA received approximately Ksh.1 Billion for its implementation. The National Environment Management Authority launched a Sh1 billion climate change programme in January 2016, titled 'Integrated Programme to Build Resilience to Climate Change and Adaptive Capacity of Vulnerable Communities in Kenya' that will be implemented in 14 counties. The programme is to be implemented in conjunction with three executing entities namely Coast Development Authority, Kenya Forestry Research Institute and Tana and Athi River Development Authority and eight other Sub Executing Entities.¹⁴⁰ The Green Climate Fund (GCF) is a finance mechanism established under the UNFCCC.

¹³⁸ The ultimate objective of the Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner. (UN General Assembly, *United Nations Framework Convention on Climate Change : resolution / adopted by the General Assembly*, 20 January 1994, A/RES/48/189, Article 2)

¹³⁹ National Environment Management Authority, 'Adaptation Fund and GCF programmes,' available at http://www.nema.go.ke/index.php?option=com_content&view=Article&id=229&Itemid=461 [Accessed on 28/07/2016].

¹⁴⁰ Ibid.

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Furthermore, the Green Climate Fund (GCF)¹⁴¹ accepted the application of National Environment Management Authority (NEMA) based on its eligibility to be accredited as an Implementing Entity (IE) under the Green Climate Fund. The decision was made during the twelfth meeting of the GCF Board, held from 8th to 10th March 2016, in Songdo, Korea.¹⁴² NEMA is thus the national implementing entity for Adaptation Fund project pipeline in Kenya. Following the GCF accreditation, NEMA has become the first government institution in Kenya, accredited to have direct access for GCF funding of up to USD 10 million, having submitted its application in May 2015.¹⁴³

In addition to the foregoing, the *National Climate Change Response Strategy 2010* (NCCRS)¹⁴⁴, has identified the forestry sector as a strong vehicle for undertaking both mitigation and adaptation efforts and intends to exploit incentives provided within the framework of UNFCCC, especially the Reducing Emissions from Deforestation and Forest Degradation (REDD) mechanism, to implement sustainable forest management approaches.¹⁴⁵

Kenya is also an observer country to the UN-REDD Programme and it is a participant country to the Forest Carbon Partnership Facility (FCPF).¹⁴⁶ As part of its FCPF programme, Kenya is well on its way to developing its National REDD+ Strategy and implementation framework, in addition to establishing a Forest Reference Level/Reference Emission Level and a National Forest Monitoring System.¹⁴⁷

¹⁴¹ This fund is established to fund climate change adaptation and mitigation projects in developing countries. The Fund is a unique global initiative to respond to climate change by investing into low-emission and climate-resilient development. GCF is accountable to the United Nations. It is guided by the principles and provisions of the UN Framework Convention on Climate Change (UNFCCC). It is governed by a Board of 24 members, comprising an equal number of members from developing and developed countries. The Green Climate Fund is the only stand-alone multilateral financing entity whose sole mandate is to serve the Convention and that aims to deliver equal amounts of funding to mitigation and adaptation.

¹⁴² National Environment Management Authority, 'Adaptation Fund and GCF programmes,' op cit.

¹⁴³ Ibid.

¹⁴⁴ See para. 4.2.5.2, *National Climate Change Response Strategy 2010*, Government of Kenya, 2010.

¹⁴⁵ The REDD Desk, *REDD in Kenya*, available at <http://theredddesk.org/countries/kenya> [Accessed on 28/07/2016].

¹⁴⁶ Ibid.

¹⁴⁷ Ibid; See also Gichu, A. & Chapman, S., *Overview of REDD+ in Kenya*, REDD+ Law Project - Briefing Paper, July 2014. Available at

Kenya has already put in place the *Climate Change Act*¹⁴⁸ to provide for a regulatory framework for enhanced response to climate change; to provide for mechanisms and measures to achieve low carbon climate development, and for connected purposes. The Act notably establishes the National Climate Change Council to coordinate the country's climate change efforts.¹⁴⁹

These efforts and initiatives should be supported as they demonstrate Kenya's commitment to climate change mitigation, a positive step towards attaining sustainable development.

4.3.7 Sustainable and Inclusive Approaches to Environmental Resources Management

The now repealed *Forest Act, 2005*¹⁵⁰ was enacted, as an attempt to provide for involvement of local communities living around any forest in the management of those forests.¹⁵¹ The Act provided for Community Forest Associations, where local communities come together and form an association, through which they can manage forest resources around them and benefit from the sustainable utilization of forest produce.¹⁵² The Forests Act (2005) introduced participatory forest management, through the engagement of local communities, and the promotion of the private sector investment in gazetted forest reserves, accompanied by associated institutional and organisation change, notably the establishment of the Kenya Forest Service (KFS)¹⁵³, and the formation of Community Forest Associations (CFAs).¹⁵⁴

One of the functions of a forest conservation committee in respect of each forest conservancy area under the Act is, in consultation with the Board, to assist local communities to benefit from royalties and other rights derived from flora or

<http://www.4cmr.group.cam.ac.uk/filecab/redd-law-project/20140821%20BP%20Overview%20of%20REDD-%20in%20Kenya.pdf> [Accessed on 28/07/2016].

¹⁴⁸ Climate Change Act, No. 11 of 2016.

¹⁴⁹ Ibid, s. 5.

¹⁵⁰ No. 7 of 2005, Laws of Kenya. The Act has since been repealed by the Forest Conservation and Management Act, No. 34 of 2016.

¹⁵¹ Part IV, SS. 45-48.

¹⁵² S.2: "forest community" means a group of persons who- a) have a traditional association with forest for purposes of livelihood, culture or religion; b) are registered as an association or other organization engaged in forest conservation.

¹⁵³ S.4, No. 7 of 2005.

¹⁵⁴ No. 7 of 2005, S. 45.

fauna traditionally used or newly discovered by such communities.¹⁵⁵ However, one of the most glaring shortcomings in this provision is the exclusion of communities in such deliberations. This is because, although the Act provided that such a committee will include four persons knowledgeable in forestry matters nominated by forest associations operating in the conservancy area, it is noteworthy that such associations are optional and an area may not necessarily have such associations.¹⁵⁶ It is also worth mentioning that the associations, as envisaged in the structure under the Act, only target formally educated people and locks out those who may possess traditional ecological knowledge but not necessarily formal environmental law knowledge.¹⁵⁷ In such an instance, the interests of the affected community may not be fully represented since they may have been locked out. As such, their participation may be limited and only exist as a formality and legal requirement, without necessarily benefitting the communities in question.

The Constitution of Kenya recognises culture as the foundation of the nation and as the cumulative civilization of the Kenyan people and nation.¹⁵⁸ Further, the Constitution obligates the State to, inter alia – promote all forms of national and cultural expression through literature, the arts, traditional celebrations, science, communication, information, mass media, publications, libraries and other cultural heritage; recognise the role of science and indigenous technologies in the development of the nation; and promote the intellectual property rights of the people of Kenya.¹⁵⁹

The important role of communities in resource management has recently been acknowledged and this is commendable. For instance, the National Land Commission Chairman was recently quoted as saying that resettling traditional forest-dwelling communities in their natural habitats can play an important role in restoring the country's forest cover.¹⁶⁰ He added that such people have the

¹⁵⁵ Ibid, s. 13(3) (e).

¹⁵⁶ Ibid, s. 13(4).

¹⁵⁷ S. 45(3) of the Forest Act 2005 (Repealed) outlines the formal requirements of such an association, before registration.

¹⁵⁸ Article 11(1), Constitution of Kenya 2010.

¹⁵⁹ Article 11(2), Constitution of Kenya 2010.

¹⁶⁰ Kibet L., 'Swazuri reveals plans to recognise forest settlers,' *The Standard*, Thursday, July 28, 2016 (The Standard Group, Nairobi, 2016), p. 2.

traditional skills needed to help the Government conserve the forests.¹⁶¹ He also affirmed the importance of a rights based approach to environmental conservation, where he asserted that securing the tenure rights of forest communities is the best way to protect their human rights while securing the forests for the nation.¹⁶² If the Commission adopts such an approach, they are likely to boost chances of succeeding in environmental conservation and enhancing meaningful and active participation of communities in natural resources and environmental conservation, especially with regard to forests.

It is also arguable that the Act did not specifically spell out how communities are to be involved in decision-making processes. Where CFAs are formed, it is noteworthy that the Act does not have substantive provisions on how such associations can participate in decision-making processes. They are portrayed as recipients of instructions from the KFS so that they can even be deregistered where it deems fit to the Director of KFS to do so.¹⁶³ Thus, this Act seems to have adopted both incentives based and protectionist approaches to management, both of which have not had any major success. Even where CFAs have been formed, the same cannot be said to have been very successful due to a number of reasons. Considering that CFAs involve a limited number of people, they may not be said to be representative of the majority and therefore even where they receive benefits, the same may not flow to the rest of population.

Secondly, CFAs are registered by few people who are interested in doing so and the same are not necessarily representatives of the majority of the people. This means, therefore, that even where they make decisions regarding formulation and implementation of forest programmes consistent with the traditional forest user rights of the community concerned, the same cannot be said to be a representative voice of the majority. Community, in this context and as defined in the Act, does not necessarily mean the whole community.

In addition to the foregoing challenges, the *Forest Policy 2015* also identifies key issues and challenges in the forestry sector which needs to be addressed. First, there has been ineffective regulatory mechanisms and inadequate law enforcement. These challenges are compounded by dwindling public land

¹⁶¹ Ibid.

¹⁶² Ibid.

¹⁶³ S. 48, Forest Act 2005 (repealed).

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meaning that forestry development has to expand into private and community land, which need incentives and clear methods of engagement to encourage investments in commercial forestry on private land.¹⁶⁴ The forest Policy acknowledges that the promulgation of the Constitution brought new requirements for natural resource management such as public participation, community and gender rights, equity in benefit sharing, devolution and the need to achieve 10% forest cover among others.¹⁶⁵ Therefore, the need to enact supporting legislation following the promulgation of the constitution is required to minimize conflicts between industry, communities and governments at both national and county levels over resource management and benefit sharing. In addition, forest governance needs to take into account emerging issues and best practices at global, regional and national level.¹⁶⁶

With regard to wildlife and biodiversity, it has been observed that many of the regions with abundant and diverse wildlife communities remaining in East Africa are occupied by pastoralists.¹⁶⁷ Further, it has also been documented that recent studies show that the majority of the local people around protected areas have negative feelings about state policies and conservation programmes. The alienation of grazing land for the exclusive use of wildlife and tourists has a very direct impact upon the pastoralist communities, and prompts them to raise questions about African wildlife policy – as if it leads to a ‘people versus animals’ conflict.¹⁶⁸ The local communities continue to incur wildlife-related losses and insecurity rather than benefits, while the government and foreign investors continue to draw large amounts of foreign income from parks through the lucrative tourism industry.¹⁶⁹

The National Wildlife Conservation and Management Policy, 2012 (Wildlife Policy 2012) observes that since Kenya is rich in natural resources, including a vast array of wildlife, and due to its species’ richness, endemism and ecosystem diversity, under the Convention on Biological Diversity Kenya is categorized as a mega-

¹⁶⁴ Forest Policy, 2015, para. 2.1.1.

¹⁶⁵ *Ibid*, para. 2.1.1.

¹⁶⁶ *Ibid*, para. 2.1.2.

¹⁶⁷ Okech, R.N., ‘Wildlife-community conflicts in conservation areas in Kenya,’ *African Journals Online*, p. 65. Available at <http://www.ajol.info/index.php/ajcr/Article/download/63311/51194> [Accessed on 22/07/2016].

¹⁶⁸ *Ibid*.

¹⁶⁹ *Ibid*, p. 74.

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diverse country.¹⁷⁰ Accordingly, the Policy affirms the need for different conservation priorities and measures, for each of the ecosystems. This is accredited to a combined set of attributes which include: variability in climate, topography, diversity in ecosystems and habitats ranging from mountain ranges to semi-arid and arid areas to marine and freshwater.¹⁷¹

Wildlife is required to contribute directly and indirectly to the local and national economy through revenue generation and wealth creation.¹⁷² Notably, the Policy observes that Kenya's wildlife is increasingly under threat and consequently opportunities are being lost for it to positively contribute to economic growth, wealth creation and increased employment. Much of this wildlife occurs outside the protected areas on lands owned by communities and other different organizations/persons. Communities consider the presence of wildlife on their land as a burden rather than an opportunity for gaining benefits.¹⁷³

From the Policy, it is also worth noting the acknowledgement that Kenyan communities have lived amongst, and used, wildlife resources since time immemorial without formal policy and legislation. These communities ensured conservation of the wildlife resource through cultural and social bonds, and traditional practices. Sacred beliefs centred on certain wildlife species ensured that conservation principles became part of their way of life.¹⁷⁴ It has been observed that when colonial governments were established in Africa, they placed the control and management of all wildlife and the lands on which it existed under state ownership. Local communities were, in all except a few cases, forcibly relocated and alienated from the resources they, or their chiefs, formerly had the right to own and control. The argument for this was that they did not have the knowledge, the will, or the training to manage the wildlife in a sustainable way.¹⁷⁵ Communities around these protected areas were seen as the principal threat to wildlife, and the governments, wildlife authorities in particular, focused their

¹⁷⁰ Republic of Kenya: Ministry of Forestry and Wildlife, National Wildlife Conservation and Management Policy, 2012, p. 1.

¹⁷¹ Ibid.

¹⁷² Ibid.

¹⁷³ Ibid.

¹⁷⁴ Ibid, p.2.

¹⁷⁵ Songorwa, A.N., et al, 'Community-Based Wildlife Management in Africa: A Critical Assessment of the Literature,' *Natural Resources Journal*, vol. 40, summer, 2000, pp. 603-643 at pp. 603-604.

attention on barring members of the community from disturbing the areas and the wildlife therein, and this continued even with post-colonial governments.¹⁷⁶

The *Wildlife Conservation and Management Act, 2013*¹⁷⁷ was enacted, as a result of the Wildlife Policy 2012, to provide for the protection, conservation, sustainable use and management of wildlife in Kenya and for connected purposes.¹⁷⁸ The Act affirms that benefits of wildlife conservation should be derived by the land user in order to offset costs and to ensure the value and management of wildlife do not decline; wildlife conservation and management should be exercised in accordance with the principles of sustainable utilization to meet the benefits of present and future generations; and benefits accruing from wildlife conservation and management should be enjoyed and equitably shared by the people of Kenya.¹⁷⁹ The Act provides for consumptive wildlife use activities, which include, game farming, ranching, live capture, research involving off-take, cropping and culling.¹⁸⁰ However, hunting is prohibited as a form of consumptive utilization.¹⁸¹ The Act provides for non-consumptive utilization of wildlife. A general permit may be issued by the Cabinet Secretary for non-consumptive wildlife user rights, including-wildlife-based tourism; commercial photography and filming; educational purposes; research purposes; cultural purposes; and religious purposes.¹⁸²

The functions of the Kenya Wildlife Service, under the Act, include, collecting revenue and charges due to the national government from wildlife and, as appropriate, develop mechanisms for benefit sharing with communities living in wildlife areas, and developing mechanisms for benefit sharing with communities living in wildlife areas.¹⁸³ The Act further establishes the County Wildlife Conservation and Compensation Committee whose functions include: overseeing the preparation and implementation of management plans on community and private land under the provisions of this Act; ensuring that benefits derived from the use of wildlife resources are distributed in accordance

¹⁷⁶ Ibid, p. 604.

¹⁷⁷ The Wildlife Conservation and Management Act, No. 47 of 2013.

¹⁷⁸ Ibid, Preamble.

¹⁷⁹ Ibid, s.4.

¹⁸⁰ Ibid, s.80 (3).

¹⁸¹ Ibid, s. 97 & s. 98; See also Eighth Schedule to the Act.

¹⁸² Ibid, s. 80.

¹⁸³ Ibid, s.7 (e) (f).

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with the provisions of this Act; and bringing together all relevant stakeholders within the county to actively harness their participation in the planning and implementation of projects and programmes related to the protection, conservation and management of wildlife resources in the county.¹⁸⁴

One of the requirements for issuance of a permit to any person desirous of undertaking bio-prospecting involving any wildlife resources is proof of: disclosure of all material information relating to the relevant bio-prospecting to the stakeholder, and on the basis of that disclosure, to obtain the prior consent of the stakeholders for the provision of or access to such resources; and the applicant and the stakeholder to have entered into a material transfer agreement that regulates the provision of or access to such resources; and a benefit-sharing agreement that provides for sharing by the stakeholders in any future benefits that may be derived from the relevant bio-prospecting.¹⁸⁵ Where a community is involved, disclosure and agreement will be to the community in question.¹⁸⁶ Notable is the requirement that the Kenya Wildlife Service should, in all bio-prospecting involving any wildlife resources, be a joint partner on behalf of the people of Kenya.¹⁸⁷

Also significant is the provision that every person has the right to practice wildlife conservation and management as a form of gainful land use.¹⁸⁸ Further, every person has the right to reasonable access to wildlife resources and should be entitled to enjoy the benefits accruing therefrom without undue hindrance.¹⁸⁹ However, utilisation and exploitation of wildlife resources by any person whether individual land owner or in a conservation area, and wherever else

¹⁸⁴ Ibid, s. 19(b) (c) (d).

¹⁸⁵ Ibid, s. 22(4). There is however the need to protect communities from bio-piracy as witnessed in the matter where British scientists from Leicester University worked with US firm Genencor to patent-utilise without consent, a microbe that lives in the caustic lakes of Kenya's Rift Valley (Muiruri, M., 'Kenya loses Sh70m to biopirates in Biopiracy,' (Northwest Resistance against Genetic Engineering). Available at <http://nwrage.org/content/kenya-loses-sh70m-biopirates> [Accessed on 27/07/2016]). This is just one of the many instances where communities have lost genetic resources to biopirates (See Biopirates Are Harming Indigenous Livelihoods, available at <https://www.newsrecord.co/biopirates-are-harming-indigenous-livelihoods/> [Accessed on 27/06/2016]). It is important that the trend is curbed through putting in place an effective framework.

¹⁸⁶ *Wildlife Conservation and Management Act, 2013*, s. 22(5).

¹⁸⁷ Ibid, s. 22(6).

¹⁸⁸ Ibid, s. 70(1).

¹⁸⁹ Ibid, s. 71(1).

should be practised in a manner that is sustainable and in accordance with regulations made under the Act.¹⁹⁰

The Act requires the Cabinet Secretary, in consultation with the land owner, the National Land Commission, the Commission on Revenue Allocation and in liaison with the Service, to formulate regulations and guidelines on access and benefit sharing.¹⁹¹

The 2013 Act provides for County Wildlife Conservation Committees, Community Wildlife Associations and Wildlife Managers and community conservancies as institutions of promoting community participation. As far as regulation is concerned, the Act does away with an autonomous regulatory agency and instead gives powers of wildlife regulation and licensing to the Cabinet Secretary in charge of wildlife. The various institutions are mostly to advise the Cabinet secretary who then makes the final decision. It is, therefore, clear that the Act does not create clear channels for the communities to participate in decision making. The approach adopted is also broadly protectionist and does little to bring a change of attitude by local communities regarding wildlife diversity. While the Policy framework seems to acknowledge the importance of community inclusion, there is little evidence in the Act that the same was considered during deliberations to formulate the law.

If the affirmations in the Wildlife Policy are anything to go by, then the protectionist approaches adopted in management and conservation of biological diversity are not justified and do little to achieve the desired objectives of sustainable development. It has been suggested that there is need to adopt a more active participatory approach which is mainly informed by two additional principles: putting resources under local control; and giving local communities a decisive voice and representation through their own local institutions, which means participation in making decisions that affect them.¹⁹² These principles, it

¹⁹⁰ Ibid, s. 72(1).

¹⁹¹ Ibid, s. 73; See also s. 76(1)-The Cabinet Secretary shall, upon advice by the Service, in consultation with the Commission on Revenue Allocation, formulate guidelines regarding incentives and benefit sharing, and the nature and manner in which the same shall be distributed.

¹⁹² See Songorwa, A.N., et al, 'Community-Based Wildlife Management in Africa: A Critical Assessment of the Literature,' op cit. p. 607; See also Colchester, M., 'Sustaining the Forests: The Community-Based Approach in South and South-East Asia,' (United Nations Research Institute For Social Development, 1992). Available at <http://www.unrisd.org/80256B3C005BCCF9%2F>

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has been contended, intend to increase trust and confidence and strengthen leadership capabilities at the community level.¹⁹³ While it may not necessarily be important to devolve control and ownership, there is need for more active and quality community participation in decision-making processes.

With regard to forests, it has been observed that the management regimes of public forests (and arguably even other natural resources in Kenya), whether they are protectionist oriented or incentive-based are important in determining outcomes of conservation and sustainable use.¹⁹⁴ Kenya has historically adopted a protectionist model, where conservation strategies have been dominated by attempts to fence off or reserve areas for nature and exclude people from the reserved areas, and also involved the creation of protected areas (national parks, game reserves and national forest reserves), the exclusion of people as residents, prevention of consumptive use, and minimisation of other forms of human impact.¹⁹⁵ Broadly, this approach viewed development objectives of local communities as being in direct conflict with the objectives of biodiversity conservation.¹⁹⁶

As far as wildlife biodiversity is concerned, it has been contended that the involvement and support of local communities in wildlife conservation is a prerequisite to effective and long-term conservation of wildlife and wildlands as part of the terrestrial biodiversity.¹⁹⁷ To this extent, it is argued that as a resource, wildlife must be of value to humans and contribute to human development. In other words, it must directly benefit the people who have the option to use the wildlands for other purposes.¹⁹⁸ Consequently, in spite of any existing controversies between the purely protectionist approach to wildlife management

([http://AuxPages/%2F53024E4A3BAA768480256B67005B6396%2F\\$file%2Fdp35.pdf](http://AuxPages/%2F53024E4A3BAA768480256B67005B6396%2F$file%2Fdp35.pdf)) [Accessed on 28/07/2016].

¹⁹³ Ibid.

¹⁹⁴ Guthiga, P.M., 'Understanding Local Communities' Perceptions Of Existing Forest Management Regimes of A Kenyan Rainforest,' *International Journal of Social Forestry (IJSF)*, 2008, Vol. 1, No.2, pp.145-166 at p. 146.

¹⁹⁵ Ibid, p. 146.

¹⁹⁶ Ibid.

¹⁹⁷ Sibanda, B.M.C. & Omwega, A.S., 'Some Reflections on Conservation, Sustainable Development And Equitable Sharing of Benefits From Wildlife in Africa: The Case of Kenya and Zimbabwe,' *South African Journal Of Wildlife Research*, Vol. 26, No. 4, 1996, pp. 175-181 at p 175.

¹⁹⁸ Ibid.

and the conservation approach, it is argued that it is the local communities who are to determine whether wildlife conservation is a priority form of land use.¹⁹⁹

It has been recommended that involving local communities in sustainable natural resource use and conservation must be encouraged. Arguably, no rural-based education about the use of such resources will succeed if local community needs and opinions are not met and incorporated in conservation practice and policies. If they do not benefit from biodiversity resources, and are not compensated for opportunity costs and wildlife-induced losses, they will not support the conservation of biodiversity.²⁰⁰ Lastly, it has been suggested that a national land use plan can also help and will put into perspective land use practices that are compatible with the socio-economic needs, natural resource endowment, and ecological and climatic constraints within different regions of the country.²⁰¹ There is hope for Kenya after the recently developed Draft National Land Use Policy 2016²⁰² whose overall goal is to provide legal, administrative, institutional and technological framework for optimal utilization and productivity of land and land related resources in a sustainable and desirable manner at National, County and local level.²⁰³

¹⁹⁹ Ibid; see generally Grossman, E. (ed), 'Integrating Land Use Planning & Biodiversity,' (Defenders of Wildlife, Washington, D.C., 2003). Available at http://www.defenders.org/publications/integrating_land_use_planning_and_biodiversity.pdf [Accessed on 27/07/2016]; See also Kiss, A., 'Making Biodiversity Conservation A Land Use Priority,' available at <http://www2.gsu.edu/~wwwceec/special/AgiBookChapter2002.pdf> [Accessed on 27/07/2016]

²⁰⁰ Okech, R.N., 'Wildlife-community conflicts in conservation areas in Kenya,' *African Journals Online*, op cit at p.78.

²⁰¹ Ibid, p. 78; See also generally, Wehrmann, B. (ed), 'Land Use Planning: Concept, Tools and Applications,' (Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Eschborn, 2012). Available at <https://www.giz.de/fachexpertise/downloads/Fachexpertise/giz2012-en-land-use-planning-manual.pdf> [Accessed on 27/07/2016]

²⁰² Developed by the Ministry of Lands and Physical Planning, Kenya, May 2016.

²⁰³ Ibid, para. 1.4. Specifically the policy shall offer a framework of recommendations and principles designed to ensure the maintenance of a land use system that will provide for:

- a) Land-use planning, resource allocation and resource management for sustainable development to promote public good and general welfare;
- b) environmental management and sustainable production initiatives in the utilization of land resources
- c) Coordination and integration of institutional linkages in planning at sectoral and cross-sectoral levels to foster collaboration and decision making among different land users.
- d) Optimum utilization of land resources to meet governance, social-economic, political and cultural obligations of the people of Kenya.
- e) Anchoring land development initiatives that will respond positively to the market demands.

4.4 Conclusion

With regard to natural resources and the equitable sharing of the accruing benefits, the International Finance Corporation, a member of the World Bank Group (WBG), argues that Governments face competing priorities when designing policies that determine when, how, and by whom the natural resources will be developed.²⁰⁴ From a benefit-sharing perspective, such policies need to embrace the interests of current and future generations and the rights, interests, and needs of different levels of government, communities, and other stakeholders.²⁰⁵ Further, with specific reference to extractives industry, the role of government in establishing a framework to manage and invest revenues derived from oil, gas, and mining projects is crucial to ensure that the sector contributes positively to sustainable development.²⁰⁶

Sustainable exploitation, utilisation, management and conservation of the environment and natural resources and equitable sharing of the accruing benefits are key in fighting poverty and consequently, empowering communities for overall national development. Indeed, this is reflected in the *2030 Agenda for Sustainable Development*,²⁰⁷ which recognises that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development. Some of the Agenda's key principles include sustainability and inclusivity.²⁰⁸

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- f) Integrated framework for the preparation of a National Spatial Plan and review of various land use plans.
 - g) Mainstreaming of gender and special interest groups in land use planning and management.
 - h) A comprehensive, efficient and affordable computer based land use information management system.
 - i) An appropriate, accountable and democratic institution for land use conflicts resolution.
 - j) Mitigating problems associated with poor land use;

²⁰⁴ International Finance Corporation, 'The Art and Science of Benefit Sharing in the Natural Resource Sector,' *Discussion Paper*, February 2015, p. 7. Available at http://www.ifc.org/wps/wcm/connect/8e29cb00475956019385972fbd86d19b/IFC_Art+and+Science+of+Benefits+Sharing_Final.pdf?MOD=AJPERES&CACHEID=8e29cb00475956019385972fbd86d19b [Accessed on 13/07/2016].

²⁰⁵ Ibid.

²⁰⁶ Ibid, p. 11.

²⁰⁷ United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, Resolution adopted by the General Assembly on 25 September 2015, A/RES/70/1; See also United Nations General Assembly, "The road to dignity by 2030: ending poverty, transforming all lives and protecting the planet," *Synthesis Report of the Secretary-General on the post-2015 Sustainable development agenda*. A/69/700. para.45.

²⁰⁸ Ibid.

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The existing policies, legal and regulatory frameworks, as highlighted in select statutes, appear to suggest that the sustainable management of resources agenda is one to be driven by the State, especially in terms of decision-making, and not in collaboration with the local community. The Constitution envisages a collaborative approach between communities and the State. Decision making processes still seem to be largely top-down in nature and communities are only afforded opportunities to apply for resource user rights, with little or no consultations regarding management.

*Agenda 21*²⁰⁹ provides that while managing resources sustainably, an environmental policy that focuses mainly on the conservation and protection of resources must take due account of those who depend on the resources for their livelihoods. Otherwise, it could have an adverse impact both on poverty and on chances for long-term success in resource and environmental conservation.²¹⁰ Governments, with the assistance of and in cooperation with appropriate international, nongovernmental and local community organizations, required to establish measures that will directly or indirectly *inter alia* rehabilitate degraded resources, to the extent practicable, and introduce policy measures to promote sustainable use of resources for basic human needs.²¹¹

The overall agenda is to promote conservation and sustainable use of oceans and seas, freshwater resources, as well as forests, mountains and drylands and to protect biodiversity, ecosystems and wildlife while at the same time using these resources to address human needs.²¹²

The Constitution of Kenya creates an opportunity where, through devolution, communities are supposed to be empowered by devolving power from the state to local institutions of decision-making as a way of empowering local communities to manage natural resources and environmental matters. There is

²⁰⁹ (A/CONF.151/26, vol.II), United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992, Agenda 21.

²¹⁰ Ibid, Clause 3.2.

²¹¹ Ibid, Clause 3.8.

²¹² Para. 33, United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, Resolution adopted by the General Assembly on 25 September 2015, A/RES/70/1. Goal 15 thereof also requires Member States to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

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also a need to put in place a framework that clearly defines the role of various stakeholders. The State should also consult widely when coming up with the methods of benefit sharing especially with regard to the local community. It is only through mobilizing the efforts of all the relevant stakeholders that the constitutional provisions on the environment and natural resources can effectively be implemented and make it possible to achieve sustainable development. The various sectoral laws and policies must be designed in a way that protects the environment from degradation, and also involves communities through measures that encourage active participation in benefit sharing or decision-making processes, whether through incentives or otherwise. There is a clear need to nurture the environment for sustainable development in Kenya.

Natural Resources Exploitation and Sustainable Development

5.1 Introduction

This chapter explores the subject of natural resources exploitation in light of sustainable development. The main argument is that there should be a paradigm shift from over-reliance on natural resources to curb on environmental degradation and resource depletion. This section emphasises that scientific innovation and creativity amongst other means of supporting community livelihood should be encouraged. Easing the pressure on the environment through diversification of livelihood means is essential to facilitate protection, conservation and replenishment of the environment and the resources therein.

Africa is well-endowed with natural resource wealth and as a result, there are many exploration and exploitation activities going on all over the continent.¹ Africa has a large quantity of natural resources like oil, gold, diamonds, iron, cobalt, copper, bauxite, silver, uranium, titanium, petroleum among others.² The natural resources wealth of Africa rightfully belongs to the people of Africa. The power to safeguard these resources is entrusted in the governments of African countries. The utilisation of Africa's resources should contribute to the realization of economic rights of the people of Africa as envisaged in various international law instruments and national laws.

A cursory glance of Africa would paint a picture of a rich continent with the expectation of a people enjoying a high standard of living and excellent development. It would be expected that such a continent would enjoy good infrastructure, high employment levels, high quality education, good health and long life expectancy. It would be expected to be a conflict free zone where everyone is comfortable with life owing to the abundance of resources. Ironically, the situation in Africa is strikingly the opposite. Africa's resources are fueling the world economy while Africa itself remains economically crippled; exploited and

¹ Rajaram, A., "Rich Countries, Poor People; Will Africa's Commodity Boom Benefit the Poor", available on <http://blogs.worldbank.org/african/rich-countries-poor-people-will-africa-s-commodity-boom-benefit-poor> [Accessed on 7/01/ 2014].

² World Resources, 'Natural Resources of Africa', available at www.worldresources.envi.org/natural-resources-africa/ [Accessed on 7/01/ 2014].

neglected. Sadly, the national leaders who are entrusted with the mandate of safeguarding natural resources for the benefits of the people have by and large betrayed the trust. The level of corruption in the application of revenue from the natural resources is high. When they enter into resource extraction contracts, they do not carry people's interests at heart. In effect, Africans have been deprived of their right to benefit and control the utilisation of their natural resources. Poverty level is very high with a minority of extremely wealthy class and a majority of poor people.³

This chapter looks at the crucial role that natural resources can play in eliminating poverty, which is one of the major hindrances to achieving sustainable development. It critically examines how the natural resources of Africa can be used in the realization of basic human rights and particularly alleviating poverty among the African people. It also identifies challenges facing African economies and the opportunities that can be harnessed to enable Africa utilize its resources to fight poverty. This chapter also expresses the optimism that Africa has a bright future and what needs to be done is to ensure effective utilization of its wealth of resources. To this end, the chapter makes a number of recommendations which relate to the policy, legal and institutional frameworks. The ultimate aim would be to utilize Africa's resources to fight and eventually eradicate poverty.

5.2 Status of Natural Resources in Africa as a Continent

Natural resources have no definite definition. However, Article 260 of the Constitution of Kenya, 2010 broadly defines natural resources to mean *the physical non-human factors and components, whether renewable or non-renewable including sunlight, surface and ground water, forests, biodiversity and genetic resources and rocks, minerals, fossil fuels and other sources of energy.*⁴

The African continent arguably lies on the greatest percentage of earth's natural resources comprising rare minerals, huge oil deposits and a variety of physical features as identified in the foregoing definition.⁵ This also makes Africa become possibly one of the biggest contributors to the percentage of the world's natural

³ World Bank, *Economic Survey for Sub-Saharan Africa, 2013*, Africa Pulse October, 2013 Vol.8 available at

http://www.worldbank.org/content/dam/Worldbank/document/Africa/Report/Africas-Pulse-brochure_Vol8.pdf [Accessed on 8/01/ 2014].

⁴ Constitution of Kenya, 2010, Article 260.

⁵ Ibid.

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resources.⁶ It has been posited that Africa harbours approximately 10% of the world's known oil reserves, 40% of gold and 80-90% of the chromium and platinum metal group.⁷ Although they are not evenly distributed, each state has a fair share of its own natural resources thus resulting in diversity on the availability of these resources. These include organic natural resources ranging from forests and the forest products in general and other land based resources including oil, gold, iron, cobalt, uranium, copper, bauxite, silver and petroleum which constitute the mineral and gas based resources. A recent World Economic Survey by CNN has shown that most manufacturing industries in the world derive the greatest percentage of raw materials in form of mineral resources from Africa.⁸

In Africa, oil is produced in Nigeria, Libya, Egypt, Sudan, Angola, Gabon, Congo, Cameroon, Tunisia, Equatorial Guinea, Gambia, Democratic Republic of Congo (DRC) and Cote d'Ivoire. Gold mining is done in South Africa, Congo and West African Belt. There are diamond deposits in Tanzania, Botswana, Zimbabwe, DRC and South Africa. Tantalum mining is done in DRC. Platinum and rhodium ores are also found in Africa. South Africa and Guinea exports large amounts of cobalt and chromium used to manufacture airplanes.⁹ Niger, Namibia and Malawi are exporters of uranium. In Kenya, there is soda, cement and ongoing oil exploration in Turkana and coal in Kitui. Uganda produces copper, and it is also engaging in oil exploration.

This is evident from the reports on the ongoing exploration activities in the continent. Oil exploration is ongoing in many countries and has yielded positive results.¹⁰ Most African countries depend on agriculture for food and exports.

⁶ Global Policy Forum, *Poverty and Development in Africa*, Available at <http://www.globalpolicy.org/social-and-economic-policy/poverty-and-development-in-africa.html> [Accessed on 17/02/2014].

⁷ CNN, "How Africa's Resources fuel the World", July 2013. Available at www.edition.cnn.com/2013/07/25/world/Africa-resources-fuel-world/index.htm [Accessed on 15/01/2014].

⁸ World Economic Survey, 2013, op. cit.

⁹ "How Africa's Resources fuel the World" Courtesy of CNN July 2013, Available at www.edition.cnn.com/2013/07/25/world/Africa-resources-fuel-world/index.htm [Accessed on 15/01/2014].

¹⁰ For instance oil exploration activities by Tullow Oil Company in Turkana, Kenya. There are other multinational oil companies carrying on exploration in Namibia, Ethiopia and Uganda.

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Agricultural products from Africa are exported to the global market but fetch relatively low prices since there is little or no value addition done in Africa.

The greatest percentage of platinum and rhodium comes from Africa.¹¹ In jewellery manufacturing, Africa produces more than 50% of the world's diamonds, 75% of platinum and 20% of gold. In 2012, Africa produced 10% of the world's oil which is about 9.4 million barrels per day.¹² This oil was mainly from Nigeria, Angola, Algeria, Libya, Sudan and Egypt.¹³ Economic talks about African economy observe that Africa's resources have fueled economic growth but most Africans have not benefited.¹⁴

5.3 International Legal Framework on People-Centred Use and Management of Natural Resources and Sustainable Development

The right of a people to own, utilize and control natural resources within their countries is an internationally recognized right.¹⁵ It is a right provided for in the various international legal instruments on human rights and this has since been adopted in the national legislation of various countries around the world including African countries.

In 1952, the United Nations General Assembly requested the Commission on Human Rights to prepare recommendations concerning international respect for the right of peoples to self-determination. The Commission on Human Rights recommended establishment of a commission to investigate the right of peoples and nations to permanent sovereignty over their natural wealth and resources, as they noted that this right formed a "basic constituent of the right to self-determination".¹⁶ Consequently, the General Assembly adopted resolution 1803 (XVII) on the "Permanent Sovereignty over Natural Resources" on 14 December

¹¹ South Africa is a major producer of platinum and rhodium at 72% and 83% respectively, Zimbabwe is the second largest producer of platinum.

¹² Cost per barrel of oil is about \$100.

¹³ *How Africa's Resources fuel the World*, op. cit.

¹⁴ Robb, C.K., Executive Director of Africa Progress Panel "How Africa's resources can Lift Millions out of Poverty." Available at www.cnn.com/2013/07/25/opinion/africas-natural-resources-millions-overtly/ [Accessed on 15/01/ 2014].

¹⁵ UDHR, ICCPR, ICESCR, Banjul Charter.

¹⁶ Preamble, General Assembly resolution 1803 (XVII) of 14 December 1962, "Permanent sovereignty over natural resources"; Kilangi, A., Introductory note, Permanent Sovereignty over Natural Resources General Assembly resolution 1803 (XVII), New York, 14 December 1962, *Audiovisual Library of International Law*, available at http://legal.un.org/avl/ha/ga_1803/ga_1803.html [Accessed on 22/02/ 2014].

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1962 by 87 votes in favour to 2 against, with 12 abstentions.¹⁷ This was due to the recognition that, firstly, the need for promotion and financing of economic development in under-developed countries and, secondly, the right of peoples to self-determination as provided for in the draft international covenants on human rights.¹⁸

This right gives a people power to use, control and derive benefits from the extraction of natural resources. It requires those entrusted with the mandate of safeguarding natural resources to do so for the benefit of their people. Under the foregoing UN Resolution on sovereignty over resources, States have rights including the right: to dispose freely of the natural resource; to freely explore and exploit natural resources; to regain effective control and to compensation for damage; to use natural resources for national development; to manage natural resources pursuant to national environmental policy; to an equitable share in benefits of transboundary natural resources; to regulate foreign investment; and to expropriate or nationalize foreign investment (right to determine the conditions of nationalization and the amount of compensation).¹⁹

However, central to this argument is the international calls for sustainable development in the utilization of these natural resources to achieve economic development. As already highlighted, Article 1.2 of *International Covenant on Economic, Social and Cultural Rights* (ICESCR)²⁰ provides that all people may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic cooperation,

¹⁷ "the right of peoples and nations to permanent sovereignty must be exercised in the interest of their national development and of the well-being of the people of the State concerned" (Article 1); "The exploration, development and disposition of such resources as well as the import of the foreign capital required for these purposes, should be in conformity with the rules and conditions which the peoples and nations freely consider to be necessary or desirable" (Article 2); "inherent and overriding right of a state to control the exploitation and the use of its natural resources" (Preamble).

¹⁸ Kilangi, A., Introductory note, Permanent Sovereignty over Natural Resources General Assembly resolution 1803 (XVII), New York, 14 December 1962, *Audiovisual Library of International Law*, op.cit.

¹⁹ Preamble, General Assembly resolution 1803 (XVII) of 14 December 1962, "Permanent sovereignty over natural resources"; See also Voigt, C., Principles in IEL, *International Environmental Law*, p. 17, available at <http://www.uio.no/studier/emner/jus/jus/JUS5520/h12/undervisningsmateriale/3.-principles-in-iel.pdf> [Accessed on 22/02/2014].

²⁰ Published on 16th December 1966, came to force on 3rd January 1976.

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based upon the principle of mutual benefit, and international law. In no case may a people be deprived of its own means of subsistence.”²¹

The *United Nations Declaration on the Rights of Indigenous Peoples*²² was adopted with the awareness that indigenous peoples have suffered from historic injustices as a result of, *inter alia*, their colonization and dispossession of their lands, territories and resources, thus preventing them from exercising, in particular, their right to development in accordance with their own needs and interests.²³ It therefore came in to, *inter alia*, correct such situations. Article 3 thereof provides that indigenous peoples have the right to self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.

The Declaration acknowledged that the Charter of the United Nations, the International Covenant on Economic, Social and Cultural Rights and the International Covenant on Civil and Political Rights, as well as the Vienna Declaration and Programme of Action, affirm the fundamental importance of the right to self-determination of all peoples by virtue of which they freely determine their political status and freely pursue their economic, social and cultural development.²⁴

Further, Article 26 thereof provides that: Indigenous peoples have the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired; the right to own, use, develop and control the lands, territories and resources that they possess by reason of traditional ownership or other traditional occupation or use, as well as those which they have otherwise acquired; and States should give legal recognition and protection to these lands, territories and resources. Such recognition should be conducted with due respect to the customs, traditions and land tenure systems of the indigenous peoples concerned. Also important is Article 29(1) which is to the effect that indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. Further, States

²¹ Initially addressed in general terms under Article 22 of the United Nations Declaration of Human Rights.

²² 61/295, *United Nations Declaration on the Rights of Indigenous Peoples*, adopted by the General Assembly on Thursday, 13 September 2007.

²³ *Ibid*, Preamble.

²⁴ *Ibid*; See also Article 3.

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are to establish and implement assistance programmes for indigenous peoples for such conservation and protection, without discrimination.

The provisions of this Declaration are consistent with Principle 22 of the Rio Declaration which is to the effect that indigenous people and their communities, and other local communities, have a vital role in environmental management and development because of their knowledge and traditional practices. Further, States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.

Regionally, the *African Charter for Human and People's Rights* (Banjul Charter)²⁵ echoes the provisions of ICESCR, under Article 21 that all peoples should freely dispose of their wealth and natural resources. This right is to be exercised in the exclusive interest of the people and in no case are a people to be deprived of it. Under Article 21.2, in case of spoliation, the dispossessed people have the right to the lawful recovery of its property as well as to an adequate compensation. To safeguard this right, the provision tasks State parties to undertake to eliminate all forms of economic exploitation particularly practiced by international monopolies so as to enable their peoples to fully benefit from the advantages derived from their national resources.²⁶ Governments bear the primary responsibility for equitably managing resources for the benefit of their people. Any act of derogation or violation of this right is greatly condemned under the various international and regional legal instruments on human rights.²⁷

One theme that evidently runs across all the foregoing legal instruments is the value of people as the centre of natural resources use and management and especially in the sustainable development agenda. The resources are first and foremost to be used for improving livelihoods and empowering the people in all aspects of their lives including, political, social and economic.

²⁵ *African Charter for Human and People's Rights* (Banjul Charter), adopted 27 June 1981, entered into force 21 October 1986).

²⁶ *Ibid*, Article 21(6).

²⁷ See Article 30, UDHR; Article 5, ICESCR; and Article 21.2, Banjul Charter.

The overall wellbeing of the people must be balanced with that of the environment in the discussion for sustainable use and management of natural resources, for sustainable development.

5.4 Challenges

The period between 1960s-70s saw many African countries attain independence from colonial domination. Among the key reasons for the rebellion by Africans was harsh economic exploitation due to land alienation for settler farming, natural resources extraction and forced labour. The independent Africa was ushered with much optimism. Africans trusted their new independent governments to safeguard their economic and social interests. There were expectations that wealth would trickle down and create jobs for the people.²⁸ It was expected that revenue from resources would be shared equitably and for the benefit of all. It was also expected that the independent governments would be democratic and transparent. However, for most African countries, the expectations of a prosperous independent country remained a mirage. Poverty remains rampant amongst many people across many African nations. This may be attributed to such factors as discussed herein below.

5.4.1 Corporate dominance by Foreign Multinational Companies

Oil and mineral extraction in Africa is mostly carried out by multinational companies. These companies enter into agreements with African Governments for the extraction of resources. They have high bargaining power in the negotiations due to their influential position and backing from their governments. On the other hand, African governments have low bargaining power in these contracts or agreements because they are less influential. They are more flexible in negotiations than their foreign counterparts. In exchange, they end up giving what rightfully belongs to the people to foreigners.²⁹

5.4.2 Globalisation

Globalisation has simply been described as increasing and intensified flows between countries of goods, services, capital, ideas, information and people, all

²⁸ Pilger, J., "Apartheid Did Not Die" in "Freedom Next Time" (Edition, 2006); "Mandela's Greatness may be assured, but not his Legacy" *New African*, Jan. 2014.

²⁹ Africa Development Bank, "Resource companies ripping-off Africa" -AFDB Chief Available at <http://uk.reuters.com/Article/2013/06/16/uk-africa-economy-idUKBRE95F0EH20130616> [Accessed on 10/02/2014].

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of which produce cross border integration of a number of economic, social and cultural activities.³⁰ There are said to be four main driving forces behind increased interdependence namely: trade and investment liberalization; technological innovation and the reduction of communication costs; entrepreneurship; and global social networks.³¹ Generally, the international market operates under a global platform with a liberalized and free market. In the liberalized market, there is free movement of goods and services around the world. Regulations and legal interventions are kept at a minimum and operate only to facilitate movement of goods and services.

There are remarkable benefits that come with globalisation. For instance, there has been introduction of new technologies, access to new markets and the creation of new industries. Foreign aid remains crucial to developing countries. However, the practical situation in the global market is that there are unfair rules that are disadvantageous to developing countries due to their reduced bargaining powers as against many of the developed world countries.³²

Advocates of globalisation have contended that it affords the poor countries and their citizenry the chance to develop economically and raise their standards of living.³³ Opponents of globalisation on the other hand, have argued that the creation of an unregulated international free market works for the benefit of multinational corporations in the Western world at the expense of local enterprises, local cultures, and common people.³⁴ They disagree with those who support globalisation in that it is concerned with the welfare of the rich and the developed world while denying the poor countries and their citizenry the chance to develop economically and raise their standards of living. The more developed countries with high bargaining power enjoy the biggest share of the benefits of globalisation. The rich industrialized countries formulate policies to make developing countries liberalize domestic markets for easier access but the same

³⁰ Bertucci, G., & Alberti, A., 'Globalization and the Role of the State: Challenges and Perspectives' p. 1. Available at <http://unpan1.un.org/intradoc/groups/public/documents/un/unpan006225.pdf> [Accessed on 24/02/2014].

³¹ Ibid.

³² World Bank World Economy Report, 'Sustainable Development Challenges' *World Economic and Social Survey* 2013 E/2013/50/Rev. 1ST/ESA/344.

³³ Globalization 101, 'What Is Globalization?' *The Levin Institute* - The State University of New York, Available at <http://www.globalization101.org/what-is-globalization/> [Accessed on 24/02/2014].

³⁴ Ibid

is not reciprocated in the domestic markets of industrialized countries. This makes Africa vulnerable since it can be extensively exploited yet it cannot readily access the national markets of developed countries.³⁵ As a result, African domestic industries have collapsed while foreign investments continue thriving. It has been argued that international policies on globalisation are deliberately calculated to ensure continued economic domination by the industrialized countries.³⁶ This only serves to impoverish the people in the developing states especially in Africa. Globalisation has also been associated with a decline in the power of national governments to direct and influence their economies especially with regard to macroeconomic management.³⁷

5.4.3 Poor Governance

African governments have arguably played a role in making the continent poor. There has been collusion between dishonest leaders and foreign companies to sell out resources and manipulate national laws for easy access by the foreign companies.³⁸ Economic corruption remains rampant in most African countries. Some corrupt African leaders are said to use natural resources to satisfy their selfish interests at the expense of the citizens. It is noteworthy that many a times, African governments do not uphold the key principles of democracy, transparency and accountability in governance. As a result, the subjects minimally, if at all, participate in the use and management of natural resources in their countries and benefit sharing is often absent.³⁹

Some countries export and earn heavy revenue from resources, but the revenue is misappropriated by corrupt leaders. It has been asserted that corruption deepens poverty, it debases human rights; it degrades the environment; it derails development, including private sector development; it can drive conflict in and between nations; and it destroys confidence in democracy and the legitimacy of

³⁵ For example, under North American Free Trade Agreement, USA has entered into agreement opening its market only to its neighbours, that is, Canada and Mexico. Developing countries are excluded yet NAFTA members can under WTO's GATT agreement access the markets of developing countries.

³⁶ Stiglitz, J., *"Globalization and its Discontents"* (Penguin Books, UK, 2002).

³⁷ Smith, M. K. & Doyle M. 'Globalization' *the encyclopedia of informal education* (2002), Available at www.infed.org/biblio/globalization.htm [Accessed on 24/02/2014].

³⁸ Dare, S., 'A Continent in Crisis: Africa and Globalization,' *Third World Traveller, Dollars and Sense magazine*, July/August 2001, available at http://www.thirdworldtraveler.com/Africa/Continent_Crisis.html

³⁹ Akindele, S.T., et. al., *Globalization, Its Implications and Consequences for Africa.*

governments. It debases human dignity and is universally condemned by the world's major faiths.⁴⁰

5.4.4 Lack of Industrial Development

Most African countries lack advanced industries for processing and value addition of raw materials. This can be attributed to high capital requirements to set up such industries and the technology gap.⁴¹ It has been asserted that Africa lost its status as a net exporter of agricultural products in the early 1980s when prices for raw commodities fell and local production stagnated, making agricultural imports grow faster than agricultural exports, and by 2007 reached a record high of \$47bn, yielding a deficit of \$22bn. Further, it is said that the value of agricultural exports from Thailand is now greater than for the whole of the African continent below the Sahara.⁴² This has been blamed on bad weather and climate change. Technology inferiority is also partly to blame.

5.4.5 Unfair and Inequitable Economic Policies.

The world economy under the globalized market is run by a number of international economic institutions whose functions are policy formulation, managing and monitoring global markets. The main international economic institutions that impact on African policies include: World Bank, International Monetary Fund (IMF), the UN Conference on Trade and Development (UNCTAD), African Development Bank, European Bank for Reconstruction and Development and Canadian International Development Agency.⁴³

Some of these institutions are specialized agents of the international community while others are a coalition of States drawing membership from State members. Whereas developing countries are part of the international economic institutions, decision making on policy is done by developed countries which enjoy international market dominance. Few or none of the members from developing countries are invited to the policy negotiation and formulation table.

⁴⁰ *The Durban Commitment to Effective Action Against Corruption*, 1999.

⁴¹ Ngwenya, S., "Africa has to Shed off the Resource Curse Stigma" *The Star Newspaper*, Friday January 3, 2014.

⁴² Skoll World Forum, On Africa: The Value Addition Imperative In Agriculture, *Forbes*, Available at <http://www.forbes.com/sites/skollworldforum/2013/08/21/on-africa-the-value-addition-imperative-in-agriculture/> [Accessed on 24/02/2014].

⁴³ The WTO and other organizations - World Trade Organization, www.wto.org > ... > wto & other organizations.

5.4.6 Use of Poor Technology

Although the raw materials are plenty, they cannot be effectively harnessed without good and effective modern technology, lacking in most African domestic industries. The use of poor technology in Africa may be attributed to the high expense of technology.⁴⁴ Most African countries cannot meet the high capital requirements in acquisition of technology in terms of the know-how itself, the equipment and equipping workers with the necessary skills.⁴⁵ This has forced many countries to export raw materials instead of processing them in the domestic industries.

5.4.7 Climate Change

Climate change has been identified as a fundamental threat to sustainable development and the fight against poverty.⁴⁶ Human activities have released large amounts of carbon dioxide and other greenhouse gases into the atmosphere, thereby causing global warming. One of the most devastating effects of global warming is desertification which problem directly affects people's livelihoods especially in Africa.

"Desertification" has been defined in the United Nations Convention to Combat Desertification (UNCCD) to refer to land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities.⁴⁷ Further, UNCCD defines land degradation as a reduction or loss, in arid, semi-arid, and dry sub-humid areas, of the biological or economic productivity and complexity of rain-fed cropland, irrigated cropland, or range, pasture, forest, and woodlands resulting from land uses or from a process or combination of processes, including processes arising from human activities and habitation patterns, such as: (i) soil erosion caused by wind and/or water; (ii) deterioration of the physical, chemical and biological or economic properties of soil; and (iii) long-term loss of natural vegetation.⁴⁸

⁴⁴ *Africa's Technology Gap: Case Studies on Kenya, Ghana, Uganda and Tanzania*, pp.11-12, United Nations Publications, July 2003, UNCTAD/ITE/IPC/Misc.13.

⁴⁵ *Ibid.*

⁴⁶ The World Bank Group, Visit <http://www.worldbank.org/en/topic/climatechange> [Accessed on 22/02/2014].

⁴⁷ *United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa*, Ch XXVII 10 VOL-2 Chapter XXVII ,Paris, 14 October 1994.

⁴⁸ *Ibid.*, Article 1 (f).

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This phenomenon affects people's livelihoods especially those who directly rely on natural resources for their livelihoods, thus leading to poverty. Those living in such dry areas do often rely on the goodwill of the government to support them and this insecurity reduces them to leaving miserable lives.

5.5 Natural Resources and Realization of Human Rights in Africa

Article 22 of UDHR, 1948 guarantees that everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality. Furthermore, most African countries have ratified ICESCR and the Banjul Charter and integrated them into their national laws. These instruments appeal to State parties to take all the necessary measures and to use the state resources in ensuring realization of enjoyment of the human rights of their people. Indeed, some countries have integrated the right of a people to benefit from and control extraction of natural resources into their Constitutions. For instance, Kenya promulgated her Constitution on 27th August 2010. Chapter Four thereof envisages the Bill of Rights and fundamental freedoms. Article 43 provides for economic and social rights of all the Kenyan people. The Article guarantees the right to an adequate standard of living for all and this encompasses right to adequate food, clothing, shelter, clean and safe water, education, health and social security.

Of great significance to this discourse is Article 1.4 of the Rio+20 Declaration in which the State parties recognized that poverty eradication, changing unsustainable and promoting sustainable patterns of consumption and production and protecting and managing the natural resource base of economic and social development are the overarching objectives of and essential requirements for sustainable development.⁴⁹ They also reaffirmed the need to achieve sustainable development by promoting sustained, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion, and promoting integrated and sustainable management of natural resources and ecosystems that supports, *inter alia*, economic, social and human development while facilitating ecosystem

⁴⁹ Rio+20 Report, Op. cit. Article 1.4.

conservation, regeneration and restoration and resilience in the face of new and emerging challenges.

5.6 Opportunities

Although Africa has constantly featured in the UN and World Bank World poverty index, all is not lost. There is high potential and opportunities for economic recovery and prosperity in Africa. The world economy statistics published in March 2013 ranked Africa as the poorest continent. Despite this, the World Bank projects that most African countries will hit 'middle income status'⁵⁰ by 2025 provided that the current growth rates continue.⁵¹ In 2013, it was reported that Africa has a high economic potential since it was ranked as the world's fastest growing continent, at 5.6% a year and GDP is expected to rise by an average of over 6% a year between 2013 and 2023.⁵²

Similarly, Global Multidimensional Poverty Index 2013⁵³ indicates some African countries as countries with the most reducing Multidimensional Poverty Index. They include Ghana, Rwanda, Uganda, Ethiopia, Kenya and Tanzania. This shows that African countries can fight poverty if they are willing to utilize their resources effectively.

Currently, there are lucrative value addition opportunities through COMESA and COMESA-EAC-SADC tripartite region in a number of mineral sectors including coal, natural gas, mineral oil, copper, iron and steel, manganese, phosphates and nickel. It is the beneficiation and value addition of mineral deposits and other commodities that holds the potential for growth of African industries. In effect, Africa will be able to create jobs, regional market and equitable health.⁵⁴

⁵⁰ Equivalent to at least 1000 USD per person per year.

⁵¹ See World Bank World Economy Report, 'Sustainable Development Challenges' *World Economic and Social Survey* 2013 op. cit.

⁵² Ibid.

⁵³ United Nations, *UNDP Human Development Report 2013 & Alkire and Conconi Report 2013*, available at <http://sustainabledevelopment.un.org/content/documents/3528alkire.pdf> [Accessed on 10th January 2014].

⁵⁴ Ngwenya, S., "Africa has to Shed off the Resource Curse Stigma" *The Star Newspaper*, Friday January 3, 2014.

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Today, Africa has embraced education. Many of its inhabitants have had access to education and with the consolidation of the democratic process, expect their popularly elected governments to deliver on the promises of employment and improving quality of life for all. Under Article 31 of the RIO+20 Report, state parties emphasized that sustainable development must be inclusive and people-centred, benefiting and involving all people, including youth and children. They also recognized that gender equality and women's empowerment are important for sustainable development and our common future. They therefore reaffirmed their commitments to ensure women's equal rights, access and opportunities for participation and leadership in the economy, society and political decision-making.

It has been observed that the view that poverty is a shortage of income ought to be changed to one that perceives poverty as 'unfreedoms' of various sorts: the lack of freedom to achieve even minimally satisfactory living conditions.⁵⁵ Low income can contribute to that, but other factors such as the lack of schooling facilities, absence of health facilities, unavailability of medicines, the suppression of women, hazardous environmental features and lack of jobs do also play a major role. Therefore, poverty can be reduced through addressing all these issues.⁵⁶ Addressing these issues requires mobilization of resources by the state. This mobilization depends on a number of factors which include but are not limited to sound institutional and legal frameworks, streamlining the governance system, empowering the citizenry to participate in the governance matters, amongst other measures.

5.6.1 Establishment of a Strong Legal Framework.

For effective protection of the people's rights to benefit and control the utilization natural resources, there is a need for a strong national legal and institutional framework on efficient use and management of natural resources. Such legislation should take into consideration mechanisms to ensure transparency and accountability in the extraction, use and application of revenue from natural

⁵⁵ Green, D., *From Poverty to Power: How active citizens and effective states can change the world*, (2nd ed., 2012), p. IX (Foreword by Amartya Sen), Rugby, UK: Practical Action Publishing and Oxford: Oxfam International, Available at http://www.oxfamamerica.org/static/media/files/From_Poverty_to_Power_2nd_Edition.pdf [Accessed on 24/02/2014].

⁵⁶ Ibid.

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resources, including benefit sharing. This will ensure that natural resources are utilized in accordance with the law and all revenue accounted for. This in turn will highly contribute towards fighting poverty in Africa. Principle 11 of the Rio declaration on Environment and Development requires that states enact effective environmental legislation. It states that environmental standards, management objectives and priorities should reflect the environmental and developmental context to which they apply. Laws should therefore be more practical rather than theoretical in their drafting and application.

In exercising permanent sovereignty over natural resources, States must as a matter of obligation use the resources for national development and the well-being of the people and ensure conservation and preservation of the same.⁵⁷ Indeed, this is echoed under the Constitution of Kenya 2010, Article 69(1), which lay out the state obligations toward environment to include *inter alia*: ensure sustainable exploitation, utilization, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits; encourage public participation in the management, protection and conservation of the environment; protect genetic resources and biological diversity; establish systems of environmental impact assessment, environmental audit and monitoring of the environment; eliminate processes and activities that are likely to endanger the environment; and utilize the environment and natural resources for the benefit of the people of Kenya.

5.6.2 Value Addition

To reduce poverty in Africa and steer the continent to its full potential, value addition model is the best alternative rather than a commodity export model. By this model, Africans would use the resources they have as anchors for regional growth clusters and then ensure that they attract value-addition industries.⁵⁸ Locally produced food and other potential income earners natural resources could undergo local value addition and be exported either within African region markets or out of Africa. This would have a positive effect on the economic wellbeing of all persons starting from the grassroots levels.

⁵⁷ UN Res. 1803/XVII, 1962.

⁵⁸ Ngwenya, S., "Africa has to Shed off the Resource Curse Stigma" op. cit.

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Over time there have been successful value addition efforts in Africa. For instance, Ethiopia has adopted value addition approach to its leather industry.⁵⁹ In Kenya, value addition has been achieved in the horticulture industry.⁶⁰ Kenya has a well-established export base of highly processed horticultural products to the overseas market in the European Union, although the same has lately been facing challenges too.⁶¹

Exporting fully processed goods instead of raw commodities is said to result in a much higher percentage of their value staying in African countries and many more opportunities for families to gain livelihoods and exit poverty.⁶²

5.6.3 Transparency in Governance

Under Article 1.10 of the RIO+20 Report, State parties acknowledged that democracy, good governance and the rule of law, at the national and international levels, as well as an enabling environment, are essential for sustainable development, including sustained and inclusive economic growth, social development, environmental protection and the eradication of poverty and hunger. Further, they reaffirmed that to achieve sustainable development goals there is need for institutions at all levels that are effective, transparent, accountable and democratic.⁶³

Indeed, one of the guiding principles in the implementation of the Programme of Action based on a strengthened framework of partnership for successfully achieving the objectives of the *Programme of Action for the Least Developed Countries for the Decade 2011-2020*, is Country ownership and leadership.⁶⁴ Article 13 thereof

⁵⁹ In Ethiopia, the value addition strategy on the leather industry has revolved around a combination of an export tax on unprocessed hides, incentives for value added manufacturing firms, and aggressive measures on technology and skills transfer. The export tax has forced reluctant European manufacturers to relocate tanning and manufacturing activities to Ethiopia. Consequently, the composition of Ethiopia's leather exports has changed dramatically. For instance, the share of hides in leather group exports declined from 70% in 2004 to zero per cent in 2011. The share of finished leather increased from less than a third to 93% in the same period.

⁶⁰ Horticulture products are among the Kenya's leading exports. The horticulture industry in Kenya has undergone significant transformation and Kenyan producers have been able to meet increasingly stringent food safety regulations, demanding market requirements and private standard.

⁶¹ Ngwenya, S., 'Africa has to Shed off the Resource Curse Stigma,' op. cit.

⁶² *Value Added in Africa*, Available at <http://www.ideaonline.ie/content/value-added-africa> [Accessed on 24/02/2014].

⁶³ RIO+20 Report, op. cit.

⁶⁴ Article 13, *Programme of Action for the Least Developed Countries for the Decade 2011-2020*,

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is to the effect that the ownership, leadership and primary responsibility for the least developed countries own development lies with them. The Plan observes that the Least developed countries (most of which are in Africa) have the right and responsibility to formulate and execute their own coherent economic and development policies and strategies and identify their own national priorities, including striking a balance in the allocation of resources between economic and social sectors. Perhaps more important is the observation that Development partners should support least developed countries in the design and implementation of their development strategies. Transparency in governance cannot therefore be substituted with foreign aid in order to realize economic development and ultimate uplifting of the people from poverty.

There are a lot of non-transparent dealings in resource extraction in Africa. Beside insufficient or unavailability of information, there are other complicated issues of tax avoidance and evasion, profit concealment and anonymous company ownerships and corruption. To counter concealment of profits, African governments should put in place mechanisms that ensure systematic monitoring of the value and quantity of exports by extracting companies. There should be a clear export taxation system and policy. Availability and access to information can counter anonymous company ownerships which in turn would reduce money laundering and corruption. This calls for the cooperation of the international community since anonymous company ownership is a global problem which is making countries lose huge revenues to fraudsters.⁶⁵

Africa has lost huge revenues to fraudsters. For example, Democratic Republic of Congo has recently lost an estimated US\$ 1.36 billion through a protracted systematic undervaluation and sale of mineral assets to unknown buyers.⁶⁶ Members of the international community should put in place measures to deal with false companies in their jurisdictions.

Although there have been attempts by the international community to resolve this problem through the establishment of Extractive Industries Transparency

A/CONF.219/3, Fourth United Nations Conference on the Least Developed Countries, Istanbul, 9-13 May 2011.

⁶⁵ "Equity in Extractives: Stewarding Africa's Natural Resources for All" (Africa Progress Report 2013).

⁶⁶ Rajaram, A., "Rich Countries, Poor People; Will Africa's Commodity Boom Benefit the Poor" available on <http://blogs.worldbank.org/african/rich-countries-poor-people-will-africa-s-commodity-boom-benefit-poor> [Accessed on 24/02/2014].

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Initiative (EITI), a lot needs to be done. It would be helpful to establish such similar institutions at local and regional levels. Transparency is necessary in utilisation of the accruing natural resource revenue. It should be applied reasonably, fairly and equitably for the benefit of all. For example, by 2011, Equatorial Guinea had grown on average of 17%, making it the fastest growing economy in the world joining the leagues of high-income countries.⁶⁷ Despite this remarkable economic growth, three quarters of Equatorial Guinea's population live in poverty and the country records high child mortality rates.⁶⁸

Lack of transparency also affects the taxation system. There is a need to tackle tax avoidance and tax evasion by foreign companies carrying out resource extraction in Africa. Tax avoidance is one of the biggest problems bedeviling African economies because it is reported that the revenue lost in Africa through tax avoidance is greater than the combined revenue from international aid and direct foreign investment.

5.6.4 Job Creation

Most of African countries have a rapidly growing population. There is high rate of unemployment in the continent. Under Article 24 of the RIO+20, State parties expressed deep concern about the continuing high levels of unemployment and underemployment, particularly among young people, and noted the need for sustainable development strategies to proactively address youth employment at all levels. In this regard, they recognized the need for a global strategy on youth and employment building on the work of the International Labour Organization (ILO).⁶⁹ Further, Article 30 thereof is to the effect that state parties did recognize that many people, especially the poor, depend directly on ecosystems for their livelihoods, their economic, social and physical well-being, and their cultural heritage. For this reason, it is essential to generate decent jobs and incomes that decrease disparities in standards of living in order to better meet people's needs and promote sustainable livelihoods and practices and the sustainable use of natural resources and ecosystems. The *International Covenant on Economic, Social and Cultural Rights* protects numerous fundamental rights, including the right to work, under Articles 6 and 7.

⁶⁷ "Equity in Extractives: Stewarding Africa's Natural Resources for All" (Africa Progress Report 2013).

⁶⁸ Ibid.

⁶⁹ RIO+20 Report, op. cit.

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Even if Africa were to improve on resource utilisation without creating jobs for the people, the revenue from resources would be inadequate to cater for the needs of the people. Thus, there is a need to create jobs for the rapidly growing population. This would of course import the need to provide good education to equip people with skills and knowledge suitable for the job market. For effective job creation, Africa must also invest in its people through quality education. The money generated from the natural resources should also be invested in the education sector so as to empower the people. Education and job opportunities will empower the poor. It is generally accepted that effective poverty reduction cannot be achieved without the empowerment of the poor.⁷⁰

5.6.5 Institutional Reforms

The quality of institutions matter because of the pivotal role they play in good administration and performance towards economic growth.⁷¹ Public institutions may be economically classified as inclusive or extractive. Inclusive institutions manage and apply resources for the public good and benefit of all. Conversely, extractive institutions apply and manage public resources for the benefit of certain influential individuals at the expense and sufferance of the majority.⁷² It is important that measures are taken to ensure that these institutions are used for the interests of the wider society as against promoting the interests of a few people in a country.

In natural resource management across African countries, there is a great need for ensuring quality participation of the people in the use and management of natural resources. This can be achieved in many ways including communities and/or local people's participation through any community based natural resource management approaches, as would be applicable to various countries.

In order to increase environmental management efficiency and improve equity and justice for local people, there is a need to explore participatory and Community-Based Natural Resource Management (CBNRM).⁷³ However, the

⁷⁰ United Nations High Commissioner for Human Rights, *Principles And Guidelines For A Human Rights Approach To Poverty Reduction Strategies*, HR/PUB/06/12, p. 9.

⁷¹ Ibid.

⁷² Acemalogue & Robinson, *Why Nations Fail: The Origins of Power, Prosperity and Poverty*, (Crown Business; Reprint edition, September 17, 2013).

⁷³ Ribot, J.C., 'Democratic Decentralization of Natural Resources: Institutionalizing Popular Participation,' p.1, (World Resources Institute report, 2002).

assertion is that decentralization requires both power transfers and accountable representation. It is noteworthy that across many states, local representatives remain accountable and subject to central authorities and their powers can be given and taken at the whim of central agents. Thus, choosing representative and accountable local institutions is key for equity, justice, and efficiency. Accountability of local decision makers to the people, that is, local democracy is arguably a viable mechanism for achieving greater equity and efficiency in resource management.⁷⁴ Reforms aimed at ensuring greater representation and quality participation by all can be an effective tool for ensuring that more benefits from natural resources exploitation flows to the common people and eventually alleviating poverty.

5.6.6 Sound, Fair and Equitable Globalisation Policies

Good political environment is critical for economic development. Over time, African politics have been founded on ethnicity and greed. Africa should provide for an enabling environment by creating an initiative for policy dialogue and conducting informed democratic discussions of alternative policies.

A good market policy should clearly state the role of the government interventions and market forces. While markets are at the center of the economy, the government has a role to play as well. The two are complementary.⁷⁵ There is a need to reinvent the government to make it more efficient and responsive. The international community should formulate rules that promote fairness and equality. Decision making should be inclusive; both the rich and poor countries should participate.

Some proponents of globalization argue that contrary to what is often claimed, economic globalization is not a blind force. They argue that it is individual governments that set the policies and the rules of the globalized economy. Thus, economic globalization is, according to them, the result of policy decisions made by individual countries that allow global market forces to operate. To make globalization beneficial to states, it is argued, the actual issue that ought be looked into is determining which countries set the rules, whoever benefits from the

⁷⁴ Ibid, p.1.

⁷⁵ This is because while government cannot remedy every market failure, markets by themselves cannot solve any societal problem. For example, the government can play a key role in reduction of inequality, unemployment, protection of domestic industries and control of pollution.

favour and how best the least powerful countries can also influence policy-making in the international arena, and do it in ways that will benefit them.⁷⁶

Under Article 1.11 of the RIO+20 Report, the State parties reaffirmed their commitment to strengthen international cooperation to address the persistent challenges related to sustainable development for all, in particular in developing countries. In this regard, the state parties reaffirmed the need to achieve economic stability, sustained economic growth, promotion of social equity and protection of the environment, while enhancing gender equality, women's empowerment and equal opportunities for all, and the protection, survival and development of children to their full potential, including through education. Through exploitation of national and international resources and international cooperation, the foregoing can indeed be achieved.

It has been stated that while "integrating with the world economy is a powerful vehicle for growth and poverty reduction in developing countries,... it would be still more powerful if the rich countries further increased the openness of their own economies".⁷⁷ There is need for fair and equitable ground rules of globalization for the benefit of all countries especially the third world countries from Africa.

Even in the face of globalization, there is a need to uphold and respect the right of people and states to self-development especially in light of exploiting natural resources for their own empowerment. Any economic engagement ought to show this recognition. The right of peoples to self-determination as contemplated under the various international and regional legal instruments is said to depend on the following elements: the free choice of political status and of economic, social and cultural development; peoples' sovereignty over their natural resources; equality of peoples; non-discrimination; sovereign equality of states; peaceful settlement of disputes; good faith in the accomplishment of obligations and in international relations; the non-use of force; international cooperation and the respect by states of their international commitments, in particular regarding

⁷⁶ Bertucci, G., & Alberti, A., 'Globalization and the Role of the State: Challenges and Perspectives' op. cit. p. 2.

⁷⁷ Ibid., p. 6.

human rights.⁷⁸ The international consensus on the making of sound, fair and equitable globalization policies can demonstrate the recognition of every state's ability to engage competitively and productively in the global arena, for the benefit of all.

5.6.7 Access to Information/Public Participation

The role of information in economic growth cannot be overlooked. There is need for an open access to information. To this end, a free and independent press is a critical check on abuses and is necessary for democracy. The one with the information has a higher bargaining power. Developing countries lack sufficient information on global market hence cannot bargain their place.

Principle 10 of the Rio Declaration on Environment and Development provides that environmental issues are best handled with the participation of all concerned citizens, at the relevant level. Further, at the national level, each individual is to have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. The Rio Declaration requires that states should facilitate and encourage public awareness and participation by making information widely available. Scholars argue that it is imperative to allow the resources that are vital for people's way of life to be managed by those that depend on them.⁷⁹

It has been posited that co-management of resources can balance state-level priorities of efficiency and equity against local concerns for self-governance and participatory decision-making. Consequently, this direct user involvement in negotiations is believed to increase the legitimacy of rules and leads to better compliance.⁸⁰

Such participation and/or inclusion in decision making demand a well-informed people. There is need to realize that if citizens are to gain maximum benefits from

⁷⁸ Ozden, M. & Golay, C., 'The Right Of Peoples To Self-Determination And To Permanent Sovereignty Over Their Natural Resources Seen From A Human Rights Perspective,' p. 13, *Part of a series of the Human Rights Programme of the Europe-Third World Centre (CETIM)*.

⁷⁹ Clarke, R.A., 'Securing Communal Land Rights to Achieve Sustainable Development in Sub-Saharan Africa: Critical Analysis and Policy Implications,' *Law, Environment and Development Journal*, Vol. 5, No.2, 2009, p. 130 at p. 132.

⁸⁰ *Ibid*, p. 139.

natural resources use and management, they need to be well informed. It has been asserted that the three “access rights” of access to information, participation in decision-making and access to justice in environmental matters empower individuals to have a meaningful voice in decisions that affect sustainable development.⁸¹ Environmental democracy entails the principle of equal rights for all including the public, community groups, advocates, industrial leaders, workers, governments, academics and other professionals to be involved in environmental governance.⁸² It connotes the right of all whose daily lives are affected by the quality of the environment to participate in environmental decision-making as freely as they do in other public interest matters such as education, health care, finance and government.⁸³ Access to environmental information and justice for all those who choose to participate in such decision-making is integral to the concept of environmental democracy.⁸⁴

5.6.8 Use of Modern Technology

For Africa to export manufactured products to the international market there is a need to use the best modern and advanced technology in value addition process. At the moment the technology used in Africa in the extraction of natural resources is poor. There is little value addition technology. This explains why most of Africa’s exports are raw materials or semi-processed products. On this issue, the way forward would be for Africa to invest highly in modern technology through human resource development and acquisition of technology products. The ability to create, acquire and adapt new technologies is said to be a critical requirement for competing successfully in the global marketplace.⁸⁵ There has been contention that Africa's technological gap could be the source of its increasing economic deterioration since other developing regions (East and South-East Asian countries) are constantly upgrading their own technological

⁸¹ ‘Environmental Democracy: An Assessment of Access to Information, Participation in Decision-making and Access to Justice in Environmental Matters in Selected European Countries’, p. 11, *European Regional Report*, The Access Initiative Europe; See also *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters*, Aarhus, Denmark, on 25 June 1998 (the Aarhus Convention).

⁸² Hazen, S., *Environmental Democracy*, (1998). Available at <<http://www.ourplanet.com>> [Accessed on 25/02/2014].

⁸³ Ibid.

⁸⁴ Ibid.

⁸⁵ *Africa's Technology Gap: Case Studies on Kenya, Ghana, Uganda and Tanzania*, pg iii, op.cit.

capabilities, and the global marketplace has become increasingly liberalized and competitive.⁸⁶

It has been argued and rightly so that science can essentially contribute to solving the global problems of hunger, poverty, and environmental degradation.⁸⁷ Science can be useful in enhancing yield and productivity, bridging yield gaps, and protecting yield gains; exploiting the gene revolution (biotechnology); benefiting from information and communication technology revolution and promoting knowledge-based development; managing natural resources (land, water, and biodiversity); addressing environmental concerns; managing climate change; and minimizing adverse impacts of natural disasters.⁸⁸ Sound scientific and technology knowledge application to agriculture, fisheries, and forestry, and to rural, coastal, and urban ecosystems and human systems within which hunger and poverty persist can help alleviate the problem of poverty.⁸⁹

5.6.9 Climate Change

The *United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification* has a very broad and potentially effective objective which is to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements, in the framework of an integrated approach which is consistent with Agenda 21, with a view to contributing to the achievement of sustainable development in affected areas.

In order to achieve this objective, the Convention further provides for guiding principles which are *inter alia*: the Parties should ensure that decisions on the design and implementation of programmes to combat desertification and mitigate the effects of drought are taken with the participation of populations and local communities and that an enabling environment is created at higher levels to facilitate action at national and local levels; the Parties should, in a spirit of international solidarity and partnership, improve cooperation and coordination

⁸⁶ Ibid.

⁸⁷ FAO, 'Science and Technology to Meet the Challenges: Food-Security, Poverty-Alleviation, And Sustainability' Available at <http://www.fao.org/docrep/005/ac483e/ac483e08.htm> [Accessed on 24/02/2014].

⁸⁸ Ibid.

⁸⁹ Ibid.

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at sub regional, regional and international levels, and better focus financial, human, organizational and technical resources where they are needed; the Parties should develop, in a spirit of partnership, cooperation among all levels of government, communities, non-governmental organizations and landholders to establish a better understanding of the nature and value of land and scarce water resources in affected areas and to work towards their sustainable use; and the Parties should take into full consideration the special needs and circumstances of affected developing country parties, particularly the least developed among them.⁹⁰

There are of course many other international instruments which seek to address the problem of climate change. If these principles are actualized, it is possible to effectively address this problem of climate change in order to achieve sustainable development. There is need for combined efforts from national, regional to international community to tackle the problem of climate change and this will ultimately impact positively on the fight against poverty.

5.7 Conclusion

There are many opportunities for effective utilization of resources to fight poverty. The potential for Africa's natural resources is high. If it can utilize its resources maximally, effectively and sustainably, Africa has the potential to eradicate poverty amongst its people through equitable utilization of its resources. The change may be gradual, even discouraging, but the ultimate goal of eradicating poverty is worth pursuing. For effective utilisation of Africa's resources to fight poverty, there is a need to adopt the foregoing recommendations since if all of them are effectively applied, they may contribute to reduction of poverty in Africa.

Under Article 23 of the RIO+20 Report, the state parties reaffirmed the importance of supporting developing countries in their efforts to eradicate poverty and promote empowerment of the poor and people in vulnerable situations, including removing barriers to opportunity, enhancing productive capacity, developing sustainable agriculture and promoting full and productive employment and decent work for all, complemented by effective social policies,

⁹⁰ United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Principle 3.

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including social protection floors, with a view to achieving the internationally agreed development goals, including the Millennium Development Goals and the Sustainable Development Goals.

It is noteworthy that each African country faces specific challenges to achieve sustainable development and eradication of poverty.⁹¹ However, if each of these countries explores the best resource exploitation practices to make maximum use of the natural resources in their territory, it is indeed possible to eradicate poverty to achieve sustainable development, equity, justice, non-discrimination and fairness in society and Africa as a continent.

⁹¹ Article 32, RIO+20 Report.

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6.1 Introduction

The United Nations Framework Convention on Climate Change (UNFCCC)¹ defines climate change as a “*change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods*”.² It is noteworthy that while the foregoing definition attributes climate change to human activity in a generalized manner, Kenya’s *Climate Change Act, 2016*³ defines climate change to mean a change in the climate system which is caused by significant changes in the concentration of greenhouse gases as a consequence of human activities and which is in addition to natural climate change that has been observed during a considerable period.⁴

The *Agenda 2030 on Sustainable Development* calls on countries to take urgent action to combat climate change and its impacts.⁵ It has been argued that some of the most adverse effects of climate change will be in developing countries, where populations are most vulnerable and least likely to easily adapt to climate change, and that climate change will affect the potential for development in these countries.⁶ This vulnerability has been attributed to their reliance on agriculture, their lower tolerance to coastal and water resource changes, and lower financial, technical, and institutional capacity to adapt.⁷

While the foregoing assertion may bear some truth in it, it is also true that climate change has had a global impact to a point where the international community has already come together to put in place measures aimed at addressing the scourge.

¹ United Nations Framework Convention on Climate Change (United Nations, 1992), Article 1(2).

² UN General Assembly, *United Nations Framework Convention on Climate Change: resolution / adopted by the General Assembly*, 20 January 1994, 1771 UNTS 107; S. Treaty Doc No. 102-38; U.N. Doc. A/AC.237/18 (Part II)/Add.1; 31 ILM 849 (1992).

³ No. 11 of 2016, Laws of Kenya.

⁴ S. 2, No. 11 of 2016, Laws of Kenya.

⁵ United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, Goal 13.

⁶ Beg, N., ‘Linkages between climate change and sustainable development,’ *Climate Policy*, Vol. 2, 2002, pp.129-144 at p. 129.

⁷ *Ibid*, p.133.

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Climate change has been associated with direct economic impacts, crop failure due to climate change which could also increase unemployment, destabilised food security, further increasing competition for scarce resources and increase social inequity, and in addition, risks associated with sea-level rise in some of the world's poorest regions, such as displacement.⁸ As such, climate change is relevant to priority development objectives such as combating poverty, food security, access to basic services such as clean water, sanitary living conditions and energy, and education.⁹

This chapter offers an analysis of the subject of climate change and its relationship with environmental management and sustainable development. The chapter also evaluates Kenya's efforts in combating climate change.

6.2 Global Efforts towards Combating Climate Change

6.2.1 Agenda 21

Agenda 21¹⁰ is part of the global efforts aimed to address the pressing problems of today and also aims at preparing the world for the challenges of the next century. It reflects a global consensus and political commitment at the highest level on development and environment cooperation.¹¹ Chapter 9 of the Agenda 21 is dedicated to measures aimed at protection of the atmosphere. Specifically, the chapter is dedicated to the following areas: addressing the uncertainties: improving the scientific basis for decision-making; promoting sustainable development: energy development, efficiency and consumption; transportation; industrial development; terrestrial and marine resource development and land use; preventing stratospheric ozone depletion; and transboundary atmospheric pollution.¹² As part of the efforts towards ensuring environmentally sound atmosphere, states are to take diverse measures that address the threats that contribute to depreciating atmospheric conditions. The suggestions are cross-cutting and aimed at addressing threats that may emanate from various sectors of the economy.

⁸ Ibid, p. 133.

⁹ Ibid, p. 134.

¹⁰ United Nations, United Nations Conference on Environment & Development, Rio de Janeiro, Brazil, 3 to 14 June 1992, Agenda 21.

¹¹ Ibid, Preamble.

¹² Ibid, para. 9.5.

6.2.2 1992 United Nations Framework Convention on Climate Change

The 1992 United Nations Framework Convention on Climate Change (UNFCCC)¹³ which is an intergovernmental treaty developed to address the problem of climate change, setting out an agreed framework for dealing with the issue, was negotiated from February 1991 to May 1992 and opened for signature at the June 1992 UN Conference on Environment and Development (UNCED) – also known as the Rio Earth Summit.¹⁴

By 1995, countries realized that emission reductions provisions in the Convention were inadequate. They launched negotiations to strengthen the global response to climate change, and, two years later, adopted the *Kyoto Protocol*. The Kyoto Protocol legally binds developed countries to emission reduction targets. The Protocol's first commitment period started in 2008 and ended in 2012. The second commitment period began on 1 January 2013 and will end in 2020.¹⁵

Parties to the Convention continue to meet regularly to take stock of progress in implementing their obligations under the treaty, and to consider further actions to address the climate change threat.¹⁶ The ultimate objective of the Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.¹⁷

¹³ UN General Assembly, *United Nations Framework Convention on Climate Change: resolution / adopted by the General Assembly*, 20 January 1994, A/RES/48/189.

¹⁴ International Institute for Sustainable Development – Reporting Services Division, “Climate and Atmosphere: Introduction to the UNFCCC and Kyoto Protocol,” available at http://www.iisd.ca/process/climate_atm-fcccintro.htm [Accessed on 24/10/2015].

¹⁵ United Nations Framework Convention on Climate Change, *Background on the UNFCCC: The international response to climate change*, available at http://unfccc.int/essential_background/items/6031.php [Accessed on 24/10/2015].

¹⁶ International Institute for Sustainable Development – Reporting Services Division, “Climate and Atmosphere: Introduction to the UNFCCC and Kyoto Protocol,” *op cit*.

¹⁷ UNFCCC, Article2.

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In their actions to achieve the objective of the Convention and to implement its provisions, the Parties are to be guided, inter alia, by the following principles: protection of the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with common but differentiated responsibilities and respective capabilities; specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration; precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects; a right to, and should, promote sustainable development.

Policies and measures to protect the climate system against human-induced change should be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change; and cooperation to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change.¹⁸ These provisions and principles are to inform the national policy and legal framework for environmental security for the current and future generations.

6.2.3 Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto Protocol)

The Kyoto protocol¹⁹ spells out some obligations that, in achieving its quantified emission limitation and reduction commitments under Article 3 (of UNFCCC), each State Party should: implement and/or further elaborate policies and measures in accordance with its national circumstances;²⁰ and cooperate with

¹⁸ UNFCCC, Article 3.

¹⁹ United Nations, Kyoto Protocol to the United Nations Framework Convention on Climate Change, *Secretariat for the United Nations Framework Convention on Climate Change*, UN Doc FCCC/CP/1997/7/Add.1, Dec. 10, 1997; 37 ILM 22 (1998).

²⁰ These include enhancement of energy efficiency in relevant sectors of the national economy; protection and enhancement of sinks and reservoirs of greenhouse gases not controlled by the Montreal Protocol, taking into account its commitments under relevant international environmental agreements; promotion of sustainable forest management practices, afforestation

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other such Parties to enhance the individual and combined effectiveness of their policies and measures adopted under this Article, pursuant to Article 4, paragraph 2(e) (i), of the Convention. To this end, these Parties are to take steps to share their experience and exchange information on such policies and measures, including developing ways of improving their comparability, transparency and effectiveness.²¹

The Parties are to strive to implement policies and measures under this Article in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially developing country Parties and in particular those identified in Article 4, paragraphs 8 and 9, of the Convention, taking into account Article 3 of the Convention.

6.2.4 Paris Agreement

The *Report of the Conference of the Parties on its twenty-first session held in Paris from 30 November to 13 December 2015 (Paris Agreement)*²² was adopted at Conference of the Parties (COP) 21 in Paris, where Parties to the UNFCCC reached a landmark agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future.²³ The Paris Agreement is meant to build upon the Convention and – for the first time – brings all nations into a common cause to undertake take ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so.²⁴

and reforestation; promotion of sustainable forms of agriculture in light of climate change considerations; research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovative environmentally sound technologies; progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that run counter to the objective of the Convention and application of market instruments; encouragement of appropriate reforms in relevant sectors aimed at promoting policies and measures which limit or reduce emissions of greenhouse gases not controlled by the Montreal Protocol; measures to limit and/or reduce emissions of greenhouse gases not controlled by the Montreal Protocol in the transport sector; limitation and/or reduction of methane emissions through recovery and use in waste management, as well as in the production, transport and distribution of energy.

²¹ Kyoto Protocol, Article 2.

²² 1/CP.21.

²³ UNFCCC, *Summary of the Paris Agreement*, available at <http://bigpicture.unfccc.int/#content-the-paris-agreement> [Accessed on 20/08/2016]

²⁴ Ibid.

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The Paris Agreement's central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.²⁵ Additionally, the agreement aims to strengthen the ability of countries to deal with the impacts of climate change.²⁶

The Paris Agreement was opened for signature on 22 April 2016 – Earth Day – at UN Headquarters in New York and it is to enter into force 30 days after 55 countries that account for at least 55% of global emissions have deposited their instruments of ratification.²⁷

The Paris Agreement, in seeking to strengthen the global response to climate change, reaffirms the goal of limiting global temperature increase to well below 2 degrees Celsius, while pursuing efforts to limit the increase to 1.5 degrees.²⁸

The Paris Agreement also obligates developed country Parties to provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention.²⁹ The agreement also provides that the Financial Mechanism of the Convention, including the Green Climate Fund (GCF), shall serve the Agreement.³⁰

The decision of COP 21 also welcomed the efforts of all non-Party stakeholders to address and respond to climate change, including those of civil society, the private sector, financial institutions, cities and other sub-national authorities. These stakeholders were requested to scale up their efforts and showcase them via the Non-State Actor Zone for Climate Action platform.³¹ Parties also recognized the need to strengthen the knowledge, technologies, practices and

²⁵ Ibid, Article 2.

²⁶ Ibid.

²⁷ Article 21(1), *Report of the Conference of the Parties on its twenty-first session held in Paris from 30 November to 13 December 2015*.

²⁸), *Report of the Conference of the Parties on its twenty-first session held in Paris from 30 November to 13 December 2015*, Article 2.

²⁹ *Report of the Conference of the Parties on its twenty-first session held in Paris from 30 November to 13 December 2015*, Article 9(1).

³⁰ Ibid, Article 9(8) (9).

³¹ UNFCC, *Summary of the Paris Agreement*, op cit.

efforts of local communities and indigenous peoples, as well as the important role of providing incentives through tools such as domestic policies and carbon pricing.³²

The Paris Agreement on post-2020 actions on climate change succeeds the Kyoto Protocol on climate change matters. Unlike the Kyoto Protocol, it provides a framework for all countries to take action against climate change and for the first time brings together all nations for a common cause under the UNFCCC.³³ It also envisages an all-inclusive approach to climate mitigation and adaptation, considering that it incorporates the efforts of non-party stakeholders.

6.2.5 Montreal Protocol on Substances that Deplete the Ozone Layer, 1987 (Montreal Protocol)

The Montreal Protocol³⁴ was adopted in order to legally enforce phasing out of the production and use of ozone depleting substances such as hydro chlorofluorocarbons (HCFCs), a substance mainly used in cooling and refrigeration and in the manufacture of foam products. The protocol has been hailed as having greatly contributed to a significant drop in total global production and consumption of ozone depleting substances used in agricultural, consumer and industrial sectors around the world. It has also generated climate benefits as some of these substances are greenhouse gases, too.³⁵

6.2.6 East African Community Climate Change Policy

The *East African Community Climate Change Policy*³⁶ was formulated with the overall aim of contributing to sustainable development in the East African Region through harmonized and coordinated regional strategies, programmes and actions to respond to climate change.³⁷

The *EAC Climate Change Policy* recommends that some of the mitigation measures for climate change should include; afforestation, reforestation, promotion of energy efficiency, efficient crop and livestock production systems and efficient

³² Ibid.

³³ 'Chapter 8: Climate Change and Sustainable Development,' pp. 176-191 at p. 179.

³⁴ Montreal Protocol on Substances that Deplete the Ozone Layer, 1987 (Montreal Protocol),

³⁵ The World Bank, 'Montreal Protocol,' *Climate Change Brief*, October 23, 2013. Available at <http://www.worldbank.org/en/topic/climatechange/brief/montreal-protocol> [Accessed on 04/09/2016].

³⁶ East African Community (EAC) Climate Change Policy, EAC Secretariat, Arusha, Tanzania, April 2011.

³⁷ Clause 2.1.

transport systems, waste management, while capturing opportunities in emission reductions in the region such as access to Carbon Credit facilities.³⁸ As adaptation measures for climate change, the Policy aims at streamlining *inter alia*: irrigation, crop and livestock production; protection of wildlife and key vulnerable ecosystems such as wetlands, coastal, marine and forestry ecosystems; and improving land use, soil protection, tourism, infrastructure and human settlement.³⁹

6.3 National Initiatives on Climate Change and Sustainable Development

Although not necessarily adequate, Kenya has taken some positive measures towards cushioning farmers and the general agriculture sector in Kenya against the effects of climate change, sustainable energy, as well as addressing climate change problems in general. Indeed, Kenya has been hailed as being among the first non-LDC countries in Africa to develop government plans for responses to climate change across key economic sectors.⁴⁰ For instance, about five years ago, the Ministry of Environment and Mineral Resources, the then Office of the Prime Minister and Ministry of Development of Northern Kenya and other Arid Lands developed a five-year Natural Resources Management Program (2010–2014)⁴¹ whose overall objective was to contribute to reduced poverty in the context of “Kenya Vision 2030” so as to safeguard the state of the environment and promote sustainable management of natural resources, including adaptation to climate change.⁴²

From the best international practices, the following have been identified as potential adaptation and mitigation strategic interventions to address gaps in agricultural production in Kenya: Promotion of the creation of weather based insurance scheme for crop and livestock production; Promotion of conservation

³⁸ Ibid, p. ii.

³⁹ Ibid, p. ii.

⁴⁰ Maina, I., et. al., M. FAC Working Paper 70. *Agriculture and Climate Change in Kenya: Climate Chaos, Policy Dilemmas*. Future Agricultures Consortium, Brighton, UK (2013) 30 pp. at p. 4. Available at http://r4d.dfid.gov.uk/pdf/outputs/Futureagriculture/FAC_Working_Paper_070.pdf [Accessed on 17/09/2014].

⁴¹ Republic of Kenya, *Natural Resources Management Program (2010–2014)*, (Government Printer, Nairobi).

⁴² Waithaka, M., et. al. (eds), Chapter 7, ‘East African Agriculture and Climate Change: A Comprehensive Analysis’, *International Food Policy Research Institute*, Washington, DC, 2013, p.2. Available at <http://www.ifpri.org/sites/default/files/publications/rr181ch07.pdf> [Accessed on 17/07/2014].

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agriculture to ensure efficient use of water resources through drip irrigation, water recycling, and reuse, mulching and appropriate land-use techniques, and so on; Promotion of appropriate irrigation technologies suitable for different agro-climatic regions and sensitive to ecological systems; and facilitation of the enhancement of farming systems that encourage crop diversification, including the cultivation of more drought-tolerant food crops such as millet, sorghum and sweet potatoes.⁴³

Further, the United Nations Economic Commission for Africa observes that Kenya needs advanced agricultural innovation, including the development of and deployment of next generation transgenic⁴⁴ to meet the growing challenges of food security and climate change, and advanced crop varieties are needed to meet these challenges by creating improved crops with greater resilience to climate change and climate variability.⁴⁵

6.3.1 Climate Change Act, 2016

The *Climate Change Act, 2016*⁴⁶ provides for the legal and institutional framework for the mitigation and adaption to the effects of climate change; to facilitate and enhance response to climate change; to provide for the guidance and measures to achieve low carbon climate resilient development and for connected purposes.⁴⁷

⁴³ United Nations Economic Commission for Africa, 'An Assessment of Agricultural Sector Policies and Climate Change in Kenya: Nexus between Climate Change Related Policies, Research and Practice: Final Report' December, 2013, op. cit., pp. 3-4.

⁴⁴ Although Genetically Modified Organisms' food (commonly known as GMOs) have elicited mixed reactions in the country.

⁴⁵ United Nations Economic Commission for Africa, 'An Assessment of Agricultural Sector Policies and Climate Change in Kenya: Nexus between Climate Change Related Policies, Research and Practice: Final Report', op cit. p. 4.

⁴⁶ No. 11 of 2016, Laws of Kenya.

The Act defines "climate change" to mean a change in the climate system which is caused by significant changes in the concentration of greenhouse gases as a consequence of human activities and which is in addition to natural climate change that has been observed during a considerable period (s.2).

⁴⁷ Ibid, preamble. The Act, *inter alia*, provides: a framework for mitigating and adapting to the effects of climate change on all sectors of the economy and levels of governance; a mechanism for coordination and governance of matters relating to climate change; coordination mechanism for formulation of programmes and plans to enhance the resilience of human and ecological systems against the impacts of climate change; for mainstreaming of the principle of sustainable development in the planning for and on climate change response strategies and actions; for promotion of social and economic measures in climate change responses to support sustainable human development; and a mechanism for coordination of measuring , verification and reporting of climate interventions (S.3 (1)).

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The Act establishes the National Climate Change Council⁴⁸ and the functions of the Council are to, *inter alia*: advise the national and county governments on legislative and other measures necessary for mitigating and adapting to the effects of climate change; provide coordination between and amongst various governmental and non-governmental stakeholders dealing with matters related to climate change; advise the national and county governments on regional and international conventions, treaties and agreements on climate change to which Kenya is a party or should be a party to and follow up the implementation of the conventions, treaties and agreements to which Kenya is a party; and coordinate negotiations on climate change related issues at the local, regional and international levels.⁴⁹

The Act is to be applied in all sectors of the economy by the national and county governments to- mainstream climate change responses into development planning, decision making and implementation; build resilience and enhance adaptive capacity to the impacts of climate change; formulate programmes and plans to enhance the resilience and adaptive capacity of human and ecological systems to the impacts of climate change; mainstream and reinforce climate change disaster risk reduction into strategies and actions of public and private entities; mainstream intergenerational and gender equity in all aspects of climate change responses; provide incentives and obligations for private sector contribution in achieving low carbon climate resilient development; promote low carbon technologies, improve efficiency and reduce emissions intensity by facilitating approaches and uptake of technologies that support low carbon, and climate resilient development; facilitate capacity development for public participation in climate change responses through awareness creation, consultation, representation and access to information; mobilize and transparently manage public and other financial resources for climate change response; provide mechanisms for, and facilitate climate change research and development, training and capacity building; mainstream the principle of sustainable development into the planning for and decision making on climate change response; and integrate climate change into the exercise of power and functions of all levels of governance, and to enhance cooperative climate change governance between the national government and county governments.⁵⁰

⁴⁸ S. 4(1).

⁴⁹ s. 5, No. 11 of 2016, Laws of Kenya.

⁵⁰ S. 3(2), No. 11 of 2016, Laws of Kenya.

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The Constitution of Kenya calls for the formulation of adaptation and mitigation legislation, policies and strategies by providing for sustainable development as one of the national values and principles of governance which must bind all State organs, State officers, public officers and all persons whenever any of them: applies or interprets the Constitution; enacts, applies or interprets any law; or makes or implements public policy decisions.⁵¹

The Climate Change Act reflects some of the best practices and approaches as envisaged in international and regional legal and regulatory instruments on climate change adaptation and mitigation. This law will hopefully boost the efforts to reverse the effects of climate change in the country and demonstrates Kenya's commitment to tackle this threat to realisation of sustainable development. However, it requires all stakeholders to actively engage each other in tackling the problem of climate change through reversing the already existing effects while preventing deterioration of the problem. It is imperative to note that an effective legal and institutional framework that is not backed by political goodwill and also excludes local communities in climate change mitigation efforts is likely to be ineffective or even fail.

6.3.2 Natural Resource Management Programme

The *Natural Resource Management Programme 2010-2014: Component 2 on Medium-Term ASAL Programme Kenya* rightly points out that poor natural resource management, unsettled resource governance structures and rapid population growth, have put great strains on natural resources.⁵² It also identifies the critical issues as including land degradation, land-use conflicts, lost opportunities for sustainable natural resource utilisation, depletion of water catchment areas, and a serious loss of biodiversity.⁵³ Consequently, the effects have been particularly adverse in the arid and semi-arid regions of the country, where the environment is threatened by increasingly unsustainable use of the areas with the highest potential for production during the dry season and which are seeing expanding agriculture, fuel-wood collection, charcoal burning, deforestation, and localized overgrazing – all exacerbated by the impacts of climate change.⁵⁴

⁵¹ See Articles 10 and 69.

⁵² Government of Kenya and Danish Ministry of Foreign Affairs, *Natural Resource Management Programme 2010-2014: Component 2 on Medium-Term ASAL Programme, Kenya*, p.2.

⁵³ Ibid.

⁵⁴ Ibid.

6.3.3 Technology Transfer

The National Climate Change Action Plan as provided for under the Climate Change Act, 2016 is to prescribe measures and mechanisms to, inter alia, strengthen approaches to climate change research and development training and technology transfer.⁵⁵ In formulating the National Climate Change Action Plan, the Cabinet Secretary is also to be informed by, inter alia, technology and technological innovations relevant to climate change.⁵⁶

The United Nations asserts that transfer of technologies to developing countries is central to pursuing meaningful adaptation and mitigation actions, as well as more broadly advancing sustainable development goals and objectives.⁵⁷ This, it argues, is important in promoting the diffusion and uptake of environmentally friendly and climate-friendly technologies and practices towards achieving objectives of mitigation and adaptation at the country level.⁵⁸

6.3.4 Renewable Energy Production

Economically sustainable energy strategies require policies to be implemented for reduced energy demand and increased investments in low-carbon electricity.⁵⁹ It is argued that this shifts energy investment flows from conventional fossil fuel technologies towards renewables, the consequence of which is decreased levels of greenhouse gas emissions, leading to faster decarbonisation rates and reduced exposure of communities to climate change in the long term, through reduced risk of more severe climate change impacts.⁶⁰ It has been documented that renewable energy production and efficiency improvements in energy use can make a significant contribution to reducing GHG emissions.⁶¹

Kenya's Energy Act 2006⁶² defines 'renewable energy' to mean all non-fossil sources including, but not limited to biomass, geothermal, small hydro-power,

⁵⁵ S. 13(3) (k), No. 111 of 2016, Laws of Kenya.

⁵⁶ *Ibid.*, S. 13(5) (b).

⁵⁷ United Nations, 'Acting on Climate Change: The UN Delivering as One,' (United Nations, New York, November 2008), p.32.

⁵⁸ *Ibid.*, p. 32.

⁵⁹ Ansuategi, A., et al, *The Impact Of Climate Change On The Achievement Of The Post-2015 Sustainable Development Goals*, (Climate and Development Knowledge Network, May 2015), p. 12.

⁶⁰ *Ibid.*

⁶¹ Beg, N., 'Linkages between climate change and sustainable development,' *op cit.*, p.135.

⁶² No. 12 of 2006, Laws of Kenya, Revised Edition 2012 [2006].

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solar, wind, sewage treatment and plant gas.⁶³ The major sources of energy in the country are non-renewable and these have adverse effects not only on the consumers but also on the economic development. Problems relating to environmental degradation, land clearance, overgrazing, deforestation, drought and desertification are placing more and more pressure on dwindling Bioenergy resources.⁶⁴ Biomass fuels are the largest source of primary energy in Kenya with wood fuel consumption accounting for over 68% of the total primary energy consumption particularly for rural households. Biomass use comes with air and soil pollution, environmental degradation. These also pose a major challenge not only to the health of the users but also to the environmental sustainability and conservation.

Section 103 (1) of the *Energy Act 2006* obligates the Cabinet Secretary responsible for energy matters to promote the development and use of renewable energy technologies, including but not limited to biomass, biodiesel, bio-ethanol, charcoal, fuel-wood, solar, wind, tidal waves, hydropower, biogas and municipal waste.⁶⁵ This is to be achieved through *inter alia*: formulating a national strategy for coordinating research in renewable energy; providing an enabling framework for the efficient and sustainable production, distribution and marketing of biomass, solar, wind, small hydros, municipal waste, geothermal and charcoal; promoting the use of fast maturing trees for energy production including bio-fuels and the establishment of commercial woodlots including peri-urban plantations; promoting the use of municipal waste for energy production; and promoting the development of appropriate local capacity for the manufacture, installation, maintenance and operation of basic renewable technologies such as bio-digesters, solar systems and hydro turbines; promoting international co-operation on programmes focusing on renewable energy sources; harnessing opportunities offered under clean development mechanism and other mechanisms including, but not limited to, carbon credit trading to promote the development and exploitation of renewable energy sources; promoting the utilization of renewable energy sources for either power generation or transportation; promoting co-generation of electric power by sugar millers and

⁶³ S. 2, No. 12 of 2006, Laws of Kenya.

⁶⁴ Pisces, 'Gender and Equity in Bioenergy Access and Delivery in Kenya' Available at <http://www.pisces.or.ke/pubs/pdfs/Gender%20and%20Equity%20in%20Bioenergy%20in%20Kenya.pdf> [Accessed on 1/09/2016].

⁶⁵ S. 103, Energy Act 2006.

sale of such electric power through the national grid directly to the consumers; and promoting the production and use of gasohol and biodiesel.⁶⁶

Despite these provisions, the use of renewable energy in Kenya has not gone large scale as the Government has not done much especially in relation to financial support so as to promote the same and ensure that even the poor can afford it. The local communities have to either do it individually or in community-based groups to make it affordable. A good example is a story that appeared in one of the local dailies where farmers in Murang'a County have set up mini biogas plants in their own homes.⁶⁷ According to the Article, a local venture titled 'Boosting Young Entrepreneurs' Programme has boosted about eight farmers by extending a loan to them for the project in a bid to promote the use of sustainable energy through community members. The aim is to replace firewood with biogas so as to achieve the broader goal of reversing poverty cycle and providing new opportunities for growth for the residents of the area.⁶⁸

The foregoing scenario highlights the inadequacy of government efforts in promoting the same. The above project cost owners about Kenya Shillings seventy five thousand and an accruing interest of about Kenya Shillings five thousand. The reality is that many of the people around the area may not be able to achieve this dream due to abject poverty. Poverty affects people's access to energy due to the involved costs and this adversely affects their efforts to liberate themselves from poverty and maintain sustainability.

There is need to put in place measures that encourage more investment in the renewable energy options. This will not only eliminate the environmental problems that come with non-renewable energy sources but will also expand the energy sources in country thus ensuring a wider distribution and affordability by consumers. The stakeholders should exploit the various alternative source of energy to boost reliability and availability of energy in the country. Such alternatives include but are not limited to biomass, geothermal, solar, wind, small hydros and municipal waste. Much needs to be done to facilitate their successful roll out to the communities. Solar energy, if efficiently harnessed, can be used to

⁶⁶ Ibid, S. 103(2).

⁶⁷The Standard Xtra 'Let There Be light' pp 2-2, Tuesday, October 29, 2013.

⁶⁸ Ibid, p. 3.

power very many households and businesses especially in the rural areas and the peri-urban areas in the country.

Kenya's energy profile is said to be predominated by traditional biomass energy to meet the energy needs of the rural households and a heavy dependence on imported petroleum for the modern economic sector needs. As a result, the country faces challenges related to unsustainable use of traditional forms of biomass and exposure to high and unstable oil import prices.⁶⁹

Bioenergy comes from any fuel that is derived from biomass. Biomass means any plant-derived organic matter available on a renewable basis. The other form of biomass is Liquid bio-fuels which are liquid fuels that can be produced from agricultural and forest products or the biodegradable portion of industrial and municipal waste. The most widely used forms of liquid bio-fuels are bio-ethanol and biodiesel. Bio-ethanol is produced from agricultural products such as starchy and cereal crops (sugarcane, corn, beets, wheat and sorghum) while the main feedstock used in biodiesel production are oil crops and trees such as rapeseed, soy, sunflower, palm, jatropha or coconut.⁷⁰ Section 2 of the *Energy Act 2006* defines biomass to mean 'non-fossilized and biodegradable organic material originating from plants, animals and micro-organism and includes bio-ethanol, biogas, charcoal, fuel-wood and agro waste'.

Although renewable energy is available in Kenya, large scale exploration of all the sources of renewable energy have not been successfully achieved for various reasons which may include, *inter alia*, inadequate funds, lack of political goodwill and ignorance, amongst consumers. If such alternative sources of energy are harnessed and fully exploited, they would help minimize greenhouse gases emissions, conserve forests and consequently mitigate climate change problems.

⁶⁹ Ibid

⁷⁰ Annie Dufey, *Biofuels production, trade and sustainable development: emerging issues*, International Institute for Environment and Development, p. 1, 2006, London. Available at <http://pubs.iied.org/pdfs/15504IIED.pdf> Accessed on 4th November, 2013

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There is hope since Kenya has already introduced feed-in tariffs (FITs)⁷¹ to promote renewable energy generation in the country.⁷² FiTs were introduced in Kenya in 2008 and were revised in 2010 to accommodate additional renewable energy sources and reviewed the tariffs. These included wind, biomass, hydro, geothermal, biogas and cogeneration projects. FiTs levels have been set at 12 US cents per kWh for wind, 8 US Cents per kWh for biomass and 8.5 US Cents per kWh for geothermal.⁷³ The success of FITs would help alleviate the problem and enhance access to energy by, all including the poor.

Kenya's FIT policy is guided by the following objectives: to facilitate resource mobilization by providing investment security and market stability for investors in Renewable Energy Sources (RES) electricity generation; to reduce transaction and administrative costs by eliminating the conventional bidding processes; and to encourage private investors to operate the power plant prudently and efficiently so as to maximize its returns.⁷⁴ It has been noted that a FITs policy can achieve the following: environmental integrity including the reduction of greenhouse gas emissions; enhancing energy supply security, reducing the country's dependence on imported fuels; and coping with the global scarcity of fossil fuels and its attendant price volatility; and finally enhancing economic competitiveness and job creation.⁷⁵ The above advantages make FITs policy worth exploring as it is a step towards reduction of greenhouse gases and addressing climate change.

⁷¹ A feed-in tariff (FIT) has been defined as a policy instrument that makes it mandatory for energy companies or "utilities" responsible for operating the national grid to purchase electricity from renewable energy sources at a pre-determined price that is sufficiently attractive to stimulate new investment in the renewables sector. This, in turn, ensures that those who produce electricity from identified renewable energy sources such as solar, wind and other renewable sources have a guaranteed market and an attractive return on investment for the electricity they produce. Aspects of an FIT include access to the grid, long-term power purchase agreements and a set price per kilowatt hour (kWh) (United Nations Environment Programme, Green Economy, *Feed-in tariffs in Kenya*, Available at

<http://www.unep.org/greeneconomy/SuccessStories/FeedintariffsinKenya/tabid/29864/Default.aspx> [Accessed on 01/09/2016].

⁷² Norton Rose Fulbright, 'Scaling-up renewable energy in Africa: Kenya.' Available at <http://www.nortonrosefulbright.com/knowledge/publications/58980/scaling-up-renewable-energy-in-africa-kenya> [Accessed on 01/09/2016].

⁷³ Ibid. See also Ministry of energy website <<http://www.energy.go.ke>> [Accessed on 01/09/2016].

⁷⁴ Government of Kenya, Ministry of Energy, *Feed-in-Tariffs policy for wind, biomass, small hydros, geothermal, biogas and solar*, 2nd revision, December, 2012, p. 6.

⁷⁵ Ibid.

6.3.5 Effective Climate Change Adaptation and Mitigation Measures

Greenhouse gases warm the surface and the atmosphere with significant implications for rainfall, retreat of glaciers and sea ice, sea level, among other factors.⁷⁶ Agenda 2030 on Sustainable Development calls for strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.⁷⁷ Further, it requires integration of climate change measures into national policies, strategies and planning.⁷⁸ It also calls states to improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.⁷⁹

Adaptation refers to adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts. It refers to changes in processes, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change.⁸⁰ The *Climate Change Act, 2016*⁸¹ also defines adaptation to mean adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects which moderates harm or exploits beneficial opportunities.⁸² The Act also links greenhouse gases and climate change by defining climate change to mean a change in the climate system which is caused by significant changes in the concentration of greenhouse gases as a consequence of human activities and which is in addition to natural climate change that has been observed during a considerable period.⁸³

The Paris Agreement establishes binding commitments by all Parties to prepare, communicate (every 5 years) and maintain a nationally determined contribution (NDC) and to pursue domestic measures to achieve them.⁸⁴ It also encourages Parties to conserve and enhance, as appropriate, sinks and reservoirs of

⁷⁶ Ramanathan, V. & Feng, Y., 'Air pollution, greenhouse gases and climate change: Global and regional perspectives,' *Atmospheric Environment*, Vol.43, 2009, pp. 37-50 at p.37.

⁷⁷ *Ibid*, para. 13.1.

⁷⁸ *Ibid*, para. 13.2.

⁷⁹ *Ibid*, para. 13.3.

⁸⁰ Burton, I., et al, 'Chapter 18: Adaptation to Climate Change in the Context of Sustainable Development and Equity,' pp. 879-906 at p. 879.

⁸¹ No. 11 of 2016, Laws of Kenya.

⁸² S. 2, No. 11 of 2016, Laws of Kenya.

⁸³ S. 2, No. 11 of 2016, Laws of Kenya.

⁸⁴ *Ibid*, Article 4(2).

greenhouse gases as referred to in Article 4, paragraph 1(d) of the Convention, including forests.⁸⁵

Further, the Paris Agreement establishes a mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development, as well as defining a framework for non-market approaches to sustainable development.⁸⁶

The Paris Agreement also establishes a global goal to significantly strengthen national adaptation efforts – enhancing adaptive capacity, strengthening resilience and reduction of vulnerability to climate change – through support and international cooperation. It also recognizes that adaptation is a global challenge faced by all. All Parties should therefore submit and update periodically an adaptation communication on their priorities, implementation and support needs, plans and actions. Developing country Parties are to receive enhanced support for adaptation actions.⁸⁷

It has rightly been argued that the extent to which ecosystems, food supplies, and sustainable development are vulnerable or “in danger” depends both on exposure to changes in climate and on the ability of the impacted system to adapt.⁸⁸ Further, adaptation depends greatly on the adaptive capacity or adaptability of an affected system, region, or community to cope with the impacts and risks of climate change, where the adaptive capacity of communities is determined by their socioeconomic characteristics.⁸⁹ As such, it is suggested that there is need for enhancement of adaptive capacity which represents a practical means of coping with changes and uncertainties in climate, including variability and extremes to reduce vulnerabilities and promote sustainable development.⁹⁰ Scholars have argued that enhancement of adaptive capacity involves similar requirements as promotion of sustainable development, and have thereof suggested some measures, including: Improved access to resources; reduction of

⁸⁵ Ibid, Article 5(1).

⁸⁶ *Report of the Conference of the Parties on its twenty-first session held in Paris from 30 November to 13 December 2015*, See Article 6.

⁸⁷ Ibid, Article 7.

⁸⁸ Burton, I., et al, ‘Chapter 18: Adaptation to Climate Change in the Context of Sustainable Development and Equity,’ pp. 879-906 at p. 879.

⁸⁹ Ibid.

⁹⁰ Ibid.

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poverty; lowering of inequities in resources and wealth among groups; improved education and information; improved infrastructure; diminished intergenerational inequities; respect for accumulated local experience; moderate long-standing structural inequities; assurance that responses are comprehensive and integrative, not just technical; active participation by concerned parties, especially to ensure that actions match local needs and resources; and improved institutional capacity and efficiency.⁹¹

It is true that vulnerability to specific impacts of climate change will be most severe when and where they are felt together with stresses from other sources, including non-climatic stresses such as poverty, unequal access to resources, food security, environmental degradation and risks from natural hazards.⁹² These stresses, which fall within the economic, ecological and social dimensions of sustainable development, must therefore be satisfactorily addressed as part of addressing the threats posed by climate change.

Section 57(1) of the *Environmental Management and Coordination Act* (EMCA)⁹³ provides that the Cabinet Secretary responsible for finance may, on the recommendation of the Council, propose to Government tax and other fiscal incentives, disincentives or fees to induce or promote the proper management of the environment and natural resources or the prevention or abatement of environmental degradation. The tax and fiscal incentives, disincentives or fees may include: customs and excise waiver in respect of imported capital goods which prevent or substantially reduce environmental degradation caused by an undertaking; tax rebates to industries or other establishments that invest in plants, equipment and machinery for pollution control, re-cycling of wastes, water harvesting and conservation, prevention of floods and for using other energy resources as substitutes for hydrocarbons; tax disincentives to deter bad environmental behavior that leads to depletion of environmental resources or that cause pollution; or user fees to ensure that those who use environmental resources pay proper value for the utilization of such resources.⁹⁴

⁹¹ Ibid, p. 899.

⁹² Yohe, G.W., et al, 'Perspectives on climate change and sustainability,' *Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, M.L. Parry, et al, (Eds.), (Cambridge University Press, Cambridge, UK, 2007), 811-841 at p. 813.

⁹³ *Environmental Management and Coordination Act* (EMCA), Act No. 8 of 1999, Laws of Kenya.

⁹⁴ Ibid, s. 57(2).

Further, section 104 of the Energy Act, 2006 mandates the Cabinet Secretary responsible for Energy to develop and manage a prudent national energy efficiency and conservation programme.⁹⁵ So as to enhance energy efficiency and conservation in the country, the Cabinet Secretary is to *inter alia*: give financial assistance to institutions for promoting efficient use of energy and its conservation; give financial incentives for any investment made to replace or install additional capital investments to improve energy efficiency; and make it mandatory, in collaboration with Kenya Bureau of Standards, the importation of energy efficient but cost effective technologies. Indeed, in the financial year 2012/2013 national budget, the Finance Cabinet Secretary zero-rated all the solar energy equipment imports (photovoltaic devices or solar cells) so as to encourage solar energy exploration in the country.

These provisions may be utilised in tackling the problem of pollution as a climate change mitigation measure by discouraging use of technology that contributes to greenhouse gases or causes pollution.

6.3.6 Increased Reforestation and Afforestation/Agroforestry

It has been noted that although hunting, charcoal production and timber felling have been banned by the Kenya government, informally they remain important sources of food and income especially in the rural areas.⁹⁶ Forests and trees contribute to food and nutrition security in various ways and provide direct support to 90 percent of the world's 1.2 billion poorest people and to nearly half of the 2.8 billion people who live on US\$2 or less per day.⁹⁷ They promote food availability indirectly by increasing the sustainability of agricultural production systems.⁹⁸ This arises from the fact that forests and trees maintain land productivity by drawing nutritive elements from deep in the soil into the production system and reducing wind and water erosion.⁹⁹ Further, agro-forestry has great potential to reduce vulnerability to climate shocks as permanent tree

⁹⁵ S. 104(1), Energy Act 2006.

⁹⁶ Gibbon, H., et. al., 'Forest and Woodland Management in East and Central Africa: Emerging models for improvement in livelihoods and natural resource management in Kenya and Zambia', 17th Commonwealth Forestry Conference 2005, Colombo Sri Lanka, p.4.

⁹⁷ FAO, Promoting decent employment in forestry for improved nutrition and food security, *Background paper for the International Conference on Forests for Food Security and Nutrition*, FAO, Rome, 13–15 May, 2013, p. 2.

⁹⁸ FAO, Promoting decent employment in forestry for improved nutrition and food security, op. cit., p.7.

⁹⁹ Ibid.

cover protects and improves the soil while increasing soil carbon stocks, thus contributing to climate change adaptation and reducing the dependency on single staple crops.¹⁰⁰

The conservation and sustainable development of forest ecosystems and their associated resources is essential for sustainable poverty reduction and sustainable development. Forest ecosystems are said to be important in conservation of soil, water and biodiversity as well as in moderation of climate. Further, they are the richest terrestrial habitats for biodiversity and useful for maintaining forest biodiversity which safeguards the economic potential of future opportunities for new non-timber products such as food and medicine as well as social sustainability by offering aesthetic, spiritual and recreational settings for people.¹⁰¹ The Kenya Vision 2030 targets the planting of at least seven billion trees to address food, water and energy security.

6.3.7 Carbon Credit facilities

REDD-related¹⁰² activities of the UN system aspire to contribute towards achieving sustainable management of forests that enables the economic, environmental and social goods and services of forests to benefit countries, communities and forest users, while also contributing to global reductions in greenhouse gas emissions.¹⁰³ The UN-REDD Programme includes the following key activities: at international level, promoting coherence across REDD initiatives, facilitating the exchange of national experiences and feeding into efforts in developing REDD arrangements linked with the UNFCCC process; at national level, assisting developing countries to prepare and implement national REDD strategies focusing on nationally-identified needs and priorities, including co-benefits.¹⁰⁴ The Kenya Agricultural Carbon Project (KACP), developed by the Vi Agroforestry Programme, receives mitigation funding from the WorldBank's BioCarbon Fund for soil carbon sequestration and above-ground sequestration in trees.

¹⁰⁰ Ibid, p.11.

¹⁰¹ *National Environment Policy* 2013, op. cit. Clause 4.1.1.

¹⁰² UN Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD).

¹⁰³ United Nations, 'Acting on Climate Change: The UN Delivering as One,' (United Nations, New York, November 2008), p.28.

¹⁰⁴ Ibid, p. 29.

Apart from providing farmers with a small sum of extra cash, the switch to climate-smart agricultural practices has had the additional benefits of increasing crop yields as well as improving farmer's resilience to climate change.¹⁰⁵

In January 2014, it was reported that the first batch of Smallholder farmers in western Kenya started benefiting from carbon credits generated by improving farming techniques.¹⁰⁶ These were the first credits worldwide issued under the Sustainable Agricultural Land Management (SALM) carbon accounting methodology.¹⁰⁷

The Kenya Agricultural Carbon Project (KACP) involves over 60,000 farmers on 45,000 hectares to support farming that is more productive, sustainable and climate-friendly.¹⁰⁸ After years of land degradation, many farmers struggled to grow enough food for their families but after the World Bank Programme intervention, they are now using a wide range of methods to increase the organic matter in soils.¹⁰⁹ In the long term, this is expected to improve the soil's water absorption, nutrient supply and biodiversity, and help prevent erosion, for higher farm yields, improved food security and making agriculture more resilient to climate change.¹¹⁰

6.4 Conclusion

There is need to ensure that there is full and meaningful implementation of the international conventions and other legal and regulatory instruments on combating climate change and ensuring that countries strengthen and promote the integration of climate change concerns into sustainable development agenda. However, this should be done in cognisance of the local needs and circumstances of each country for best results.

It has rightly been pointed out that while climate change results from activities all over the globe (with rather unevenly spread contributions to it), it may lead to

¹⁰⁵ Ibid.

¹⁰⁶ World Bank, 'Kenyans Earn First Ever Carbon Credits From Sustainable Farming,' *Press Release January 21, 2014*, available at <http://www.worldbank.org/en/news/press-release/2014/01/21/kenyans-earn-first-ever-carbon-credits-from-sustainable-farming> [Accessed on 24/05/2016].

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

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very different impacts in different countries, depending on local/regional environmental conditions and on differences in vulnerability to climate change – independent of the contributions to climate change of these countries.¹¹¹ The difference in impacts and vulnerability has been acknowledged in the *Paris Agreement*'s bottom-up approach, which allows each nation to submit its own national plan for reducing greenhouse gas emissions, unlike the top-down approach advocated by the *Kyoto Protocol*, giving each country an emission reduction target.

The United Nations suggests that building up the individual and collective capacity of countries to monitor climate change, enhance climate science and services and utilize climate predictions is crucial for effective adaptation and mitigation strategies.¹¹² Such capacity, it asserts, also enables timely planning to reduce the impact of increasing natural disasters, enhance food security and manage climate risks in all socioeconomic sectors.¹¹³ From the foregoing, it is true that adaptation measures embedded within climate-change policies could, by design, try to reduce vulnerabilities and risks by enhancing the adaptive capacity of communities and economies, which would in turn be consistent with sustainability goals.¹¹⁴

¹¹¹ Banuri, T. & Opschoor, H., 'Climate Change and Sustainable Development,' United Nations Department of Economic and Social Affairs Working Paper No. 56, ST/ESA/2007/DWP/56, October 2007, p.2.

¹¹² United Nations, 'Acting on Climate Change: The UN Delivering as One,' (United Nations, New York, November 2008), p.12.

¹¹³ Ibid.

¹¹⁴ Burton, I., et al, 'Chapter 18: Adaptation to Climate Change in the Context of Sustainable Development and Equity,' op cit., p. 818.

Environmental Security and Sustainable Development

7.1 Introduction

This Chapter examines the concept of environmental security in the context of sustainable development. It explores the various elements of environmental security and how do they relate to sustainable development.

The importance of the environment cannot be overstated since it ensures survival of all forms of life. The enjoyment of the right to life depends on a clean and healthy environment.¹ A secure environment makes possible the exercise of the right to life certain by ensuring that any threats to life are neutralized. Although there have been widespread calls for a more secure environment, backed with conventions and global agreements on the present problem of an environment that is under threat, the uptake of actions to curb the same has been dismal and insufficient, to say the least. State and governmental efforts have not been satisfactory to effect the agreed upon principles and mechanisms.

The chapter examines the concept of environmental security as one of the elements requisite for the realisation of environmental rights. The approach adopted is both anthropocentric and ecocentric. The ecocentric approach to environmental security is relevant considering that it advocates for the conservation of the environment as a matter of right and not merely because of the benefits that accrue to the human beings.² The discourse analyses how a secure environment can promote or guarantee realisation of human rights. It is argued that in the absence of environmental security, proper development cannot be sustainably achieved. Therefore, achieving environmental security first, as a human right prerogative will ensure that the Kenyan populace is able to enjoy access to environmental goods and services and in so doing, development can be adequately pursued and responsibly achieved.

¹ See generally, Stock, A., *The Right to a Healthy Environment: How to use international legal mechanism for the protection of our environment and our health - A Manual*, (Women in Europe for a Common Future, Utrecht/Munich, September 2007).

² See generally, 'Species Extinction Is a Great Moral Wrong' (Elsevier Connect) available at <<https://www.elsevier.com/connect/species-extinction-is-a-great-moral-wrong>> [Accessed on 23/10/2015].

7.2 Conceptualising Environmental Security

Environmental degradation has become a worrying trend the world over, thus prompting discussions at all levels on how best to address the same. Indeed, it has been observed that over the last several years environmental degradation and resource scarcity have come to be perceived as threats not only to human well-being and prosperity, but also to international security.³ This has also led to calls for reconceptualisation and re-evaluation of security as traditionally understood, due to the growing potential for conflict over scarce or degraded resources, to include environmental security as an element of human security.⁴ As already pointed out, a secure environment makes it possible to exercise and enjoy the right to life by ensuring that any threats to life, and extension to human beings, are neutralized. It is argued that the notion of "environmental security," should be understood to have two dimensions. On the one hand, in placing emphasis upon the environmental dimension, security means maintaining an ecological balance, at least to the extent necessary to sustain resource supplies and life-support systems. On the other hand, in emphasizing the dimension of security in the traditional sense, the term refers to the prevention and management of conflicts precipitated by environmental decline.⁵

Environmental security is defined as environmental viability for life support, with three sub-elements; preventing or repairing military damage to the environment, preventing or responding to environmentally caused conflicts, and protecting the environment due to its inherent moral value.⁶ It has also been defined as the process of peacefully reducing human vulnerability to human-induced environmental degradation by addressing the root causes of

³ Brunnee, J., "Environmental Security in the Twenty-First Century: New Momentum for the Development of International Environmental Law?" *Fordham International Law Journal*, Vol. 18, 1995, pp. 1742-1747 at p. 1742.

⁴ *Ibid*, p. 1742; See also, Græger, N., "Environmental Security?" *Journal of Peace Research*, Vol. 33, No. 1 (Feb., 1996), pp. 109-116, at pp. 109-110; See also A.S. Tolentino, "Asean environmental security concerns," *The Manila Times*, October 3, 2015 10:16 pm, available at <http://www.manilatimes.net/asean-environmental-security-concerns/221970/> [Accessed on 17/10/2015].

⁵ Brunnee, J., "Environmental Security in the Twenty-First Century: New Momentum for the Development of International Environmental Law?" *op cit*, p. 1742.

⁶ Ayeni, A.O. & Olorunfemi, F.B., 'Reflections on Environmental Security, Indigenous Knowledge and the Implications for Sustainable Development in Nigeria,' *Jorind*, Vol. 12, No. 1, June, 2014, pp. 46-57 at p. 51.

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environmental degradation and human insecurity.⁷ This broader conception of environmental security, it has been argued, is crucial because, at least in the long term, security, even in the traditional sense, can be ensured only if security in the environmental sense is emphasized. Only where ecological balance is maintained, resources are protected, and supplies ensured, will the potential for conflict be significantly reduced. Further, focusing on common environmental interests rather than on competing strategic interests will promote international cooperation and, ultimately, security.⁸ To buttress this, it has been argued that *few threats to peace and survival of the human community are greater than those posed by the prospects of cumulative and irreversible degradation of the biosphere on which human life depends. True security cannot be achieved by mounting buildup of weapons (defence in a narrow sense), but only by providing basic conditions for solving non-military problems which threaten them. Our survival depends not only on military balance, but on global cooperation to ensure a sustainable environment* (emphasis added).⁹

The Brundtland Commission argued that the whole notion of security as traditionally understood in terms of political and military threats to national sovereignty, must be expanded to include the growing impacts of environmental stress - locally, nationally, regionally, and globally.¹⁰ They observed that there are no military solutions to 'environmental insecurity'.¹¹ There has been a growing linkage between environment and conflict.¹² Environmental deficiencies supply conditions which render conflict all the more likely. They can serve to determine the source of conflict, they can act as multipliers that aggravate core causes of conflict, and they can help to shape the nature of conflict. Moreover they can not only contribute to conflict, they can stimulate the growing use of force to repress disaffection among those who suffer the consequences of environmental

⁷ Rita, F., "The Environmental Security Debate and Its Significance for Climate Change," *The International Spectator: Italian Journal of International Affairs*, Vol. 43, Issue 3, 2008, pp.51-65 at p. 56.

⁸ Ibid; See also, Nijkamp, P., "Environmental Security and Sustainability in Natural Resource Management: A Decision Support Framework," *Serie Research Memoranda*, 1997, pp. 4-5.

Available at <http://degree.uvu.vu.nl/RePEc/vua/wpaper/pdf/19970063.pdf> [Accessed on 16/10/2015].

⁹ World Commission on Environment and Development, *Our Common Future: Report of the World Commission on Environment and Development*, 1987, A/42/427.

¹⁰ Ibid, para. 86.

¹¹ Ibid.

¹² Bromwich, B., "Environmental degradation and conflict in Darfur: implications for peace and recovery," *Humanitarian Exchange Magazine*, Issue 39, July 2008, available at <http://www.odihpn.org/humanitarian-exchange-magazine/issue-39/environmental-degradation-and-conflict-in-darfur-implications-for-peace-and-recovery> [Accessed on 10/10/2015].

decline.¹³ As a result, it is concluded that national security is no longer about fighting forces and weaponry alone, but it relates increasingly to watersheds, forests, soil cover, croplands, genetic resources, climate and other factors rarely considered by military experts and political leaders, but that taken together deserve to be viewed as equally crucial to a nation's security as military prowess.¹⁴

Environmental security has been defined in different ways to fit various contexts, and despite the many attempts, its meaning remains highly contextual.¹⁵ For instance, it has been argued that in developing countries, environmental security has more to do with a household's ability to meet the demand for environmental resources in production and consumption activities.¹⁶ In this regard, it is observed that for many of the four billion inhabitants in the developing countries, security is conceived at the most basic level of the struggle for individual survival.¹⁷ It is estimated that over eight hundred million live in absolute poverty and deprivation, five hundred million are malnourished, and many millions have no access to safe drinking-water and do not have the income necessary to purchase food.¹⁸ They lack protection against the consequences of environmental degradation and natural calamities, such as floods and drought, which, in Africa in particular, have produced famine and suffering of unprecedented proportions.¹⁹ This is the approach to environmental security that informs the discussion in this chapter.

¹³ Myers, N., "Environmental Security: What's New and Different?" Available at <http://www.envirosecurity.org/conference/working/newanddifferent.pdf> [Accessed on 11/10/2015], p.4.

¹⁴ Ibid, p.4; See also generally, B.R. Allenby, "Environmental Security: Concept and Implementation," *International Political Science Review / Revue internationale de science politique*, Vol. 21, No. 1 (Jan., 2000), pp. 5-21.

¹⁵ Skarlato, O. & Telesh, I., Environmental security and policymaking: concepts and practices in North America and Europe, a Review, *Rostock. Meeresbiolog. Beitr.*, pp. 169-185, p. 170. Available at http://www.oekologie.uni-rostock.de/fileadmin/Mathnat_Bio_Oekologie/RMB/RMB_19/RMB_19-12.pdf [Accessed on 12/10/2015].

¹⁶ Shrestha S.S. & Bhandari, P.B., "Environmental Security and Labor Migration in Nepal," *Paper for presentation at the IUSSP's XXV International Population Conference, Tours, France, July 18-23, 2005*, p. 2. Available at http://demoscope.ru/weekly/knigi/tours_2005/papers/iussp2005s52252.pdf [Accessed on 12/10/2015].

¹⁷ United Nations, "Concepts of Security," *United Nations Publication, A/40/553*, 1986, p. 20, para. 86.

¹⁸ Ibid.

¹⁹ Ibid.

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In this chapter, environmental security is used to refer to an environmental condition that is able to fully satisfy the needs of the people living around an area, those who rely on it for their survival. Human security as an element of poverty eradication has been defined as: protection of the vital core of all human lives in ways that enhance human freedoms and human fulfillment. Human security means protecting fundamental freedoms – freedoms that are the essence of life. It involves protecting people from critical and pervasive threats and situations. It includes using processes that build on people’s strengths and aspirations, thus creating political, social, environmental, economic, military and cultural systems that together give people the building blocks of survival, livelihood and dignity.²⁰ Environmental conditions, being central to human security and survival, must be addressed as one of the means of eradicating poverty. Human security can be threatened by various factors, including conflicts arising from scarce resources, as well as unhealthy environment.²¹

There are scholars who have argued that not all environmental problems lead to conflict, and not all conflicts stem from environmental problems, and that indeed it is rare for linkages to be directly and exclusively causative.²² It is argued that while environmental phenomena contribute to conflicts, they can rarely be described as sole causes: there are too many other variables such mixed in, as inefficient economies, unjust social systems and repressive governments, any of which can predispose a nation to instability-and thus, in turn, make it specially susceptible to environmental problems.²³ While this may be true, it is noteworthy that the link between the two is more pronounced in developing countries, like Kenya, where most people derive their livelihoods from the environment.²⁴

²⁰ United Nations Human Security Unit, *Human Security in Theory and Practice: An Overview of the Human Security Concept and the United Nations Trust Fund for Human Security*, 2009, p. 5. Available at

http://www.un.org/humansecurity/sites/www.un.org/humansecurity/files/human_security_in_theory_and_practice_english.pdf [Accessed on 12/10/2015].

²¹ See generally, Laura J Shepherd, *Critical Approaches to Security: An Introduction to Theories and Methods* (Routledge 2013).

²² Myers, N., “Environmental Security: What's New and Different?” *op cit*, p.3.

²³ Ibid, p.3; See also generally, N.R. Biswas, “Is the Environment a Security Threat? Environmental Security beyond Securitization,” *International Affairs Review*, Vol. XX, No. 1, Winter 2011.

²⁴ See Bocchi, S., et al, ‘Environmental Security: A Geographic Information System Analysis Approach – The Case of Kenya,’ *Environmental Management* Vol. 37, No. 2, 2005, pp. 186–199, pp. 191-195.

Competition for scarce resources may lead to a 'survival of the fittest' situation.²⁵ In such circumstances, environmental degradation poses a higher potential for conflict, as every group fights for their survival.²⁶ Even where resources are abundant, conflicts can arise when one group controls a disproportionate portion of the same ("Resource capture"). Resource capture occurs when the supply of a resource decreases due to either depletion or degradation and/or demand increases (due to population and/or economic growth).²⁷ This encourages the more powerful groups in a society to exercise more control and even ownership of the scarce resource, thereby enhancing their wealth and power.²⁸ For instance, land has been an emotive issue in Kenya as it is in the hands of a few people in the country, and this has often led to tribal clashes.²⁹

7.3 Constitution of Kenya 2010 and the Environmental Security

The preamble to the Constitution of Kenya recognises the importance of the environment and therefore calls for its respect, being the heritage of the Kenyan people, and also requires its sustenance for the benefit of future generations.³⁰ Also noteworthy is the provision that sustainable development is one of the national values and principles of governance, which must bind all State organs, State officers, public officers and all persons whenever any of them: applies or interprets the Constitution; enacts, applies or interprets any law; or makes or implements public policy decisions.³¹ This is especially important in environmental and natural resource management matters.

The Constitution also has a whole chapter dedicated to land and environmental related matters.³² The Constitution provides that every person has the right to a clean and healthy environment, which includes the right: to have the

²⁵ See generally, "Chapter 5: Survival at Stake: Violent Land Conflict in Africa," *Small Arms Survey 2013*, available at <http://www.smallarmssurvey.org/fileadmin/docs/A-Yearbook/2013/en/Small-Arms-Survey-2013-Chapter-5-EN.pdf> [Accessed on 12/10/2015].

²⁶ See Bowman, K., *et al*, "Chapter 1: Environment for Development," (United Nations), available at http://www.unep.org/geo/geo4/report/01_Environment_for_Development.pdf [Accessed on 12/10/2015].

²⁷ Khagram, S., *et al*, "From the Environment and Human Security to Sustainable Security and Development," *Journal of Human Development*, Vol. 4, No. 2, July 2003, pp. 289-313, p. 295.

²⁸ *Ibid*.

²⁹ See the *Report of the Judicial Commission Appointed to Inquire into Tribal Clashes in Kenya*, (the 'Akiwumi Commission'), (Government Printer, Nairobi, 1999).

³⁰ Preamble, Constitution of Kenya, (Government Printer, 2010).

³¹ Article 10.

³² Arts. 60-72.

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environment protected for the benefit of present and future generations through legislative and other measures, particularly those contemplated in Article 69³³; and to have obligations relating to the environment fulfilled under Article 70.³⁴ In a bid to ensure sustainability and safeguard land-related resources, the Constitution provides that land in Kenya should be held, used and managed in a manner that is equitable, efficient, productive and sustainable, and in accordance with the following principles: equitable access to land; security of land rights; sustainable and productive management of land resources; transparent and cost effective administration of land; sound conservation and protection of ecologically sensitive areas; elimination of gender discrimination in law, customs and practices related to land and property in land; and encouragement of communities to settle land disputes through recognised local community initiatives consistent with the Constitution.³⁵

These principles may be construed as ones meant to ensure that even as communities derive their livelihoods from land and land-related resources, they do so in a sustainable manner. Sustainable rural livelihood has been defined as *a livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living; a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long-term (emphasis added).*³⁶

³³ Article 69 (1) provides for State and individual obligations in respect of the environment. It requires the State to, inter alia: ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits; work to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya; encourage public participation in the management, protection and conservation of the environment; protect genetic resources and biological diversity; establish systems of environmental impact assessment, environmental audit and monitoring of the environment; eliminate processes and activities that are likely to endanger the environment; and utilise the environment and natural resources for the benefit of the people of Kenya; Article 70 (1) provides that if a person alleges that a right to a clean and healthy environment recognised and protected under Article 42 has been, is being or is likely to be, denied, violated, infringed or threatened, the person may apply to a court for redress in addition to any other legal remedies that are available in respect to the same matter.

³⁴ Article 42.

³⁵ Article 60(1).

³⁶ Krantz, L., *The Sustainable Livelihood Approach to Poverty Reduction: An Introduction*, (Swedish International Development Cooperation Agency, February, 2001), p.6, available at http://www.sida.se/contentassets/bd474c210163447c9a7963d77c64148a/the-sustainable-livelihood-approach-to-poverty-reduction_2656.pdf [Accessed on 16/10/2015]; cf, 'Chapter 2: The Theory Behind

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With regard to economic and social rights, the Constitution provides that every person has the right: to the highest attainable standard of health, which includes the right to health care services, including reproductive health care; to accessible and adequate housing, and to reasonable standards of sanitation; to be free from hunger, and to have adequate food of acceptable quality; to clean and safe water in adequate quantities; to social security; and to education.³⁷

It is noteworthy that the provision of most of the economic and social rights as guaranteed in the Constitution, is dependent on the state of the environment.³⁸ It has been argued that full environmental security is achieved when the natural resources provide full environmental services to the human beings who depend on this area and when this condition is sustainable.³⁹ This demonstrates the close relationship between environmental security and sustainable development. A healthy environment that supports the needs of communities, with natural ability

the Sustainable Livelihood Approach,' in Morse, S. & McNamara, N., *Sustainable Livelihood Approach: A Critique of Theory and Practice*, (Springer Science+Business Media Dordrecht, 2013), pp. 15-60. Morse & McNamara observe that, sustainable livelihood approach evolved within the context of the intentional development approach by which development practitioners were seeking to maximise the effectiveness of their interventions to help the disadvantaged. It is in effect a diagnostic tool which provides a framework for analysis leading to concrete suggestions for intervention. It was typically applied in poorer countries as part of a planning phase for an intervention via policy, a development project or perhaps as the basis for more in-depth research. In that sense the sustainable livelihood approach is an analysis of peoples' current livelihood and what is needed for an 'enhancement', and useful in avoiding the inappropriate interventions critiqued by the post-developmentalists. They however argue that it should be noted that the latter might not necessarily be the need for people to replace their current livelihood or indeed have more means of livelihood. Instead it might involve making the current means of livelihood less susceptible to environmental, social or economic 'stresses'. The sustainable livelihood approach could also result in recommendations that people themselves may be able to put into practice rather than be dependent upon the actions of outsiders. According to them, therefore, it is thus a 'no holds barred' approach to understanding and improving the sustainability of livelihood, although it clearly has to take into account what is feasible in different circumstances (p. 17-18). The import of this, in the Kenyan context, would be that various regions require different approaches to achieve environmental security and overall development for the people.

³⁷ Constitution of Kenya, Article 43(1).

³⁸ See generally, Boyle, A., "Human Rights and the Environment: A Reassessment," *Boyle UNEP Paper Revised*, 2010. available at <http://www.unep.org/environmentalgovernance/Portals/8/documents/Events/HumanRightsEnvironmentREv.pdf> [Accessed on 12/10/2015].

³⁹ Vries, F. W. T. P., et al, "Integrated Land and Water Management for Food and Environmental Security," *Integrated land and water management for food and environmental security*, (Comprehensive Assessment of Water Management in Agriculture Research Report 1, 2003), p. 54. Available at <http://www.unep.org/environmentalgovernance/Portals/8/documents/Events/HumanRightsEnvironmentREv.pdf> [Accessed on 16/10/2015].

for replenishment means that there is enough for everyone as well as hope for future generations. A satisfied society is able to co-exist peacefully.

To establish the relationship between environmental security and sustainable development, the Food and Agricultural Organisation defines sustainable development by specifying the features of sustainable development thus: *resource use and environmental management are combined with increased and sustained production, secure livelihoods, food security, equity, social stability, and people's participation in the development process* (emphasis added).⁴⁰ As such, it is arguable that for a country to achieve sustainable development, all the foregoing elements, including environmental security concerns, must be addressed. This is due to the fact that any external shock to the environment such as deforestation, makes the local people, especially the rural households, environmentally and economically vulnerable in securing their livelihood.⁴¹ It has been argued that poverty eradication contains four ingredients which include: food and nutritional security; income security; social security; and human security.⁴² For poverty to be fully eradicated, these elements must adequately be addressed.

A number of these ingredients are so closely related to environmental security, that an environmentally insecure environment compromises the realisation of a poverty-free society. A population that is food insecure and poorly equipped concerning agriculture production is desperate to survive, and this is often at the expense of environmental sustainability since they engage in unsustainable agricultural practices.⁴³ It has rightly been observed that impoverished people feel driven by their plight to overwork their croplands, to clear forests and to cultivate drylands and mountain slopes for additional croplands, all of which trigger soil erosion and other environmental ills, and result in poverty compounded.⁴⁴ In such an environment, sustainable development becomes a

⁴⁰ Shrestha, S.S. & Bhandari, P.B., "Environmental Security and Labor Migration in Nepal," *op cit*, p. 4.

⁴¹ *Ibid*, p. 1.

⁴² Das, R., *Poverty and Hunger: Causes and Consequences*, (Sarup & Sons, 2006), p. 8.

⁴³ K. Muigua, "Food Security and Environmental Sustainability in Kenya," p.4, available at

<http://www.kmco.co.ke/attachments/Article/129/FOOD%20SECURITY%20AND%20ENVIRONMENTAL%20SUSTAINABILITY%20IN%20KENYA.pdf> [Accessed on 16/10/2015].

⁴⁴ Myers, N., "Environmental Security: What's New and Different?" pp. 3-4.

mirage.⁴⁵ Nevertheless, it has been observed that rapidly increasing population in the dynamic semi-arid agro-ecosystems in sub-Saharan Africa highlights the necessity to increase food production, while at the same time safe-guarding other ecological systems that support human development and well-being.⁴⁶

From the foregoing, it is arguable that the full implementation of the Bill of Rights largely depends on the state of the environment, especially in relation to the social and economic rights of the people. A clean and healthy environment that is secure is central for the implementation and enforcement of the right to: the highest attainable standard of health; accessible and adequate housing, and to reasonable standards of sanitation; freedom from hunger, and adequate food of acceptable quality; clean and safe water in adequate quantities; and social security.⁴⁷ Environmental degradation negatively affects the ability of a State to feed its people, provide clean and safe drinking water in adequate quantities, and attain right to health and reasonable standards of sanitation, amongst others. Any meaningful implementation of the constitutional Bill of Rights should therefore start with the realisation of an environmentally secure society for all.

7.4 Global Efforts towards Environmental Security

Environmental protection and conservation has been at the centre stage in the global economic, social and political discussions. Sustainable development agenda was informed by the need to ensure an environmentally sound world that can satisfy the needs of the current generation as well as those of future generations. Indeed, it has been asserted that sustainable development has been the overarching goal of the international community since the UN Conference on Environment and Development (UNCED) in 1992, where, amongst numerous commitments, the Conference called upon governments to develop national strategies for sustainable development, incorporating policy measures outlined in the Rio Declaration and Agenda 21.⁴⁸

⁴⁵ Boyce, J.K., 'Is Inequality Bad for the Environment?' (200m7) 15 *Research in Social Problems and Public Policy* 267; See also Hoffman, A.J. & Sandelands, L.E., 'Getting Right with Nature' (2005) 18 *Organization & Environment* 141.

⁴⁶ *Smallholder System Innovations in Integrated Watershed Management (SSI), Strategies of Water for Food and Environmental Security in Drought-Prone Tropical and Subtropical Agro-Ecosystems*, p. vii.

⁴⁷ Article 43.

⁴⁸ United Nations Department of Economic and Social Affairs (UNDESA), *A guidebook to the Green Economy, Issue 1: Green Economy, Green Growth, and Low-Carbon Development - history, definitions and a guide to recent publications*, UN-DESA, August 2012, Available at <http://www.uncsd2012.org/index.php?page=view&type=400&nr=528&menu=45> [Accessed on

It is further observed that despite the efforts of many governments around the world to implement such strategies as well as international cooperation to support national governments, there are continuing concerns over global economic and environmental developments in many countries which have been intensified by recent prolonged global energy, food and financial crises, and underscored by continued warnings from global scientists that society is in danger of transgressing a number of planetary boundaries or ecological limits.⁴⁹ Environmental security is thus one of the key elements of the sustainable development agenda.

7.5 Environmental Security as a Means to an End

While a proper environmental security mechanism ensures that access to environmental goods and services is available to all, many Kenyans continue to ravage in poverty with no ability to benefit from the environmental resources capable of being generated from the surrounding environment. Many user groups still find it hard to enjoy environmental goods and services, while facing social problems such as, poor sanitation, lack of clean water, and an array of pollutants, amongst others. Although there have been widespread calls for a more secure environment, the uptake of actions to curb the same has been dismal and insufficient, to say the least. State and governmental efforts have not been satisfactory to address the problem.

It is generally agreed that conflict over scarce resources, such as minerals, fish, water, and particularly territory, is a traditional source of armed struggle.⁵⁰ It is also not in question that environmental degradation may be viewed as a contribution to armed conflict in the sense of exacerbating conflicts or adding new dimensions.⁵¹ This is well demonstrated in the armed conflicts in parts of Kenya's Tana Delta, Rift Valley Region and Northern parts of the country, where inter-ethnic resource-based conflict has been prevalent.⁵² However, resource

24/10/2015].

⁴⁹ Ibid.

⁵⁰ Gleditsch, N.P., "Armed Conflict and the Environment: A Critique of the Literature," *Journal of Peace Research*, Vol. 35, No. 3, *Special Issue on Environmental Conflict* (May, 1998), pp. 381-400, p. 381.

⁵¹ Ibid, p. 382.

⁵² See generally, Wepundi, M., *et al*, "Availability of Small Arms and Perceptions of Security in Kenya: An Assessment," *Special Report, June 2012*, (Small Arms Survey, Graduate Institute of International and Development Studies, Geneva, 2012). Available at

<http://www.smallarmssurvey.org/fileadmin/docs/C-Special-reports/SAS-SR16-Kenya.pdf> [Accessed on 13/10/2015].

abundance can also lead to conflict over resources as has been witnessed in many African States.⁵³ Efforts towards achieving environmental security must therefore tackle problems related to the two instances, where they are likely to occur. Environmental security involves addressing environmental degradation, resource depletion, natural disasters, and pollution, amongst others.⁵⁴

Recently, Kenya has experienced various security threats from external sources, namely Al Shabaab,⁵⁵ as well as internal inter-ethnic and inter-clan conflict which are mainly fueled by conflicting interests and competition over resources.⁵⁶ While the State forces, mainly National Police service and Kenya Defence Forces, can deal with the external attacks more effectively, it is arguable that the solution to the internal conflict lies in something deeper than the use of force. Any feasible approach must address the root causes of these internal conflicts. While addressing any ongoing aggression between communities and clans through more reactive means, it is important that measures that pre-empt recurrence of such conflict are adopted. Measures that are geared towards achievement of environmental security for all would go a long way in addressing such conflict, by ensuring that such factors as environmental degradation, resource depletion,

⁵³ For instance, the following countries have experienced internal natural resources-related conflict that may be attributed to resource abundance: South Sudan, Liberia, Sierra Leone, Democratic Republic of Congo, Congo -Brazzaville, Central African Republic, amongst others; See also generally, G. King & V. Lawrence, Africa, "A Continent in Crisis: The Economic and Social Implications of Civil War and Unrest among African Nations," *EDGE*, Final Spring 2005, June, 2005; see also, Jenkins, M. & Umoh, E., 'Africa in Conflict and Crisis: Critical Perspectives on the Role of Conflict Diamonds and Oil on the Livelihood of Sierra Leone and Nigeria.' Autumn, 2002; *Wiwa v. Royal Dutch Petroleum Co.*, 226 F.3d 88 (2d Cir. 2000), cert. denied, 532 U.S. 941(2001); Institute for Environmental Security, "What is Environmental Security?" Available at http://www.envirosecurity.org/activities/What_is_Environmental_Security.pdf [Accessed on 13/10/2015].

⁵⁴ Wepundi, M., *et al.*, "Availability of Small Arms and Perceptions of Security in Kenya: An Assessment," *op cit*, p.7.

⁵⁵ Islamist militant group *al-Shabaab* operates from Somalia, and has been carrying out terrorist attacks against Kenya.

⁵⁶ See generally, Haji, A.H., *Inter-Clan Peace Initiative in Mandera County: A Case of Gurreh and Murulle Communities from 1998 to 2012*, Research Project Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Armed Conflict and Peace Studies, of the University of Nairobi, December 2014. Available at http://erepository.uonbi.ac.ke/bitstream/handle/11295/76901/Alinur_Inter-clan%20peace%20initiative%20in%20Mandera%20county%3A%20a%20case%20of%20Qurreh%20and%20Murulle%20communities%20from%201998%20to%202012.pdf?sequence=1 [Accessed on 13/10/2015]; See also, Institute for Peace and Security Studies in Collaboration with Friedrich Ebert Stiftung, *Anthology of Peace and Security Research*, (Addis Ababa, Ethiopia, Vol. 3, December, 2012), p. 5. Available at <http://library.fes.de/pdf-files/bueros/aethiopian/09883.pdf> [Accessed on 13/10/2015].

natural disasters, and pollution, amongst others are adequately dealt with to guarantee environmental security for all.

7.6 Efforts towards Environmental Security in Kenya

There has been various efforts by the Kenyan authorities to ensure that the environment is secure both for the current generation and the future generations, as required under the international legal instruments on environment and development. The country has been grappling with such issues as climate change, environmental degradation, pollution and deforestation, amongst others. To address these issues, a number of measures have been put in place.

The *REDD+ Concept Note: Dryland Forest Conservation*⁵⁷ records that the Government of Kenya has a REDD+ Coordination Office and National REDD+ Technical Working Group in place, developed a REDD readiness preparation proposal (RPP) and is working toward a national REDD+ strategy.⁵⁸ The REDD+ actions are consistent with the goal of Kenya's Constitution that sets a target of 10 percent tree cover, up from the current six percent. These actions are also consistent with *Kenya Vision 2030*, the long-term development blueprint for the country.⁵⁹ According to the Vision 2030, Kenya aims to be a nation that has a clean, secure and sustainable environment by 2030. The actions are also aimed at restoring dryland forests for sustainable development.⁶⁰ This can go a long way in attaining environmental security in the arid and semi-arid regions in the country. However, there should be taken realizable steps in collaboration with the locals, to ensure the Government projections are realized for environmental security especially in the arid and semi-arid areas in the country.

As part of an analysis of low-carbon development options in Kenya, which covers the six mitigation sectors set out in Article 4.1 of the *United Nations Framework Convention on Climate Change* (UNFCCC): energy, transport, industry, waste, forestry and agriculture, Kenya has made attempts to move away from over-reliance on energy sources that increase greenhouse gas emissions.⁶¹ The country aims at diversifying energy sources for the growing energy needs in the country,

⁵⁷ Murphy, D. & McFatrige, S., *REDD+ Concept Note: Dryland Forest Conservation*, (IISD, 2012).

⁵⁸ *Ibid*, p. 1.

⁵⁹ *Ibid*, p.1.

⁶⁰ *Ibid*, pp. 3-4.

⁶¹ Cameron, L., et al, *National Climate Change Action Plan: Mitigation*, 'Chapter 5: Electricity Generation,' (Government of Kenya, August 2012), p. 1.

while reducing environmental impact for sustainability. This is a laudable step considering that wood fuel greatly affects reforestation and afforestation efforts. Diversified energy sources can boost the drive towards achieving at least ten percent forest cover in the country.

It has been observed that Kenya is experiencing rapid growth in the generation of solid waste, and appropriate systems for waste collection, management and disposal are a cornerstone for development as they significantly contribute to cleanliness and health in human settlements.⁶² However, while solid waste collection, management and disposal has improved over the past years, it still poses a challenge in Kenya, since according to the Kenya National Environment Management Authority (NEMA), only 40 percent of waste generated in urban centres is collected and disposed of at designated disposal sites. Further, the provision of adequate sanitary facilities in urban areas in the face of growing population, especially sewage disposal, poses another challenge.⁶³

To address the problem, the Government aims to adopt several Pollution and Solid Waste Management strategies have been identified to deliver on short- and long-term goals which include: develop and enforce mechanisms targeting pollution and solid waste management regulations; public-private partnerships for municipal waste; reduce importation of oil with high sulphur content; establish a national air quality monitoring system; and apply market-oriented instruments to regulate the use of plastic bags.⁶⁴

It is important to point out that while pollution is a major contributing factor to environmental degradation, pollution and solid waste management strategies will require to be backed by creating environmental awareness to curb further pollution by the local people. Pollution of water, air and other land-based resources does not come from the urban centres only but also from unsustainable agricultural and production methods among the people. These ought to be dealt with through ensuring a collaborative approach to pollution control and eliminations. For instance, through encouraging the communities to plant more trees and to employ sustainable production methods, atmospheric pollution is greatly reduced through reduced greenhouse gases elimination. Communities

⁶² Ibid, p. 1.

⁶³ Ibid.

⁶⁴ Ibid, p. 3.

are also able to employ precautionary approach in their interaction with the environment. An environmentally-conscious community makes it easier to bring polluters to book. Thus, the foregoing government plans should as much as possible include the people who are most affected so as to make them appreciate the implications of such efforts and consequently give them social approval.

7.7 Conclusion

Environmental security is not only concerned with sustainable management of natural resources for the sake of achieving sustainable development but also incorporates the moralistic duty to conserve the environment for the sake of the other forms of life namely animals and plants. The quest for sustainable development should not only be informed by the human desire to secure their future but should also include the duty to safeguard the environment for its own sake. Further, as it has been argued in this chapter, achieving peace in the country is pegged on a number of issues. One of the ways of doing this is ensuring that human security is guaranteed through enjoyment of environmental goods and services for all. It is imperative that all the relevant stakeholders join hands in their efforts to conserve and protect the environment for a better, healthy and secure environment that will guarantee better lives for the human race, animals and plants. Achieving environmental security in Kenya is possible. It is an ideal that is attainable, for the sake of the environment and the people of Kenya.

Food Security and Environmental Sustainability in Kenya

8.1 Introduction

Food security has been described as a multifaceted sustainable development topic, linked to health through malnutrition, but also to sustainable economic development, environment, and trade.¹ It is noteworthy that small-scale farmers dominate the agricultural sector in Kenya and derive their livelihoods from agriculture which is mainly reliant on rainfall. These farmers, it has been noted, face the challenges of land degradation, poor soil fertility management, and continuous cropping.² The agricultural sector in Kenya is said to be highly exposed to climate change and climate variability, as farming activities directly depend on climatic conditions.³ This has adverse effects on both food security and environmental sustainability in the country.

A population that is food insecure and poorly equipped concerning agriculture production is desperate to survive and this is often at the expense of environmental sustainability since they engage in unsustainable agricultural practices. It is noteworthy that unsustainable agricultural practices as well as unsustainable economic activities such as charcoal burning, timber harvesting or logging are likely to endanger the environment. The author herein argues that unless the food insecurity problem is adequately addressed, any efforts to achieve environmental protection and sustainability in the country will be futile.

8.2 Background

Agriculture and fisheries sector make a major contributor to the Kenyan economy, accounting for 26.4% of the Growth Domestic Product (GDP) and providing 18% and 60% of the formal and total employment respectively during

¹ World Health Organisation, 'Trade, foreign policy, diplomacy and health', *Food Security*, available at <http://www.who.int/trade/glossary/story028/en/> [Accessed on 17/07/2014].

² United Nations Economic Commission for Africa, 'An Assessment of Agricultural Sector Policies and Climate Change in Kenya: Nexus between Climate Change Related Policies, Research and Practice: Final Report' December, 2013, p.1. Available at http://www.climdevafrica.org/sites/default/files/DocumentAttachments/ACPC_KIPPRA_Kenya_Policy_Research_Practice%20%26%20Climate%20Change_12.12.2013_Final.pdf [Accessed on 17/07/2014].

³ *Ibid*, p. 2.

the financial year 2013/2014.⁴ Food security is a growing concern worldwide, with more than one billion people estimated to lack sufficient dietary energy availability, and at least twice that number suffering micronutrient deficiencies.⁵

In Kenya, food security debate received a boost after the passage of the current Constitution of Kenya 2010, which expressly recognises the right of every person to be free from hunger, and to have adequate food of acceptable quality as well as the right to clean and safe water in adequate quantities.⁶ To facilitate achievement of the foregoing, the Constitution requires that the State should take legislative, policy and other measures, including the setting of standards, to achieve the progressive realisation of the rights guaranteed under Article 43.⁷

In the 2013/2014 financial year, Kenya made substantial allocations towards achievement of food security. Kenya Shillings (KES) 2 billion was set aside for Agri-Business Fund, while KES 3.6 billion was allocated for the implementation of the first phase of the 1 million acre irrigation and food security project in Galana.⁸ This project was expected to, among others: produce adequate food for the country and supplying to the market at affordable price; creating at least 3 million jobs along the agriculture value-chain, including multiplier effects; and transforming the Galana ranch and, by extension the coastal region, into an economic hub for production, agro-processing, packaging, distribution, exporting and tourism.⁹ To deal with the perennial challenges of food insecurity and to reduce cost of living associated with high food prices, the Cabinet Secretary for Agriculture stated that they would implement a comprehensive agricultural revitalization program aimed at expanding, enhancing productivity and transforming agriculture into a business venture.¹⁰

⁴ Institute of Economic Affairs, Budget Guide, 'Budget 2013/14: The Onset of the Devolved Government and the Hurdles Ahead', June 2013, p.14. Available at www.ieakenya.or.ke/publications/doc.../277-budget-guide-2013-14. [Accessed on 18/07/2014].

⁵ Barrett, C.B., *et al.*, 'Measuring Food Insecurity', *Science*, vol. 327, 12 February 2010, pp. 825-828, p.825.

⁶ Article 43(1) (c).

⁷ Article 21(2).

⁸ Statement Delivered To The Budget And Appropriation Committee Of The National Assembly On 13th June, 2013, By Mr. Henry K. Rotich, Cabinet Secretary For The National Treasury, Republic Of Kenya, When Highlighting The Budget Policy And Revenue Raising Measures For Fiscal Year 2013/2014 1st July, 2013 To 30th June, 2014.

⁹ *Ibid.*

¹⁰ *Ibid.*

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Although the foregoing are some of the indicators of the Government's efforts towards achieving food security in the country, there is need for Kenya to do a lot more so as to achieve the Millennium Development Goals (MDGs)¹¹ as well as the more recent Sustainable Development Goals-Agenda 2030. A closer look at the MDGs Reports indicates that Kenya scores poorly in achieving these MDGs objectives, although there are indications of government effort towards the same.¹² To this day, the country is still struggling with increasing numbers of chronically hungry people, skyrocketing food prices due to lower production of staple food, which is basically maize, and lack of agricultural inputs. This is despite having put in place several legislation and sectoral policies on agriculture some of which are highlighted herein. It is against this background that the author argues that much more still needs to be done to achieve food security and offers the way forward, calling for tailor made solutions to the problem of food insecurity in Kenya.

8.3 Meaning of Food Security

During the *World Food Summit of 1996*, food security was defined as existing when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.¹³ It has also been defined as the existence of the necessary conditions for human beings to have physical and economic access, in socially acceptable ways, to food that is safe, nutritious and in keeping with their *cultural preferences* (emphasis added), so as to meet their dietary needs and live productive and healthy lives.¹⁴

¹¹ United Nations Development Programme, *The Millennium Development Goals: Eight Goals for 2015*, available at <http://www.undp.org/content/undp/en/home/mdgoverview.html> [Accessed on 18/07/2014].

¹² Government of Kenya, *Millennium Development Goals in Kenya: Needs & Costs*, Government Printer, Nairobi, 2005. Available at

<http://planipolis.iiep.unesco.org/upload/Kenya/Kenya%20MDG%20Needs%20Assessment.pdf> [Accessed on 18/07/2014]; See also United Nations Economic Commission for Africa, 'Assessing Progress in Africa toward the Millennium Development Goals', *Food security in Africa: Issues, challenges and lessons*, MDG Report 2013, available at

http://www.undp.org/content/dam/undp/library/MDG/english/MDG%20Regional%20Reports/Africa/MDG%20Report2013_ENG_Fin_12June.pdf [Accessed on 18/07/2014].

¹³ The 1996 World Food Summit definition.

¹⁴ Inter-American Institute for Cooperation on Agriculture, *IICA's Definition of Food Security*, March, 2009, p.1. Available at

http://www.iica.int/esp/programas/SeguridadAlimentaria/Documents/SeguridadAlimentarias_Quees_Eng.pdf [Accessed on 17/07/2014].

It has been asserted that food security requires ensuring that food grains are physically and economically accessible to households, and economic accessibility depends upon the purchasing power of the people, which is primarily affected by two factors, the price of food grains and the income of the people.¹⁵ This definition is useful in determining the best ways of achieving food security in any society, as it brings out the various issues involved and calls for a multi-sectoral approach to the problem. It calls for the participation of all persons in the process and most importantly, requires that the affected communities (at least in the context of Kenya) should be involved so as to achieve the social acceptance and cultural preferences aspects of the same.

Thus, the definition adopted at the World Food Summit 1996 is the most comprehensive and widely used one at the global, regional and national levels to achieve world food security. All the aspects of food security as captured therein must, therefore, be addressed for a fulfilling solution to the food security problem. This is the definition that informs the discussion in this chapter.

8.4 Elements of Food Security

It has been argued that a right-to-food approach to food security is not based on vague and replaceable policy goals subject to periodic redefinition, but on existing, comparatively specific and continuously becoming more precise obligations undertaken by governments.¹⁶ The right to food cannot only be regarded as a means to achieve food security, but must be seen as a wider, more encompassing, and distinct objective in itself, and realizing the right to food should, be part and parcel of rights-based approaches to development that aim to implement all human rights obligations which States have committed themselves to under human rights law.¹⁷ It is important to note that human rights are interdependent and interrelated and cannot be achieved separately, thus calling for an integrated approach to achieving them.¹⁸

¹⁵ Ananda, D., Chapter - II, 'Food Security: the Concept and the Issue', 2012, p. 2. Available at http://shodhganga.inflibnet.ac.in/bitstream/10603/4066/8/08_chapter%202.pdf [Accessed on 18/07/2014].

¹⁶ Mechlem, K., 'Food Security and the Right to Food in the Discourse of the United Nations,' *European Law Journal*, Vol. 10, 2004, pp. 631-648.

¹⁷ *Ibid.*

¹⁸ The Universal Declaration of Human Rights, 1948.

Food security has also been conceptualized as resting on three pillars: availability, access, and utilization.¹⁹ These concepts are seen as inherently hierarchical, with availability necessary but not sufficient to ensure access, which is, in turn, necessary but not sufficient for effective utilization. It is said that adequate availability is necessary, but does not ensure universal access to “sufficient, safe and nutritious food,” as access is most closely related to concepts of individual or household well-being such as the range of food choices open to the person(s), given their income, prevailing prices, and formal or informal safety net arrangements through which they can access food.²⁰ Aspects such as unemployment, food prices, and economic policies affect food security, thus demonstrating the close relationship between poverty, social, economic, and political issues.²¹

Food security, as a concept, is multi-sectoral and therefore requires interplay among many other factors if it is to be achieved in the society.

8.5 Legal and Institutional Framework on Food Security

8.5.1 International Legal and Institutional Framework

It is noteworthy that in most of the international instruments on human rights, the right to food has been recognized as part of the right to an adequate standard of living, striving to promote freedom from hunger.²²

¹⁹ Barrett, C.B., *et al.*, ‘Measuring Food Insecurity’, *op. cit.* p. 825.

²⁰ *Ibid.* Barrett argues that utilisation reflects concerns about whether individuals and households make good use of the food to which they have access: Do they consume nutritionally essential foods they can afford, or do they choose a nutritionally inferior diet? Are the foods safe and properly prepared, under sanitary conditions, so as to deliver their full nutritional value? Is their health such that they absorb and metabolize essential nutrients? Utilization pays greater attention to dietary quality, especially micronutrient deficiencies associated with inadequate intake of essential minerals and vitamins.

²¹ See generally Smith, P. J., *Food Security and Political Stability In The Asia-Pacific Region*, Asia-Pacific Center For Security Studies, September 11, 1998, Honolulu, Hawaii. Available at http://www.apcss.org/Publications/Report_Food_Security_98.html [Accessed on 18/07/2014]; Burns, C., ‘A Review of the Literature Describing the Link between Poverty, Food Insecurity and Obesity with Specific Reference to Australia’, *VicHealth Literature Review*, April 2004. Available at http://secure.secondbite.org/sites/default/files/A_review_of_the_literature_describing_the_link_between_poverty_food_insecurity_and_obesity_w.pdf [Accessed on 18/07/2014].

²² See the *Food and Agricultural Organisation (FAO)*, 1965 Preamble to the Constitution.

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The *Charter of the United Nations*²³ requires the United Nations to promote: higher standards of living, full employment, and conditions of economic and social progress and development; solutions of international economic, social, health, and related problems; and international cultural and educational co-operation; and universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.²⁴ This is for purposes of creating conditions of stability and well-being which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples.

The *Universal Declaration of Human Rights* (UDHR)²⁵ guarantees that everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.²⁶

The *International Covenant on Economic, Social and Cultural Rights*²⁷ (ICESCR), provides that States Parties to the Covenant should recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions. Further, it states that in recognition of the fundamental right of everyone to be free from hunger, they should take, individually and through international cooperation, the measures, including specific programmes, which are needed:²⁸ to improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources; and taking into account the problems of both food-importing and food-exporting countries, to ensure an equitable distribution of world food supplies in relation to need.

²³ United Nations, *Charter of the United Nations*, 24 October 1945, 1 UNTS XVI.

²⁴ *Ibid*, Article 1.

²⁵ UN General Assembly, *Universal Declaration of Human Rights*, 10 December 1948, 217 A (III).

²⁶ *Ibid*, Article 25.1.

²⁷ UN General Assembly, *International Covenant on Economic, Social and Cultural Rights*, 16 December 1966, United Nations, Treaty Series, vol. 993, p. 3.

²⁸ *Ibid*, Article 11.2.

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The *Rome Declaration and Plan of Action*²⁹ affirmed that everyone should have access to adequate and safe food and be free from hunger, and action must be taken to assist the more than 800 million people without food to meet their basic needs. The Declaration also recognised that poverty, environmental degradation, war, terrorism and corruption also cause insecurity in terms of food for all.

The *Declaration and the Plan of Action* emphasised on the need for mobilizing all types of resources around the world in order to help nations without resources to reach safe and healthy levels of food security. The attendees of the Rome Conference pledged to help create a proper environment, politically, economically and socially, for the implementation of programmes that would ensure food security the world over. All nations are to promote and develop policies that should allocate resources, involve all peoples, help in times of disaster, and improve the quality of life for all so as to ensure that food security for the entire world will be achieved.

The *Sustainable Development Goals*³⁰ are to succeed the Millennium Development Goals in 2015. The relevant goals as far as food security are concerned are, *inter alia*: end poverty in all its forms everywhere; end hunger, achieve food security and adequate nutrition for all, and promote sustainable agriculture; attain gender equality, empower women and girls everywhere; secure water and sanitation for all for a sustainable world; promote strong, inclusive and sustainable economic growth and decent work for all; promote sustainable industrialization; promote sustainable consumption and production patterns; promote actions at all levels to address climate change; attain conservation and sustainable use of marine resources, oceans and seas; protect and restore terrestrial ecosystems and halt all biodiversity loss; and strengthen and enhance the means of implementation and global partnership for sustainable development.³¹

8.5.2 Regional and Kenya Framework

Africa as a continent has attempted to put in place measures meant to deal with the challenge of food security for its people. A number of regional instruments

²⁹ World Food Summit: The Rome Declaration and Plan of Action. Rome, 13-17 November 1996.

³⁰ United Nations Department of Economic and Social Affairs, Division for Sustainable Development, 'Sustainable development goals', available at <http://sustainabledevelopment.un.org/?menu=1300> [Accessed on 18/07/2014].

³¹ Ibid.

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attempt to bring together the efforts of various countries so as to adequately address the problem of food security for their people.

The *Comprehensive Africa Agriculture Development Programme (CAADP)*³² was established as part of *New Partnership for Africa Development (NEPAD)* in July 2003 with the objective of improving and promoting agriculture across Africa.³³ CAADP aimed to eliminate hunger and reduce poverty through agriculture so that by the year 2015, the following were to be achieved: dynamic agricultural markets within and between countries and regions in Africa; farmers being active in the market economy and the continent becoming a net exporter of agricultural products; a more equitable distribution of wealth for rural populations; Africa as a strategic player in agricultural science and technology; and environmentally sound agricultural production and a culture of sustainable management of natural resources in Africa.

The *Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa*³⁴ guarantees the right of women to food security and requires States Parties to facilitate women's enjoyment of this right to nutritious and adequate food.

The *East African Community Treaty* 1999 which is a multi-sectoral treaty states that the overall objectives of co-operation in the agricultural sector are the achievement of food security and rational agricultural production within the Community.³⁵

The *East African Community Food Security Action Plan (2011 - 2015)*³⁶ was developed to address food insecurity in the East African region and was informed by the overall objective of the EAC Treaty regarding cooperation in agriculture and rural development, which is achievement of food security and rational agricultural production.³⁷

³² Visit <http://www.nepad.org/foodsecurity/agriculture/about> [Accessed on 19/07/2014].

³³ Ibid.

³⁴ African Union, *Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa*, 11 July 2003.

³⁵ Article 105(1). Chapter Eighteen of the *East African Community Treaty* 1999 is dedicated to agriculture and food Security in the region.

³⁶ EAC Secretariat, Arusha, Tanzania, February, 2011.

³⁷ Ibid, p.6, clause 1.1.

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The EAC *Agriculture and Rural Development Policy* (EAC ARDP)³⁸ was formulated with the aims of attaining food security through increased agricultural production, processing, storage and marketing. The Policy is an initial step towards the implementation of the provisions of the Treaty. It captures the commitment of the Partner States to foster their economic co-operation for the benefit of their peoples.³⁹

Kenya's *National Environment Policy* 2013⁴⁰ provides for the conservation and sustainable development of forest ecosystems and their associated resources, essential for sustainable poverty reduction and sustainable development. Kenya's *National Food and Nutrition Security Policy* 2011⁴¹ was formulated to add value, build synergies and assist with the implementation of existing national and sectoral policies and strategies to effectively address issues of food insecurity and malnutrition in Kenya. The aim was to understand and build from existing Government and partner initiatives, rather than duplicate such efforts.⁴²

The *Vision 2030*⁴³ is Kenya's blueprint for development, covering the period between 2008 and 2030, with the aim of transforming Kenya into a newly industrialising, 'middle-income' country, by providing a high quality life to all its citizens, by the year 2030.

The Ministry of Agriculture, Livestock and Fisheries is mandated with promoting and facilitating production of food and agricultural raw materials for food security and incomes; advancing agro based industries and agricultural exports; and enhance sustainable use of land resources as a basis for agricultural enterprises.

The *National Agricultural Sector Extension Policy* 2012 (NASEP)⁴⁴ provides for effective management and organization of agricultural extension in a pluralistic

³⁸ EAC, Tanzania, November 2006.

³⁹ East African community, *Agriculture and Livestock, EAC's agenda for agriculture*, available at http://www.agriculture.eac.int/index.php?option=com_content&view=Article&id=73&Itemid=117 [Accessed on 18/07/2014].

⁴⁰ *National Environment Policy*, (Government Printer, Nairobi, 2013).

⁴¹ *National Food and Nutrition Security Policy*, (Government Printer, Nairobi, 2011).

⁴² *Ibid*, clause 1.5.1.

⁴³ *Vision 2030*, Government Printer, 2030.

⁴⁴ Government of Kenya, June 2012, Government Printer, Nairobi.

system where both public and private service providers are active participants. It provides a point of reference for service providers and other stakeholders on standards, ethics and approaches, and guides all players on how to strengthen coordination, partnership and collaboration.⁴⁵

The *National Accelerated Agricultural Input Access Program* (NAAIAP) is a pro-poor, food security and poverty alleviation government initiative that is aligned with Vision 2030 and other government policy documents.⁴⁶ It provides targeted agricultural inputs subsidy to smallholder resource poor farmers. The core objective of NAAIAP is to improve farm inputs access and affordability for small-scale farmers to enhance food security at household level and generate incomes from sales of surplus produce. The Program is however said to be facing challenges due to limited information on crop nutrients requirements, characteristics of soils and high level of variation in soil properties that are experienced across many sub counties where the program operates.⁴⁷

8.6 Food Security, Peace and Environmental Sustainability

There are environmental trends that threaten to radically alter the planet, that threaten the lives of many species upon it, including the human species.⁴⁸ Forest areas are converted to low-grade farmland unable to support the farmers who settle it.⁴⁹ In the Northern parts of Kenya, the negative climate change impact on natural resources, stress existing mechanisms for sharing resources like food and pastures, and there is always potential for tensions which can often escalate into serious clan fights for the available limited resources. The pastoralists graze their cattle on the existing pasture, leaving the soil bare. Recently, the Turkana community has turned to agriculture as a way of earning livelihood. However, considering that there are other communities in the area who are still pastoralists, there is likelihood of tribal clashes over the resources found in the irrigated areas.

There has been an increase in food insecurity in pastoral areas of East Africa due to a combination of climate change, population growth, and the continued

⁴⁵ Ibid, p. ii.

⁴⁶ Ministry of Agriculture, <http://www.kilimo.go.ke/> [Accessed on 19/07/2014].

⁴⁷ Ibid.

⁴⁸ World Commission on Environment and Development, *Our common future*. Oxford, (Oxford University Press, 1987), para. 7.

⁴⁹ Ibid.

underinvestment in and marginalization of pastoral areas.⁵⁰ Further, it has been observed that in recent years, there has also been an increased settlement in pastoral areas – particularly around fixed water points – and this, combined with lack of effective natural resource management institutions to manage livestock and pastures in a sustainable way, has reportedly led to a number of environmental problems, including overgrazing, soil degradation and erosion.⁵¹ Attempts to secure control of water sources are likely to be divisive and may become politicized along ethnic lines, or even lead to inter-state tensions with neighbouring countries.⁵²

Desertification⁵³ alongside climate change and the loss of biodiversity were identified as the greatest challenges to sustainable development during the 1992 Rio Earth Summit.⁵⁴ The *United Nations Convention on Combating Desertification* 1994⁵⁵ (UNCCD) is a binding international agreement linking environment and development to sustainable land management. The Convention addresses specifically the arid, semi-arid and dry sub-humid areas, known as the dry lands. In the *10-Year Strategy of the UNCCD* (2008-2018) that was adopted in 2007, State Parties to the Convention are "to forge a global partnership to reverse and prevent desertification/land degradation and to mitigate the effects of drought in affected areas in order to support poverty reduction and environmental sustainability."⁵⁶

⁵⁰ Conservation Development Centre, International Institute for Sustainable Development and Safer world, *Climate change and conflict: Lessons from community conservancies in northern Kenya Conservation Development*, November 2009. Available at http://www.iisd.org/sites/default/files/pdf/2009/climate_change_conflict_kenya.pdf [Accessed on 18/07/2014].

⁵¹ Ibid, p. 8.

⁵² Ibid, p. 10.

⁵³ Article 1 of the United Nations Convention to Combat Desertification defines "desertification" to mean land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors, including climatic variations and human activities.

⁵⁴ United Nations Convention to Combat Desertification, *About the Convention, Treaty Series*, vol. 1954, p. 3.

⁵⁵ *United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly In Africa*, A/AC.241/27, 12 September 1994. Kenya signed the Convention on 14 Oct 1994 and ratified it on 24 Jun 1997. As per Article 2.1 thereof, the objective of the Convention is to combat desertification and mitigate the effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa, through effective action at all levels, supported by international cooperation and partnership arrangements, in the framework of an integrated approach which is consistent with Agenda 21, with a view to contributing to the achievement of sustainable development in affected areas.

⁵⁶ UNCCD Decision 3/COP.8, *The 10-year strategic plan and framework to enhance the implementation of the Convention*.

8.7 Challenges to Food Security

8.7.1 Climate Change

The effects of climate change and associated extreme weather events threaten sustainable development and impacts negatively on the sector. Flooding and droughts affect food production, water supply, housing access, livestock production and general livelihoods of the people.⁵⁷

Northern parts of Kenya popularly referred to as the Arid and Semi-Arid Areas (ASALs) have borne the full impact of climate change in Kenya. The results are often food crisis resulting in loss of lives of people, livestock and inter-tribal clashes. It has been asserted that reductions in crop yields and increasingly unpredictable weather patterns may lead to higher prices for food and greater food insecurity, and increase the stakes for control over productive agricultural land.⁵⁸ For instance, it has been predicted that there is going to be a hotter, drier and less predictable climate in the Middle East, a region already considered to be the world's most water-scarce with demand for water already outstripping supply.⁵⁹ Climate change threatens to reduce the availability of scarce water resources, increase food insecurity, hinder economic growth and lead to large-scale population movements and this could reportedly hold serious implications for peace in the region.⁶⁰ The challenge of climate change cannot, therefore, successfully be handled by one country but calls for international cooperation since it is a worldwide problem.

8.7.2 Land Tenure

In the face of the ever burgeoning population, agricultural land has continually diminished, forcing people to 'make maximum use' of the available land, often at the expense of sound agricultural practices such as agro forestry, or even worse

⁵⁷ Republic of Kenya, *Environment Protection, Water and Housing Sector Report*, 2012, p. 62 (Government Printer, Nairobi).

⁵⁸ Brown, O. & Crawford, A., 'Climate Change and Security in Africa: A Study for the Nordic-African Foreign Ministers Meeting', (International Institute for Sustainable Development, March 2009). available at

http://www.iisd.org/sites/default/files/pdf/2009/climate_change_security_africa.pdf
[Accessed on 18/07/2014].

⁵⁹ Brown, O. & Crawford, A., 'Rising Temperatures, Rising Tensions: Climate change and the risk of violent conflict in the Middle East', (International Institute for Sustainable Development, 2009).

⁶⁰ Ibid; See also Brown, O. & Crawford, A., 'Give Peace (and the climate) a Chance', (International Institute for Sustainable Development, November 6, 2009). Available at

http://www.iisd.org/sites/default/files/pdf/2009/peace_and_climate_a_chance.pdf[Accessed on 18/07/2014].

turning to deforestation in attempts to get more land. The problem of the reduced land size is aggravated by poor and unsustainable agricultural practices such as excessive use of chemicals and cutting down of trees, which ultimately lead to environmental degradation. Indeed, according to the *National Environment Policy, 2013*⁶¹ environmental degradation in Kenya directly contributes to impacts of climate change, and the expansion of human activities into marginal areas leading to clearance of natural habitats such as forests and wetlands has been a major driving force behind land degradation throughout the country.⁶²

Kenya's forest resources are being subjected to overwhelming pressure from competing land uses like agriculture, industry, human settlement and development of infrastructure.⁶³ In addition, extraction of forest products, illegal logging, cutting trees for fuel wood and charcoal and grazing of livestock have also contributed to the degradation of forests. These competing land uses have adverse environmental effects on long term sustainability of forest ecosystems. It is arguable that even though land reform has often been advocated for (and rightly so) as a solution to food insecurity in Kenya, the problem is more deeply rooted in patterns of inequality in power and access to human and material resources, necessary for sustainable agriculture. Access to land with no resources to improve it will not be very useful in achieving food security.

Thus, the unsustainable use of land in urban and rural areas, such as unsuitable agricultural land use, poor soil and water management practices, deforestation and overgrazing, remains a major challenge to all Kenyans due to the serious impact on the environment.⁶⁴

8.7.3 Poverty

Poverty has been defined as lack of access to food, clothing, shelter, education and health care, and it is a cause of hunger; poor people are always chronically hungry.⁶⁵ Poverty is a major cause of food insecurity and sustainable progress in poverty eradication is critical to improve access to food through undertaking

⁶¹ Republic of Kenya, *National Environment Policy, 2013* (Government Printer, Nairobi, 2013). Clause 2.3.

⁶² Ibid, Clause 2.3.

⁶³ Ibid, Clause 4.1.2.

⁶⁴ Ibid, Clause 4.6.2.

⁶⁵ Ananda, D., - 2012, Chapter II, 'Food Security: the Concept and the Issue', op. cit. p. 8.

increased food production, including staple food.⁶⁶ This should happen within the framework of sustainable management of natural resources, elimination of unsustainable patterns of consumption and production, particularly in industrialized countries, and early stabilization of the world population.

Arguably, poverty and environment are inter-linked through four main dimensions: livelihoods, resilience to environmental risks, health and economic development.⁶⁷ Across many communities in Kenya, agriculture has been the single largest source of livelihoods for most people especially the poor. For sustainable and economical agricultural practice, there are resources such as seeds and mechanisation that are required. However, due to poverty, many of the poor lack the finances to facilitate this and also engage in unsustainable agricultural practices. Access to agricultural loans and extension services (which often require collateral) as well as training on economical, sustainable and productive agricultural practices is out of reach for many of the poor rural folk. Unsustainable farming practices in many regions are causing land resources to degrade – threatening future food security as well as the livelihoods of the poor rural people.⁶⁸

Indeed, the UN Committee on Economic, Social and Cultural Rights (CESCR Committee) observed in *the General Comment No. 12* that the roots of the problem of hunger and malnutrition are not lack of food but lack of access to available food, *inter alia* because of poverty, by large segments of the world's population.⁶⁹ Arguably, food sustainability is not achievable in the face of poverty. This assertion is indeed supported by the CESCR Committee's opinion that the notion of sustainability is intrinsically linked to the notion of adequate food or food security, implying food being accessible for both present and future generations.

⁶⁶ Ibid.

⁶⁷ Lusigi, A., UNDP-UNEP Poverty - Environment Initiative, *Linking Poverty to Environmental Sustainability*, p. 1. Available at <http://povertyandconservation.info/sites/default/files/Linking%20Poverty%20to%20Environment%20Sustainability.pdf> [Accessed on 17/07/2014].

⁶⁸ International Water Management Institute, Breaking the Cycles of Land Degradation: A case study from Ban Lak Sip, Laos, *Water Policy Briefing Series*, Issue No. 16, December, 2005, p.1. Available at http://www.iwmi.cgiar.org/Publications/Water_Policy_Briefs/PDF/wpb16.pdf [Accessed on 17/07/2014].

⁶⁹ UN Committee on Economic, Social and Cultural Rights (CESCR Committee), General Comment No. 12, para. 5.

The poor strive to survive from day to day and, therefore, food sustainability, which requires long-term availability and accessibility remains a mirage to many. Consequently, with the poor farming methods, insufficient food production and shrinking land parcels of land, environmental conservation becomes least of their concerns. Persistent hunger and food insecurity on the one hand and economic disparities on the other, can only breed resentment and instigate violence, putting the social fabric of the nation at risk.⁷⁰ Poverty eradication is thus important in ensuring that the country is not only food secure at the national level, but also at the household level.

8.7.4 Human-Wildlife Conflict

There are selected areas in the country especially those neighbouring game reserves and national parks that suffer from perennial shortage of food because once they cultivate their lands, the wildlife, specifically herbivores, leave the parks and destroy their crops. A good example is the case of elephants of the Mount Kenya region. The conflict arises especially in the densely settled areas and agricultural land which are not compatible with many kinds of wildlife.⁷¹ Some of the communities living near forests resort to other means of generating income such as charcoal burning and timber sale, both of which in turn affect the environment negatively. Unless the government, in consultation with all the relevant stakeholders, including the communities, adequately addresses such conflicts, food security for the affected communities remains a mirage.

8.8 Way Forward

It has been agreed that governing food systems to reduce hunger and malnutrition at country level is becoming ever more difficult, as food security increasingly depends on many exogenous factors and major global trends such as energy, climate change, protracted crisis, international investments, biofuels production, trade and finance.⁷² There is a need to adopt a National Food Strategy

⁷⁰ Ananda, D., - 2012, Chapter - II, 'Food Security: the Concept and the Issue', op. cit. p. 17.

⁷¹ Kenya Wildlife Service, *Human Wildlife Conflict Mitigation Measures*, available at http://www.kws.org/parks/community_wildlife_program/HWC.html [Accessed on 18/07/2014].

⁷² *Workshop Report, 'Good Food Security Governance: The Crucial Premise to the Twin-Track Approach'*, (Organized by the Agricultural Development Economics Division (ESA) of the Food and Agriculture Organization of the United Nations (FAO), 5-6 December 2011, Rome), p.1. Available at http://www.fao.org/righttofood/project_files/goodFSgovernance/FoodSecurityGovernanceWorkshop_backgroundpaper.pdf [Accessed on 15/07/2014].

that would incorporate both long term and short term policy dimensions. The long term goal is to increase food security through improved agricultural production and diversified rural economy, while the short term the goal is to provide food security to the most vulnerable section of its population.⁷³

Since the issue of food security and environmental sustainability are interlinked with many other issues, it is important for all the relevant stakeholders to be included in the debate. They should must combine their efforts if any meaningful results are to be achieved.⁷⁴

8.8.1 Empowered Small Scale Farmers

It is estimated that there are about half a billion smallholder farms worldwide, with most of these being found in the developing countries where, the overwhelming majority of farms are small and family-run, and they produce most of the food consumed locally.⁷⁵ It has rightly been observed that smallholder farmers: need more secure access to land and water, and better access to financial services to pay for seed, tools and fertilizer, better functioning markets that provide incentives to invest in improving production, with less risk; roads and transportation to get their products to market; access to technology for up-to-date and reliable market information; agricultural research and technology to raise productivity and to improve their resilience to natural resource degradation and climate change; and stronger organizations to pool their resources, better manage risk, have greater bargaining power in the marketplace, and influence agricultural policies and public investments.⁷⁶

Food security requires attention to questions of distribution, since hunger often arises from lack of purchasing power rather than lack of available food.⁷⁷

⁷³ Asefa, S., 'Enhancing food access in Africa: The Botswana experience' *Studies In Comparative International Development*, vol. 26, Issue 3 , Springer-Verlag, Fall 1991, pp 59-83.

⁷⁴ See generally Muigua, K., & Musyimi, P.N., *Enhancing Environmental Democracy In Kenya*, available at http://www.kmco.co.ke/attachments/Article/81/072_Envotal_Dem_Kenya.pdf [Accessed on 18/09/2014].

⁷⁵ International Fund for Agricultural Development, *The future of world food and nutrition security: Investing in smallholder agriculture – an international priority*, May 2012, p. 2. Available at http://www.ifad.org/hfs/index_full.htm [Accessed on 18/07/2014].

⁷⁶ Ibid, p. 2.

⁷⁷ Report of the World Commission 1987, *Our Common Future, From One Earth to One World*, op. cit. para. 47.

The *Rome Summit Plan of Action* stressed that research in agriculture, fisheries and forestry will be essential in achieving the sustainable food productivity upon which the short and long term food security of a growing world population will depend.⁷⁸ The combination of such research, and an enabling framework can improve food security both at national and household levels. Further, research efforts should clearly focus on poverty eradication and on the creation of more environmentally sustainable agricultural, fisheries, forestry and food production systems. This research should be directed to low, as well as high, potential areas according to their specific research needs. Renewed efforts should be made to involve farmers, fishers, foresters and their organizations in setting research priorities and directions, and to make experimental findings accessible to them.⁷⁹

8.8.2 Climate Change Mitigation/Adaptation

Climate change mitigation and adaptation is an important step towards achieving both food security and environmental sustainability. Such adaptation, it is argued, is a key factor that will shape the future severity of climate change impacts on food production.⁸⁰ Countries in Sub-Saharan Africa are said to be vulnerable to climate change, given dependence on agricultural production and limited adaptive capacity.⁸¹ This emphasizes the need for greater investments in rural and agricultural development to support the ability of households to make strategic, long-term decisions that affect their future well-being. Indeed, as recently as 2013, it was reported that Kenyan farmers and agriculture officials need to prepare for a possible geographic shift in maize production as climate change threatens to make some areas of the country much less productive for cultivation while simultaneously making others more maize-friendly.⁸² Some of the possible mitigation measures have been discussed in detail in chapter six of this book.

⁷⁸ *Rome Summit Plan of Action*, Commitment No. 3.

⁷⁹ *Ibid.*

⁸⁰ Lobell, D.B., et al., 'Prioritizing Climate Change Adaptation Needs for Food Security in 2030,' *Science*, Vol. 319, No.1, February 2008. 607-610, p.607.

⁸¹ Bryan, E., et al., 'Adapting agriculture to climate change in Kenya: Household strategies and determinants' *Journal of Environmental Management*, vol. 114, 15 January 2013, pp. 26-35.

⁸² International Food Policy Research Institute (IFPRI), Report: *Climate change to shift Kenya's breadbaskets*, Sep 16, 2013. Available at <http://www.ifpri.org/pressrelease/report-climate-change-shift-kenya-s-breadbaskets> [Accessed on 17/09/2014].

8.8.3 Food Production Diversification

To achieve food availability, there is a need for food production diversification in the country. It has been observed that natural resources need to be protected and research must be done to investigate ways of preserving food resources- promote environmental protection programmes, promote wise rural resource use, invest in research programmes aimed at sustaining food production, find new food source and alternatives, governmental policies for environmental protection and safe usage of resources.⁸³ Further, the sustainable management of agriculture, fisheries, forestry and rural development in low as well as high potential areas will be importance for food security. The fundamental role of farmers, fishers, foresters, indigenous people and their communities, and all other people involved in the food sector, and of their organizations, supported by effective research and extension, in attaining food security has been acknowledged.⁸⁴ Food diversification is crucial in cushioning the people against such challenges as climate change and rainfall shortage.

8.8.4 Gender Roles and Empowerment of Youth and Women

The fundamental contribution to food security by women, particularly in rural areas of developing countries, and the need to ensure equality between men and women cannot be gainsaid.⁸⁵ Further, the *Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa*⁸⁶ recognises the right of women to food security and states that States Parties should ensure that women have the right to nutritious and adequate food. In this regard, they should respond appropriately to: provide women with access to clean drinking water, sources of domestic fuel, land, and the means of producing nutritious food; and establish adequate systems of supply and storage to ensure food security.⁸⁷

It is noteworthy that women play a critical role in the production, availability, consumption and access to food considering that women head many homes around Kenya. They are also charged with the preparation of such food, a duty that requires fuel which is mostly firewood or charcoal. Thus, any meaningful step towards achieving food security and environmental sustainability in Kenya

⁸³ The Rome World Food Summit Plan of Actions.

⁸⁴ Ibid.

⁸⁵ Rome Declaration on World Food Security, 1996.

⁸⁶ African Union, *Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa*, 11 July 2003.

⁸⁷ Ibid, Article 16.

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will substantially depend on ensuring that gender issues are fully integrated into the food security debate. Such women from poor households should be empowered through such means as mechanization so as to increase women's farm labour productivity, special training (such as tertiary and vocational education) programs to improve women's capacity to engage in economically productive activities.⁸⁸

The youth also need to be empowered to ensure that they are able to take care of themselves and their young families, thus cushioning the country against chronic poverty. Chronic poverty is often believed to be a source of food insecurity and should therefore be eliminated. The Constitution of Kenya 2010 obligates the State to take measures, including affirmative action programmes, to ensure that the youth: access relevant education and training; have opportunities to associate, be represented and participate in political, social, economic and other spheres of life; access employment; and are protected from harmful cultural practices and exploitation.⁸⁹

Such empowerment measures especially when extended to the minorities and marginalised groups⁹⁰ are crucial, if the country is to move from the current state of hopelessness and perpetual reliance on foreign food aid as well as avoiding indiscriminate environmental degradation. It has been rightly asserted that although the most severe food insecurity is typically associated with disasters such as drought, floods, war, or earthquakes, most food insecurity is associated not with catastrophes, but rather with chronic poverty.⁹¹ It is therefore important that steps are taken to address such chronic poverty as well as any predisposition to the same. To address the food security issues, there is need to move away from the more common feeding programs, and approach the same through putting in

⁸⁸ See generally, Horenstein, N. & Nadine R, 'Women and Food Security in Kenya', *PPR Working Paper Series*, Women in Development Division, World Bank, June 1989, WPS 232. Available at http://www.wds.worldbank.org/serolet/WDSContentServer/WDSP/IB/2000/08/23/000009265_3960928010917/Rendered/PDF/multi_page.pdf [Accessed on 18/07/2014].

⁸⁹ Constitution of Kenya 2010, Article 55.

⁹⁰ Article 56 of the Constitution provides that the State shall put in place affirmative action programmes designed to ensure that minorities and marginalised groups—participate and are represented in governance and other spheres of life; are provided special opportunities in educational and economic fields; are provided special opportunities for access to employment; develop their cultural values, languages and practices; and have reasonable access to water, health services and infrastructure.

⁹¹ Barrett, C.B., *et al.*, 'Measuring Food Insecurity', *op. cit.* p. 827.

place empowerment measures and policies that promote poverty reduction through employment creation and broad based agricultural productivity among the poor, as well as safety nets to safeguard the vulnerable non-poor such as the youth.

It has been posited that enhanced control over productive assets and access to the technologies and markets necessary to sustainably use them to generate a stable livelihood are especially crucial to reducing vulnerability to food insecurity and facilitating the escape from poverty traps.⁹²

The *Rome Declaration on World Food Security* 1996 recognise the need to adopt policies conducive to investment in human resource development, research and infrastructure for achieving food security. It emphasises the need to encourage generation of employment and incomes, and promote equitable access to productive and financial resources. It observes that trade is a key element in achieving food security and the attendees to the Summit agreed to pursue food trade and overall trade policies that will encourage the producers and consumers to utilize available resources in an economically sound and sustainable manner. The Declaration state that sustainable development policies will promote full participation and empowerment of people, especially women, an equitable distribution of income, access to health care and education, and opportunities for youth.

One of the commitments in the *World Food Summit Plan of Action* was to ensure an enabling political, social, and economic environment designed to create the best conditions for the eradication of poverty and for durable peace, based on full and equal participation of women and men, which is most conducive to achieving sustainable food security for all.⁹³

Under the *Plan of Action*, one of the objectives is to ensure gender equality and empowerment of women through requiring that, governments, *inter alia*: support and implement commitments made at the Fourth World Conference on Women, Beijing 1995, that a gender perspective is mainstreamed in all policies; Promote women's full and equal participation in the economy, and for this purpose

⁹² Ibid, p. 827.

⁹³ *World Food Summit Plan of Action*, Commitment No. 1.

introduce and enforce gender-sensitive legislation providing women with secure and equal access to and control over productive resources including credit, land and water; Provide equal gender opportunities for education and training in food production, processing and marketing; tailor extension and technical services to women producers and increase the number of women advisors and agents; improve the collection, dissemination and use of gender-disaggregated data in agriculture, fisheries, forestry and rural development; focus research efforts on the division of labour and on income access and control within the household; and gather information on women's traditional knowledge and skills in agriculture, fisheries, forestry and natural resources management.⁹⁴

8.8.5 Regional cooperation on Agricultural Production and Trade

In order to promote food security and environmental sustainability in Kenya and the region at large, regional cooperation arrangements needs to be encouraged through various channels such as bilateral, multilateral, regional or global platforms through which there can be sharing of agricultural research and extension technologies and information on best practices in achieving food security through sustainable agricultural production.

Chapter Eighteen of the *East African Community Treaty 1999*⁹⁵ is dedicated to agriculture and food Security in the region. The *East African Community Treaty 1999*, a multi-sectoral treaty, states under Article 105 thereof the overall objectives of co-operation in the agricultural sector are the achievement of food security and rational agricultural production within the Community.⁹⁶ To achieve this, it states that Partner States undertake to adopt a scheme for the rationalisation of agricultural production with a view to promoting complementarity and specialisation in and the sustainability of national agricultural programmes in order to ensure: a common agricultural policy; food sufficiency within the

⁹⁴ Commitment No. 1, Objective 1.3.

⁹⁵ The East African Community (EAC) is the intergovernmental organisation of the Republics of Kenya, Uganda, the United Republic of Tanzania, Republic of Rwanda and Republic of Burundi with its headquarters in Arusha, Tanzania. The Treaty for Establishment of the East African Community was signed on 30 November 1999 and entered into force on 7 July 2000 following its ratification by the original three Partner States – Kenya, Uganda and Tanzania. The Republic of Rwanda and the Republic of Burundi acceded to the EAC Treaty on 18 June 2007 and became full Members of the Community with effect from 1 July 2007. [See East African Community, available at <http://www.mea.gov.in/Portal/ForeignRelation/east-african-community-april-2011.pdf> [Accessed on 18/07/2014].

⁹⁶ Article 105(1).

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Community; an increase in the production of crops, livestock, fisheries and forest products for domestic consumption, exports within and outside the Community and as inputs to agro-based industries within the Community; and post-harvest preservation and conservation and improved food processing.⁹⁷

For purposes of achieving the foregoing, the Treaty provides that the Partner States undertake to co-operate in specific fields of agriculture, including: the harmonisation of agricultural policies of the Partner States; the development of food security within the Partner States and the Community as a whole, through the production and supply of foodstuffs; agro-meteorology and climatology to promote the development of early climatological warning systems within the Community; the development and application of agricultural training and research and extension services; the adoption of internationally accepted quality standards for food processing; the establishment of joint programmes for the control of animal and plant diseases and pests; the marketing of food and the co-ordination of the export and import of agricultural commodities; joint actions in combating drought and desertification; and in such other fields of agriculture as the Council may determine.⁹⁸

For purposes of seed multiplication and distribution, the treaty provides that the Partner States shall: strengthen co-operation in quality seed development and production through research and plant breeding; support co-operation in the establishment of gene banks; enhance capacity in seed technology; initiate and maintain strategic seed reserves; harmonise quarantine policies, legislation and regulations to ease trade in seeds; and create an enabling environment for private sector seed multiplication and distribution.⁹⁹ Regarding livestock, the Treaty states that The Partner States shall: develop mechanism for co-operation in livestock breeding, including artificial insemination institutions and livestock breeding centres; encourage and facilitate exchange of genetic material to widen the base of livestock development; encourage private sector participation in livestock multiplication and distribution; develop common regulatory framework in livestock multiplication, trade in semen, embryos, breeding stock, drugs and vaccines; and harmonise quarantine regulations in artificial

⁹⁷ Ibid.

⁹⁸ Article 105(2).

⁹⁹ Article 106.

insemination and livestock breeding centres.¹⁰⁰ The Treaty also provides for harmonisation of policies, legislation and regulations for enforcement of pests and disease control.¹⁰¹ Further the Treaty states that the Partner States agree to take concerted effort to expand agricultural land through irrigation and water catchment strategies.¹⁰²

Concerning food security, the Treaty provides that the Partner States should: establish a mechanism for exchange of information on demand and supply surpluses and deficits, trade, forecasting and state of food nutrition; harmonise quality and standards of inputs and products including food additives; develop modalities to have timely information on market prices; harmonise food supply, nutrition and food security policies and strategies; initiate and maintain strategic food reserves; and develop marine and inland aquaculture and fish farming.¹⁰³

The Treaty also requires that the Partner States, in recognition of the fact that development activities may have negative impacts on the environment leading to the degradation of the environment and depletion of natural resources and that a clean and healthy environment is a prerequisite for sustainable development are to: take concerted measures to foster cooperation in the joint and efficient management and sustainable utilisation of natural resources within the Community; undertake, through environmental management strategy, to co-operate and co-ordinate their policies and actions for the protection and conservation of the natural resources and environment against all forms of degradation and pollution arising from developmental activities; co-operate and adopt common policies for control of trans-boundary movement of toxic and hazardous waste including nuclear materials and any other undesirable materials; provide prior and timely notification and relevant information to each other on natural and human activities that may or are likely to have significant trans-boundary environmental impacts and consult with each other at an early

¹⁰⁰ Article 107.

¹⁰¹ Article 108.

¹⁰² Article 109. To promote this, the Partner States are to: co-operate in formulating and implementing national and Community irrigation programmes; co-operate in developing and preserving traditional irrigation systems; improve water catchment management, including rainwater harvesting; and adopt and promote the use of environmentally safe methods of land use.

¹⁰³ Article 110.

stage; and develop and promote capacity building programmes for sustainable management of natural resources.¹⁰⁴

The *East African Community Food Security Action Plan (2011 – 2015)*¹⁰⁵ was developed to address food insecurity in the East African region. The Action Plan was informed by the overall objective of the EAC Treaty regarding cooperation in agriculture and rural development which is the achievement of food security and rational agricultural production.¹⁰⁶ Further, the *EAC Agriculture and Rural Development Policy, 2006* aims at attaining food security through increased agricultural production, processing, storage and marketing.

In this connection EAC Head of States directed that the EAC Food Security Action plan and EAC Climate Change Policy be developed to address food insecurity and adverse effects of climate change in the region.¹⁰⁷

These measures and resolutions, if fully, implemented can go a long way in the achievement of food security not only in Kenya but also in the larger East Africa region as well as sustainable environmental management.

8.8.6 Sustainable Agriculture and Rural Development

It has been noted that the rural areas in developing countries are generally poorly equipped in terms of technical and financial resources and educational infrastructure. Lack of income opportunities, failure to crop and to maintain production systems, inadequate commodity and input and consumer goods distribution networks, limited access to public services and the poor quality of these services are all fundamental aspects that need to be considered with regard to rural food security.¹⁰⁸

It has been observed that investments in rural infrastructure (such as rural roads, electricity, schools and health facilities) can promote overall rural development and have not just economic value but social value as well, thus promoting market

¹⁰⁴ Article 111; See generally Chapter 19 of the Treaty.

¹⁰⁵ EAC Secretariat, Arusha, Tanzania, February, 2011.

¹⁰⁶ *Ibid*, p. 6, clause 1.1.

¹⁰⁷ Preamble.

¹⁰⁸ Clause 31.

opportunities to raise rural income and improve the food security of the poor.¹⁰⁹ The *Rome Declaration and Plan of Action 1996* states that rural development and help for rural peoples will improve the balance of rural to urban peoples and help to provide more diverse food supplies. Since poverty, hunger and malnutrition are some of the principal causes of accelerated migration from rural to urban areas in developing countries, there is need to address these problems in an appropriate and timely fashion, so as to preserve the political, economic and social stability of many countries and regions, and consequently the world peace.¹¹⁰

The *Plan of Action* stated that the economic and social development of the rural sector is a key requisite for the achievement of food security for all, with the recognition that rural poverty is a complex phenomenon that varies considerably between and within countries.

8.8.7 Poverty Eradication

Poverty eradication is essential to improve access to food.¹¹¹ The vast majority of those who are undernourished, either cannot produce or cannot afford to buy enough food, and they have inadequate access to means of production such as land, water, inputs, improved seeds and plants, appropriate technologies and farm credit. Although food assistance may be provided to ease their plight, it is not a long term solution to the underlying causes of food insecurity. However, it is important to maintain an adequate capacity in the international community to provide food aid, whenever it is required, in response to emergencies.¹¹²

The *Rome Plan of Action* under commitment two sought to implement policies aimed at eradicating poverty and inequality and improving physical and economic access by all, at all times, to sufficient, nutritionally adequate and safe food and its effective utilization.¹¹³ Further, it sought to pursue poverty eradication, among both urban and rural poor, and sustainable food security for all as a policy priority and to promote, through sound national policies, secure

¹⁰⁹ Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific, 'A regional rice strategy for sustainable food security in Asia and the Pacific', *RAP Publication 2014/05*, Final edition, 2014, p. xvii.

¹¹⁰ *World Food Summit Plan of Action*, No. 4.

¹¹¹ *Rome Declaration and Plan of Action 1996*.

¹¹² *Ibid*.

¹¹³ *Commitment No. 2*.

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and gainful employment and equitable and equal access to productive resources such as land, water and credit, so as to maximize the incomes of the poor.¹¹⁴ To achieve this, the *Plan of Action* required that governments, in partnership with all actors of civil society, as appropriate, will: Review and adopt policies to pursue the eradication of hunger and attain sustainable food security at the household and national levels as a top policy priority, and make every effort to eliminate obstacles such as unemployment and lack of access to factors of production that adversely affect the attainment of food security, and implement the relevant commitments they entered into at the *World Summit for Social Development*, Copenhagen 1995¹¹⁵; Develop human skills and capacities through basic education and pre- and on-the-job training; adopt policies that create conditions which encourage stable employment, especially in rural areas, including off-farm jobs, so as to provide sufficient earnings to facilitate the purchase of basic necessities, as well as encourage labour intensive technologies where appropriate; Pursue sound economic, agriculture, fisheries, forestry and land reform policies that will permit farmers, fishers, foresters and other food producers, particularly women, to earn a fair return from their labour, capital and management, and encourage conservation and sustainable management of natural resources including in marginal areas; Improve equal access, by men and women, to land and other natural and productive resources, in particular, where necessary, through the effective implementation of land reform and the promotion of efficient utilization of natural and agricultural resources and resettlement on new lands, where feasible; and promote access, by farmers and farming communities, to genetic resources for food and agriculture.¹¹⁶

There is need to use the available resources to alleviate poverty and consequently achieve equitable access to food and food security for all.¹¹⁷ There is need to

¹¹⁴ Ibid, Objective 2.1.

¹¹⁵ World Summit for Social Development, held in March 1995 in Copenhagen, Governments reached a consensus on the need to put people at the centre of development. The Summit pledged to make the conquest of poverty, the goal of full employment and the fostering of social integration overriding objectives of development. [Economic and Social Development at the United Nations, World Summit for Social Development, Copenhagen, 1995, Available at <http://www.un.org/esa/socdev/wssd/text-version/> [Accessed on 18/07/2014].

¹¹⁶ Objective 2.1.

¹¹⁷ See Muigua, K., *Utilizing Africa's Natural Resources to Fight Poverty*, February, 2014, available at <http://www.kmco.co.ke/attachments/Article/121/Utilizing%20Africa%27s%20Natural%20Resources%20to%20Fight%20Poverty-26th%20March,2014.pdf>; See also generally United Nations Expert Group Meeting on Natural Resources and Conflict in Africa: Transforming a Peace Liability into a Peace Asset, *Conference Report*, 17-19 June 2006, Cairo, Egypt. Available at

facilitate physical and economic access to food through enhancing the purchasing power of people by affording them employment opportunities to help them achieve sustainable livelihoods.

8.9 A Rights-Based Approach to Food Security

The international human rights framework is based on the *Universal Declaration of Human Rights, 1948*, the *International Covenant on Economic, Social and Cultural Rights* and the *International Covenant on Economic, Social and Cultural Rights*, collectively known as the international Bill of Rights. All these have legal provisions that endeavour to promote a hunger free world through realisation of the right to food and the right to be free from hunger. Article 25 of the *Universal Declaration of Human Rights*, guarantees the right to a minimum standard of living for every person. The *International Covenant on Economic, Social and Cultural Rights* provides for the right to food as an integral part to the overall right to a minimum standard of living that includes right to housing, clothing, health care, and social services.

The *Universal Declaration of Human Rights 1948* recognises the inherent dignity and the equal and inalienable rights of all members of the human family as the foundation of freedom, justice and peace in the world.¹¹⁸ Further, the Declaration reaffirmed the faith of the peoples of the United Nations in fundamental human rights, in the dignity and worth of the human person and in the equal rights of men and women and their determined to promote social progress and better standards of life in larger freedom.¹¹⁹ Further, Article I thereof declares that all human beings are born free and equal in dignity and rights.

The human right to adequate food is recognized in several instruments under international law although the *International Covenant on Economic, Social and Cultural Rights* deals with it more comprehensively than any other instrument.¹²⁰ Pursuant to Article 11.1 of the Covenant, States parties recognize “the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of

http://www.un.org/africa/osaa/reports/Natural%20Resources%20and%20Conflict%20in%20Africa_%20airo%20Conference%20ReportwAnnexes%20Nov%202017.pdf [Accessed on 17/07/2014].

¹¹⁸ Preamble, Universal Declaration of Human Rights of 1948.

¹¹⁹ Ibid.

¹²⁰ UN Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 12: The Right to Adequate Food (Article 11 of the Covenant)*, 12 May 1999, Introduction and basic premises.

living conditions”, while pursuant to Article 11.2 they recognize that more immediate and urgent steps may be needed to ensure “the fundamental right to freedom from hunger and malnutrition”.

The human right to adequate food is of crucial importance for the enjoyment of all rights.¹²¹ The right to adequate food is indivisibly linked to the inherent dignity of the human person and is indispensable for the fulfillment of other human rights enshrined in the International Bill of Human Rights.¹²² It is also inseparable from social justice, requiring the adoption of appropriate economic, environmental and social policies, at both the national and international levels, oriented to the eradication of poverty and the fulfillment of all human rights for all.¹²³

The *United Nations Convention on the Rights of the Child*, 1989¹²⁴ requires States Parties to take appropriate measures to *inter alia*: to combat disease and malnutrition, including within the framework of primary health care, through, *inter alia*, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental pollution.¹²⁵ Alleviation of hunger and poverty is therefore, in the long-run interest of the human development.¹²⁶

8.10 Use of Traditional Knowledge in Sustainable Agricultural Production

Food security depends, *inter alia*, on sustainable management of fish, forests, and wildlife since in many indigenous communities; these resources are the principal sources of protein in the diet.¹²⁷ It also highlights the fact that the traditional knowledge within indigenous communities also plays an important role in the achievement of food security for these communities and others.¹²⁸

¹²¹ UN Committee on Economic, Social and Cultural Rights.

¹²² *Ibid.*

¹²³ General Comment No. 12: *The Right to Adequate Food*, op. cit.

¹²⁴ UN General Assembly, *Convention on the Rights of the Child*, 20 November 1989, United Nations, Treaty Series, vol. 1577, p. 3.

¹²⁵ Article 24.2.

¹²⁶ Ananda, D., Chapter - II, 'Food Security: the Concept and the Issue', op. cit. p. 2.

¹²⁷ The *Rome World Food Summit Commitment* No. 3.

¹²⁸ *Ibid.*

Further, the Constitution of Kenya 2010 obliges the State to protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities.¹²⁹ One way of protecting and enhancing it is integrating it into the available production methods as this will help achieve food security as contemplated in the Rome Summit definition of food security, that is, food that is produced in socially acceptable ways and in consistent with communities' cultural preferences.

8.11 Conclusion

There is need for urgency in taking action to fulfill the responsibility to achieve food security for present and future generations. Attaining food security is a complex task for which the primary responsibility rests with individual governments and they need to develop an enabling environment and have policies that ensure peace, as well as social, political and economic stability and equity and gender equality. However there is need for all the relevant stakeholders to support the Government in this task and within the global framework, governments should also cooperate actively with one another and with United Nations organizations, financial institutions, intergovernmental and non-governmental organizations, and public and private sectors, on programmes directed toward the achievement of food security for all.

Clearly, food security and environmental sustainability are linked. There is a need to enhance food security in Kenya within the context of environmental sustainability. Achieving food security in Kenya can indeed lead to environmental security. It is an imperative whose time has come, especially in line with Goal 2 of the 2030 Agenda on Sustainable Development which seeks to end hunger, achieve food security and improved nutrition and promote sustainable agriculture.

¹²⁹ Article 69(1) (c).

CHAPTER NINE

Promoting the Right to Clean and Healthy Environment for Sustainable Development

9.1 Introduction

This chapter examines the right to clean and healthy environment as envisaged in the Constitution of Kenya 2010, its legal underpinnings and the extent to which the same has been realised for the Kenyan people. It traces the legal foundations of this right in the international environmental discourse as well as its place in the Kenyan law. The chapter also argues that there is need to reconceptualise the concept of right to clean and healthy environment with a view to enhancing its protection and enforcement for the Kenyan people. The author proffers the view that there is a need to clarify and define this right so as to make it realisable. The chapter generally argues that promoting and protecting the right to clean and healthy environment can play a key role in facilitating achievement of sustainable development. It explores the specific ways in which this right can be realised and consequently support the efforts towards sustainable development. The argument is that a clean and healthy environment has both anthropocentric and ecocentric benefits and should therefore be pursued.

9.2 Defining the Right to Clean and Healthy Environment

It has been argued that the problem in declaring a *right to a clean and healthy environment* (emphasis added) as is found in various documents is that there is yet no clear definition of this right nor is its content clearly demarcated. Pertinent questions abound: what is the measure for a clean and healthy environment? At what point can one say this right has been violated - is it after a single oil spill, or continuously with or without an immediate clean up or after a refusal to return the contaminated environment to status quo ante?¹ For instance, in the Kenyan case of *Pastor James Jessie Gitahi & 202 others v Attorney General*,² the Court observed that "...prevention of noise and vibration pollution is now recognised as a component of a clean and healthy environment. Noise pollution covers sound which can result in hearing impairment while vibrations pollution covers vibration transmitted to the human body through solid structures. Both excessive

¹ Okpara, C. I., 'Right to a Clean and Healthy Environment: The Panacea to the Niger Delta Struggle,' *Journal of Politics and Law*, Vol. 5, No. 1; March 2012, pp. 3-8, p.6.

² [2013] eKLR, Petition No. 683 of 2009.

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noise and vibration can cause injury to the body hence the need to regulate the level of noise through the Regulations.³ The Court also stated that “Part II of the Regulations⁴ has a general prohibition against, “loud, unreasonable, unnecessary or unusual noise which annoys, disturbs, injures or endangers the comfort, repose, health or safety of others and the environment.” In determining whether the noise is loud several factors are considered including the time of the day, the proximity to a residential neighbourhood, whether the noise is recurrent intermittent or constant, the level or intensity of the noise, whether the noise has been enhanced by any electronic or mechanical means or whether the noise can be controlled without effort or expense to the person making the noise. According to the Court, a violation of the general prohibition is an offence and attracts a penalty under the Act and the Regulations.”

Although there is no single universally accepted definition of what entails the environment, it is arguable that environment goes beyond the physical surroundings to incorporate such issues as social and cultural conditions that influence the life of an individual or a community. It is however important to point out that the foregoing definitions of the right to a clean and healthy environment are now falling by the wayside in view of the fact that this right has been equated to life itself. It has been observed that while a number of States still refuse to recognize the human right to a clean environment, the international jurisprudence developed around numerous universally-recognized substantive rights, such as the right to life, health, food and housing, offers robust legal and conceptual bridges between the social, economic and environmental dimensions of sustainable development, and could shift priorities in the political economy of resource allocation and distribution.⁵ At the international level, it has been held that ‘the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn.’⁶

³ Para. 28.

⁴ Environmental Management and Coordination (Noise and Excessive Vibration Pollution) (Control) Regulation, 2009, Legal Notice No. 61 of 2009.

⁵ United Nations Non-Governmental Liaison Service, *Human Rights Approaches to Sustainable Development*, NGLS Roundup 90, May 2002, p. 1. Available at <http://www.un-ngls.org/orf/pdf/ru90hrsd.pdf> [Accessed on 28/08/2015].

⁶ ICJ Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons*, I.C.J. Reports 1996, p. 241, para. 29.

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The right to a clean environment openly became an international concern first in 1968 when the UN General Assembly passed a resolution identifying the relationship between the quality of the environment and the enjoyment of basic rights.⁷ It was not until the Stockholm conference in 1972 that the right to a healthy environment was explicitly recognized in an international environmental law document (Stockholm Declaration, 1972)⁸. It declared that *man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations* (Emphasis added).⁹ It is noteworthy that the Declaration did not just recognise the right to a good quality environment but also placed a responsibility on human beings to protect and improve the environment for present and future generations. This position of rights and responsibility towards the environment is now widely accepted and it goes to the core of the sustainable development discourse.¹⁰

9.3 Scope of the Right to Clean and Healthy Environment

Article 42 of the Constitution of Kenya provides that every person has the right to a clean and healthy environment, which includes the right—to have the environment protected for the benefit of present and future generations through legislative and other measures, particularly those contemplated in Article 69¹¹; and to have obligations relating to the environment fulfilled under Article 70¹².

⁷ United Nations General Assembly, *Problems of the Human Environment*, UNGA Res 2398(XXII) 3 December 1968.

⁸ Declaration of the United Nations Conference on the Human Environment Stockholm, 16 June 1972, UN Doc.A/CONF.48/14/Rev.1.

⁹ *Ibid*, Principle 1.

¹⁰ For instance, see Article 69, Constitution of Kenya, 2010 (Government Printer, Nairobi).

¹¹ Article 69 outlines the State and individual obligations in respect of the environment. Clause (1) provides that the State shall—(a) ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits; (b) work to achieve and maintain a tree cover of at least ten per cent of the land area of Kenya; (c) protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities; (d) encourage public participation in the management, protection and conservation of the environment; (e) protect genetic resources and biological diversity; (f) establish systems of environmental impact assessment, environmental audit and monitoring of the environment; (g) eliminate processes and activities that are likely to endanger the environment; and (h) utilise the environment and natural resources for the benefit of the people of Kenya.

¹² Article 70(1) provides that if a person alleges that a right to a clean and healthy environment recognised and protected under Article 42 has been, is being or is likely to be, denied, violated, infringed or threatened, the person may apply to a court for redress in addition to any other legal

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These constitutional provisions do not clearly define what constitutes the right to clean and healthy environment. However, Kenya's *Environmental Management and Coordination Act* (EMCA) defines the entitlement to a clean and healthy environment to include access by any person in Kenya to the various public elements or segments of the environment for recreational, educational, health, spiritual and cultural purposes.¹³

The *Draft Principles on Human Rights and the Environment of 1994*,¹⁴ declare that all persons have the right to freedom from pollution, environmental degradation and activities that adversely affect the environment, threaten life, health, livelihood, well-being or sustainable development within, across or outside national boundaries.¹⁵ This is a broader description of the right to clean and healthy environment, which includes such aspects as elimination of environmental threats to life, health, livelihood, well-being or sustainable development. Indeed, this Declaration expressly states that such a right must be recognised within and outside the national boundaries.

Principle 1 of the *Stockholm Declaration* refers to an 'environment of a quality that permits a life of dignity and well-being', while Article 24 of the *African Charter on Human and Peoples' Rights* (the African Charter)¹⁶ refers to a 'general satisfactory environment favourable for their development'. The close link between economic and social rights and the environment was also affirmed in the Kenyan case of *Friends of Lake Turkana Trust v Attorney General & 2 others*¹⁷ where the Learned Judge stated, *inter alia*, that the right to life, dignity and economic and social rights are all connected and indivisible, and it cannot be said that "one set of rights is

remedies that are available in respect to the same matter. Clause (2) thereof provides that on application under clause (1), the court may make any order, or give any directions, it considers appropriate--(a) to prevent, stop or discontinue any act or omission that is harmful to the environment; (b) to compel any public officer to take measures to prevent or discontinue any act or omission that is harmful to the environment; or (c) to provide compensation for any victim of a violation of the right to a clean and healthy environment.

¹³ S. 3(2), No. 8 of 1999, Laws of Kenya.

¹⁴ Draft Principles On Human Rights And The Environment, E/CN.4/Sub.2/1994/9, Annex I (1994).

¹⁵ *Ibid*, Principle 5.

¹⁶ African [Banjul] Charter on Human and Peoples' Rights, adopted June 27, 1981, OAU Doc. CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982), entered into force Oct. 21, 1986.

¹⁷ [2014] eKLR, ELC Suit No. 825 OF 2012.

Promoting the Right to Clean and Healthy Environment for Sustainable Development more important than another. All these rights of necessity need to be observed for person to attain a reasonable livelihood.”¹⁸

According to the World Health Organization (WHO), environmental health is concerned with all the physical, chemical, and biological factors external to a person, and all the related factors impacting behaviours. It encompasses the assessment and control of those environmental factors that can potentially affect health.¹⁹ Health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The WHO has asserted that more than three million children under five die each year from environment-related causes and conditions. This thus, makes the environment one of the most critical contributors to the global toll of more than ten million child deaths annually-as well as a very important factor in the health and well-being of their mothers.²⁰ The WHO observes that polluted indoor and outdoor air, contaminated water, lack of adequate sanitation, toxic hazards, disease vectors, ultraviolet radiation, and degraded ecosystems are all important environmental risk factors for children, and in most cases for their mothers as well.²¹

On a general scale, it is believed that environmental hazards are responsible for an estimated 25% of the total burden of disease worldwide, and nearly 35% in regions such as sub-Saharan Africa.²² In this regard, it has been argued that addressing the effects of the environment on human health is essential if we are to achieve the goal of health for all.²³ Human health is believed to be connected to environmental health and that the two are mutually dependent.²⁴

¹⁸ p.11.

¹⁹ World Health Organization, *Environmental Health*, available at http://www.who.int/topics/environmental_health/en/ [Accessed on 1/09/2015].

²⁰ World Health Organization, *Children's environmental health: The environment and health for children and their mothers*, available at <http://www.who.int/ceh/publications/factsheets/fs284/en/> [Accessed on 1/09/2015].

²¹ Ibid.

²² Health and Environment Linkages Initiative – HELI, *Health and Environment Linkages Initiative*, available at <http://www.who.int/heli/en/> [Accessed on 1/09/2015].

²³ Higenbottam, N., 'Nurse's Role as an Environmental Activist,' p.2. Available at <http://www.theluminaryproject.org/downloads/Essay%20Contest%20Higenbottam.pdf> [Accessed on 1/09/2015].

²⁴ World Health Organization, *Human health under threat from ecosystem degradation, 9 December 2005*, available at <http://www.who.int/mediacentre/news/releases/2005/pr67/en/> [Accessed on 1/09/2015].

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The right to a clean and healthy environment is so interwoven with the realisation and enjoyment of other fundamental rights that any attempt to classify it as an inferior right sabotages the realisation of all the other basic rights, including life, health, livelihood and well-being, amongst others.²⁵ This right advocates for a healthy human habitat, including clean water, air and soil that are free from toxins or hazards that threaten human health.²⁶

Human rights and the environment are said to be inherently interlinked, as the life and the personal integrity of each human being depends on protecting the environment as the resource base for all life.²⁷ It is noteworthy that the environment is the main reservoir for most of the resources necessary for realisation of economic and social rights. Therefore, efforts towards addressing threats to a clean and healthy environment must adopt an integrated approach that brings on board all actors, drawn from all the sectors, especially those that address socio-economic needs of the society. For instance, with regard to health, it is rightly observed that the scope for creating a healthy environment is clearly not limited to hospitals and doctor's surgeries, but includes the myriad factors that influence to health, agriculture and food, education, housing, employment status and working environment, water and sanitation, and health care services.²⁸ Further, clean environment indicates freedom from dirt, noise, sound pollution, pollution, garbage, insanitary toilets, and improper disposal of animal waste, improper solid waste management systems.²⁹ These issues normally fall under the mandates of different authorities, as defined by law. This is therefore calls for concerted efforts from various sectors to address the potential challenges that may arise in actualizing the right to clean and healthy environment.

²⁵ See generally Lador, Y., 'The challenges of human environmental rights,' in *Human Rights and the Environment: Proceedings of a Geneva Environment Network roundtable*, (United Nations Environment Programme for the Geneva Environment Network, 2004).

²⁶ Okpara, C. I., 'Right to a Clean and Healthy Environment: The Panacea to the Niger Delta Struggle,' *op cit*, p. 5.

²⁷ F.X., Perrez, 'Key questions concerning the human rights and environment debate: An introduction,' in *Human Rights and the Environment: Proceedings of a Geneva Environment Network roundtable*, (United Nations Environment Programme for the Geneva Environment Network, 2004), p.4.

²⁸ Mohammad, N., 'Environmental Rights for Administering Clean and Healthy Environment towards Sustainable Development in Malaysia: A Case Study,' *International Journal of Business and Management*; Vol. 9, No. 8; 2014, pp. 191-198 at p.192.

²⁹ *Ibid*, p.193.

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The broad scope of the right to clean and healthy environment was affirmed by the Kenyan Courts in the case of *Peter K. Waweru v Republic*,³⁰ where the Court stated, *inter alia*, that ‘the right of life is not just a matter of keeping body and soul together because in this modern age that right could be threatened by many things including the environment. The right to a clean environment is primary to all creatures including man; it is inherent from the act of creation, the recent restatement in the Statutes and the Constitutions of the world notwithstanding.’³¹ This right and the other human rights, including civil, cultural, economic, political and social rights, are universal, interdependent and indivisible.³² The Supreme Court of India held in *Subhash Kumar v State of Bihar*,³³ that the “right to life guaranteed by Article 21 of the Constitution includes the right of enjoyment of pollution-free water and air for full enjoyment of life.” Further, in the case of *Dr. Mohiuddin Farooque v Bangladesh, represented by the Secretary, Ministry of Irrigation, Water Resources and Flood Control and Others*³⁴, the Supreme Court interpreted the right to life to include the protection and preservation of the environment and ecological balance free from pollution of air and water.

In the Indian case of *K. Ramakrishnan and Others v State of Kerala and Others* (smoking case), the Court stated that “The word ‘life’ in the Constitution has not been used in a limited manner. A wide meaning should be given to the expression ‘life’ to enable a man not only to sustain life but also to enjoy it in a full measure. The sweep of right to life conferred by Article 21 of the Constitution is wide and far-reaching so as to bring within its scope the right to pollution free air and the “right to decent environment.”(Emphasis added)³⁵

In the case of *Peter K. Waweru v Republic*, the Court observed that “...environmental crimes under the Water Act, Public Health Act and EMCA cover the entire range of liability including strict liability and absolute liability and ought to be severely punished because the challenge of the restoration of the environment has to be tackled from all sides and by every man and woman...” It went further to state, “...In the name of environmental justice water was given

³⁰ [2006] eKLR.

³¹ *Ibid*, p.8.

³² Principle 2, UDHR, 1948.

³³ AIR 1991 SC 420, 1991 (1) SCC 598.

³⁴ 48 DLR 1996 (SC Bangladesh, 1996).

³⁵ AIR 1999 Ker 385, p.11.

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to us by the Creator and in whatever form it should never ever be the privilege
of a few – the same applies to the right to a clean environment.”³⁶

In the enforcement of other Constitutional rights such as economic and social rights and the right to life under the Constitution, courts should accord such provisions broad interpretations so as to address any environmental factors that impede access to the resources necessary for enjoyment of the right in question. These include right, *inter alia*: to the highest attainable standard of health, which includes the right to health care services, including reproductive health care; to accessible and adequate housing, and to reasonable standards of sanitation; to be free from hunger, and to have adequate food of acceptable quality; and to clean and safe water in adequate quantities.³⁷ Adequate fulfillment of these rights depends on proper and efficient mechanisms for protection of the right to clean and healthy environment.

The right to clean and healthy environment is inherently connected to the realisation of the other fundamental rights. Such broad approaches to realisation of other rights can go a long way in the protection of the right to clean and healthy environment, considering the central role played by the environment in meeting most the basic rights.

This is a demonstration of the broad definition that can be afforded the right to clean and healthy environment. It however remains a fluid concept that is largely determined or interpreted as per the prevailing law. There is a need to clearly and sharply define it in legal instruments so as to ensure its exercise.

9.4 National Courts and the Right to a Clean and Healthy Environment

It has been argued that while international law plays a vital role in establishing norms and offering a court of last resort for human rights violations, the reality is that most of the action to protect and fulfill rights occurs at the national level.³⁸ This is because, within countries, a constitution is the highest and strongest law, as all laws, regulations, and policies must be consistent with it. A constitution

³⁶ [2006] eKLR, Misc. Civ. Applic. No. 118 of 2004, p.14.

³⁷ Constitution of Kenya, Article 43(1).

³⁸ Boyd, D.R., ‘The Constitutional Right to a Healthy Environment,’ *Environment: Science and Policy for Sustainable Development*, July-August 2012, available at <http://www.environmentmagazine.org/Archives/Back%20Issues/2012/JulyAugust%202012/constitutional-rights-full.html> [Accessed on 1/09/2015].

Promoting the Right to Clean and Healthy Environment for Sustainable Development protects human rights, sets forth the obligations of the state, and restricts government powers. On a deeper level, constitutions are believed to reflect the most deeply held and cherished values of a society.³⁹

It has been pointed out that, whereas the right to a clean and healthy environment has rapidly gained constitutional protection around the world, in some countries, recognition of the right first occurred through court decisions determining that it is implicit in other constitutional provisions, primarily the right to life.⁴⁰ Currently a number of countries have devoted constitutional provisions to an enforceable right to a clean and healthy environment including, *inter alia*: Uganda⁴¹, South Africa⁴², Congo⁴³ and Ecuador⁴⁴. These provisions however mean little, because they cannot be enforced in the courts, which regard them as insufficient to provide legal standing to anyone who cannot give evidence of personal and direct environmental harm.⁴⁵ Where the requirement for *locus standi* has been dispensed with, the other impediment is the prerequisite that one must prove how their right to clean and healthy environment is likely to be denied, violated, infringed or threatened.⁴⁶ It seems that it would not suffice that the particular activity in question poses environmental threat, without necessarily proving direct threat to this right. Arguably, all one should be able to prove is

³⁹ Ibid.

⁴⁰ Boyd, D.R., 'The Implicit Constitutional Right to Live in a Healthy Environment,' *Review of European Community & International Environmental Law*, Vol. 20, No. 2, 2011, pp. 171-179 at p. 171.

⁴¹ *Constitution of The Republic of Uganda*, 1995. S.39 provides that every Ugandan has a right to a clean and healthy environment.

⁴² *Constitution of the Republic of South Africa*, 1996 -s. 24 provides that everyone has the right - to an environment that is not harmful to their health or well-being; and to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that -(i) prevent pollution and ecological degradation; (ii) promote conservation; and (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

⁴³ *Constitution of the Democratic Republic Of The Congo-Article 53* provides that all persons have the right to a healthy environment that is favorable to their development; they have the duty to defend it; The State ensures the protection of the environment and the health of the population.

⁴⁴ Republic of Ecuador, *Constitution of 2008- Article 14* provides that the right of the population to live in a healthy and ecologically balanced environment that guarantees sustainability and the good way of living (*sumak kawsay*), is recognized; Environmental conservation, the protection of ecosystems, biodiversity and the integrity of the country's genetic assets, the prevention of environmental damage, and the recovery of degraded natural spaces are declared matters of public interest.

⁴⁵ Okpara, C. I., 'Right to a Clean and Healthy Environment: The Panacea to the Niger Delta Struggle,' *op cit*, p.6.

⁴⁶ *Constitution of Kenya*, Article 70(1).

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likelihood of pollution or degradation of the environment. That is, adopting an ecocentric approach. For example, in the Ugandan case of *The Environmental Action Network Ltd v Attorney General & NEMA*⁴⁷, the court held that the applicant, a public interest litigation group which had filed the application in its own behalf and on behalf of the non-smoking members of the public under Article 50 (2) of the Constitution, to protect their right to a clean and healthy environment, their right to life and the general good of public health in Uganda, could bring a public interest action on behalf of groups or individual members of the public although the applying organisation had no direct individual interest in the infringing acts it sought to have addressed. This is also to be found under Article 22(2) of the Constitution of Kenya. The Court should be able to step in and protect the environment without necessarily looking for immediate proof of likely violation of the right to clean and healthy environment. To facilitate the same, the Constitution gives courts the power to make any order, or give any directions, it considers appropriate – to prevent, stop or discontinue any act or omission that is harmful to the environment, or to any public officer to take measures to prevent or discontinue any act or omission that is harmful to the environment, or to provide compensation for any victim of a violation of the right to a clean and healthy environment.⁴⁸ An applicant seeking such orders from courts does not have to demonstrate that any person has incurred loss or suffered injury. The Constitution provides that an applicant does not have to demonstrate that any person has incurred loss or suffered injury.⁴⁹ However, to succeed in their plea one must demonstrate that their Right under Article 42 has been or is likely to be denied, violated, infringed or threatened.⁵⁰

The implication of the foregoing is that if a party is unable to prove the denial, violation, infringement or threat for one reason or the other, then their guarantee to right to clean and healthy environment is likely to be defeated. Indeed, this was demonstrated in the case of *Republic v Lake Victoria South Water Services Board & another*⁵¹ where the learned Judge observed that the applicants who claimed

⁴⁷ Misc. Application No. 39 of 2001 (High Court of Uganda).

⁴⁸ Article 70(2).

⁴⁹ Article 70(3); See also s. 3(1) of *Environment (Management and Conservation) Act, 1999* (EMCA)

⁵⁰ *Joseph Owino Muchesia & another v Joseph Owino Muchesia & another* [2014] eKLR, para. 34.

⁵¹ [2013] eKLR, Miscellaneous Civil Application 47 of 2012; See also *John Kamau Kenneth I Mpapale v City Council of Nairobi & 7 others* [2014] eKLR, Formerly Petition No. 63 of 2012 Now ELC No. 867 OF 2012, where the Learned Judge stated that the Petitioners had not made any submissions to the effect that the projects undertaken by the Respondents, being expansion of a road/construction to

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that their right to clean and healthy environment was likely to be contravened by the respondents if they were allowed to proceed with the implementation of a project, did not indicate clearly how their right to clean and healthy environment was likely to be infringed. However, the Judge went on to state that from the possible impacts set out in the Environmental Impact Assessment (EIA) Report that he had referred to in the case, there was no doubt that the applicants' right to clean and healthy environment would be breached unless adequate mitigation measures are put in place to meet these impacts.⁵² The enforcement of the Constitutional provisions on the right to clean and healthy environment thus seems to be left to the discretion of the presiding Judge.

Recent decisions from the Kenyan Courts confirm this position. In *Said Tahir & 2 others v County Government of Mombasa & 5 others*,⁵³ the Learned Judge was of the opinion that although the right to a clean and healthy environment is a right under the Bill of Rights (Chapter 4 of the Constitution), the determination of which is conferred upon the High Court under Article 23(1) of the Constitution, there is a duality of jurisdiction between the High Court and the Environment and Land Court by virtue of Article 162 (2) of the Constitution, and by virtue of the jurisdiction conferred upon the latter court by section 13(7) of the *Environment and Land Act*⁵⁴. The Court went further to state that the balance of convenience of jurisdiction lies with the Environment and Land Court by virtue of Article 70 of the Constitution which confers upon the court the power to make any order, or give any directions, it considers appropriate – to prevent, stop or discontinue any act or omission that is harmful to the environment, or to any public officer to take measures to prevent or discontinue any act or omission that is harmful to the environment, or to provide compensation for any victim of a violation of the right to a clean and healthy environment.⁵⁵

In *Timothy Otuya Afubwa & another v County Government of Trans-Nzoia & 3 others*, the Court stated that the Constitution designates the High Court as the only court

a link road, would result to environmental degradation or in any way create unclean and unhealthy environment to the Petitioners. In the absence of specificity of the manner in which Arts 42, 69 and 70 had been violated, the Court found that there is no violation of the Petitioner's rights to a clean and healthy environment (p.13).

⁵² Para. 14.

⁵³ [2015] eKLR, Petition No. 6 of 2015.

⁵⁴ No 19 of 2011, Laws of Kenya.

⁵⁵ *Ibid*, para 15.

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to address questions on violation of the Bill of Rights. The only right under the Bill of Rights which the Environment and Land Court can hear is the right to clean and healthy environment and thus it has jurisdiction to entertain matters relating to violation of this right.⁵⁶ This case does not however seem to have settled the issue of jurisdiction.

Lack of clarity on which Court should handle matters relating to violation of the clean and healthy environment is, arguably, likely to affect efforts to realise the same for the Kenyan people. To overcome such likely challenges, it is important to adopt a broader approach to protection of the right to clean and healthy environment. This should be an approach that does not only rely on proof by the complainant of actual or likely denial, violation, infringement or threat by the respondent, but one that also incorporates ecocentric values. It is also important to point out that the Courts are under a constitutional obligation under Article 10 to uphold the principles of sustainable development. This includes protecting the environment for the sake of future generations, who may not be able to prove the likelihood of denial, violation, infringement or threat to the right. They have a duty to protect the right of such future generations. The Court should, like in the case of *Peter K. Waweru (supra)*, be proactive in promoting environmental protection and conservation for sustainable development.

The proposed approach was adopted in the case of *Joseph Leboo & 2 others v Director Kenya Forest Services & another*⁵⁷ where the Learned Judge observed that “...in my view, any person is free to raise an issue that touches on the conservation and management of the environment, and it is not necessary for such person to demonstrate, that the issues being raised, concern him personally, or indeed, demonstrate that he stands to suffer individually. Any interference with the environment affects every person in his individual capacity, but even if there cannot be demonstration of personal injury, such person is not precluded from raising a matter touching on the management and conservation of the environment....Any person, without the need of demonstrating personal injury, has the freedom and capacity to institute an action aimed at protecting the environment. The plaintiffs have filed this suit as representatives of the local community and also in their own capacity. The community, of course, has an

⁵⁶*Timothy Otuya Afubwa & another v County Government of Trans-Nzoia & 3 others* [2015] eKLR, para.8.

⁵⁷ [2013] eKLR, Environment and Land No. 273 of 2013.

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interest in the preservation and sustainable use of forests. Their very livelihoods depend on the proper management of the forests. Even if they had not demonstrated such interest that would not have been important, as any person *who alleges a violation of any law touching on the environment is free to commence litigation to ensure the protection of such environment....*⁵⁸ (emphasis added)

As stated by the Judges in *Peter K. Waweru* case, “in the name of environmental justice water was given to us by the Creator and in whatever form it should never ever be the privilege of a few – the same applies to the right to a clean environment.” Courts ought to protect this right, for all and going by the above decisions, it is arguable that courts have not done enough in playing this role. An approach that does not emphasize on the likely denial, violation, infringement or threat to the right to clean and healthy environment but one that focuses on the protection and conservation of the environment and its resources, is what is required if the Courts are to ensure that all persons including those who cannot access justice through courts, enjoy the above right.

9.5 Reconceptualising the Right to Clean and Healthy Environment in Kenya

It is no longer in dispute, at least in Kenya, that there exists a human right to a clean and healthy environment recognised even by the Constitution. Ensuring full enjoyment of a clean and healthy environment, through effective environmental management, will provide multiple benefits to society and the economy.⁵⁹ This calls for a holistic, comprehensive and integrated approach to health and environment to protect both the environment and public health.⁶⁰

Notable is the *European Charter on Environment and Health*⁶¹ which provides for both entitlements and responsibilities. Article 2 thereof provides that every individual has a responsibility to contribute to the protection of the environment, in the interests of his or her own health and the health of others. The Charter’s provisions on principles for public policy are relevant to this discourse. It

⁵⁸ Paras 25 & 28.

⁵⁹ United Nations Environmental Programme, “Human Health and the Environment,” *UNEP Post 2015 Note No. 3*, available at <http://www.unep.org/roap/Portals/96/UNEP-Post-2015-Note-3.pdf> [Accessed on 2/09/2015].

⁶⁰ Narain, J.P., “The challenge of health & environment: Profiling risks & strategic priorities for now & the future,” *Indian Journal of Medical Research*, Vol. 136, No.2, August, 2012, pp. 185–191 at p. 186.

⁶¹ WHO, *European Charter on Environment and Health*, 1989, European Series No. 35, adopted at the First European Conference on Environment and Health Frankfurt, 7–8 December 1989.

Promoting the Right to Clean and Healthy Environment for Sustainable Development provides that, *inter alia*: Good health and wellbeing require a clean and harmonious environment in which physical, psychological, social and aesthetic factors are all given their due importance. The environment should be regarded as a resource for improving living conditions and increasing wellbeing; and that Governments, public authorities and private bodies should aim at both preventing and reducing adverse effects caused by potentially hazardous agents and degraded urban and rural environments.

The foregoing provisions, although not territorially applicable to Kenya, offer a stark reminder for the country on the special relationship between human health and environment and the best approaches to dealing with them. There is need for strengthening multisectoral cooperation, integrating environmental health concerns into all national and county environmental and health-related policies. Under the Fourth Schedule of the Constitution, the National and County Governments have shared responsibilities when it comes to environment and natural resources. The National Government is tasked with protection of the environment and natural resources with a view to establishing a durable and sustainable system of development, including, in particular – fishing, hunting and gathering; protection of animals and wildlife; water protection, securing sufficient residual water, hydraulic engineering and the safety of dams; and energy policy.⁶² It is also to come up with health policy; agricultural policy; and the energy policy including electricity and gas reticulation and energy regulation.⁶³ On the other hand, the functions and powers of the county are, *inter alia*: agriculture, including – crop and animal husbandry; livestock sale yards; plant and animal disease control; and fisheries.⁶⁴ They are also tasked with County health services, including, in particular – county health facilities and pharmacies; ambulance services; promotion of primary health care; licensing and control of undertakings that sell food to the public; and refuse removal, refuse dumps and solid waste disposal.⁶⁵ The other function of county governments is control of air pollution, noise pollution, other public nuisances and outdoor advertising.⁶⁶ The foregoing functions all contribute in one way or the other to creation of a clean and healthy environment. The two government levels should

⁶² Fourth Schedule to the Constitution, Part I clause 22.

⁶³ Clauses 28, 29, 31.

⁶⁴ Fourth Schedule to the Constitution, Part II, Clause 1

⁶⁵ *Ibid*, clause 2.

⁶⁶ *Ibid*, clause 3.

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work together to facilitate a coordinated, multisectoral approach for effectiveness in the efforts to ensure realisation of the constitutional right to clean and healthy environment, for all.

Kenya Vision 2030 is the long-term development blueprint for the country, with various pillars that include economic, social and political pillars. The social pillar seeks to build a just and cohesive society that enjoys equitable social development in a clean and secure environment.⁶⁷ The transformation targets key social sectors, which include *inter alia*: water and Sanitation; the Environment and Housing and Urbanisation. Concerning the environment, the Blueprint seeks to ensure that Kenya becomes a nation that has a clean, secure and sustainable environment by 2030. This is to be achieved through: (i) promoting environmental conservation to better support the economic pillar's aspirations; (ii) improving pollution and waste management through the application of the right economic incentives; (iii) commissioning of public-private partnerships (PPPs) for improved efficiency in water and sanitation delivery; (iv) enhancing disaster preparedness in all disaster-prone areas and improving the capacity for adaptation to global climatic change.⁶⁸ It is important that these aspirations are achieved as they go to the core of the right to clean and healthy environment. Joint efforts from all the relevant stakeholders including private citizens, coupled with collaborative approach by all the Government authorities can enhance the country's efforts for a prosperous nation.

The *Sessional Paper on Vision 2030* notes that growth will be dependent on agriculture, tourism, manufacturing and the energy sector, which heavily rely on exploitation of natural resources and the environment.⁶⁹ Further, major developments, anticipated by Vision 2030 will affect pollution levels and generate larger quantities of solid waste than at present. Anticipated growth in manufacturing activities will also give rise to an increase in effluents discharged, which will require effective disposal management. The Arid and Semi-Arid Lands (ASALs), which constitute approximately 80 per cent of the total land mass and support some 10 million people and more than 70 per cent livestock, will also undergo major changes as a result of new towns, better infrastructure and livestock based industries. All these changes will consequently exert immense

⁶⁷ Sessional paper No. 10 of 2012, On Kenya Vision 2030, Government Printer, 2012.

⁶⁸ Ibid.

⁶⁹ Ibid, p.123.

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pressure on the already declining natural resources base and on the country's fragile environment. The *Sessional Paper on Vision 2030* advocates for a strong policy on the environment in order to sustain economic growth while mitigating the impacts of rapid industrialisation.⁷⁰

The Blueprint also points out that Kenya's current institutional framework to manage the environment, which is characterised by fragmentation, has various aspects of the environment policy cutting across different institutions. Accordingly, policy and institutional reform for stricter enforcement, therefore, poses a big challenge that must be overcome by Vision 2030. However, policy and legal measures require determination and political goodwill from the citizenry and leadership, for their successful enforcement and compliance. Realising the right to clean and healthy environment requires an integrated approach that incorporates social, cultural and political measures from all.

The environment should be accorded some right, independent of the human beings. Indeed, the Constitution of Kenya elevates the environment as worthy of protection by stating in the preamble that the People of Kenya are respectful of the environment, which is their heritage, and are determined to sustain it for the benefit of future generations. The constitutional recognition of this position in Kenya should give the law makers, courts and other stakeholders an incentive and clear authority to take strong action to protect the environment.

9.6 Traditional Knowledge for Clean and Healthy Environment

"Traditional knowledge" is defined as any knowledge originating from a local or traditional community that is the result of intellectual activity and insight in a traditional context, including know-how, skills, innovations, practices and learning, where the knowledge is embodied in the traditional lifestyle of a community, or contained in the codified knowledge systems passed on from one generation to another.⁷¹ The term is not to be limited to a specific technical field, and may include agricultural, environmental or medical knowledge, and knowledge associated with genetic resources.⁷²

⁷⁰ Ibid, p.123.

⁷¹ African Regional Intellectual Property Organization (ARIPO), *Swakopmund Protocol on the Protection of Traditional Knowledge and Expressions of Folklore*, Adopted by the Diplomatic Conference of ARIPO at Swakopmund (Namibia) on August 9, 2010.

⁷² Ibid.

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Africa is believed to be endowed with rich and highly diverse biological resources and traditional knowledge which have been practised centuries before the advent of colonialization.⁷³ This knowledge reflects the cumulative body of knowledge and beliefs handed down through generations by cultural transmission and the relationship of the local people with their environment.⁷⁴ Traditional knowledge also encompasses belief systems that play a fundamental role in a people's livelihood, maintaining their health, and protecting and replenishing the environment.⁷⁵

The Constitution of Kenya recognises culture as the foundation of the nation and as the cumulative civilization of the Kenyan people and nation.⁷⁶ Particularly, it obligates the State to, *inter alia*, recognise the role of science and indigenous technologies in the development of the nation, and, recognise and protect the ownership of indigenous seeds and plant varieties, their genetic and diverse characteristics and their use by the communities of Kenya.⁷⁷ Further, with respect to the environment, the State is obligated to protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities.⁷⁸ The State should not just protect the indigenous knowledge but should also actively promote the use of this knowledge for environmental protection and conservation for a clean and healthy environment.

It has been argued that traditional knowledge may contribute to improved development strategies in several ways such as by helping identify cost-effective and sustainable mechanisms for poverty alleviation that are locally manageable and locally meaningful; by a better understanding of the complexities of sustainable development in its ecological and social diversity, and helping to identify innovative pathways to sustainable human developmental that enhance local communities and their environment.⁷⁹

⁷³ African Regional Intellectual Property Organization, available at <http://www.aripo.org/index.php/services/traditional-knowledge> [Accessed on 1/09/2015].

⁷⁴ *Ibid.*

⁷⁵ *Ibid.*

⁷⁶ Article 11(1).

⁷⁷ Article 11(2) (b) & (3) (b).

⁷⁸ Article 69(1) (c).

⁷⁹ African Regional Intellectual Property Organization, *op cit.*

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Utilizing the traditional knowledge and avoiding or eliminating practices that contribute to deterioration or degradation of the environment can go a long way in promoting the realisation of the right to clean and healthy environment for all.

9.7 Scientific Knowledge for Clean and Healthy Environment

The Constitution of Kenya protects the right of every person to freedom of expression, which includes: freedom to seek, receive or impart information or ideas; freedom of artistic creativity; and academic freedom and freedom of scientific research.⁸⁰ Further, as already pointed, the Constitution also obligates the State to recognise the role of science and indigenous technologies in the development of the nation.⁸¹ These rights are important, not only for the individual citizens, but also for the country in adopting scientific knowledge especially local for eliminating unsustainable and harmful practices that adversely affect realisation right to clean and healthy environment for all.

Adoption of cleaner technologies in such areas as transport, energy production and food production can be an effective preventive measure. Scientific knowledge is also useful in helping the citizenry adopt healthy lifestyles for a better, cleaner and healthier environment. It is common knowledge that the public, mostly around urban areas, also greatly contribute to the violation of the right to clean and healthy environment mainly through pollution and other activities that lead to degradation of the environment.⁸² This does not however mean that the rural folk is excluded. They also contribute to degradation through such means as unsustainable production methods that lead to degradation, over-exploitation of the limited resources, deforestation, overstocking, amongst others.⁸³

⁸⁰ Article 33(1).

⁸¹ Article 11(2) (b).

⁸² See Egondi, T. *et al.*, 'Community Perceptions of Air Pollution and Related Health Risks in Nairobi Slums,' *International Journal of Environmental Research and Public Health*, Vol. 10, 2013, pp. 4851-4868; See also Kithiia, S.M., 'Water Quality Degradation Trends in Kenya over the Last Decade, Water Quality Monitoring and Assessment, 2012. Available at <http://www.intechopen.com/books/water-quality-monitoring-and-assessment/water-quality-degradation-trends-in-kenya-over-the-last-decade> [Accessed on 02/09/2015].

⁸³ FAO, 'Land and environmental degradation and desertification in Africa,' available at <http://www.fao.org/docrep/X5318E/x5318e02.htm> [Accessed on 02/09/2015].

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Scientific knowledge can play a great role in dealing with the above problems through, *inter alia*, cleaner production methods, sustainable housing and effective treatment and disposal of wastes.

9.8 Poverty Eradication for Clean and Healthy Environment

It has been argued that environmental conservation can contribute to poverty reduction, particularly through restoring ecosystems and by improving access by the poor to ecosystem services, thus contributing to secure livelihoods for the people who depend on them.⁸⁴ These two concepts are however mutually dependent in that if the State puts effective measures in place to address poverty, some of the contributing factors to violation of the right to clean and healthy environment can arguably be dealt with. Such include deforestation, unsustainable production methods and giving the people a voice to deal with any likely violation through ensuring that they have the means to seek redress from Courts.⁸⁵ Effective natural resources management, along with conservation and restoration, can protect and enhance biodiversity and ecosystem services.⁸⁶ The environment and the ecosystem services are so connected to the human wellbeing that it has been argued that the Millennium Development Goals (MDGs) reflect the relationship between the environment and sustainable development. This is because the targets and indicators are based on delivery of ecosystem services to the poor.⁸⁷ Where people engage in unsustainable production activities due to poverty, the State, together with other relevant stakeholders, can put in place measures that eradicate poverty, but at the same time educating the concerned people on the best alternatives that can enhance their livelihoods while still conserving the environment.

⁸⁴ The World Conservation Union (IUCN), *Depend on Nature: Ecosystem Services supporting Human Livelihoods*, 2005, p.13. Available at <https://portals.iucn.org/library/efiles/documents/2005-009.pdf> [Accessed on 1/09/2015].

⁸⁵ Examples of unsustainable production methods and infringement on the environment include pollution especially by slum-dwellers, some of who have no sense of responsibility with regard to protection of the environment, and the people who cultivate along rivers and other water sources thus causing degradation of these resources.

⁸⁶ United Nations Environmental Programme, "Human Health and the Environment," *UNEP Post 2015 Note No. 3*, op cit.

⁸⁷ The World Conservation Union (IUCN), *Depend on Nature: Ecosystem Services supporting Human Livelihoods*, 2005, op cit., p.5.

9.9 Public Awareness and Participation for Clean and Healthy Environment

The 1994 Draft Declaration on Human Rights and Environment describes the procedural rights, such as the right to participation, necessary for realization of the substantive rights.⁸⁸ It has been argued that procedural rights, such as rights to information, participation and access to justice, have the potential to empower civil society groups to make social and environmental claims and to hold State bodies and private sector actors accountable for their actions or omissions, while exercising basic civil and political rights to be free from harassment and abuse.⁸⁹ This is reiterated under Article 1 of the Aarhus Convention “in order to contribute to the protection of the right of every person of present and future generations to live in an environment adequate to his or her health and wellbeing, each Party should guarantee the rights of access to information, public participation in decision-making and access to justice in environmental matters in accordance with the provisions of this Convention.”⁹⁰ It is believed that environmental procedural rights such as the access to information, public participation and access to justice may be one of the ways and means to a realistic way for attaining the sustainable development.⁹¹

Kenyans have a role to play in achieving the ideal of a clean and healthy environment. There is need to cultivate a culture of respect for environment by all, without necessarily relying on courts for enforcing the same. The citizenry should be able to practise preventive measures while allowing the courts to come in only in cases of violation of environmental standards. Developing environmental ethics and consciousness can be enhanced through adopting participatory approaches to conservation and management of environment and its resources. Dissemination of information and knowledge in meaningful forms can also enhance participation in decision-making and enhance appreciation of the best ways of protecting and conserving the environment.

⁸⁸ Part 3 (Principles 15-24).

⁸⁹ United Nations Non-Governmental Liaison Service, *Human Rights Approaches to Sustainable Development*, NGLS Roundup 90, May 2002, p. 1. Available at <http://www.un-ngls.org/orf/pdf/ru90hrsd.pdf> [Accessed on 28/08/2015]

⁹⁰ Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, UN Doc. Sales No. E/F/R.98.II.E.27.

⁹¹ Mohammad, N., ‘Environmental Rights for Administering Clean and Healthy Environment towards Sustainable Development in Malaysia: A Case Study,’ *International Journal of Business and Management*; Vol. 9, No. 8; 2014, pp. 191-198 at p.192.

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It has been argued that when the environment is destroyed, plundered, or mismanaged, we undermine our quality of life and that of our future generations. A degraded environment leads to a scramble for scarce resources and may culminate in poverty and even conflict.⁹²

The citizenry efforts can go a long way in creating a clean and healthy environment. There is, therefore, a need to encourage voluntary compliance with environmental regulations, by the general public. This can be achieved through creating public awareness on the impacts of unsustainable and environment-degrading production and social activities, while providing sustainable alternatives. Such awareness can include organizing public forums, use of media to disseminate information and environmental campaigns and introducing comprehensive and up-to date environmental studies in learning institutions, at all levels. Incentives and disincentives can also be offered to encourage people to discard unsustainable methods of production and other activities that contribute to the degradation of the environment. Environmental rules that reward environmental leadership, build on best practices, and ensure a level playing field are more likely to succeed in securing compliance.⁹³

9.10 Enforcement and Compliance

It has rightly been observed that enforcing environmental standards and regulations is one of the surest ways governments can use to checkmate the negative impacts of corporation's activities (and even individuals) on the environment and on the lives of inhabitants of host communities.⁹⁴ As such, faced with environmental challenges which include: deforestation: biodiversity loss, drought and desertification, erosion, flooding, air, water and land pollution, industrial pollution, noise pollution, mounting solid wastes and generally

⁹² 'Wangari Maathai-an excerpt from the Nobel Peace Prize winner's Acceptance Speech,' *Earth Island Journal*. Available at http://www.earthisland.org/journal/index.php/eij/Article/wangari_maathai_an_excerpt_from_the_nobel_peace_prize_winners_acceptance_sp/ [Accessed on 01/09/2015].

⁹³ International Network for Environmental Compliance and Enforcement (INECE), 'The Importance of Environmental Compliance and Enforcement for Sustainable Development for the Rio+20 Conference,' p.2, available at <http://www.uncsd2012.org/content/documents/332INECE%20Submission%20Rio%20Compilation%20Document.pdf> [Accessed on 04/09/2015].

⁹⁴ Edo, Z.O., 'The Challenges of Effective Environmental Enforcement and Compliance in the Niger Delta Region of Nigeria,' *Journal of Sustainable Development in Africa*, Vol. 14, No.6, 2012, p. 262.

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unsanitary conditions, the need to effectively enforce environmental laws cannot be overemphasized.⁹⁵

Internationally and regionally, there are a number of instruments that strive to facilitate enforcement and compliance with environmental law, and ultimately realisation of the right to clean and healthy environment for all. Article 2 (1) of the *Vienna Convention*⁹⁶ outlines some of the States' general obligations towards the ozone layer. The Parties to the Convention are required to take appropriate measures in accordance with the provisions of the Convention and of those protocols in force to which they are party to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer.

The Convention requires Parties to, in accordance with the means at their disposal and their capabilities: Co-operate by means of systematic observations, research and information exchange in order to better understand and assess the effects of human activities on the ozone layer and the effects on human health and the environment from modification of the ozone layer; adopt appropriate legislative or administrative measures and co-operate in harmonizing appropriate policies to control, limit, reduce or prevent human activities under their jurisdiction or control should it be found that these activities have or are likely to have adverse effects resulting from modification or likely modification of the ozone layer; co-operate in the formulation of agreed measures, procedures and standards for the implementation of this Convention, with a view to the adoption of protocols and annexes; and co-operate with competent international bodies to implement effectively this Convention and protocols to which they are party. This Convention mainly advocates for preventive and control measures by States implemented through cooperation.

These measures, as observed in the Convention, rotate around protecting human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer. These measures, if implemented can contribute positively in the realisation of the human right to clean and healthy environment. However, since they are only

⁹⁵ Ibid.

⁹⁶ United Nations, *Vienna Convention on the Law of Treaties*, 23 May 1969, United Nations, Treaty Series, vol. 1155, p. 331. Kenya is a signatory to the Convention.

Promoting the Right to Clean and Healthy Environment for Sustainable Development recommendations, they require political goodwill from the States for their implementation.

According to Kenya's Ministry of Environment and Natural Resources, Kenya has made considerable progress in phasing out substances that deplete the Ozone layer that shields the earth from harmful ultra-violet radiation from the sun.⁹⁷ The country has already phased out chlorofluorocarbons, halons and methyl bromides which are Ozone Depleting Substances (ODS) found in applications such as fire-fighting equipment and fumigation for soils and cereals.⁹⁸ The harmful effects of sun radiation include increased cases of skin cancer and eye cataracts among humans, reduced plant and animal activity, poor air quality, damage to plastics and negatively impact on the climate.⁹⁹

The *Montreal Protocol*,¹⁰⁰ also an international Treaty, aims to regulate the production and use of chemicals that contribute to the depletion of Earth's ozone layer. The protocol set limits on the production of chlorofluorocarbons (CFCs), halons, and related substances that release chlorine or bromine to the ozone layer of the atmosphere.¹⁰¹

*Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*¹⁰² affirms that States are responsible for the fulfillment of their international obligations concerning the protection of human health and protection and preservation of the environment, and are liable in accordance with international law.¹⁰³ The Convention is also based on the fact that States should take necessary measures to ensure that the management of hazardous wastes and other wastes including their transboundary movement and disposal is consistent with the protection of human health and the environment whatever the place of disposal. Under the Convention, "environmentally sound management of hazardous wastes or other wastes" means taking all practicable steps to ensure

⁹⁷ Per Principal Secretary for Environment and Natural Resources Dr. Richard Lesiyampe, available at <http://www.environment.go.ke/?p=600> [Accessed on 27/08/2015].

⁹⁸ Ibid.

⁹⁹ Ibid.

¹⁰⁰ Montreal Protocol and (London Amendment) on Substances that Deplete the Ozone layer, 1522 UNTS 3; 26 ILM 1550 (1987). Kenya is a signatory to the Protocol.

¹⁰¹ Arts. 2A-I.

¹⁰² Basel, 22 March 1989, 1673 UNTS 126; 28 ILM 657 (1989). Kenya is a signatory to the Convention.

¹⁰³ Preamble.

Promoting the Right to Clean and Healthy Environment for Sustainable Development that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes.¹⁰⁴

The Convention outlines general obligations of State Parties which include, *inter alia*: Parties exercising their right to prohibit the import of hazardous wastes or other wastes for disposal should inform the other Parties of their decision pursuant to Article 13; Parties are to prohibit or should not permit the export of hazardous wastes and other wastes to the Parties which have prohibited the import of such wastes, when notified pursuant to subparagraph (a) above; and Parties should prohibit or should not permit the export of hazardous wastes and other wastes if the State of import does not consent in writing to the specific import, in the case where that State of import has not prohibited the import of such wastes.¹⁰⁵ Further to the foregoing, each Party should take the appropriate measures to, *inter alia*: ensure that the generation of hazardous wastes and other wastes within it is reduced to a minimum, taking into account social, technological and economic aspects; and ensure the availability of adequate disposal facilities, for the environmentally sound management of hazardous wastes and other wastes, that should be located, to the extent possible, within it, whatever the place of their disposal.¹⁰⁶

The Convention requires Parties to co-operate with a view to adopting, as soon as practicable, a protocol which sets out appropriate rules and procedures in the field of liability and compensation for damage resulting from the transboundary movement and disposal of hazardous wastes and other wastes.¹⁰⁷

The International Court of Justice, in the 1997 case concerning the *Gabcikovo-Nagymaros Project* (Hungary and Slovakia)¹⁰⁸, observed that “the protection of the environment is...a vital part of contemporary human rights doctrine, for it is a *sine qua non* for numerous human rights such as the right to health and the right to life itself. It is scarcely necessary to elaborate on this, as damage to the environment can impair and undermine all the human rights spoken of in the

¹⁰⁴ Article 2.8.

¹⁰⁵ Article 4(1).

¹⁰⁶ Article 4(2).

¹⁰⁷ Article 12.

¹⁰⁸ *Gabcikovo-Nagymaros Project* (Hungary/Slovakia), Judgment, 1. C. J. Reports 1997, p. 7.

Promoting the Right to Clean and Healthy Environment for Sustainable Development Universal Declaration and other human rights instruments.” The Court held that the corpus of international law which relates to the environment now consists of the general obligation of states to ensure that activities within their jurisdiction and control respects the environment of other states or areas beyond national control. The concept of sustainable development is in consonance with the need to reconcile economic development with the protection of the environment. Hence, the terms of agreements to implement must be negotiated by the parties.¹⁰⁹

Locally, the Constitution of Kenya provides that if a person alleges that a right to a clean and healthy environment recognised and protected under Article 42 has been, is being or is likely to be, denied, violated, infringed or threatened, the person may apply to a court for redress in addition to any other legal remedies that are available in respect to the same matter.¹¹⁰ The Constitution goes further to provide that on such an application, the court may make any order, or give any directions, it considers appropriate--to prevent, stop or discontinue any act or omission that is harmful to the environment; to compel any public officer to take measures to prevent or discontinue any act or omission that is harmful to the environment; or to provide compensation for any victim of a violation of the right to a clean and healthy environment.¹¹¹

The existing environmental laws such as EMCA 1999 provide for the use of Environmental Impact Assessment (EIA) in environmental management and conservation efforts. EIA is defined as an environmental management tool aiming at identifying environmental problems and providing solutions to prevent or mitigate these problems to the acceptable levels and contribute to achieving sustainable development.¹¹² EIA can be a powerful tool for keeping the corporate including Multinational Corporations (MNCs) operating in the country in check. However, the general public should be empowered through more meaningful participation in the same to ensure that the EIAs achieve their objectives. This is the only way that the affected sections of population appreciate the use of EIAs and also ensure that such exercises are not mere formalities on

¹⁰⁹ Ibid.

¹¹⁰ Article 70 (1).

¹¹¹ Article 70(2).

¹¹² Al Ouran, N.M., ‘Analysis of Environmental Health linkages in the EIA process in Jordan,’ *International Journal of Current Microbiology and Applied Sciences*, Vol. 4, No. 7, 2015, pp. 862-871, p. 862.

Promoting the Right to Clean and Healthy Environment for Sustainable Development paper but are utilised fully for the protection of the right to clean and healthy environment. This is especially for projects taking place within the community dwellings, with potentially great effects on the people's lives. A relevant example is the recent case of lead poisoning at the Coastal region of Kenya, due to unregulated mining activities.¹¹³

It has been observed that investing in compliance and enforcement of environmental laws benefits the public by securing a healthier and safer environment for themselves and their children. It also benefits individuals, firms and others in the regulated community by ensuring a level playing field governed by clear rules applied in a fair and consistent manner.¹¹⁴

Strengthening environmental compliance and enforcement requires renewed efforts by individuals and institutions everywhere. Government officials, particularly inspectors, investigators, and prosecutors, must exercise public authority in trust for all of their citizens according to the standards of good governance and with a view to protecting and improving public well-being and conserving the environment.¹¹⁵ The judiciary has a fundamental contribution to make in upholding the rule of law and ensuring that national and international laws are interpreted and applied fairly, efficiently, and effectively.¹¹⁶ Concerted efforts from all the stakeholders, including the general public can ensure that the compliance and enforcement framework in place is used to promote and safeguard the right to clean and healthy environment as envisaged in the Constitution and environmental laws.

9.11 Towards a Clean and Healthy Environment in Kenya

The realisation of the right to clean and healthy environment for the Kenyan people calls for the reconceptualization of the right. The existing framework on environment, including EMCA falls short of defining what entails a clean and

¹¹³ Jenje, B., 'MP to compensate families injured by lead poison 'if guilty', *Daily Nation*, Wednesday, April 29, 2015, available at <http://www.nation.co.ke/news/politics/MP-to-compensate-families-injured-by-lead-poison-if-guilty/-/1064/2701594/-/15u9ivl/-/index.html> [Accessed on 05/09/2015]; See also Chege, M. W., et al, 'Lead contamination of traditional hand-dug wells in parts of Kwale County, Kenya,' *International Journal of Physical Sciences*, Vol. 8, No.17, 9 May, 2013, pp. 835-839.

¹¹⁴ International Network for Environmental Compliance and Enforcement (INECE), 'The Importance of Environmental Compliance and Enforcement for Sustainable Development for the Rio+20 Conference,' *op cit*, p.2.

¹¹⁵ Ibid.

¹¹⁶ Ibid.

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healthy environment. From the foregoing argument, it is the author's assertion that the right to a clean and healthy environment can only be fully realised through addressing all issues that adversely affect the environment. The anthropocentric approach mostly adopted by most of the existing legal instruments creates the false impression that the environment should only be protected for the convenience of human beings. However, a better approach should incorporate both anthropocentric and ecocentric ideals for better incentives.

Sustainable development efforts may not bear much if the country does not move beyond laws. There is need for educating the public on the subject, with emphasis on preventive and conservation measures. The same should include change of attitude by the general public. Through encouraging use of traditional knowledge in conservation and production to active and meaningful participation in decision-making, the citizenry can hopefully appreciate the fact that the creation of a clean and healthy environment is not a State's responsibility only but there is a requirement of cooperation between the State actors and the individuals. It is to be recalled that Article 69(2) of the Constitution provides that every person has a duty to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources. There is need to empower communities so as to actualise these constitutional provisions.

One of the national values and principles of governance as provided under Article 10 of the Constitution is sustainable development. The principles of sustainable development as captured in EMCA¹¹⁷ include: the principle of public participation in the development of policies, plans and processes for the management of the environment; the cultural and social principle traditionally applied by any community in Kenya for the management of the environment or natural resources in so far as the same are relevant and are not repugnant to justice and morality or inconsistent with any written law; the principle of international co-operation in the management of environmental resources shared by two or more states; the principles of intergenerational and intragenerational equity; the polluter-pays principle; and the pre-cautionary principle. There is a need to actively engage the communities in environmental management and

¹¹⁷ EMCA, S. 3(5).

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conservation in order to help in the implementation of these principles. With the communities empowered, then it is possible to hold to account those who flout environmental laws, be they entities or individuals. It is easier to engage a community that feels a sense of belonging than one that feels sidelined by the state actors.

There is also a need to diversify production methods and waste disposal through use of innovation and technology. The State departments tasked with encouraging innovation and science ought to work closely with communities as way of identifying the most appropriate technology, either arising from the communities themselves or elsewhere, to boost production and address poverty. This also calls for more scientific research to come up with crops that can do well in dry areas to tackle the problem of drought and ultimate desertification. This will also help in diversification in economic activities by the concerned communities.

Courts also need to work closely with the public as a way of enhancing identification of activities that violate environmental laws as well as increasing the rate of enforcement and compliance with court decisions, by bodies and individuals.

There is also need to sensitise the public on the dangers of environmental degradation through pollution, overstocking, over-exploitation of resources. Other professionals should be brought on board. These may be drawn from such fields as medical, agricultural, mining, amongst others.

When people appreciate that the state of environmental health directly affects their livelihoods, it is possible to engage them in creation of a better environment that is clean and healthy as the first step towards improving their lives.

9.12 Conclusion

From the foregoing, it is clear that it is possible for the right to clean and healthy environment to be enjoyed in Kenya. The same is protected by the Constitution and has been judicially interpreted. There is however a need to reconceptualise the right to a clean and healthy environment by clearly defining it and according it the correct place in the human rights discourse.

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The right to a clean and healthy environment can be equated to the right to life. This is the bold declaration that must be made and captured in our legal framework so as to make it a reality.

Environment, Trade and Sustainable Development

10.1 Introduction

The United Nations observes that the global understanding of development has changed over the years, and countries now have agreed that sustainable development—development that promotes prosperity and economic opportunity, greater social well-being, and protection of the environment—offers the best path forward for improving the lives of people everywhere.¹ Much of the global environmental damage has been attributed to the increased scale of global economic activity, where international trade constitutes a growing portion of global economic activity, making it an increasingly important driver of environmental change.² This is justified on the fact that, at the most basic level, all economic activity is based on the environment. Natural resources such as metals and minerals, soil, forests, and fisheries are basic inputs to production of any goods, and also provide the energy needed to process them.³

The Report of the World Commission on Environment and Development, *Our Common Future*, asserts that economic growth always brings risk of environmental damage, as it puts increased pressure on environmental resources.⁴ Thus, policy makers guided by the concept of sustainable development should necessarily work to assure that growing economies remain firmly attached to their ecological roots and that these roots are protected and nurtured so that they may support growth over the long term.⁵ This is due to the fact that environmental protection is inherent in the concept of sustainable

¹ United Nations, 'What We Do: Promote Sustainable Development,' available at <http://www.un.org/en/s.s/what-we-do/promote-sustainable-development/index.html> [Accessed on 4/09/2016].

² International Institute for Sustainable Development & United Nations Environment Programme, *Trade and Green Economy: A Handbook* (International Institute for Sustainable Development, Geneva, 2014), p.3. Available at <http://www.unep.org/roe/Portals/139/documents/trade-green-economy-handbook-third-edition-en.pdf> [Accessed on 4/09/2016].

³ Ibid.

⁴ Report of the World Commission on Environment and Development, *Our Common Future*, op cit., para. 50.

⁵ Ibid, para. 50.

development, as is a focus on the sources of environmental problems rather than the symptoms.⁶

Trade is considered as one of the driving forces of economic development for all countries, usually aimed at development and the eradication of poverty.⁷ On the one hand, environmental law, both national and international, and environmental policies – such as promotion of renewable energy, environmental taxation and conservation measures – help define how countries will structure their economic activities.⁸ On the other hand, trade law affects the way in which countries design their laws and policies in areas – such as subsidies, technical regulations, investment policy and taxes – that are integral to environmental policy.⁹

Recalling that some of the significant goals of sustainable development are eradication of poverty and economic growth, and that it is now a recognised precondition for ensuring a long-term perspective for the economy, these two concepts, trade and sustainable development, are arguably inextricable.¹⁰ The Report of the World Commission on Environment and Development, *Our Common Future*, rightly points out that previously, responsibility for environmental matters had been placed in environmental ministries and institutions that often had little or no control over destruction caused by agricultural, industrial, urban development, forestry, and transportation policies and practices.¹¹ As such, society failed to give the responsibility for preventing environmental damage to the 'sectoral' ministries and agencies whose policies

⁶ Ibid, para. 50.

⁷ 'The Link between Trade and Development: What Role for the EU Trade Policy?' AIF Conference, Christiansborg, 12 September 2000; See also Preamble, World Trade Organization. "Marrakesh Agreement Establishing the World Trade Organization. Annex 1A: Multilateral Agreements on Trade in Goods-Agreement on Trade-Related Investment Measures", The Results of the Uruguay Round of Multilateral Trade Negotiations: The Legal Texts (World Trade Organization, Geneva, 1995), pp. 163-167.

⁸ International Institute for Sustainable Development & United Nations Environment Programme, *Trade and Green Economy: A Handbook*, op cit, pp. 3-4.

⁹ Ibid, pp. 3-4.

¹⁰ Glover, F., et al, 'Reinforcing the Links between Trade, Sustainable Development and Gender: an Overview of the Papers of the Expert Workshop,' United Nations Conference on Trade and Development. Papers prepared in support of the themes discussed at the Pre-UNCTAD X Expert Workshop on Trade, Sustainable Development and Gender (Geneva, 12-13 July 1999).

¹¹ Report of the World Commission on Environment and Development, *Our Common Future*, op cit., para. 46.

cause it. Accordingly, environmental management practices focused largely upon after-the-fact repair of damage: reforestation, reclaiming desert lands, rebuilding urban environments, restoring natural habitats, and rehabilitating wild lands.

To correct this, the World Commission on Environment and Development, therefore, suggested that the ability to anticipate and prevent environmental damage would require that the ecological dimensions of policy be considered at the same time as the economic, trade, energy, agricultural, and other dimensions.¹² Thus, long term sustainable growth would require far-reaching changes to produce trade, capital, and technology flows that are more equitable and better synchronized to environmental imperatives.¹³

The recommendation by the World Commission on Environment and Development has since seen a paradigm shift in the global approach to the relationship between trade and environment. Indeed, this shift has been reflected in many trade and economic policies, which have incorporated such issues as the concept of internalisation of environmental costs as an incentive for the states and multinationals to be conscious of environmental matters in their business transitions. The concept of internalisation of environmental costs implies that market prices should reflect the environmental costs of the production and use of a product in terms of natural resource utilisation, pollution, waste generation, consumption, disposal and other factors.¹⁴ This is believed to be a focal point of environmental economics.¹⁵

This chapter generally discusses the connection between trade and environment in light of sustainable development agenda. While it is beyond the scope of this book to discuss in detail the particular trade measures that countries should or have been applying, the same have been highlighted with the recognition that they are so deep and complicated that they can form the basis for further research.

¹² Ibid, para. 46.

¹³ Ibid. para. 52.

¹⁴ OECD, *Environmental Principles and Concepts*, (Organisation For Economic Co-Operation And Development, Paris, 1995), op cit., para. 33.

¹⁵ Ibid.

10.2 International Trade as a Tool for Sustainable Development

It has been argued that the main link between trade and sustainable development is the use of non-renewable raw materials to earn foreign exchange.¹⁶ This, it has been suggested, is a result of a scenario where the dependence of the developed market economies on other mineral imports from the developing countries has also grown, and non-renewable resources like fuels and minerals, as well as manufactured goods, are now far more important than tropical products and other agricultural materials in the flow of primary products from developing to industrial countries.¹⁷ This has been such a serious problem which has continually affected third world countries that the Agenda 2030 for Sustainable Development aims at ensuring that there is significant increase in the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020.¹⁸ The Agenda 2030 also affirms that international trade is an engine for inclusive economic growth and poverty reduction, and contributes to the promotion of sustainable development.¹⁹ As such, it seeks to continue to promote a universal, rules-based, open, transparent, predictable, inclusive, non-discriminatory and equitable multilateral trading system under the World Trade Organization, as well as meaningful trade liberalisation. It also calls upon all members of the World Trade Organization to

¹⁶ Report of the World Commission on Environment and Development, *Our Common Future*, op cit., para. 41. However, this is not to say that it is the only link. There are other links between trade and sustainable development; if protectionism raises barriers against manufactured exports, for example, developing nations have less scope for diversifying away from traditional commodities. And unsustainable development may arise not only from overuse of certain commodities but from manufactured goods that are potentially polluting. The Commission also observed that the increase in protectionism in industrial countries stifles export growth and prevents diversification from traditional exports. Consequently, if developing countries are to reconcile a need for rapid export growth with a need to conserve the resource base, it is imperative that they enjoy access to industrial country markets for non-traditional exports where they enjoy a comparative advantage. (para. 51).

¹⁷ *Ibid*, para. 40.

¹⁸ United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, op cit., para. 17.11.

¹⁹ *Ibid*, para. 68. This is a restatement of para. 281 of the Rio+20 Conference outcome document (The Future We Want) which reaffirmed that international trade is an engine for development and sustained economic growth, and also reaffirmed the critical role that a universal, rules-based, open, non-discriminatory and equitable multilateral trading system, as well as meaningful trade liberalisation, can play in stimulating economic growth and development worldwide, thereby benefiting all countries at all stages of development as they advance towards sustainable development. In this context, the participants in the conference expressed their focus on achieving progress in addressing a set of important issues, such as, inter alia, trade-distorting subsidies and trade in environmental goods and services.

redouble their efforts to promptly conclude the negotiations on the Doha Development Agenda.²⁰

The international community came together in July 2015 for the Third International Conference on Financing for Development, held in Addis Ababa, Ethiopia, and agreed on a set of concrete policies and actions for enhancing the effectiveness of trade as a means of implementation of sustainable development. The Addis Ababa Action Agenda, the resultant document, states²¹: “With appropriate supporting policies, infrastructure and an educated work force, trade can also help to promote productive employment and decent work, women’s empowerment and food security, as well as a reduction in inequality, and contribute to achieving the sustainable development goals.”²²

It also stated that the Heads of State would continue to promote a universal, rules-based, open, transparent, predictable, inclusive, non-discriminatory and equitable multilateral trading system under the World Trade Organisation (WTO), as well as meaningful trade liberalisation.²³

It has been suggested that equitable international trade can enable countries to achieve food security, generate decent employment opportunities for the poor, promote technology transfer²⁴, ensure national economic security and support infrastructure development, not only for moving goods to and from ports, but also for basic services such as health, education, water, sanitation and energy.²⁵ As such, it is suggested that equitable trade may be more effectively harnessed in delivering sustainable development when integrated into the SDG framework as

²⁰ Ibid, para. 68.

²¹ ‘Trade Policymaking and the Sustainable Development’ *Trading into Sustainable Development: Trade, Market Access, and the Sustainable Development Goals*, Chapter I (United Nations, 2016).

²² *Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda)* (A/RES/69/313), Resolution adopted by the General Assembly on 27 July 2015, para. 79.

²³ Ibid.

²⁴ Article 7 of the TRIPS states that: “The protection and enforcement of intellectual property should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.”

²⁵ Galmés, G.V., ‘Trade as an enabler of sustainable development and poverty eradication,’ in United Nations, *The Road from Rio+20: Towards Sustainable Development Goals*, Issue 4, September 2014, p. 10. UNCTAD/DITC/TED/2014/1 Available at http://unctad.org/en/PublicationsLibrary/ditcted2014d1_en.pdf [Accessed on 05/09/2016].

an SDG enabler, where it would serve as a promoter for potential goals such as poverty eradication, job creation, universal healthcare and education, and a healthy environment.²⁶

International trade comprises so many issues that the international community has to address the same in various forums, sometimes only handling only one of them. For instance, the participants of the *United Nations Conference on Sustainable Development - or Rio+20*, which took place in Rio de Janeiro, Brazil on 20-22 June 2012,²⁷ emphasised that well-designed and managed tourism can make a significant contribution to the three dimensions of sustainable development, has close linkages to other sectors and can create decent jobs and generate trade opportunities.²⁸ Further, they recognised the need to support sustainable tourism activities and relevant capacity building that promote environmental awareness, conserve and protect the environment, respect wildlife, flora, biodiversity, ecosystems and cultural diversity, and improve the welfare and livelihoods of local communities by supporting their local economies and the human and natural environment as a whole.²⁹ As a result, participants called for enhanced support for sustainable tourism activities and relevant capacity-building in developing countries in order to contribute to the achievement of sustainable development.³⁰

Further, in order to promote trade in legally harvested forest products, the Rio +20 conference participants called for increased efforts to strengthen forest governance frameworks and means of implementation, in accordance with the

²⁶ Ibid, p.10.

²⁷ The Rio+20 Conference had two themes: a green economy in the context of sustainable development and poverty eradication; and the institutional framework for sustainable development (World Trade Organisation, 'Harnessing Trade for Sustainable Development and a Green Economy,' p. 2.

Available at https://www.wto.org/english/res_e/publications_e/rio20_e.htm [Accessed on 03/09/2016].

²⁸ United Nations, *The Future We Want*, A/RES/66/288, Sixty-sixth session Agenda item 19, Resolution adopted by the General Assembly on 27 July 2012, para. 130.

²⁹ Ibid.

³⁰ Ibid. As one of the means of promoting sustainable tourism, RIO +20 participants further encouraged the promotion of investment in sustainable tourism, including ecotourism and cultural tourism, which may include creating small and medium sized enterprises and facilitating access to finance, including through microcredit initiatives for the poor, indigenous peoples and local communities in areas with high ecotourism potential. In this regard, they underlined the importance of establishing, where necessary, appropriate guidelines and regulations, in accordance with national priorities and legislation, for promoting and supporting sustainable tourism (para. 131).

non-legally binding instrument on all types of forests, in order to achieve sustainable forest management. To this end, they committed to improve the livelihoods of people and communities by creating the conditions needed for them to sustainably manage forests, including by strengthening cooperation arrangements in the areas of finance, trade, transfer of environmentally sound technologies, capacity-building and governance, as well as by promoting secure land tenure, particularly with regard to decision-making and benefit-sharing, in accordance with national legislation and priorities.³¹

Based on the foregoing, it is arguable that participating in international trade can widen the economic space needed to create new job opportunities, promote efficient use of resources, increase access to food, energy and basic services, and improve productive, managerial and entrepreneurial capacity required for economic diversification, growth and development.³²

It has also been acknowledged that trade can have negative, as well as positive, impacts on economic, environmental, and social systems. Economic activities supporting rapidly expanded trade can result in serious environmental degradation when complementary environmental policies are not in place; pollution of air, water, and soil, and unrestrained natural resource exploitation causing desertification, deforestation, sea level rise and fisheries depletion may grow to levels that jeopardize sustainable development efforts; and unmanaged, trade liberalisation can also have negative social impacts including brain-drain and cultural erosion.³³

10.3 The World Trade Organization (WTO), Trade and Sustainable Development

It is noteworthy that despite the major impact of trade and investment on economic activities that impact the environment – and responses to related problems like climate change – there is no single institution at the global level tasked with ensuring the mutual supportiveness of the international trade regime with sustainable development.³⁴ Most aspects of trade – from intellectual

³¹ Ibid, para. 193.

³² Ibid, p. 10.

³³ Ibid, p.10.

³⁴ IISD, 'A Brief History of Trade, Finance and Sustainable Development.' Available at http://www.iisd.ca/process/trade_invest-intro.htm [Accessed on 08/09/2016].

property rights to agricultural policy – are addressed by different international processes, such as multilateral environmental agreements including the UN Framework Convention on Climate Change (UNFCCC), organizations like the WTO or the International Maritime Organization (IMO), and UN processes and institutions like the UN Environment Programme (UNEP), the UN Development Programme (UNDP) and the UN Food and Agriculture Organization (FAO), with varying degrees of attention to the links with sustainability.³⁵ However, considering that the other bodies deal with a whole range of issues, unlike WTO which is mainly involved in trade matters, this chapter does not dwell much on the work of the other institutions as far as international trade and sustainable development matters are concerned but instead singles out WTO.

The World Trade Organization is the international body dealing with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible, with a level playing field for all its members. Sustainable development is one of the objectives of the WTO, as reflected in the Preamble of the Marrakesh Agreement which establishes the WTO, putting it at the intersection of trade and sustainable development.³⁶ Sustainable development and protection and preservation of the environment complement the WTO's objective to reduce trade barriers and eliminate discriminatory treatment in international trade relations.³⁷

The WTO notes that while there is no specific agreement dealing with the environment, under WTO rules members can adopt trade-related measures aimed at protecting the environment provided a number of conditions to avoid the misuse of such measures for protectionist ends are fulfilled. The WTO contributes to protection and preservation of the environment through its

³⁵ Ibid.

³⁶ 'Harnessing Trade for Sustainable Development and a Green Economy' (World Trade Organization, 2012); *Marrakesh Agreement Establishing the World Trade Organization* "The Parties to this Agreement, Recognizing that their relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world's resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development...."

³⁷ World Trade Organization, 'Trade and environment,' available at https://www.wto.org/english/tratop_e/envir_e/envir_e.htm [Accessed on 07/09/2016].

objective of trade openness, through its rules and enforcement mechanism, through work in different WTO bodies, and through ongoing efforts under the Doha Development Agenda. The Doha Agenda includes specific negotiations on trade and environment and some tasks assigned to the regular WTO Trade and Environment Committee.³⁸ The Doha Round was a round of trade negotiations among the WTO membership. Its aim was to achieve major reform of the international trading system through the introduction of lower trade barriers and revised trade rules. The work programme covers about 20 areas of trade. The Round is also known semi-officially as the *Doha Development Agenda* as a fundamental objective is to improve the trading prospects of developing countries.³⁹

Thus, it has been contended WTO aims to make trade policies and environmental policies mutually supportive and to promote their compatibility so as to contribute to sustainable development.

The World Trade Organization's description of sustainable development equates the pillar of economic development to trade liberalisation⁴⁰. It has asserted that the goals of sustainable development and trade liberalisation are mutually supportive. Some environmental and social welfare advocates have disputed this mutuality, as in their view, trade liberalisation creates a race to the bottom in terms of standards, by globalizing markets and encouraging more exploitation of resources.⁴¹ However, this position has been challenged on the ground that WTO rules do not prevent countries from adopting environmental policies; instead,

³⁸ Ibid. The Trade and Environment Committee is the standing forum dedicated to dialogue between governments on the impact of trade policies on the environment, and of environment policies on trade. Created in 1995, the Committee has followed a comprehensive work programme. Under the Doha Development Agenda, the regular committee is also looking at the effects of environmental measures on market access, the intellectual property agreement and biodiversity, and labeling for environmental purposes. (Available at https://www.wto.org/english/tratop_e/envir_e/envir_e.htm [Accessed on 07/09/2016].

³⁹ Doha Round of trade negotiations (Doha Development Agenda).

Available at https://www.wto.org/english/tratop_e/dda_e/dda_e.htm In the Doha Round, WTO members are negotiating certain aspects of the link between trade and the environment, particularly the relationship between the WTO's agreements and those of other agencies, and market access for environmental goods and services. These talks take place in "Special Sessions" of the Trade and Environment Committee.

⁴⁰ Lydgate, E.B., 'Sustainable Development in the WTO: From Mutual Supportiveness to Balancing,' *World Trade Review*, Vol. 11, No. 4, 2012, pp. 621-639.

⁴¹ Ibid.

they allow complementary trade measures that are conducive to effective implementation of domestic environmental policies, but aim to prevent such measures from creating unnecessary obstacles to trade.⁴² They are seen as the guardian against protectionism and discrimination in international trade.⁴³

The relationship between trade liberalisation and economic development is arguably the most important common area of policy concern for both trade and sustainable development.⁴⁴ Trade liberalisation is one of the key goals of WTO, under the working hypothesis that trade liberalisation removes restrictions in the market, efficiently allocates resources and contributes to their optimal use. This results in increased production and income, promotes economic development, and makes more resources available for economic development, environmental management and improving social conditions, thereby contributing to sustainable development.⁴⁵

⁴² UNCTAD, 'Trade and Environment in the Multilateral Trading System,' Module 2, *Trade for Trade 2000*, para. 191. Available at <http://www.oas.org/dsd/Toolkit/Documents/ModuleIII/Trade%20and%20Environment%20in%20the%20Multilateral%20Trading%20System.pdf> [Accessed on 08/09/2016]. For instance, in the case of *United States – Import Prohibition of Certain Shrimp and Shrimp Products, the “shrimp-turtle” case*, (WTO case Nos. 58 and 61, Ruling adopted on 6 November 1998. Case brought by India, Malaysia, Pakistan and Thailand), the Appellate Body's ruling recognized that under WTO rules governments have every right to protect human, animal or plant life and health and to take measures to conserve exhaustible resources. The WTO does not have to “allow” them this right. Initially, the US lost the case because it applied its import measures in a discriminatory manner; it then revised its measures to introduce flexibilities in favour of developing countries. The Appellate Body subsequently concluded that the US ban was consistent with WTO rules. This was also the position in *United States – Standards for Reformulated and Conventional Gasoline*, (WTO case Nos. 2 and 4. Ruling adopted on 20 May 1996. Case brought by Venezuela and Brazil.) where it was affirmed that the US had every right to adopt the highest possible standard to protect its air quality so long as it did not discriminate against foreign imports. The US lost the case because it discriminated – its requirement on domestic producers was less stringent than that imposed on imported gasoline (in this case from Venezuela and Brazil). (WTO, 'Environmental disputes in GATT/WTO,' available at https://www.wto.org/english/tratop_e/envir_e/edis00_e.htm)

⁴³ United Nations Conference on Trade and Development, *Towards an enabling multilateral trading system for inclusive and sustainable development*, Trade and Development Commission Multi-year Expert Meeting on Enhancing the Enabling Economic Environment at All Levels in Support of Inclusive and Sustainable Development, Second session Geneva, 8–9 December 2014, Item 3 of the provisional agenda, Note by the UNCTAD secretariat, TD/B/C.I/MEM.5/5, para. 48. Available at http://unctad.org/meetings/en/SessionalDocuments/cimem5d5_en.pdf [Accessed on 08/09/2016].

⁴⁴ Gary P. Sampson, 'The WTO and Sustainable Development' p. 3.

⁴⁵ *Ibid.*

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Generally, trade liberalisation can have both positive and negative effects on sustainable development.⁴⁶ To maximize the positive contribution from liberalisation, it is necessary to have increased environmental safeguards, as lack of adequate environmental safeguards leads to environmental deterioration, which is likely to be on a massive scale.⁴⁷ Another positive effect is the increased revenues it brings which is essential for sustainable development.

Trade liberalisation has not, however, benefitted all regions of the world or all layers of society in an equal manner.⁴⁸ One of the concerning developmental effects of trade expansion is that international trade may have strong unequalizing tendencies, both between and within nations.⁴⁹ Agenda 21 recommends that for developing countries to benefit from the liberalisation of trading systems, they should implement the following policies, as appropriate: Create a domestic environment supportive of an optimal balance between production for the domestic and export markets and remove biases against exports and discourage inefficient import-substitution; and promote the policy framework and the infrastructure required to improve the efficiency of export and import trade as well as the functioning of domestic markets.⁵⁰ Further, it recommends that the following policies should be adopted by developing countries with respect to commodities consistent with market efficiency: expand processing, distribution and improve marketing practices and the competitiveness of the commodity sector; diversify in order to reduce dependence on commodity exports; and reflect efficient and sustainable use of factors of production in the formation of commodity prices, including the reflection of environmental, social and resources costs.⁵¹

It has been contended that there is an alarming split between industrialized countries who are successful participants of global trade and developing

⁴⁶ OECD Roundtable on Sustainable Development, Fourth Meeting, Paris 27-28 June 2008, 'Trade Liberalisation and Sustainable Development' Background Paper.

⁴⁷ The World Trade Organization and Sustainable Development: An Independent Assessment. A Report by the International Institute for Sustainable Development, 1996.

⁴⁸ 'The Link between Trade and Development: What Role for the EU Trade Policy?' AIF Conference, Christiansborg, 12 September 2000.

⁴⁹ Joeke, S., 'A Gender-Analytical Perspective on Trades and Sustainable Development' op cit.

⁵⁰ *United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992*, Agenda 21, para. 2.13.

⁵¹ *Ibid*, para. 2.14.

countries, who are largely excluded from it.⁵² There is, thus, a need to take this disparity into account as we consider the steps to be taken by various countries towards sustainable development.

Trade is deemed instrumental for growth and development under appropriate conditions. Trade provides a means to overcome constraints posed by small domestic markets and allows countries to access larger external markets, as well as skills, technology and capital, which in turn enable a better use of productive resources to catalyse structural transformation.⁵³

It has been argued that the links between trade and the environment are multiple, complex and important. Further, trade liberalisation as such is neither good nor bad for the environment. Its effects on the environment depend on the extent to which environment and trade goals can be made complementary and mutually supportive. A positive outcome requires appropriate supporting social, economic and environmental policies at the national and international levels.⁵⁴

It has been observed that there is no “one-size-fits-all” prescription to create the appropriate policy environment. In making the shift to sustainable development considerations, the approach countries will take will depend on their institutions, level of development and resource endowments, and particular environmental challenges they face.⁵⁵ While environmental standards set in developed countries are of keen interest to developing countries, they are hard to know, hard to meet, sometimes unreasonable, but all the same, imperative to export success. They end up frustrating sustainable development in developing countries.⁵⁶

There is a difference in agenda between developed and developing countries. With regard to trade, developed countries’ agenda is to establish or maintain

⁵²The Link between Trade and Development: What Role for the EU Trade Policy?’ op cit.

⁵³ United Nations Conference on Trade and Development, *Towards an enabling multilateral trading system for inclusive and sustainable development*, op cit, para. 5. Available at http://unctad.org/meetings/en/SessionalDocuments/cimem5d5_en.pdf [Accessed on 08/092016/].

⁵⁴ International Institute for Sustainable Development & United Nations Environment Programme, *Trade and Green Economy: A Handbook* op cit., p.3.

⁵⁵ ‘Harnessing Trade for Sustainable Development and a Green Economy’ (World Trade Organization) 2012.

⁵⁶ Cosby, A., ‘Lessons Learnt on Trade and Sustainable Development: Distilling Six Years of Research from the Trade Knowledge Network,’ *International Institute for Sustainable Development*, 2005.

worldwide free trade, while that of developing countries' is to gain access to new markets and to build capacity for stronger participation in international trade.⁵⁷ With regard to sustainable development, developed countries seek to ensure global environmental stability while developing countries seek to ensure development and avoid further destruction of local environments.⁵⁸

One of the rules of international trade is that countries cannot discriminate against the products of other countries on the basis of how those products were made. Regulating Process and Production Methods (PPMs) gives governments an opportunity to protect their industries unfairly against foreign competition.⁵⁹ PPMs specify how products are to be produced and what kinds of impact they may have on the environment. Applied to traded goods, they have been accused of amounting to the importing country regulating activities that take place outside its borders.⁶⁰ From the environmental perspective, how a good is made is of central importance. From a developing country perspective, dictating how a good is produced may be seen as an intrusion on sovereignty.⁶¹

In environmental terms, the essence of sustainable development is to move from the old style of cleaning up environmental problems after they occur to the new style of closed cycle facilities, cleaner production concepts and waste minimisation. Most countries and consumers will want to reward companies who produce according to these new methods.⁶²

This, may however, create the situation where standards imposed might be inappropriate for foreign investors. Another argument against PPMs is that developing countries have different social priorities than developed states, such as a higher concern for clean water than for global warming.⁶³

⁵⁷ Glover, F., et al, 'Reinforcing the Links between Trade, Sustainable Development and Gender: an Overview of the Papers of the Expert Workshop,' op cit.

⁵⁸ Ibid.

⁵⁹ International Institute for Sustainable Development & United Nations Environment Programme, *Trade and Green Economy: A Handbook*, (International Institute for Sustainable Development, Geneva, 2014).

⁶⁰ Ibid.

⁶¹ Halle, M., 'WTO and Sustainable Development' (A chapter in "The WTO and East Asian Regional Integration").

⁶² Runnals, D., 'Trade and Sustainable Development- the Emerging Issues' *Policy Matters* Issue no. 2, Spring 1998.

⁶³ International Institute for Sustainable Development & United Nations Environment Programme, *Trade and Green Economy: A Handbook*, op cit.

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It is noteworthy that developing countries face many challenges especially as far as regulation of international trade in light of environmental degradation is concerned. Multinational Corporations are arguably important players in the quest for sustainable development in international trade matters. The Report of the World Commission on Environment and Development pointed that transnationals play an important role as owners, as partners in joint ventures, and as suppliers of technology in the mining and manufacturing sectors in many developing countries, especially in such environmentally sensitive areas as petroleum, chemicals, metals, paper, and automobiles. They also dominate world trade in many primary commodities.⁶⁴ There is, thus, a need to hold them accountable in their activities in a bid to achieve the right equilibrium between international trade and sustainable development agenda. Considering that many of the developing countries may not have an effective framework to contain these multinationals, this is where the multilateral trading system comes in to fill in the gaps in the regulatory framework especially with regards to environmental sustainability.

Agenda 21 points out that international cooperation in the environmental field is growing, and in a number of cases trade provisions in multilateral environment agreements have played a role in tackling global environmental challenges. Trade measures have thus been used in certain specific instances, where considered necessary, to enhance the effectiveness of environmental regulations for the protection of the environment.⁶⁵ Such regulations should address the root causes

⁶⁴ Report of the World Commission on Environment and Development, *Our Common Future*, op cit., chapter 3, para. 58.

⁶⁵ For Instance, The *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (27 UST 1087; TIAS 8249; 993 UNTS 243) is an international agreement which aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival by regulating trade in such animals and plants (e.g. Elephant tusks). Further, in the *US – Gasoline case* (, the Appellate Body stated as follows (WTO Appellate Body Report, DSR 1996, p. 28): “It is of some importance that the Appellate Body point out what this does not mean. It does not mean, or imply, that the ability of any WTO Member to take measures to control air pollution or, more generally, to protect the environment, is at issue. That would be to ignore the fact that Article XX of the General Agreement contains provisions designed to permit important state interests—including the protection of human health, as well as the conservation of exhaustible natural resources—to find expression....”; See also GATT Panel Report, *United States – Restrictions on Imports of Tuna*, DS29/R, 16 June 1994, unadopted. The Panel noted that the objective of sustainable development, which includes the protection and preservation of the environment, has been widely recognized by the contracting parties to the General Agreement. The Panel observed that the issue in this dispute was not the validity of the environmental objectives of the United States to protect and conserve dolphins. The issue was whether, in the pursuit of its environmental objectives, the United States

of environmental degradation so as not to result in unjustified restrictions on trade. The challenge is to ensure that trade and environment policies are consistent and reinforce the process of sustainable development. However, account should be taken of the fact that environmental standards valid for developed countries may have unwarranted social and economic costs in developing countries.⁶⁶

During the *United Nations Conference on Environment & Development, Rio de Janeiro, Brazil, 3 to 14 June 1992*, some of programme areas that led to the adoption of Agenda 21 were promoting sustainable development through trade Basis for action; Making trade and environment mutually supportive Basis for action; and encouraging economic policies conducive to sustainable development, amongst others. Agenda 21 also points out that economic policies of individual countries and international economic relations both have great relevance to sustainable development.⁶⁷ It also recommends that the international community should aim at finding ways and means of achieving a better functioning and enhanced transparency of commodity markets, greater diversification of the commodity sector in developing economies within a macroeconomic framework that takes into consideration a country's economic structure, resource endowments and market opportunities, and better management of natural resources that takes into account the necessities of sustainable development.⁶⁸ Further, governments should strive to meet the following objectives, through relevant multilateral forums, including General Agreement on Tariffs and Trade (GATT)⁶⁹, United

could impose trade embargoes to secure changes in the policies which other contracting parties pursued within their own jurisdiction. The Panel therefore had to resolve whether the contracting parties, by agreeing to give each other in Article XX the right to take trade measures necessary to protect the health and life of plants, animals and persons or aimed at the conservation of exhaustible natural resources, had agreed to accord each other the right to impose trade embargoes for such purposes. (para. 5.4.2).

⁶⁶ *United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992*, Agenda 21, para. 2.20.

⁶⁷ *United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992*, Agenda 21, para. 2.1.

⁶⁸ *Ibid*, para. 2.11.

⁶⁹ The General Agreement on Tariffs and Trade (GATT) was a multilateral agreement regulating international trade. It was created in 1948 and lasted until 1993 when the World Trade Organization (WTO) was formed as a replacement for GATT in 1995. GATT went out of existence with the formal conclusion of the Uruguay Round on April 15, 1994. Its principles and the many trade agreements reached under its auspices were adopted by the WTO. (<https://www.britannica.com/topic/General-Agreement-on-Tariffs-and-Trade>). It is worth mentioning that the original GATT text (GATT 1947) is still in effect under the WTO framework, subject to the modifications of GATT 1994. World Trade

Nations Conference on Trade and Development (UNCTAD) and other international organizations: to make international trade and environment policies mutually supportive in favour of sustainable development; to clarify the role of GATT, UNCTAD and other international organizations in dealing with trade and environment -related issues, including, where relevant, conciliation procedure and dispute settlement; and to encourage international productivity and competitiveness and encourage a constructive role on the part of industry in dealing with environment and development issues.⁷⁰

10.4 United Nations Conference on Trade and Development

UNCTAD is a permanent intergovernmental body established by the United Nations General Assembly in 1964, with its headquarters located in Geneva, Switzerland, and have offices in New York and Addis Ababa.⁷¹ UNCTAD is part of the UN Secretariat and it reports to the UN General Assembly and the Economic and Social Council but have their own membership (194 members as at 2015), leadership, and budget.⁷²

Working at the national, regional, and global level, UNCTAD's efforts are aimed to help countries to: diversify economies to make them less dependent on commodities; limit their exposure to financial volatility and debt; attract investment and make it more development friendly; increase access to digital technologies; promote entrepreneurship and innovation; help local firms move up value chains; speed up the flow of goods across borders; protect consumers from abuse; curb regulations that stifle competition; and adapt to climate change and use natural resources more effectively.⁷³

UNCTAD's work on harnessing international trade in promoting sustained growth and inclusive development includes as a key aspect, support to developing countries in taking advantages of emerging opportunities for trade

Organisation, 'Uruguay Round Agreement General Agreement On Tariffs And Trade 1994,' available at

https://www.wto.org/english/docs_e/legal_e/06-gatt_e.htm [Accessed on 9/09/2016].

⁷⁰ United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992, Agenda 21, para. 2.21.

⁷¹ UNCTAD, (ECOSOC res. 917 (XXXIV) OF 1962 & RES 1995 (XIX) (1964) 'About UNCTAD,' available at <http://unctad.org/en/Pages/aboutus.aspx> [Accessed on 9/09/2016].

⁷² Ibid.

⁷³ Ibid.

associated with the protection, promotion and preservation of the environment and sustainable development objectives generally, while minimizing potential adverse impacts.⁷⁴ It has been engaging in initiatives that are meant to achieve its objectives. For instance, UNCTAD launched the BioTrade Initiative in 1996 and it has been promoting sustainable BioTrade⁷⁵ in support of the objectives of the Convention on Biological Diversity. Since 2003 the BioTrade Initiative has also hosted the BioTrade Facilitation Programme (BTFP) which focuses on enhancing sustainable bio-resources management, product development, value adding processing and marketing. The BTFP complements the UNCTAD BioTrade Initiative activities.⁷⁶ In 2015, UNCTAD launched the third phase of the BioTrade Facilitation Programme, which helps developing countries to strengthen their institutional capacity and policy frameworks.⁷⁷

UNCTAD observes that biodiversity is the source of many products and services utilized by society and its sustainable use is thus fundamental for long-term sustainable development. They also highlight the fact that natural resources are located mainly in rural areas, where over 70 per cent of the world's poor live and directly depend on these resources to cover 90 per cent of their needs in terms of food, fuel, medicine, shelter and transportation. As such, the BioTrade Initiative of the United Nations Conference on Trade and Development (UNCTAD) seeks to generate additional economic opportunities and income through the sustainable commercialization of biodiversity-based products and services. BioTrade encompasses activities ranging from the production to the sale of products and services derived from native biodiversity. Its implementation is based on compliance with a set of environmental, economic and social sustainability criteria aimed at generating economic growth and sustainable livelihoods for rural populations while conserving biodiversity.⁷⁸

⁷⁴ UNCTAD, 'Trade, Environment, Climate Change and Sustainable Development,' available at <http://unctad.org/en/Pages/DITC/Trade-and-Environment.aspx> [Accessed on 9/09/2016].

⁷⁵ BioTrade refers to those activities of collection, production, transformation, and commercialization of goods and services derived from native biodiversity under the criteria of environmental, social and economic sustainability. [UNCTAD, 'About BioTrade,' available at <http://unctad.org/en/Pages/DITC/Trade-and-Environment/BioTrade.aspx> [Accessed on 10/09/2016].

⁷⁶ Ibid.

⁷⁷ UNCTAD, 'UNCTAD Annual Report 2015: Delivering On A Sustainable Agenda,' (UNCTAD, Geneva, 2015), p. 29. Available at http://unctad.org/en/PublicationsLibrary/dom2016d1ipub_en.pdf [Accessed on 10/09/2016].

⁷⁸ UNCTAD, *Training Manual on Developing Joint BioTrade and REDD+ Projects*, UNCTAD/DITC/TED/2015/1. Available at <http://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=1558>

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Another laudable initiative by UNCTAD, in collaboration with the UN Global Compact, the UN Environment Program Finance Initiative (UNEP FI), and the Principles for Responsible Investment (PRI), is the Sustainable Stock Exchanges (SSE) initiative which is a peer-to-peer learning platform for exploring how exchanges, in collaboration with investors, regulators, and companies, can enhance corporate transparency – and ultimately performance – on ESG (environmental, social and corporate governance) issues and encourage sustainable investment.⁷⁹

The participating stock exchanges commit to sustainability in their markets. They make a voluntary public commitment to promote improved ESG disclosure and performance among listed companies.⁸⁰ SSE works with all of its Partner Exchanges through dialogue, capacity building and research to continue the momentum and to promote sustainable and transparent capital markets worldwide.⁸¹

Nairobi Securities Exchange (NSE) is also a member of SSE. Kenyan private sector is already taking advantage of this initiative, with reports that Kenyan bankers are working to develop a Green Bonds (GBs) Market in collaboration with the NSE.⁸² A GB is a debt instrument that is issued to raise capital in support of environmental and climate related projects. This has been commended as one of the ways that can enable Kenya transition to low carbon development and climate resilient growth.⁸³

The highest decision-making body of UNCTAD is the quadrennial conference, at which member States make assessments of current trade and development issues, discuss policy options and formulate global policy responses.⁸⁴ The conference also sets the organization's mandate and work priorities, and it is a subsidiary organ of the United Nations General Assembly. The conferences serve an

[Accessed on 10/09/2016].

⁷⁹ Sustainable Stock Exchanges (SSE) Initiative, 'About the Sustainable Stock Exchanges (SSE) initiative,' available at <http://www.sseinitiative.org/about/> [Accessed on 13/09/2016].

⁸⁰ Ibid.

⁸¹ Ibid.

⁸² Nyandika, P., 'Green Bonds Value in Financial Investments,' *The Standard*, Tuesday, September 13, 2016, p. 15 (The Standard Group, Nairobi, 2016).

⁸³ Ibid.

⁸⁴ UNCTAD, 'UNCTAD Conferences,' available at <http://unctad.org/en/Pages/Meetings/UNCTAD-Conferences.aspx> [Accessed on 10/09/2016].

important political function: they allow intergovernmental consensus building regarding the state of the world economy and development policies, and they play a key role in identifying the role of the United Nations and UNCTAD in addressing economic development problems.⁸⁵

The member States of the United Nations Conference on Trade and Development (UNCTAD), gathered in Nairobi from 17 to 22 July 2016 for the fourteenth session of the Conference (UNCTAD XIV), under the theme “From decision to action: Moving towards an inclusive and equitable global economic environment for trade and development”, resulted in the Nairobi Consensus document, known as *the Maafikiano*.⁸⁶ The conference resulted in concrete progress including the launch of a new e-trade initiative, the first UN statistical report on the Sustainable Development Goals (SDGs) indicators, the launch of a multi-donor trust fund on trade and productive capacity, and the commitment of more than 90 countries for a roadmap on fisheries subsidies.⁸⁷

This is one of the commendable initiatives of UNCTAD that are meant to promote sustainable development, making this body an important player in promoting fair and environmentally conscious trade practices for sustainable development. These initiatives are commendable especially because they can go a long way in enhancing technology transfer efforts in trade matters, necessary for sustainable development.

⁸⁵ Ibid.

⁸⁶ UNCTAD, *Nairobi Maafikiano*, ‘From decision to action: Moving towards an inclusive and equitable global economic environment for trade and development,’ Fourteenth session Nairobi, 17–22 July 2016, TD/519/Add.2, 5 September 2016. The Document states, inter alia, ‘in moving from decisions to actions, UNCTAD should undertake the following actions: (a) Give due account to cross-cutting issues such as good governance at all levels, freedom, peace and security, respect for human rights, including the right to development, gender equality and women’s empowerment, youth and an overall commitment to just and democratic societies, which are essential to all countries to attain sustainable and equitable growth and development; (b) Continue its efforts in all its work to mainstream cross-cutting issues of gender equality and the empowerment of women, and the promotion of sustainable development and full and productive employment; (c) Continue and strengthen its engagement with Governments, in particular those of developing countries, and all relevant stakeholders including civil society, academia and the private sector; and (d) Continue its efforts to enhance its efficiency, effectiveness, transparency and accountability, including through effective results-based management and ensuring a member State-driven process through the intergovernmental machinery. (para. 14).

⁸⁷ United Nations Conference on Trade and Development, ‘Negotiators at UNCTAD14 reach consensus, strengthen UNCTAD work programme,’ 22 July 2016. Available at <http://unctad.org/en/pages/newsdetails.aspx?OriginalVersionID=1301> [Accessed on 10/09/2016].

10.5 Conclusion

Linking development and environment is the central idea behind sustainable development. In practice, this implies opening environmental debates to the development dimension and vice versa, and seeking ways to better integrate them.⁸⁸ The relationship between trade and sustainable development is manifested in the impact of trade on the environment and the effect of environmental policies on international trade. The impact of trade on the environment is indirect, mediated by its effects on consumption and production, rigour and suitability of environmental policy.⁸⁹ The impact of environment policies on trade depends on the amount and frequency of the transaction, conditioned by the degree of trade liberalisation.⁹⁰

Some of the positive impacts of trade on the environment include the facilitation of international transfer of 'green' technologies, convergence of environmental standards of products and processes to the highest levels in the world, encouraging the development of organic products markets, elimination of subsidies and distorted prices in closed economies including the alignment of world prices, encouragement of international cooperation regarding the environmental protection, amongst others.⁹¹

The World Commission on Environment and Development recommended that in order to achieve sustainable development, changes are required in the attitudes and procedures of both public and private-sector enterprises. Moreover, environmental regulation must move beyond the usual menu of safety regulations, zoning laws, and pollution control enactments; environmental objectives must be built into taxation, prior approval procedures for investment and technology choice, foreign trade incentives, and all components of development policy.⁹²

⁸⁸ The World Trade Organization and Sustainable Development: An Independent Assessment. A Report by the International Institute for Sustainable Development, 1996.

⁸⁹ Timbur, M. & Pralea, S., 'International Trade - Environment' Relationship in the Context of Sustainable Development,' CES Working Papers.

⁹⁰ Ibid.

⁹¹ Ibid.

⁹² Report of the World Commission on Environment and Development, *Our Common Future*, op cit., chapter 2, para. 79.

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Trade is now considered one of the tools to implement sustainable development. There is, thus, the move towards integration of environmental and poverty alleviation goals into macro-economic policies, including trade policies.⁹³ Environment, trade and development are clearly linked. An integrated approach that fully incorporates environmental concerns, fair trade and sustainable development is desirable.

⁹³ 'Enhancing Capacity Building for Environment, Trade and Sustainable Development,' Draft Working Paper. *Capacity Building Meeting on Environment, Trade and Sustainable Development for the Latin American and Caribbean Region, Mexico City, Mexico, 27th-28th March 2003.*

Indigenous Knowledge and Sustainable Development

11.1 Introduction

This chapter critically examines the relationship between traditional or indigenous knowledge and environmental management in Kenya. It discusses the relationship between traditional or indigenous knowledge and the sustainable development agenda. The author argues that traditional or indigenous knowledge can be harnessed or used in the quest for sustainable development. The discourse traces the connection between traditional knowledge and environmental matters, with a view to making a case on how the knowledge can be harnessed or used in sustainable environmental management.

This chapter is informed by the hypothesis that indigenous knowledge reflects communities' practices and beliefs, and it can effectively be used to address some of the localized environmental problems. It examines the role and relevance of traditional knowledge in achieving environmental sustainability for the Kenyan communities and ultimately sustainable development.

11.2 Traditional or Indigenous Knowledge

Traditional knowledge (TK) may exist in various forms. While the discussion in this chapter highlights TK in other forms where relevant, the main focus shall be indigenous knowledge in the form of Traditional Ecological Knowledge (TEK). Traditional Ecological Knowledge has been defined as a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.¹ Traditional knowledge (TK) has also been defined as knowledge, know-how, skills and practices that are developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity.² The term "indigenous knowledge" may generally refer to how members

¹ Berkes, F., et. al., 'Rediscovery of Traditional Ecological Knowledge as Adaptive Management,' *Ecological Applications*, Vol. 10, No. 5., October 2000, pp. 1251-1262 at p. 1252.

² World Intellectual Property Organisation, 'Traditional Knowledge,' available at <http://www.wipo.int/tk/en/tk/> [Accessed on 10/04/2016].

of a community perceive and understand their environment and resources, particularly the way they convert those resources through labour.³

From the foregoing definitions, TK or indigenous knowledge (IK) mainly originates from the communities and it can be said to be a reservoir for community expertise and experiences in relation to environmental matters. It has been argued that indigenous groups offer alternative knowledge and perspectives based on their own locally developed practices of resource use.⁴ Traditional knowledge may be holistic in outlook and adaptive by nature, gathered over generations by observers whose lives depended on this information and its use. It often accumulates incrementally, tested by trial-and-error and transmitted to future generations orally or by shared practical experiences.⁵ In general, all traditional knowledge and resources are considered to be collective heritage of a community or ethnic group, even if the accumulation of knowledge is individual, because they are ancestral heritage, and are believed to come from God.⁶

11.3 Place of Traditional or indigenous knowledge in the Legal Framework

11.3.1 International Legal Framework on Protection of TK/IK

The *Convention on Biological Diversity*⁷ under Article 8 (j), dealing with traditional knowledge, provides that each contracting party shall, as far as possible and appropriate: "Subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and

³ Castro, A.P. & Ettenger, K., 'Indigenous Knowledge And Conflict Management: Exploring Local Perspectives And Mechanisms For Dealing With Community Forestry Disputes,' *Paper Prepared for the United Nations Food and Agriculture Organization, Community Forestry Unit, for the Global Electronic Conference on "Addressing Natural Resource Conflicts Through Community Forestry,"* (FAO, January-April 1996).

Available at <http://www.fao.org/docrep/005/ac696e/ac696e09.htm> [Accessed on 10/04/2016].

⁴ Berkes, F., et. al., 'Rediscovery of Traditional Ecological Knowledge as Adaptive Management,' op cit., p. 1251.

⁵ Ibid, p. 1252.

⁶ Swiderska, K., et. al., 'Protecting Community Rights over Traditional Knowledge: Implications of Customary Laws and Practices,' Interim Report (2005-2006), November 2006, p. 13. Available at <http://pubs.iied.org/pdfs/G01253.pdf> [Accessed on 10/04/2016].

⁷ 1992 Convention on Biological Diversity, [1993] ATS 32 / 1760 UNTS 79 / 31 ILM 818 (1992).

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encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.” Further, Article 10(c) of the UN Convention on Biological Diversity (CBD) provides that each Contracting Party shall, as far as possible and as appropriate protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements.

The CBD may be the only international treaty that specifically acknowledges the role of traditional knowledge, innovations, and practices in biodiversity conservation and sustainable development, as well as the need to guarantee their protection, whether through intellectual property rights (IPRs) or other means.⁸

The *United Nations Declaration on the Rights of Indigenous Peoples*,⁹ provides that indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions.¹⁰ In conjunction with indigenous peoples, States are obligated to take effective measures to recognize and protect the exercise of these rights.¹¹

One of the factors that informed this Declaration is the recognition that that respect for indigenous knowledge, cultures and traditional practices contributes to sustainable and equitable development and proper management of the environment.¹²

⁸ Dutfield, G., ‘TRIPS-Related Aspects of Traditional Knowledge,’ *Case Western Reserve Journal of International Law*, Vol. 33, Iss. 2, 2001, pp. 233-275 at pp. 261-261.

⁹ 61/295. *United Nations Declaration on the Rights of Indigenous Peoples*.

¹⁰ *United Nations Declaration on the Rights of Indigenous Peoples*, Article 31(1).

¹¹ *Ibid*, Article 31(2).

¹² *United Nations Declaration on the Rights of Indigenous Peoples*, Preamble.

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The objectives of the *Convention on the Protection and Promotion of the Diversity of Cultural Expressions 2005*¹³ include, inter alia: to protect and promote the diversity of cultural expressions; to create the conditions for cultures to flourish and to freely interact in a mutually beneficial manner; to encourage dialogue among cultures with a view to ensuring wider and balanced cultural exchanges in the world in favour of intercultural respect and a culture of peace; to foster interculturality in order to develop cultural interaction in the spirit of building bridges among peoples; and to reaffirm the importance of the link between culture and development for all countries, particularly for developing countries, and to support actions undertaken nationally and internationally to secure recognition of the true value of this link.¹⁴

The international recognition of indigenous knowledge means that national governments ought to give this knowledge more recognition and facilitate active uptake and use of the knowledge by communities.

11.3.2 National Legal Framework on protection of TK/IK

i. National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expressions, 2009

The *National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expressions, 2009*¹⁵ was developed in response to a growing need to address three main challenges facing the country today: accelerating technological development, integration of the world economic, ecological, cultural, trading and information systems and the growing relevance of intellectual property rights to these areas of activity.¹⁶ The Policy was formulated in order to provide a national framework for recognition, preservation, protection and promotion of sustainable use of traditional knowledge, genetic resources and traditional cultural expressions. Ultimately, this is meant to enhance mainstreaming of such knowledge systems into national development planning and decision making processes at all levels.¹⁷

¹³ Passed by the General Conference of the United Nations Educational, Scientific and Cultural Organization, meeting in Paris from 3 to 21 October 2005 at its 33rd session.

¹⁴ Article 1, *Convention on the Protection and Promotion of the Diversity of Cultural Expressions 2005*.

¹⁵ Government Printer, July 2009, Nairobi.

¹⁶ *Ibid*, preamble.

¹⁷ *Ibid*, para. 1.1.10.

Notably, one of the Policy Statements is to the effect that the Government in collaboration with other stakeholders will endeavour to: create awareness on the importance and the value of TK and Traditional Cultural Expressions (TCE) for, education, conflict resolution, posterity and socio-economic development.¹⁸

ii. Protection of Traditional Knowledge and Traditional Cultural Expressions Act, 2016

The *Protection of Traditional Knowledge and Traditional Cultural Expressions Act, 2016*,¹⁹ provides a unified and comprehensive framework for the protection and promotion of traditional knowledge and traditional cultural expressions; and gives effect to Article 11, 40(5) and 69 of the Constitution. Notably, one of the purposes of this Act is to recognize the intrinsic value of traditional cultures and traditional cultural expressions, including their social, cultural, economic, intellectual, commercial and educational value.²⁰ The Act defines “traditional knowledge” as any knowledge originating from an individual, local or traditional community that is the result of intellectual activity and insight in a traditional context, including know-how, skills, innovations, practices and learning, embodied in the traditional lifestyle of a community, or contained in the codified knowledge systems passed on from one generation to another and includes agricultural, *environmental* or medical knowledge, and knowledge associated with *genetic resources or other components of biological diversity* (emphasis added), and know-how of traditional architecture, construction technologies, designs, marks and indications.²¹

The discourse in this chapter contextualizes this definition in a broad manner and it is relevant to the discussion in that it contemplates environmental knowledge as part of TK.

iii. Constitution of Kenya 2010 and Indigenous Knowledge

The Constitution of Kenya 2010 provides for the national values and principles of governance that bind all State organs, State officers, public officers and all persons whenever any of them-- applies or interprets this Constitution; enacts,

¹⁸ *National Policy on Traditional Knowledge, Genetic Resources and Traditional Cultural Expressions, 2009*, para. 4.4.

¹⁹ *Protection of Traditional Knowledge and Traditional Cultural Expressions Act, 2016*, Act No. 33 of 2016, (Government Printer, Nairobi, 2016).

²⁰ *Ibid.*, s. 2(d).

²¹ *Ibid.*, s. 4.

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applies or interprets any law; or makes or implements public policy decisions.²² These national values and principles of governance include, inter alia—sharing and devolution of power, the rule of law, democracy and participation of the people; human dignity, equity, social justice, inclusiveness, equality, human rights, non-discrimination and protection of the marginalised; good governance, integrity, transparency and accountability; and sustainable development.²³ Further, the Constitution provides that it recognises culture as the foundation of the nation and as the cumulative civilization of the Kenyan people and nation.²⁴ Notably, it also outlines the State's obligation to – promote all forms of national and cultural expression through literature, the arts, traditional celebrations, science, communication, information, mass media, publications, libraries and other cultural heritage; recognise the role of science and indigenous technologies in the development of the nation; and promote the intellectual property rights of the people of Kenya.²⁵ The Constitution also guarantees every person's right to use the language, and to participate in the cultural life, of the person's choice.²⁶

The Constitution also obligates the State to put in place affirmative action programmes designed to ensure that minorities and marginalised groups, inter alia – participate and are represented in governance and other spheres of life; and develop their cultural values, languages and practices.²⁷

One of the principles of land policy in Kenya is encouragement of communities to settle land disputes through recognised local community initiatives consistent with the Constitution.²⁸ These principles shall be implemented through a national land policy developed and reviewed regularly by the national government and through legislation.²⁹

The functions of the National Land Commission include, inter alia: to initiate investigations, on its own initiative or on a complaint, into present or historical

²² Constitution of Kenya, 2010, Article 10(1).

²³ *Ibid*, Article 10(2).

²⁴ *Ibid*, Article 11(1).

²⁵ *Ibid*, Article 11(2).

²⁶ *Ibid*, Article 44(1).

²⁷ *Ibid*, Article 56.

²⁸ *Ibid*, Article 60(1) (g).

²⁹ *Ibid*, Article 60(2).

land injustices, and recommend appropriate redress; and to encourage the application of traditional dispute resolution mechanisms in land conflicts.³⁰

The obligations of the State in respect of the environment as outlined in the Constitution include, inter alia: protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and the genetic resources of the communities; encourage public participation in the management, protection and conservation of the environment; and protect genetic resources and biological diversity.³¹

The Constitution requires that, in exercising judicial authority, the courts and tribunals must be guided by the principles of, inter alia – alternative forms of dispute resolution including *reconciliation, mediation, arbitration and traditional dispute resolution mechanisms* which must be promoted, subject to clause (3) (emphasis added).³² It is noteworthy that these mechanisms form part of the TK or IK since when they are applied in the community setting, they mostly rely on such knowledge for their effectiveness.³³

The objects of the devolution of government are, inter alia – to give powers of self-governance to the people and enhance the participation of the people in the exercise of the powers of the State and in making decisions affecting them; to recognise the right of communities to manage their own affairs and to further their development; and to protect and promote the interests and rights of minorities and marginalised communities.³⁴

While the foregoing provisions are laudable in view of the fact that they have envisaged indigenous or traditional knowledge within the legal framework, the real task lies in implementing these provisions and creating opportunities for incorporation of such knowledge in decision-making. There is a need to move beyond recognition of traditional knowledge in Kenya to ensuring that the same

³⁰ Ibid, Article 67(2) (f).

³¹ Ibid, Article 69(1) (C) (d).

³² Ibid, Article 159(2) (c).

³³ Castro, A.P. & Ettenger, K., 'Indigenous Knowledge And Conflict Management: Exploring Local Perspectives And Mechanisms For Dealing With Community Forestry Disputes,' *Paper Prepared for the United Nations Food and Agriculture Organization, Community Forestry Unit, for the Global Electronic Conference on "Addressing Natural Resource Conflicts Through Community Forestry,"* op cit.

³⁴ Article 174.

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has been fully incorporated and reflected in decision-making and also implemented where the Constitution so requires. A good example of such provision is the application of traditional dispute resolution mechanisms in land conflicts (Article 67) as well as dealing with the inter-community and intra community conflicts that are mostly natural resource based.

There is a clear need to integrate traditional and formal sciences for participatory monitoring, and taking feedback to achieve adaptive strategies for management of natural resources.³⁵ It has been argued that management of natural resources cannot afford to be the subject of just any single body knowledge such as the Western science, but it has to take into consideration the plurality of knowledge systems. There is a more fundamental reason for the integration of knowledge systems. Application of scientific research and local knowledge contributes both to the equity, opportunity, security and empowerment of local communities, as well as to the sustainability of the natural resources. Local knowledge helps in scenario analysis, data collection, management planning, designing of the adaptive strategies to learn and get feedback, and institutional support to put policies in to practice. Science, on the other hand, provides new technologies, or helps in improvement to the existing ones. It also provides tools for networking, storing, visualizing, and analyzing information, as well as projecting long-term trends so that efficient solutions to complex problems can be obtained.³⁶ Through assimilation of indigenous knowledge, it is possible to capture the interests and genuine desires of the locals in natural resource exploitation activities. This reduces conflict, not only amongst the members of the concerned communities, but also between the communities and the authorities. Where they do not perceive a danger to their livelihoods, these communities are likely to embrace development projects and are also not likely to turn to unconventional ways of protecting their livelihoods.

11.4 Traditional Knowledge and Environmental Security

The Constitution provides that the State shall, *inter alia*: ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits; protect and enhance intellectual property in, and *indigenous knowledge* of,

³⁵ Pandey, D.N., 'Traditional Knowledge Systems for Biodiversity Conservation,' available at http://www.infinityfoundation.com/mandala/t_es/t_es_pande_conserve.htm [Accessed on 23/04/2016].

³⁶ Ibid.

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biodiversity and the genetic resources of the communities; *encourage public participation in the management, protection and conservation of the environment* (emphasis added); protect genetic resources and biological diversity; establish systems of environmental impact assessment, environmental audit and monitoring of the environment; eliminate processes and activities that are likely to endanger the environment; and utilise the environment and natural resources for the benefit of the people of Kenya.³⁷

In the Northern parts of Kenya, the negative climate change impact on natural resources, stress existing mechanisms for sharing resources like food and pastures, and there is always potential for tensions which can often escalate into serious clan fights for the available limited resources.³⁸ The pastoralists graze their cattle on the existing pasture leaving the soil bare. Recently, the Turkana community has turned to agriculture as a way of livelihood.³⁹ However, considering that there are other communities in the area who are still pastoralists, there is likelihood of tribal clashes over the resources found in the irrigated areas.⁴⁰

The Food and Agriculture Organization of the United Nations (FAO) has suggested that the promotion and protection of traditional and local food and agricultural knowledge will require international, intercultural and interdisciplinary approaches, communication and cooperation.⁴¹ Coordination of indigenous and local communities' sustainable use, conservation and management of food and agriculture within and across ecosystems, landscapes and seascapes will also require synergies that link food security, livelihood sustainability, poverty alleviation and food and agricultural productivity to rural

³⁷ Article 69(1).

³⁸ Pkalya, R., et al, 'Conflict in Northern Kenya: A focus on the internally displaced conflict victims in Northern Kenya,' available at http://practicalaction.org/docs/region_east_africa/conflict_in_northern_kenya.pdf [Accessed on 23/04/2016].

³⁹ See African Development Bank, Socio-Economic Analysis and Public Consultation of Lake Turkana Communities – Draft Report, December, 2009, p. 141. Available at <http://www.afdb.org/fileadmin/uploads/afdb/Documents/ComplianceReview/PUBLIC%20CONSULTATION%20AND%20SOCIO%20ECONOMIC%20ANALYSIS%20OF%20LAKE%20TURKANA%20COMMUNITIES%20UPDATED%20VERSION.PDF> [Accessed on 23/04/2016].

⁴⁰ Ibid, p. 141.

⁴¹ Food and Agriculture Organization of the United Nations (FAO), *FAO and traditional knowledge: the linkages with sustainability, food security and climate change Impacts*, 2009, p.9.

development processes based on *in* and *ex situ* conservation of food and agricultural genetic resources.⁴²

The resilience of indigenous peoples and local communities, as sustained by their cultural systems which have adapted to local ecological niches over long timeframes, and the detailed and broad knowledge they have of adaptation, is affected negatively by the loss of land, ecosystem capacity, and alienation of culturally significant places, migration and losses in livelihoods.⁴³ The element of traditional knowledge includes moral and ethical statements about the environment and about the relationships between humans, animals, and the environment; the “right way” to do things.⁴⁴

It has correctly been observed that ecological knowledge does not function in isolation but it is, instead, embedded in institutions and local social norms.⁴⁵ Further, the structure and dynamics of institutions are critical for implementation of management practices based on ecological understanding in any society.⁴⁶ The coordination of appropriate resource use practices is often entrusted with traditional leaders.⁴⁷

It has been asserted that while local people possess a great store of knowledge which they can draw upon to manage their environments, often with great success, such knowledge should not be seen as an unchanging set of rules for conduct.⁴⁸ Indigenous knowledge-whether about farming or settling disputes, does not provide a set formula for community decision-making. It is simply a

⁴² Ibid.

⁴³ Crawhall, N., ‘Indigenous knowledge in adaptation: conflict prevention and resilience-building,’ *Conflict-sensitive Adaptation: Use Human Rights to Build Social and Environmental Resilience, Brief 10*. (Indigenous Peoples of Africa Co-ordinating Committee and IUCN Commission on Environmental, Economic and Social Policy, 2014), p. 2. Available at http://cmsdata.iucn.org/downloads/tecs_csa_10_indigenous_knowledge_in_adaptation_crawhall.pdf [Accessed on 10/04/2016].

⁴⁴ Mackenzie Valley Environmental Impact Review Board, *Guidelines for Incorporating Traditional Knowledge in Environmental Impact Assessment*, July 2005, p. 6. Available at http://www.reviewboard.ca/upload/ref_library/1247177561_MVReviewBoard_Traditional_Knowledge_Guidelines.pdf [Accessed on 10/04/2016].

⁴⁵ Berkes, F., et. al., ‘Rediscovery of Traditional Ecological Knowledge as Adaptive Management,’ op cit. p. 1258.

⁴⁶ Ibid, p. 1258.

⁴⁷ Ibid, p. 1258.

⁴⁸ Castro, A.P. & Ettenger, K., ‘Indigenous Knowledge and Conflict Management: Exploring Local Perspectives and Mechanisms for Dealing with Community Forestry Disputes,’ op cit.

repertoire of ideas and actions from which individuals and communities faced with specific problems can draw, depending on their own level of knowledge, their preferences, and their ability and motivation to act.⁴⁹

It has been suggested that drawing TK/IKS holders into decision-making and policy dialogue may valorize TK/IK knowledge, facilitate participation of traditional customary resource management institutions while informing and adjusting national or subnational policy to find equitable, socially just, and environmentally well-informed solutions during times of extreme weather shocks or threshold crises of natural resource systems.⁵⁰ This is based on the assertion that participation in both decision-making and locally-owned conflict resolution strategies is more likely to be sustained and respected. *Local institutions that are aligned to traditional values, clan systems or other local social network, may be able to identify opportunities for resolution that are not evident to outside arbitrators or judges* (emphasis added).⁵¹

11.5 Traditional Knowledge in Kenya: A Mirage?

While the formal recognition of TK or IK has existed in Kenya's laws for some time, this has not translated to promotion of active utilisation of the knowledge by communities for management of environmental conflicts or problems. The practice has been to suppress them or even overshadow them using the formal mechanisms. This has also been evidenced by court pronouncements on the same which have not been consistent. In the case of *Joseph Letuya & 21 others v Attorney General & 5 others* [2014] eKLR⁵², the Court observed that: "quite apart from the special consideration that needs to be given to the Ogiek community as a minority and indigenous group when allocating forest land that this court has enunciated on in the foregoing, this court also recognizes the unique and central role of indigenous forest dwellers in the management of forests. This role is recognized by various international and national laws. The Convention on Biological Diversity which Kenya has ratified and which is now part of Kenyan law by virtue of Article 2(6) of the Constitution recognizes the importance of traditional knowledge, innovations and practices of indigenous and local communities for

⁴⁹ Ibid.

⁵⁰ Crawhall, N., 'Indigenous knowledge in adaptation: conflict prevention and resilience-building,' op cit. p. 2.

⁵¹ Ibid, p.2.

⁵² ELC Civil Suit No. 821 of 2012 (OS).

the conservation and sustainable use of biodiversity and that such traditional knowledge should be respected, preserved and promoted.” Such an affirmation from courts is to be lauded. Ideally, the same should be extended in entrenching the richness of TK/IK in environmental matters. However, while the Constitution recognises customary law as source of law in Kenya, the same has been subjugated to the formal sources of law.⁵³ It is also clear from the foregoing case that the concerned community had to fight their way through formal courts to secure their rights.

It is also noteworthy that in the past, the position has been that courts do not take judicial notice of customary law (including environmental customary law and norms) and the same must specifically be pleaded and proved by the person seeking to benefit from it. In the case of *Kimani v Gikanga*⁵⁴ the Court of Appeal for Eastern Africa was dealing with the issue of how the Court would establish customary laws as facts before it. The Court held that any person seeking to rely on customary law must prove the same in court. In other words, the Court will not take judicial notice of customary law. Customary law contains environmental norms and ethics on how to manage the environment. This position raises substantial questions as to the place of customary law under the current Constitution of Kenya, 2010. It has not specifically been overturned by Kenyan courts and could only be inferred that it was changed by the provisions of the current Constitution of Kenya 2010. However, even as the Constitution requires that, in exercising judicial authority, the courts and tribunals must be guided by the principles of, inter alia – alternative forms of dispute resolution including reconciliation, mediation, arbitration and traditional dispute resolution mechanisms must be promoted, subject to clause (3)⁵⁵, it is not clear as to how the repugnancy clause may be applied. This therefore poses the same risk of subjugation of customary laws. Customary law and traditional ecological norms thus have the problem of general acceptance by the law enforcing authorities.

⁵³ Article 2(4) of the Constitution provides that any law, including customary law, that is inconsistent with this Constitution is void to the extent of the inconsistency, and any act or omission in contravention of this Constitution is invalid.

⁵⁴ Court of Appeal for Eastern Africa, [1965] E.A. 735.

⁵⁵ (3) Traditional dispute resolution mechanisms shall not be used in a way that – (a) contravenes the Bill of Rights; (b) is repugnant to justice and morality or results in outcomes that are repugnant to justice or morality; or (c) is inconsistent with this Constitution or any written law.

While some of the foregoing case law seem to support and recognise the use of TK or IK, there has not been consistency. There is a need to clarify the place of traditional for environmental management in Kenya.

11.6 Harnessing Traditional or Indigenous Knowledge: Walking the Talk

It has been proposed that traditional knowledge, either on its own or in conjunction with science, can greatly aid in predicting and preventing the potential environmental impacts of development, as well as informing wise land-use and resource management.⁵⁶ Proponents of traditional knowledge maintain that it can offer contributions to environmental decision making from a broader scope of environmental values, practices, and knowledge.⁵⁷ The United Nations 2030 Agenda for Sustainable Development⁵⁸ recognizes peace as a vital threshold condition for development, as well as a development outcome in its own right. The General Assembly of the United Nations, in adopting the 2030 Agenda for Sustainable Development affirmed their determination to foster peaceful, just and inclusive societies which are free from fear and violence. It also affirmed that there can be no sustainable development without peace and no peace without sustainable development.⁵⁹

Indigenous or traditional knowledge (TK) is used at the local level by communities as the basis for making decisions pertaining to food security, human and animal health, education, natural resource management and other vital activities.⁶⁰

Exploring the community's knowledge and knowledge of people dealing with agriculture, is deemed crucial to determine their norms, values, and belief in regards to their activities, particularly in the area of water and land

⁵⁶ Ellis, S.C., 'Meaningful Consideration? A Review of Traditional Knowledge in Environmental Decision Making,' *Arctic*, Vol. 58, No. 1 (March 2005), p. 66-77 at p. 67.

⁵⁷ *Ibid* at p. 67.

⁵⁸ UNGA, *Transforming our world: the 2030 Agenda for Sustainable Development*, Resolution adopted by the General Assembly on 25 September 2015 [without reference to a Main Committee (A/70/L.1)], Goal 16.

⁵⁹ Preamble, the United Nations 2030 Agenda for Sustainable Development.

⁶⁰ Gorjestani, N., 'Indigenous Knowledge for Development: Opportunities and Challenges,' in Twarog, S. & Kapoor, P. (eds), 'Protecting and Promoting Traditional Knowledge: Systems, National Experiences and International Dimensions,' (United Nations Conference on Trade and Development, 2004), UNCTAD/DITC/TED/10, pp. 265-272 at p. 265. Available at http://unctad.org/en/docs/ditcted10_en.pdf [Accessed on 10/04/2016].

management.⁶¹ The way how people develop such knowledge by understanding their environment through observation and experiences determine the specific group of people's knowledge.

11.6.1 Concerted Efforts

However, harnessing this knowledge is not a one person affair but instead calls for concerted efforts from all quotas. Non-Governmental organisations, academia and government institutions directly concerned can collaborate in creating awareness of the ways in which the scientific knowledge can be applied concurrently with IK/TK to manage environmental conflicts for peace and sustainable development. Churches and other religious organisations can also come in to facilitate the actual processes of conflict management and also foster awareness creation efforts. Courts are also under an obligation to take lead role in promoting the use of traditional knowledge in environmental conflict management. They should offer support and uphold the relevant provisions where they are faced with such situations.

The need to involve everyone is affirmed in the Constitution which provides that every person has a duty to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.⁶²

11.7 Conclusion

There is clearly a link between traditional or indigenous knowledge and environmental conflict management. TK or IK involve the knowledge of and application of conflict management mechanisms that are acceptable by communities and that promote peaceful co-existence.

TK, TEK and IK are based on inclusivity. Community members are given a voice- they are able to take part in the management of natural resources within the areas that they live in. Within TK is to be found certain environmental ethics that relate

⁶¹ Retnowati, A., et al, 'Environmental Ethics in Local Knowledge Responding to Climate Change: An Understanding of Seasonal Traditional Calendar *Pranoto Mongso* and Its Phenology in Karst Area of Gunung Kidul, Yogyakarta, Indonesia,' *Procedia Environmental Sciences*, Vol. 20, 2014, pp. 785 - 794 at p. 787.

⁶² Constitution of Kenya 2010, Article 69(2).

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to how human beings deal with the environment. The idea of being in harmony with nature is one that can work towards minimizing environmental conflicts.

TK is relevant in conflict management in environmental matters. It may be used in tandem with other mechanisms to achieve the same end. Successful management of environmental conflicts has the desired goal of ensuring that Kenya achieves environmental security and sustainable development.

All knowledge including traditional knowledge, traditional ecological knowledge and indigenous knowledge should be utilised in a bid to address environmental problems in Kenya. The sustainable development agenda calls for an integrated approach to natural resources governance and management to ensure that all groups and stakeholders are brought on board.

Attaining Gender Equity for Sustainable Development

12.1 Introduction

The role of gender in the national development discourse and particularly sustainable development in Kenya is pertinent. The current Constitution of Kenya 2010 places great emphasis on the equality of both gender and their participation in the country's development agenda.¹ However, gender equity is an ideal that is yet to be fully realized owing to various factors that are discussed in this chapter. The author herein examines the legal and institutional framework on gender equity and human rights with a view to making a case for the practical empowerment of both gender for national development.

Arguably, this cannot be achieved without the cooperation of both gender. This chapter makes both a legal and moral argument in support of the need for full participation of both gender in the sustainable development efforts. Thus, the author does not only advocate for the empowerment of females and males as an end in itself but as a means of ensuring that there is cooperation between them in achieving inclusive development in Kenya.

This chapter critically examines the concept of gender equity and the role it plays in efforts towards achieving inclusive development in Kenya. The author argues that the country's efforts towards achieving sustainable development require the concerted efforts of both men and women. This is because the two groups have different but complementary needs that inclusive national development must

¹ Article 1 of the Constitution emphasizes that all sovereign power belongs to the people while Article 10 sets out democracy and participation of the people and inclusiveness as some of the national values and principles of governance in Kenya; Article 27 prohibits either the State or any person from discriminating against any person on any of these grounds including: race, sex, pregnancy, marital status, health status, ethnic or social origin, colour, age, disability, religion, conscience, belief, culture, dress, language or birth; Article 59 thereof establishes the Kenya National Human Rights and Equality Commission whose functions include *inter alia* promoting gender equality and equity generally and to coordinate and facilitate gender mainstreaming in national development. Article 69(2) also obligates every person to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources. Further, Article 175 (c) provides that one of the principles of principles of devolved government is that no more than two-thirds of the members of representative bodies in each county government should be of the same gender; See also Article 197.

address. This discussion makes a case for enhanced role of gender equity for the realisation of meaningful and participatory national development through proposing ways of promoting empowering both gender for the same.

In recognition of the important role that both men and women can play in achieving sustainable development, this chapter argues that it is not possible to achieve sustainable development where one gender is sidelined. There should be concerted efforts towards nurturing a healthy and sustainable environment to facilitate realisation of social sustainability, one of the key elements of sustainable development. Indeed, considering the special relationship that women have with the environment and environmental resources in most communities, any measures in the struggle for sustainable development that leave them out would be self-defeating. Using select community case studies, this chapter demonstrates that certainly, environmental degradation hurts women most due to the traditional and cultural roles that are ascribed to them. Therefore, successful nurturing and ultimate achievement of sustainable development requires the active role of both men and women.

Although reference has been made to the other elements of sustainability, due to their interrelated nature, this chapter mainly focuses on the social aspect. Gender equity is a fundamental element of sustainable development. A socially sustainable system must achieve fairness in distribution and opportunity, adequate provision of social services including health and education, gender equity, and political accountability and participation.² This argument is concerned with the social component of sustainable development with a view to ensuring that both men and women are empowered and effectively participate in the achievement of all the other aspects of sustainable development.

12.2 Gender Equity and Equality

The term “gender” is used to refer to the set of social norms, practices and institutions that regulate the relations between women and men (also known as “gender relations”).³ It has also been defined as a social construct that ascribes

² Harris, J.M., “Sustainability and Sustainable Development,” International Society for Ecological Economics Internet Encyclopaedia of Ecological Economics, February 2003, p. 1. Available at <http://www.isecoeco.org/pdf/susdev.pdf> [Accessed on 20/04/2015].

³ United Nations, “The Role of Men and Boys in Achieving Gender Equality,” *Women 2000 and Beyond*, December 2008. P.4. Available at

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different qualities and rights to women and men regardless of individual competence or desires.⁴ It is noteworthy that gender does not mean 'women' or 'girls' – although the word is frequently (mis)used as shorthand for women, women's empowerment, women's human rights, or, more broadly, for any initiative that is geared towards girls or women.⁵

Gender equity is used to denote the equivalence in life outcomes for women and men, recognising their different needs and interests, and requiring a redistribution of power and resources.⁶ According to the European Commission, gender equity entails the provision of fairness and justice in the distribution of benefits and responsibilities between women and men, while recognising that women and men have different needs and power and that these differences should be identified and addressed in a manner that rectifies the imbalances between the sexes.⁷ Equity is generally regarded as a state of fairness and justness and it requires that the specific needs of particular groups are considered separately and acted upon accordingly.⁸

From the foregoing, it is noteworthy that gender equity strives towards ensuring that the different gender are not only included in development but also that their special needs that may be attributed to inevitable differences are also adequately addressed. Equity is thus important since it ensures that even where both gender

<http://www.unwomen.org/~media/headquarters/media/publications/un/en/w2000menandboyseweb.pdf>
[Accessed on 03/04/2015].

⁴ Latham, G. J., "A study on gender equality as a prerequisite for sustainable development," *Report to the Environment Advisory Council*, Sweden, 2007:2, p. 17. Available at

http://www.uft.oekologie.uni-bremen.de/hartmutkoehler_fuer_studierende/MEC/09-MECreading/gender%202007%20EAC%20rapport_engelska.pdf [Accessed on 03/04/2015].

⁵ UNICEF, "Promoting Gender Equality: An Equity-Focused Approach to Programming," *Operational Guidance Overview*, p. 10. Available at

http://www.unicef.org/gender/files/Overarching_Layout_Web.pdf [Accessed on 03/04/2015].

⁶ Reeves, H. & Baden, S., "Gender and Development: Concepts and Definitions," *Prepared for the Department for International Development (DFID) for its gender mainstreaming intranet resource*. Institute of Development Studies, Report No 55, February 2000, p. 10.

⁷ European Commission, *Gender equality – glossary*, available at http://ec.europa.eu/justice/gender-equality/glossary/index_en.htm [Accessed on 19/05/2015].

⁸ NSW Health Department, 'Gender Equity in Healthcare,' *State Health Publication No: (HSP) 000015*, April 2000, p.2. Available at http://www0.health.nsw.gov.au/pubs/2000/pdf/gender_equity.pdf [Accessed on 19/05/2015]; See also Canadian Association for the Advancement of Women and Sport and Physical Activity (CAAWS), "What is Gender Equity?" Available at <http://www.caaws.ca/gender-equity-101/what-is-gender-equity/> [Accessed on 19/05/2015].

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are afforded equal opportunities, the enjoyment and benefit accruing from those opportunities effectively addresses the needs and desires of each group.

Efforts to introduce gender-sensitive approaches to national development have not been quite successful because even as legislative measures are put in place, they fail to address the underlying norms and customs that define gender relations and power dynamics in the society. The power imbalance that defines gender relations influences women's access to and control over resources, their visibility and participation in social and political affairs, and their ability to realize their fundamental human rights.⁹

Gender inequality has been defined as the differential treatment and outcomes that deny women the full enjoyment of the social, political, economic and cultural rights and development. It is the antithesis of equality of men and women in their human dignity, autonomy and equal protection.¹⁰ Gender equality is however not a 'women's issue' but refers to the equal rights, responsibilities and opportunities of women and men, girls and boys, and should concern and fully engage men as well as women.¹¹ It is also used to refer to the equal participation of women and men in decision-making, equal ability to exercise their human rights, equal access to and control of resources and the benefits of development, and equal opportunities in employment and in all other aspects of their livelihoods.¹²

It is noteworthy that gender equity has been defined differently in diverse contexts. However, this chapter adopts a definition that describes it as the presence of a gender perspective in decision-making of all kinds and those

⁹ Strickland, R. & Duvvury, N., "Gender Equity and Peacebuilding," *From Rhetoric to Reality: Finding the Way*, International Center for Research on Women Discussion Paper, 2003. p. 5. Prepared for the Gender Equity and Peacebuilding Workshop with a grant from the International Development Research Centre (IDRC), Ottawa, Canada. Available at <http://www.icrw.org/files/publications/Gender-Equity-and-Peacebuilding-From-Rhetoric-to-Reality.pdf> [Accessed on 16/05/2015].

¹⁰ Baraza, N., 'Lost Between Rhetoric and Reality: What Role for the Law and Human Rights in Redressing Gender Inequality?' *Kenya Law Reform* Vol. II [2008-2010], p. 1.

¹¹ See generally 'Universal Declaration of Human Rights - In six cross-cutting themes' Available at http://www.ohchr.org/EN/UDHR/Documents/60UDHR/Stories_on_Human_Right_PressKit_en.pdf [Accessed on 1/04/2015].

¹² Fao, "Gender and Climate Change Research in Agriculture and Food Security for Rural Development," *FAO Training Guide*, 2nd Ed., 2013, p.9. Available at <http://www.fao.org/docrep/015/md280e/md280e.pdf> [Accessed on 1/04/2015].

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women's interests are given the same consideration as men's in terms of rights and the allocation of resources to fully address their specific needs and desires.¹³ In the Kenyan context, this definition encompasses what the Bill of Rights in the Constitution of Kenya 2010 provides for.¹⁴ The Constitution provides for equality of all persons and prohibits any form of discrimination on any ground, including sex.¹⁵ It provides that equality includes the full and equal enjoyment of all rights and fundamental freedoms.¹⁶ Further, it states that women and men have the right to equal treatment, including the right to equal opportunities in political, economic, cultural and social spheres.¹⁷

The Constitution envisions a situation where women and men participate equally and competitively in national development. It is important to note that the national values and principles of governance as envisaged in the current Constitution of Kenya bind all State organs, State officers, public officers and all persons whenever any of them--applies or interprets the Constitution; enacts, applies or interprets any law; or makes or implements public policy decisions.¹⁸ The most significant of these values and principles are participation of the people, equity, social justice, inclusiveness, equality, human rights, non-discrimination and protection of the marginalised.¹⁹ Indeed, some of these are captured in the Preamble to the Constitution which provides that one of the pillars of the current Constitution is the recognition of the aspirations of all Kenyans for a government based on the essential values of human rights, equality, freedom, democracy, social justice and the rule of law.

Gender equality is seen as a shared vision of social justice and human rights and one that requires concerted efforts from all to achieve.²⁰ The effect of this is that the foregoing values and principles ought to inform any development deliberations and move towards achievement of gender equality in Kenya.

¹³ Latham, G. J., "A study on gender equality as a prerequisite for sustainable development," op. cit, p. 17.

¹⁴ Chapter 4 (Articles 19-59).

¹⁵ Constitution of Kenya 2010, Article 27(4).

¹⁶ Ibid, Article 27 (2).

¹⁷ Ibid, Article 27 (3).

¹⁸ Ibid, Article 10 (1).

¹⁹ Ibid, Article 10(2) (b) (c).

²⁰ See generally, *Beijing Declaration and Plat form for Action Beijing+5 Political Declaration and Outcome*, United Nations 1995.

12.3 International Framework on Gender Equity and Equality

12.3.1 Universal Declaration of Human Rights, 1948

The *Universal Declaration of Human Rights, 1948*(UDHR) recognizes that the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world.²¹ Further, it provides that all are equal before the law and are entitled without any discrimination to equal protection of the law.²² The Universal Declaration of Human Rights acknowledges that men and women are not the same but insists on their right to be equal before the law and treated without discrimination.²³ To this end, the Declaration recognises the important role of equity in ensuring that all persons are not only afforded equal opportunities but are also able to take advantage of such opportunities in a fair manner.

The Declaration thus requires that all persons, men and women, should enjoy the human rights equally and also demands that all should be protected by law from any form of discrimination. In light of the foregoing, the current Constitution of Kenya provides for equality of all persons and non-discrimination on any ground as well as equal protection of the law.²⁴

The Declaration is important not only for pushing for the promotion of the rights of all persons but also for correction of any violation of the said rights.²⁵ The UDHR thus forms the benchmark against which many laws on human rights around the world are pegged. The universal acceptance of its values and principles means that every state, Kenya included, should work towards achieving the ideal world of equity and equality as contemplated in the Declaration. It is noteworthy that the Declaration recognises the equal dignity of all human beings, both men and women. Arguably, this is one of the main ways of ensuring that both men and women can meaningfully pursue the aspirations of freedom, justice and peace in the world. This is in fact captured in the

²¹ UN General Assembly, *Universal Declaration of Human Rights*, 10 December 1948, 217 A (III), Preamble. Article 1 thereof also emphasizes on equality of all.

²² *Ibid*, Article 7.

²³ *Ibid*, Article 2.

²⁴ *Ibid*, Article 27.

²⁵ For instance, Article 22(1) of the Constitution of Kenya gives every person the right to institute court proceedings claiming that a right or fundamental freedom in the Bill of Rights has been denied, violated or infringed, or is threatened; See also Article 70 thereof.

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Constitution of Kenya which states that the purpose of recognising and protecting human rights and fundamental freedoms is to preserve the dignity of individuals and communities and to promote social justice and the realisation of the potential of all human beings.²⁶ The focus is therefore on the humanity as a whole where efforts go towards ensuring that all persons are fully empowered to realise their potential and consequently promote national development.

12.3.2 1995 United Nations World Conference in Beijing

The Governments participating in the Fourth World Conference on Women in Beijing China declared *inter alia*, that women's empowerment and their full participation on the basis of equality in all spheres of society, including participation in the decision-making process and access to power, are fundamental for the achievement of equality, development and peace.²⁷ They went further to state that equal rights, opportunities and access to resources, equal sharing of responsibilities for the family by men and women, and a harmonious partnership between them are critical to their well-being and that of their families as well as to the consolidation of democracy.²⁸

It is noteworthy that this Conference came at a time when women were still oppressed and its outcome has gone a long way in boosting the empowerment efforts for the female gender. It is, however, worth mentioning that the Conference was not all about women but it was an effort towards achieving gender equity. This is reflected in their deliberations as captured above where the participants stated that equal rights, opportunities and access to resources, equal sharing of responsibilities for the family by men and women, and a harmonious partnership between them are critical to their well-being and that of their families as well as to the consolidation of democracy. The outcome of the Conference should therefore not be seen as an effort towards emancipation of one gender at the expense of the other but should be used to promote gender equity for inclusive national development.

²⁶ Constitution of Kenya, Article 19(2).

²⁷ United Nations, *Report of the Fourth World Conference on Women*, Beijing, 4-15 September 1995, A/CONF.177/20/Rev.1. para. 13 Annex I.

²⁸ *Ibid*, para. 15.

12.3.3 The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)

The *Convention*²⁹ notes in its Preamble that discrimination against women violates the principles of equality of rights and respect for human dignity, is an obstacle to the participation of women, on equal terms with men, in the political, social, economic and cultural life of their countries, hampers the growth of the prosperity of society and the family and makes more difficult the full development of the potentialities of women in the service of their countries and of humanity.

Further, it requires that States Parties should condemn discrimination against women in all its forms, agree to pursue by all appropriate means and without delay a policy of eliminating discrimination against women and, to this end, undertake *inter alia*: to embody the principle of the equality of men and women in their national constitutions or other appropriate legislation if not yet incorporated therein and to ensure, through law and other appropriate means, the practical realization of this principle.³⁰ The Convention is thus an effort towards ensuring that women and men participate meaningfully and productively in the national development discourse.

The Convention thus advocates for the active participation of both men and women in an equal manner in the political, social, economic and cultural life of their countries. The Convention arguably provides the basis for realizing equity between women and men through ensuring women's equal access to, and equal opportunities in, political and public life -- including the right to vote and to stand for election -- as well as education, health and employment.³¹ To this end, Kenya has performed impressively as far as framework laws are concerned, considering that the principles of non-discrimination, social equity and equality, amongst others feature prominently in the Constitution. The Constitution also obligates the State to take legislative, policy and other measures, including the setting of standards, to achieve the progressive realisation of the rights guaranteed under Article 43.³² What is now required is ensuring that this is actually done and it does

²⁹ UN General Assembly, *Convention on the Elimination of All Forms of Discrimination Against Women*, 18 December 1979, United Nations, Treaty Series, vol. 1249, p. 13.

³⁰ *Ibid*, Article 2 (a).

³¹ *Ibid*, Article 10 & 11.

³² Article 21(2). Article 43 provides for economic and social rights of every person in Kenya.

not remain in text, so as to ensure that both men and women meaningfully participate in national development and especially in realizing the country's development blueprint, Vision 2030.

12.3.4 The International Covenant on Economic, Social and Cultural Rights (ICESCR)

The *Convention on Economic, Social and Cultural Rights*³³ was adopted in 1966, but it entered into force 1976. It commits states parties to promote and protect a wide range of economic, social and cultural rights, including rights relating to work in just and favourable conditions, to social protection, to an adequate standard of living, to the highest attainable standards of physical and mental health, to education and to enjoyment of the benefits of cultural freedom and scientific progress. It obliges states parties to respect and ensure that all individuals subject to their jurisdiction enjoy all the rights included in the ICESCR, without discrimination.

ICESCR provides a framework for creating gender sensitive indicators for measuring government accountability for commitments adopted under the ICESCR, and the extent to which women's full participation is reflected in decision making in the legal, political, economic, social, and familial spheres. Article 3 of the ICESCR promotes equal rights to men and women. The Covenant thus promotes gender equity and inclusive enjoyment of the human rights. The Constitution of Kenya reflects the spirit of this Covenant as it provides for economic and social rights of all persons.³⁴ Indeed, it goes further to state that the state should give priority to ensuring the widest possible enjoyment of the right or fundamental freedom having regard to prevailing circumstances, including the vulnerability of particular groups or individuals.³⁵

³³ UN General Assembly, *International Covenant on Economic, Social and Cultural Rights*, 16 December 1966, United Nations, Treaty Series, vol. 993, p. 3.

³⁴ *Ibid*, Article 43.

³⁵ *Ibid*, Article 20(5) (b).

12.4 Regional Framework Gender Equity and Equality

12.4.1 The African Charter on Human and Peoples' Rights

The *African Charter on Human and Peoples' Rights* (Charter)³⁶ guarantees that all peoples shall have the right to their economic, social and cultural development with due regard to their freedom and identity and in the equal enjoyment of the common heritage of mankind.³⁷ In its Preamble, the Charter *inter alia* reaffirmed, in light of the Charter of the Organization of African Unity, that freedom, equality, justice and dignity are essential objectives for the achievement of the legitimate aspirations of the African peoples.

The Charter also reiterates that every individual is entitled to the enjoyment of the rights and freedoms recognized and guaranteed in the Charter without distinction of any kind such as race, ethnic group, color, sex, language, religion, political or any other opinion, national and social origin, fortune, birth or other status.³⁸ This provision thus prohibits any form of discrimination on either men or women in all spheres of life. The Charter also guarantees every individual's right to receive information and the right to express and disseminate their opinions within the law.³⁹ In the context of this discussion, this right would include the right to receive and share information which would facilitate participation of all persons in sustainable development efforts. As such, in a bid to achieve gender equity for an all-inclusive approach to national development, states should also promote other rights which would facilitate enjoyment of the foregoing rights and this would include ensuring that all the citizens are empowered.

The Charter further guarantees every individual's right to work under equitable and satisfactory conditions, and receive equal pay for equal work.⁴⁰ It has been acknowledged that poverty hampers achievement of sustainable development. One of the ways of addressing poverty is economic empowerment of both women and men which can be done by way of promoting the right to work for all in order

³⁶ African [Banjul] Charter on Human and Peoples' Rights, adopted June 27, 1981, OAU Doc. CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982), entered into force Oct. 21, 1986.

³⁷ *Ibid*, Article 22(1).

³⁸ *Ibid*, Article 2.

³⁹ *Ibid*, Article 9.

⁴⁰ *Ibid*, Article 15.

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to give them a source of income.⁴¹ It is also important to note that all peoples have the right to their economic, social and cultural development with due regard to their freedom and identity and in the equal enjoyment of the common heritage of mankind. States have the duty, individually or collectively, to ensure the exercise of the right to development.⁴² Women and men have the right to equal treatment, including the right to equal opportunities in political, economic, cultural and social spheres.⁴³ Gender equity comes in to ensure that all benefit fairly in exploitation of the available opportunities.

12.4.2 Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (the Maputo Protocol)

The Maputo Protocol⁴⁴ reaffirms in its Preamble the principle of promoting gender equality as enshrined in the Constitutive Act of the African Union as well as the New Partnership for Africa's Development, relevant Declarations, Resolutions and Decisions, which underline the commitment of the African States to ensure the full participation of African women as equal partners in Africa's development.

The Protocol provides that States Parties should combat all forms of discrimination against women through appropriate legislative, institutional and other measures.⁴⁵ In this regard, it requires that they should integrate a gender perspective in their policy decisions, legislation, development plans, programmes and activities and in all other spheres of life.⁴⁶ Further, as a corrective measure, it obligates States Parties to commit themselves to modify the social and cultural patterns of conduct of women and men through public education, information, education and communication strategies, with a view to achieving the elimination of harmful cultural and traditional practices and all other practices which are based on the idea of the inferiority or the superiority of either of the sexes, or on stereotyped roles for women and men. The Protocol

⁴¹ Ibid, Article 41(1) of the Constitution of Kenya guarantees every person's right to fair labour practices.

⁴² Constitution of Kenya 2010, Article 22.

⁴³ Ibid, Article 27(3).

⁴⁴ African Union, Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa, 11 July 2003.

⁴⁵ Ibid, Article 2(1).

⁴⁶ Ibid, Article 2(1) (c).

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reaffirms that women and men are equal before the law and should have the right to equal protection and benefit of the law.⁴⁷

In addition to the foregoing, the Protocol states that States Parties are to take specific positive action to promote participative governance and the equal participation of women in the political life of their countries through affirmative action, enabling national legislation and other measures to ensure that *inter alia*, women are equal partners with men at all levels of development and implementation of State policies and development programmes.⁴⁸ In a move that reflects the foregoing, the Constitution of Kenya provides that all State organs and all public officers have the duty to address the needs of vulnerable groups within society, including women, older members of society, persons with disabilities, children, youth, members of minority or marginalised communities, and members of particular ethnic, religious or cultural communities.⁴⁹ Indeed, it goes further to state that the State shall enact and implement legislation to fulfil its international obligations in respect of human rights and fundamental freedoms.⁵⁰ These provisions create opportunity for the country to adopt international's best practices for realisation of gender equity and also mobilising all persons to promote gender equity for inclusive national development in Kenya.

With regard to Right to Sustainable Development, the Protocol provides that women have the right to fully enjoy their right to sustainable development.⁵¹ To facilitate this, the Protocol provides for several measures. It requires the States Parties to introduce the gender perspective in the national development planning procedures. They are also to ensure participation of women at all levels in the conceptualisation, decision-making, implementation and evaluation of development policies and programmes. They are also to promote women's access to and control over productive resources such as land and guarantee their right to property. Further, they are to promote women's access to credit, training, skills development and extension services at rural and urban levels in order to provide women with a higher quality of life and reduce the level of poverty among

⁴⁷ Ibid, Article 8. This is also captured under Article 27 of the current Constitution of Kenya.

⁴⁸ Ibid, Article 9(1) (c).

⁴⁹ Constitution of Kenya 2010, Article 21(3).

⁵⁰ Ibid, Article 21(4).

⁵¹ Ibid, Article 19.

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women. In addition to the foregoing, they are to take into account indicators of human development specifically relating to women in the elaboration of development policies and programmes. The Protocol also requires States Parties to ensure that the negative effects of globalisation and any adverse effects of the implementation of trade and economic policies and programmes are reduced to the minimum for women.⁵²

Further, the Protocol requires that women should have the right to live in a healthy and sustainable environment.⁵³ In order to facilitate this, the Protocol requires that States Parties should take all appropriate measures to *inter alia*, ensure greater participation of women in the planning, management and preservation of the environment and the sustainable use of natural resources at all levels.⁵⁴

In Kenya, this can be achieved through full implementation of the values and principles of governance in development matters in the country. If properly effected, the Maputo Protocol can go a long way in ensuring gender equity for inclusive development.

12.4.3 Declaration on Gender Equality in Africa

The *Declaration on Gender Equality in Africa*⁵⁵ in its preamble takes cognizance of the adverse impact of gender inequality on the economic growth of Africa and the fact that African women bear a disproportionate burden of poverty. It also affirms the fact that extreme poverty cannot be addressed without concerted efforts to improve women's access to resources and that access to resources increases the level of spending, especially on food and children's education. The Declaration advocates for women's literacy and improved girls' education as this spins off a wide range of benefits including improving the welfare of the family and the quality of the labour force, increasing the tax base, and boosting levels of agricultural output. The overall benefit would be the realisation of all inclusive and beneficial development for all.

⁵² Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa.

⁵³ *Ibid*, Article 18(1).

⁵⁴ *Ibid*, Article 18(2).

⁵⁵ Adopted at the Third Ordinary Session of AU Assembly in Addis Ababa, Ethiopia, from 6-8 July 2004.

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In order to achieve the foregoing, the participating states agreed to carry out a number of initiatives which included but not limited to strengthening the gender machineries in their countries and provide them with enough human and financial resources to enable them to carry out their responsibility of promoting and tracking gender equality. The Constitution of Kenya adopts this recommendation especially with regard to social and economic rights. It provides that in applying any right under Article 43, if the State claims that it does not have the resources to implement the right, it is the responsibility of the State to show that the resources are not available.⁵⁶ States are thus expected to demonstrate their genuine efforts towards achieving these rights for all persons.

12.5 Gender and Development-The Interface

The term 'development' is perceived differently by different people and countries and thus defined differently. It has been argued that in addition to improvements in incomes and output, it typically involves radical changes in institutional, social, and administrative structures as well as in popular attitudes and, in many cases, even customs and beliefs.⁵⁷ If this assertion is anything to go by, then development would also include attitudes towards gender and particularly stereotyped roles of men and women in any society. Any tangible development should also strive towards achieving gender parity in a given society. It has been observed that Gender equality, centered in human rights, is both a development goal on its own and a vital tool to accelerating sustainable development and unless women and girls are able to fully realize their rights in all spheres of life, an all-inclusive human development will not be advanced.⁵⁸

The social dimension of sustainable development is a neglected area in such analyses and often, this places women at a disadvantage, since the social dimension affects gender-based rights and social position, which are key factors in determining women's access to resources, decision-making and the like.⁵⁹ For instance, gender equality is considered a critical element in achieving decent work for all women and men, in order to effect social and institutional change

⁵⁶ Constitution of Kenya, Article 20(5) (a).

⁵⁷ Todaro, M., 'Economic Development' chapter 3, (2000, 7th ed.)

⁵⁸ UNDP, *Gender equality*, available at

<http://www.africa.undp.org/content/undp/en/home/ourwork/gender-equality/overview.html> [Accessed on 02/04/2015].

⁵⁹ *Ibid.*

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that leads to sustainable development with equity and growth.⁶⁰ As such, *gender equity, which goes beyond equality*, is necessary (emphasis added). It is noteworthy that the term 'development' is perceived differently by different people and countries and thus defined differently. That is probably the reason why there exists the 'developed' and 'developing' countries classification. There is therefore no single agreed definition of the concept of development. However, development has various angles to it and may be classified as economic development, human development, *inter alia*. However, development is not an exclusively economic phenomenon but encompasses financial as well as reorganization and reorientation of entire economic and social systems. It has been argued that in addition to improvements in incomes and output, it typically involves radical changes in institutional, social, and administrative structures as well as in popular attitudes and, in many cases, even customs and beliefs.⁶¹

The dimensions of development are extremely diverse, including economic, social, political, legal and institutional structures, technology in various forms, the environment, religion, the arts and culture.⁶² Development has been described as the upward movement of the entire social system, which encloses, besides the so-called economic factors, all non-economic factors, including all sorts of consumption by various groups of people; consumption provided collectively; educational and health facilities and levels; the distribution of power in society; and more generally economic, social, and political stratification."⁶³

Despite the differences in status or any other ground, the focus is on achieving some level playing ground for all in the form of gender equity, that appreciates the contribution of every man and woman in development of the country and ultimately satisfying the needs of every person. The goal of gender equity is considered to be moving beyond equality of opportunity by requiring transformative change with the recognition that women and men have different needs, preferences, and interests and that equality of outcomes may necessitate

⁶⁰ International Labour Organisation, *Gender and Development*, available at <http://www.ilo.org/global/topics/economic-and-social-development/gender-and-development/lang--en/index.htm> [Accessed on 02/04/2015].

⁶¹ M. Todaro, 'Economic Development' chapter 3, *op cit*.

⁶² Sumner, 'What is 'Development'?' p. 11, 02/04/2015].

⁶³ Myrdal, G., 'What Is Development?' *Journal of Economic Issues*, Vol. 8, No. 4, Dec., 1974, pp. 729-736, pp. 729-730.

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different treatment of men and women.⁶⁴ An equity approach implies that all development policies and interventions need to be scrutinised for their impact on gender relations and potential advantages or otherwise on men or women.⁶⁵

Food and Agricultural Organisation (FAO) affirms that women manifest an impressive resilience and multifaceted array of talents, but they also face a range of constraints – particularly in their access to productive resources such as land, inputs, training and financial services-which prevent them from becoming equally competitive economic players, capable of creating better lives for themselves and their families, and contributing fully to the growth of their communities and countries.⁶⁶ Gender equity approach can address these challenges thus enabling men and women to participate equitably, competitively and meaningfully in the development agenda.

The centrality of equity in sustainable development can be best understood when one looks at the Kenyan constitution which provides that the State should ensure the sustainable exploitation, utilization, management and conservation of the environment and natural resources and ensure equitable sharing of the accruing benefits.⁶⁷ Understandably, the equity referred to means that it is not only the intergenerational that is pursued but also intragenerational equity. These components, namely intergenerational and intragenerational equity are part of sustainable development as popularly defined. To explore intragenerational equity, under which gender equity arguably falls, this chapter conceptualizes sustainable development in terms of the satisfaction of economic, social, and security needs of both men and women now and in the future without undermining the natural resource base and environmental quality on which life depends on.⁶⁸ It has been argued that for development to be sustainable, the environment should be protected, people's economic situation improved, and social equity achieved.⁶⁹

⁶⁴ Reeves, H. & Baden, S., "Gender and Development: Concepts and Definitions," *op cit*, p.10.

⁶⁵ *Ibid*.

⁶⁶ Food and Agriculture Organization of the United Nations, "FAO Policy on Gender Equality: Attaining Food Security Goals in Agriculture and Rural Development," Rome, 2013. *op cit* p. v.

⁶⁷ Muigua, K. & Kariuki, F., "Sustainable Development and Equity in the Kenyan Context," p.4. Available at

<http://www.kmco.co.ke/attachments/Article/104/A%20Paper%20on%20Sustainable%20Development%20and%20Equity%20in%20the%20Kenyan%20Context.pdf>[Accessed on 02/04/2015].

⁶⁸ *Ibid*.

⁶⁹ Chapter 7, "The Sociology of Sustainable Development," p. 225.

It is important to point out that the discussion herein mainly concentrates on the social equity aspect of sustainable development.

12.6 Barriers to Gender Equity and Inclusive Development in Kenya

12.6.1 Uneven access to resources

With regard to protection of vulnerable groups, *Agenda 21* provides that the general objectives of protecting vulnerable groups are to ensure that all such individuals should be allowed to develop to their full potential (including healthy physical, mental and spiritual development); to ensure that young people can develop, establish and maintain healthy lives; to allow women to perform their key role in society; and to support indigenous people through educational, economic and technical opportunities.⁷⁰

With restrained or limited access to resources including land based resources, it is hard or even impossible for women to participate actively and qualitatively in national development and ultimately sustainable development. The net effect is that women are denied the chance due to lack of capacity and resources to participate in national development. Further, left with limited resources with which to perform their critical role in society, they essentially become part of the problem instead of the solution in the fight against poverty. They are consequently relegated to a dependent position instead of becoming partners in the development efforts.⁷¹

12.6.2 Poverty

Poverty eradication has been marked as the greatest global challenge facing the world today and an indispensable requirement for sustainable development.⁷² The Rio+20⁷³ outcome reiterated the commitment to freeing humanity from poverty and hunger as a matter of urgency.⁷⁴ Problems of environment and development are closely linked; degradation of ecosystem services harms poor

⁷⁰ Agenda 21, Objective 6.23

⁷¹ For instance, a recent study established that in the ongoing coal mining deliberations in Mui , Kitui Kenya, women have been left out and are often not consulted. Daily Nation Newspaper, 19 May 2015.

⁷² United Nations, "Open Working Group proposal for Sustainable Development Goals," available at <https://sustainabledevelopment.un.org/sdgsproposal> [Accessed on 15/04/2015].

⁷³ United Nations Conference on Sustainable Development (UNCSD) (Rio 2012, Rio+20 or Earth Summit 2012).

⁷⁴ United Nations, "Open Working Group proposal for Sustainable Development Goals," op cit.

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people.⁷⁵ Indeed, among the poor there are those marginalised groups who suffer most thus adding to their misery. The Constitution of Kenya 2010 classifies women among the marginalised groups of people who may need affirmative action.⁷⁶ It has been argued that the lifestyles of women and men are rooted *inter alia* in economic conditions, power positions and gender, which inform people's perceptions of what welfare represents – and which in turn determine what people can and wish to consume.⁷⁷ It is also observed that the gender disparities in economic power-sharing are an important contributing factor to the poverty of women.⁷⁸ It has also been documented that the heavy burden of poverty falls disproportionately on women especially female-headed households whose proportion is increasing.⁷⁹ The contribution of rural women in Africa is critical in development. With poverty abounding amongst the economically challenged women, the role of women in achieving sustainability and sustainable development is thus undermined and even defeated.

It has been recognized that women make crucial contributions in agriculture and rural enterprises and they play a key role in rural economies, where the fight against hunger and poverty is most pressing, as this is where the large majority of the world's poor live.⁸⁰ They are also central to family food security and nutrition, as they are generally responsible for food selection and preparation and for the care and feeding of children.⁸¹

⁷⁵ Adams, W.M., "The Future of Sustainability: Re-thinking Environment and Development in the Twenty-first Century," *The World Conservation Union Report of the IUCN Renowned Thinkers Meeting, 29-31 January 2006*. p. 7. Available at

http://cmsdata.iucn.org/downloads/iucn_future_of_sustainability.pdf [Accessed on 15/04/2015].

⁷⁶ Constitution of Kenya 2010, Article 260.

⁷⁷ Latham, G. J., "A study on gender equality as a prerequisite for sustainable development," *op. cit.*, p. 44.

⁷⁸ "Women and Poverty", *The United Nations Fourth World Conference on Women, Beijing, China - September 1995, Action for Equality, Development and Peace*. Available at <http://www.un.org/womenwatch/daw/beijing/platform/poverty.htm> [Accessed on 15/04/2015]

⁷⁹ United Nations Economic Commission for Africa, 1990, *Abuja Declaration on Participatory Development: The role of women in Africa in the 1990s*. Chapter 3.25. Adopted by the Fifth Regional Conference on Women, held at Dakar from 16 to 23 November 1994, E/CN.6/1995/5/Add.2 Distr. GENERAL, 29 December 1994.

⁸⁰ Food and Agriculture Organization of the United Nations, "FAO Policy on Gender Equality: Attaining Food Security Goals in Agriculture and Rural Development," Rome, 2013. p. v. Available at <http://www.fao.org/docrep/017/i3205e/i3205e.pdf> [Accessed on 12/05/2015].

⁸¹ *Ibid.*

12.6.3 Lack of Education

The right to education is a human right having major implications both for the individual as well as for social and economic development.⁸² Indeed, it has rightly been pointed out that apart from its intrinsic value as a crucial development goal, education is also central to one's ability to respond to the opportunities that development presents.⁸³ The African [Banjul] Charter on Human and Peoples' Rights guarantees every individual's right to education.⁸⁴ Further, it provides for every individual's right to freely, take part in the cultural life of their community.⁸⁵ This is especially significant considering that community participation in development is envisaged under Principle 22 of the Rio Principles which states that indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States are to recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.

It has in fact been argued that failing to meet the goal of gender equity in education will not only hurt the girls who lose an opportunity for an education, but also impose societal costs in terms of lower growth, higher fertility, child mortality, and malnutrition.⁸⁶ As such, promoting female education to close these gaps is not only intrinsically valuable for the girls who would benefit and would further an important aspect of gender equity in developing countries, but it would assist in the overall development of these countries as well.⁸⁷ Education promotes realization of environmental justice for all persons. Broadly defined, environmental justice entails the right to have access to natural resources; not to suffer disproportionately from environmental policies, laws and regulations; and

⁸² United Nations, *African Platform for Action*, E/CN.6/1995/5/Add.2. Adopted by the Fifth Regional Conference on Women, held at Dakar from 16 to 23 November 1994. Chapter 3.30.

⁸³ Ghaida, D.A., & Klasen, S., "The Costs of Missing the Millennium Development Goal on Gender Equity," *Munich Economics Discussion paper* 2003-01, p.2. Available at http://www.ungei.org/info/country/files/univmunich_0301_klasen.pdf [Accessed on 16/05/2015].

⁸⁴ African [Banjul] Charter on Human and Peoples' Rights, Article 17(1).

⁸⁵ *Ibid*, Article 17(2).

⁸⁶ Ghaida, D.A., & Klasen, S., "The Costs of Missing the Millennium Development Goal on Gender Equity," *op cit*, p.21.

⁸⁷ *Ibid*, p.22.

the right to environmental information, participation and involvement in decision-making.⁸⁸

The *Aarhus Convention* establishes a number of rights of the public (individuals and their associations) with regard to the environment. The Convention provides for *inter alia*: the right of everyone to receive environmental information that is held by public authorities ("access to environmental information"); the right to participate in environmental decision-making ("public participation in environmental decision-making"); and the right to review procedures to challenge public decisions that have been made without respecting the two aforementioned rights or environmental law in general ("access to justice").⁸⁹

It is important to note that it is not possible to enjoy the foregoing rights as envisaged by the *Aarhus Convention* without the basic education and knowledge.⁹⁰ Lack of basic education therefore means that women are left out in the sustainable development agenda and do not subsequently enjoy the right to environmental justice. *Aarhus Convention* is a powerful tool that can be used to promote citizenry education and consequently deal with the barrier of lack of or inadequate education. Its main pillars have been captured in the Bill of Rights in the Constitution of Kenya under the right to information,⁹¹ right of access to justice⁹² and obligations of state and individuals in relation to the environment.⁹³ Under these provisions both men and women can play a great and synergetic role in realisation of the national development agenda.

12.6.4 Negative Cultural Practices and Beliefs

The Constitution of Kenya recognises culture as the foundation of the nation and as the cumulative civilization of the Kenyan people and nation.⁹⁴ It goes further

⁸⁸ Ako, R., 'Resource Exploitation and Environmental Justice: the Nigerian Experience,' in Botchway, F.N. (ed), *Natural Resource Investment and Africa's Development*, (Cheltenham, UK: Edward Elgar Publishing, 2011), pp. 74-76.

⁸⁹*Aarhus Convention*, Articles 4, 5, 6 & 9. Although the *UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters*, or *Aarhus Convention*, is a European region legal instrument, its provisions have gained international recognition and approval especially considering the fact that it reflects Principle 10 of the Rio Declaration on Environment and Development.

⁹⁰ Articles 4 and 5 of the *Convention* concern environmental information.

⁹¹ Constitution of Kenya, Article 35.

⁹² *Ibid*, Article 48.

⁹³ *Ibid*, Article 69.

⁹⁴ *Ibid*, Article 11(1).

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to state that every person has the right to use the language, and to participate in the cultural life, of the person's choice.⁹⁵ It nevertheless provides that any law, including customary law, which is inconsistent with the Constitution, is void to the extent of the inconsistency, and any act or omission in contravention of this Constitution is invalid.⁹⁶ The Constitution also states that a person should not compel another person to perform, observe or undergo any cultural practice or rite.⁹⁷

The foregoing provisions were enacted in recognition of the fact that some of the cultural practices are oppressive on one gender, mostly women, while elevating the other, in most if not all cases men. It is noteworthy that that due to various reasons which include negative cultural beliefs, women in some communities have not been able to fully enjoy the benefits of education as girls are kept away from classrooms.

It is noteworthy that many men still have the rather stereotyped culturally defined role of women as the children's caretaker. This is supported by many communities culture as well as some of the major religions which view one gender as superior to the other. Thus, most women especially within the poor population struggle to fend for their families by way of gathering fuel (mostly firewood) to prepare food for the whole family and also walk long distances to look for water particularly in arid and semi-arid areas.⁹⁸ They mostly rely on resources that they do not control or own and more often than not they do not even have the means or incentive to improve them.⁹⁹ Thus environmental degradation mostly affects these women who are not even given a chance to participate in deliberations on how best to achieve sustainability and sustainable development in Kenya. With women left out of the discourse, it then becomes

⁹⁵ *Ibid*, Article 44(1).

⁹⁶ *Ibid*, Article 2(4).

⁹⁷ *Ibid*, Article 44(3).

⁹⁸ IRIN, Kenya: *Women Weighed Down by Culture*, available at <http://m.irinnews.org/report/87063/kenya-women-weighed-down-by-culture#.VVutT9pRXFo> [Accessed on 19/05/2015].

⁹⁹ See Mbote, P.K., "Women, Land Rights And The Environment: The Kenyan Experience," *Development*, Vol. 49, No. 3, 2006, p. 43-48; See also generally Dick, R.M., *et al*, "Property Rights for Poverty Reduction," 2020 FOCUS BRIEF on the World's Poor and Hungry People, October 2007. Available at http://www.ifpri.org/sites/default/files/publications/beijingbrief_meinzendick2.pdf [Accessed on 20/05/2015]. It has also been documented that only 3% of women have title deeds in Kenya. UNDP-Kenya, Millennium Development Goals in Kenya-Ten Years of Implementation and Beyond: The Last Stretch Towards 2015, UNDP-Kenya, Nairobi, 2010, p.33.

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harder for the country to achieve sustainable development since it is impossible to tell them to practice sustainable utilization of resources while some of them barely have access to basic resources for survival.

On the other hand, it has been observed that gender differences can, however, also result in men being disadvantaged in certain societies, although presently, in most parts of the world, it is above all women that are victims of discrimination.¹⁰⁰ It is argued that although women are more likely to be disadvantaged and marginalised, the negative impact that gender inequality can have on men as well should not be ignored.¹⁰¹ For example, it has been observed that societal norms regarding the appropriate behaviour for men tend to put them under pressure as regards the need to provide materially for their family, and also deny them opportunities of being more nurturing towards their children and wife.¹⁰² Therefore, it is true to say that although women still suffer on a larger scale than men, both gender are susceptible to discrimination in the various spheres of development thus justifying the push for gender equity for inclusive national development.

12.7 Way Forward-Enhancing Role of Gender in Sustainable Development in Kenya

One of the national values and principles of governance as envisaged by the current Constitution of Kenya is sustainable development. Further, the country's national long-term development blue-print, *Vision 2030*,¹⁰³ advocates for equality of citizens and states that Kenya shall be a nation that treats its women and men equally without discriminating any citizen on the basis of gender, race, tribe, religion or ancestral origin.¹⁰⁴ The development of a nation should be carried out

¹⁰⁰ UNESCO, "Gender Equality and Equity," A summary review of UNESCO's accomplishments since the Fourth World Conference on Women (Beijing 1995), May, 2000. p.7. Available at <http://unesdoc.unesco.org/images/0012/001211/121145e.pdf> [Accessed on 19/05/2015].

¹⁰¹ "Difference between Gender Equality and Gender Equity," available at http://vcampus.uom.ac.mu/soci1101/432_difference_between_gender_equality_and_gender_equity.html [Accessed on 19/05/2015].

¹⁰² *Ibid.* See also Daily Nation Newspaper Editorial, "Rescue the Boy Child," Tuesday, 10 May 2015, p.12.

¹⁰³ Republic of Kenya, *Vision 2030*, 2007.

¹⁰⁴ *Ibid.*, p. 22.

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in partnership with the women and men and no one gender should be seen as either the senior or junior partner in the relationship.¹⁰⁵

Gender equality is an essential component of sustainable economic growth and poverty reduction.¹⁰⁶ Some of the basic rights guaranteed in the Constitution of Kenya 2010 include the economic and social rights of every person. These rights include the right – to the highest attainable standard of health, which includes the right to health care services, including reproductive health care; to accessible and adequate housing, and to reasonable standards of sanitation; to be free from hunger, and to have adequate food of acceptable quality; to clean and safe water in adequate quantities; to social security; and to education.¹⁰⁷ The World Bank observes that greater gender equality can enhance productivity, improve development outcomes for the next generation, and make institutions more representative.¹⁰⁸

It is noteworthy that the foregoing rights affect both men and women and some arguably affect women more than men thus placing women in a strategic position that requires them to participate in decision making . It has been noted that equitable access to more and better jobs in rural areas enable rural women to become effective economic actors and engines of growth; as well as to produce or acquire the food, water, fuel and social services their families need.¹⁰⁹ Indeed, the quality of the care mothers are able to give to their children and other household members contributes to the health and productivity of whole families and communities and improves prospects for future generations.¹¹⁰

¹⁰⁵ General Ibrahim Badamati Babangida, President of the Federal Republic of Nigeria, 'Extracts From the Opening Speeches,' *Abuja Declaration on Participatory Development: The Role of Women in Africa in the 1990*, United Nations Economic Commission for Africa. P.3. Adopted by the African Regional Conference on the Integration of Women in Development, Abuja, Nigeria, 6-10 November 1990 (4th meeting).

¹⁰⁶ Food and Agricultural Organization of the United Nations, *et al*, "Gender dimensions of agricultural and rural employment: Differentiated pathways out of poverty," Rome, 2010. p. x. Available at <http://www.fao.org/docrep/013/i1638e/i1638e.pdf> [Accessed on 13/5/2015].

¹⁰⁷ Constitution of Kenya 2010, Article 43 (1).

¹⁰⁸ World Bank Group, *World Development Report 2012: Gender Equality and Development*, p. xx. Available at <http://siteresources.worldbank.org/INTWDR2012/Resources/7778105-1299699968583/7786210-1315936222006/Complete-Report.pdf> [Accessed on 13/5/2015].

¹⁰⁹ Food and Agricultural Organization of the United Nations, *et al*, "Gender dimensions of agricultural and rural employment: Differentiated pathways out of poverty," *op cit*, p.x.

¹¹⁰ *Ibid*.

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Due to the central position occupied by women in society, the realization of these rights which mostly fall within the social sustainability pillar of sustainable development requires active participation of women in order to achieve effectiveness. It has been correctly argued that the realization of the right to food has a direct impact on the right to an adequate standard of living and the right to health, and presupposes the existence of a clean and safe environment conducive to the sustainable development of food resources.¹¹¹

Equitable gender participation in sustainable development efforts calls for empowerment of both gender which should include participation by people in decisions and processes shaping their lives; participating in the market economy; challenging inequality and oppression; the liberation of both men and women; and empowerment as bottom-up process which cannot be bestowed from the top-down.¹¹²

One of the ways of achieving sustainability as provided for by *Agenda 21*¹¹³ is empowering communities. The Rio Conference participants agreed that sustainable development must be achieved at every level of society. Peoples' organizations, women's groups and non-governmental organizations are important sources of innovation and action at the local level and have a strong interest and proven ability to promote sustainable livelihoods.¹¹⁴ As such, *Agenda 21* requires that Governments, in cooperation with appropriate international and non-governmental organizations, should support a community-driven approach to sustainability, which would include, *inter alia*: Empowering women through full participation in decision-making; and giving communities a large measure of participation in the sustainable management and protection of the local natural resources in order to enhance their productive capacity.¹¹⁵

¹¹¹ United Nations Non-Governmental Liaison Service (NGLS), "Human Rights Approaches to Sustainable Development," *NGLS Roundup* 90, May 2002. p.5. Available at <http://www.un-ngls.org/orf/pdf/ru90hrsd.pdf> [Accessed on 17/04/2015].

¹¹² Chapter 2: *Development, Empowerment, and Participation*, available at <http://www.google.com/search?ie=ISO-8859-1&q=Chapter=2%3A=development%2C=empowerment=and=participation=&btnG=Search> [Accessed on 15/05/2015].

¹¹³ United Nations Conference on Environment & Development Rio de Janeiro, Brazil, 3 to 14 June 1992.

¹¹⁴ *Ibid*, Objective 3.7.

¹¹⁵ *Ibid*.

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It also requires that Governments should, with the assistance of and in cooperation with appropriate international, non-governmental and local community organizations, establish measures that will directly or indirectly implement mechanisms for popular participation - particularly by poor people, especially women - in local community groups, to promote sustainable development.¹¹⁶ Education empowers individuals for full development of human personality, and participation in society through acquisition of knowledge, human values and skills. The right to education has close linkage with the right to development, and is a powerful tool in poverty reduction strategies.¹¹⁷ The right to education entails some basic elements without which it cannot be fully enjoyed. These include: availability of education - ensuring free and compulsory education for all children; accessibility of education - education accessible to anyone irrespective of race, gender, nationality, ethnic or social origin (elimination of discrimination); and acceptability of education - the quality of education should be guaranteed; adaptability of education - education that responds and adapts to the best interests of each child.¹¹⁸

Governments' obligations on the right to education are thus defined along these elements.¹¹⁹ With regard to availability, they are to ensure compulsory and free education for all children in the country. To guarantee accessibility, they are to eliminate exclusion from education based on any grounds of discrimination (race, colour, sex, language, religion, opinion, origin, economic status, birth, social status, minority or indigenous status, disability).¹²⁰ The education must also be acceptable in that governments must define the minimum standards for education, including the medium of instruction, contents and methods of teaching, and to ensure their observance in all educational institutions. In relation to adaptability, governments must design and implement education for children

¹¹⁶ Ibid, Objective 3.8(i).

¹¹⁷ UNESCO (2008), 'The Right to Education', p.2.

¹¹⁸ Human Rights Education Associates, 'Right to Education', available at http://www.hrea.org/index.php?doc_id=402#top [Accessed on 14/05/2015].

¹¹⁹ Tomasevski, K., 'Manual on rights-based education: global human rights requirements made simple'. Bangkok: UNESCO Bangkok, 2004. Collaborative project between the UN Special Rapporteur on the right to education and UNESCO Asia and Pacific Regional Bureau for Education., p.8. Available at http://www.hrea.org/erc/Library/display_doc.php?url=http%3A%2F%2Fwww.hrea.org%2Ferc%2FLibrary%2Fmanual_rightsbased.pdf&external=N [Accessed on 14/05/2015].

¹²⁰ Ibid, p. iv.

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precluded from formal schooling.¹²¹ This would include children belonging to nomadic pastoralists and others who may not be able to access formal institutions of learning for one reason or the other. Education is key in eradication of poverty in communities. This is especially so in the dire case of the pastoralist communities who entirely rely on environment for their livelihood. With education, it is possible to have these communities empowered to participate meaningfully in the development of their locality and this extends to enabling them actively participate in reversing or mitigating the adverse effects on the environment in these areas.¹²² Principles of public participation in governance and environmental democracy as envisaged in the current Constitution of Kenya becomes easier to implement.¹²³

Principle 8 of the *Rio Principles* states that to achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption and promote appropriate demographic policies. Further, Principle 10 thereof states that environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual is to have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes.

In order to realise this, States are to facilitate and encourage public awareness and participation by making information widely available as well as provide effective access to judicial and administrative proceedings, including redress and remedy. Arguably, this can only be achieved with the active and meaningful participation of all community members including men and women. This can only be achieved

¹²¹ Ibid, p. v.

¹²² See Abdi, A.Y., Education, 'Conflict and Development: The Case of Northern Kenya', *Chapter 5: Analysis -The Role of Education in enhancing Development in Northern Kenya*, A dissertation submitted in partial fulfillment of the requirement for the degree of Masters of Arts (MA) in Education and International Development. Institute of Education, University of London, December 4, 2012. Available at <http://www.bsix.ac.uk/staff/research/ECD%20%20DissertationvFinalFinal.pdf> [Accessed on 16/05/2015].

¹²³ Article 69 of the Constitution obligates the State to *inter alia* encourage public participation in the management, protection and conservation of the environment. This obligation is reinforced by placing a duty on every person to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.

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through concerted efforts from all the stakeholders using sector-wide approaches. It has rightly been asserted that climate change has a greater impact on those sections of the population, in all countries, that are most reliant on natural resources for their livelihoods and/or who have the least capacity to respond to natural hazards, such as droughts, landslides, floods and hurricanes.¹²⁴

It is in this regard that it has been observed that women commonly face higher risks and greater burdens from the impacts of climate change in situations of poverty, and the majority of the world's poor are women. Women's unequal participation in decision-making processes and labour markets compound inequalities and often prevent women from fully contributing to climate-related planning, policy-making and implementation.¹²⁵ It is suggested that women can (and do) play a critical role in response to climate change due to their local knowledge of and leadership in, for example, sustainable resource management and/or leading sustainable practices at the household and community level.¹²⁶

One of the functions of the National Climate Change Council¹²⁷ is to coordinate gender-responsive public education and awareness programmes on climate change and facilitate gender-balanced public participation in climate change programmes at the national and county governments.¹²⁸ The Council can, therefore, collaborate with other organs while engaging communities in enhancing the role of both men and women in advancing and achieving sustainable development.

*The National Gender and Equality Commission Act, 2011*¹²⁹ establishes the National Gender and Equality Commission as a successor to the Kenya National Human Rights and Equality Commission pursuant to Article 59(4) of the Constitution.¹³⁰ The Act seeks to achieve gender mainstreaming. Gender mainstreaming means ensuring that the concerns of women and men form an integral dimension of the

¹²⁴ United Nations Framework Convention on Climate Change, *Gender and Climate Change*, available at http://unfccc.int/gender_and_climate_change/items/7516.php [Accessed on 13/08/2016].

¹²⁵ Ibid.

¹²⁶ Ibid.

¹²⁷ S. 4(1), Climate Change Act, No. 11 of 2016, Laws of Kenya.

¹²⁸ S. 5.

¹²⁹ Act No. 15 of 2011, Laws of Kenya.

¹³⁰ Preamble; s. 3.

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design of all policies, laws and administrative procedures including budgeting and budget implementation, and the monitoring and evaluation of programmes implementing such policies, laws and administrative procedures in all political, economic and societal spheres; so as to ensure that women and men benefit equally, and that inequality is not perpetuated.¹³¹ Its main aim is thus to facilitate realisation of a just and equitable society where both men and women are treated fairly and equally.

This Commission can indeed go a long way in promoting gender equality in the country and facilitating active participation of both men and women in the country's agenda on achieving sustainable development. The right to equality means that both men and women should be empowered to effectively participate in the country's development.

With regard to poverty eradication, the *Report of the Fourth World Conference on Women in Beijing China* states that eradication of poverty based on sustained economic growth, social development, environmental protection and social justice requires the involvement of women in economic and social development, equal opportunities and the full and equal participation of women and men as agents and beneficiaries of people-centred sustainable development.¹³² The Conference also affirmed that there is need to encourage men to participate fully in all actions towards equality.¹³³ This is in recognition of the fact that gender equity requires the combined efforts of all persons if it is to be achieved.

The above is further supported by calls to ensure women's equal access to economic resources, including land, credit, science and technology, vocational training, information, communication and markets, as a means to further the advancement and empowerment of women and girls, including through the enhancement of their capacities to enjoy the benefits of equal access to these resources, *inter alia*, by means of international cooperation.¹³⁴ Under the current Constitution of Kenya, some of the Principles of land policy that should be upheld in order to ensure that land is held, used and managed in a manner that is equitable, efficient, productive and sustainable, include equitable access to

¹³¹ *National Gender and Equality Commission Act, 2011*, s.2; s.8.

¹³² United Nations Report of the Fourth World Conference on Women Annex I, op cit, para. 16.

¹³³ *Ibid*, para. 25.

¹³⁴ *Ibid*, para. 35.

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land, security of land rights, and elimination of gender discrimination in law, customs and practices related to land and property in land.¹³⁵ If fully implemented, these principles can go a long way in facilitating achievement of equitable access, use and control of natural resources by all persons for national development and self actualisation.

In a bid to ensure empowerment through education for active and meaningful participation of both gender, the *Beijing Conference* affirmed the need to promote people-centred sustainable development, including sustained economic growth, through the provision of basic education, life-long education, literacy and training, and primary health care for girls and women.¹³⁶ This is reinforced by Goal four of the *Sustainable Development Goals* which calls for inclusive and equitable quality education and promote lifelong learning opportunities for all.¹³⁷ Further, goal eight requires states to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.¹³⁸ These goals are synergetic since it is arguably not possible to implement goal 8 without ensuring that goal four is achieved for purposes of capacity building. Kenya should not be left behind in implementation of these goals as they will go a long way in facilitating achievement of an equitable society.

There is need for affirmative action¹³⁹ where necessary to ensure gender equity for development in Kenya. It is significant that this is already provided for under Article 27 relating to equality and freedom from discrimination. It provides that to give full effect to the realisation of the rights guaranteed under the Article, the State should take legislative and other measures, including affirmative action programmes and policies designed to redress any disadvantage suffered by individuals or groups because of past discrimination.¹⁴⁰ Any measure taken under clause (6) should adequately provide for any benefits to be on the basis of

¹³⁵ Article 60(1).

¹³⁶ *Ibid*, para. 27.

¹³⁷ United Nations Department of Economic and Social Affairs, "Open Working Group proposal for Sustainable Development Goals."

Available at <https://sustainabledevelopment.un.org/sdgsproposal> [Accessed on 20/05/2015].

¹³⁸ *Ibid*.

¹³⁹ Article 260 of the Constitution of Kenya defines "affirmative action" to include any measure designed to overcome or ameliorate an inequity or the systemic denial or infringement of a right or fundamental freedom

¹⁴⁰ Constitution of Kenya 2010, Article 27(6).

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genuine need.¹⁴¹ In addition to the measures contemplated in clause (6), the State is to take legislative and other measures to implement the principle that not more than two thirds of the members of elective or appointive bodies shall be of the same gender.¹⁴² In particular, the State is to put in place affirmative action programmes designed to ensure that minorities and marginalised groups – participate and are represented in governance and other spheres of life; are provided special opportunities in educational and economic fields; are provided special opportunities for access to employment; develop their cultural values, languages and practices; and have reasonable access to water, health services and infrastructure.¹⁴³

All is not lost and recently, there has been a move towards ensuring gender equity in development. For instance, the Ministry of Devolution and Planning Strategic Plan 2014-2018, affirms that sustainable development requires participation of men and women in all processes of development.¹⁴⁴ It also reiterates the fact that the country policies and programmes have for long been gender neutral without envisioning the differential impact their implementation has on the welfare of men and women. Thus, it recommends that policies, projects and programmes are implemented in a social context and their consequences need to be monitored with a view of informing policy. Gender concerns have not been addressed in

¹⁴¹ Ibid, Article 27(7).

¹⁴² Ibid, Article 27(8); Article 81 of the Constitution provides that one of the general principles for the electoral system is that not more than two-thirds of the members of elective public bodies shall be of the same gender. Article 91(1)(f) goes further to state that one of the basic requirements for political parties is that they must respect and promote human rights and fundamental freedoms, and gender equality and equity. Under Article 175 which provides for principles of devolved government, County governments must ensure that no more than two-thirds of the members of representative bodies in each county government shall be of the same gender. Article 177(1) (b) provides that a county assembly consists of *inter alia* the number of special seat members necessary to ensure that no more than two-thirds of the membership of the assembly is of the same gender. Under Article 197, County assembly should ensure that not more than two-thirds of the members of any county assembly or county executive committee are of the same gender. These provisions have been a subject of debate as to the mode of actualizing what has come to be known as the One Third Gender Rule. The Courts have even been invited to give their opinion on the matter as recorded in *The Matter of the Principle of Gender Representation in the National Assembly and the Senate* [2012] eKLR. The argument has been whether it should be progressive realisation of the same or immediate implementation. What however remains clear is that there is need for the implementation of these provisions so as to create a level playing ground that enables men and women to participate fairly in the development agenda of the country.

¹⁴³ Constitution of Kenya 2010, Article 56.

¹⁴⁴ Republic of Kenya, *Ministry of Devolution and Planning Strategic Plan 2013/14-2017/18*, (Government Printer, 2014, Nairobi), p. 32.

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monitoring and the effects policy and programmes on gender relations remains unclear. It is in recognition of this that the government has put in place measures to address marginalization of women and other vulnerable groups in the society. These include implementation of *Uwezo fund*¹⁴⁵, 30% public procurement reservations and preferences for women, youth and PWDs¹⁴⁶, the one third gender rule in public appointments and gender responsive budgeting, among others.¹⁴⁷ The Strategic Plan also calls for setting up of Gender Policy and Programmes Monitoring Department within the Ministry with the core mandate of closely monitoring implementation of policy, programmes and projects aimed at realization of gender equality, directorate planning and budgeting, research and analysis of gender related issues and tracking implementation of gender targets in performance contracts.¹⁴⁸

These efforts should be geared towards ensuring that gender equity in national development matters becomes a reality in Kenya. There is however need to protect the boy child even as the girl child is uplifted. A balance should be struck so as to ensure that again the one gender is not empowered at the expense of the other because the main objective of affirmative action and all other efforts towards gender equity and equality is to facilitate fair participation of both gender in national development.

The foregoing efforts facilitate *inter alia* gender equity for all and this can give people greater opportunities for protecting their fundamental human rights and fully participate and contribute towards achievement of national goals in development.

¹⁴⁵ The Uwezo Fund is a flagship programme for vision 2030 aimed at enabling women, youth and persons with disability access finances to promote businesses and enterprises at the constituency level, thereby enhancing economic growth towards the realization of the same and the Millennium Development Goals No.1 (eradicate extreme poverty and hunger) and 3 (promote gender equality and empower women). The Fund was launched by His Excellency the President of the Republic of Kenya on 8th September 2013 and enacted through a Legal Notice No. 21 of the Public Finance Management Act, 2014, and published on 21st February, 2014. Available at Uwezo Oversight Board, <http://www.uwezo.go.ke/> [Accessed on 23/05/2016].

¹⁴⁶ Public Procurement Oversight Authority, *Treasury Circular No. 14 of 2013, Presidential Directive:- 30 Percent of All Government procurement Be Allocated to the Youth, Women and Persons with Disabilities*, September 2013, available at <http://www.ppoa.go.ke/images/downloads/circular/Treasury%20Circular.pdf> [Accessed on 23/05/2016].

¹⁴⁷ Republic of Kenya, *Ministry of Devolution and Planning Strategic Plan 2013/14-2017/18*, op cit, p. 32.

¹⁴⁸ *Ibid*, p. 32.

12.8 Conclusion

It is not in dispute that gender inequality is one of the greatest problems of our time. Gender inequality remains embedded in the structures, instrumentalities and relations within the family, society, and the state. However, sustainable development in Kenya has to take cognizance of gender. Arguably, social sustainability will not be achieved in a society where one gender is treated as superior to the other. It is, therefore, important to promote social justice and gender equity so as to achieve an inclusive and socially sustainable development.

Women and men are entitled to equity in the development agenda. Sustainable development will not be possible without the meaningful participation of both gender. Attaining gender equity for inclusive development in Kenya is possible. It is an ideal worth pursuing.

Managing Natural Resource Conflicts for Sustainable Development

13.1 Introduction

Social conflicts, like all other kinds of conflicts, are inevitable in human interactions and if left unmanaged, they tend to degenerate into disputes that ruin the relations between persons or communities and yield undesired costs. It has rightly been observed that in any society, conflict is one of the major factors negatively affecting development as it diverts resources that could have otherwise been used productively. Conflict is also regarded as undesirable in many societies since, in its violent form, it claims the lives of many people, destroy property, and diverts human as well as financial resources away from development.¹ Thus, conflicts ought to be managed effectively.

Natural resource conflicts continue to negatively affect Kenyans owing to the many weaknesses of the present legal and institutional framework. It is noteworthy that most of the sectoral laws mainly provide for conflict management through the national court system. National legal systems governing natural resource management are based on legislation and policy statements that are administered through regulatory and judicial institutions, where adjudication and arbitration are the main strategies for addressing conflicts, with decision-making vested in judges and officials who possess the authority to impose a settlement on disputants.² Further, decisions are more likely to be based on national legal norms applied in a standardized or rigid manner, with all-or-nothing outcomes. Thus, contesting parties often have very limited control over the process and outcomes of conflict management.³

This chapter mainly traces the connection between environmental conflicts and sustainable development. It examines the impact of such conflicts on environmental health and ultimately on the efforts towards achieving sustainable development. The chapter will highlight examples from within and outside

¹ Mengesha, A.D., et al., "Indigenous Conflict Resolution Mechanisms among the Kembata Society." *American Journal of Educational Research*, 2015, Vol. 3, No. 2, pp. 225-242 at p.227.

² FAO, 'Negotiation and mediation techniques for natural resource management,' op cit.

³ Ibid.

Kenya. The general argument is that it is not possible to achieve sustainable development in a conflict-torn area. The role of the courts and other relevant institutions in promoting sustainable development are examined within this chapter.

13.2 Causes and Effects of Conflicts

There are many factors that determine the emergence, persistence, and even management of conflicts. The understanding of these factors is essential in developing policies that effectively limit and manage conflict. The factors range from internal to relational and contextual factors.⁴

It has rightly been observed that in the majority of cases of resource conflicts, one or more of the following drivers are usually at play: conflict over resource ownership; conflict over resource access; conflict over decision making associated with resource management; and conflict over distribution of resource revenues as well as other benefits and burdens.⁵ These conflict drivers have contributed to most of the natural resource conflicts in Kenya and should therefore be adequately addressed in managing the conflicts.⁶

The structure of relations between parties to the conflict and the way parties interpret the same may affect the course of the conflict and its management. The relation factors include differences in sizes (group conflicts), economic endowment (resources), coerciveness between the parties, and cultural patterns of conduct. They also include the nature and degree of integration between adversaries in economic, social, and cultural domains. So that a conflict between groups that depend on each other's produce will be easy to manage because each party is feeling the strain of the conflict resulting from scarcity of the produce

⁴ Louis, K., "Factors Shaping the Course of Intractable Conflict." *Beyond Intractability*. Eds. Guy Burgess and Heidi Burgess. Conflict Research Consortium, University of Colorado, Boulder. Posted: October 2003. Available at http://www.beyondintractability.org/essay/factors_shaping_intractable_conflict/ [Accessed on 17/01/2016].

⁵ The United Nations Department of Political Affairs and United Nations Environment Programme, *Natural Resources and Conflict: A Guide for Mediation Practitioners*, (2015, UN DPA and UNEP), p. 11.

⁶ Campbell, D.J., et al, 'Land use conflict in Kajiado District, Kenya,' *Land Use Policy*, Vol.17, Issue 4, October 2000, pp. 337-348; Yamano, T, et al, 'Land Conflicts in Kenya: Causes, Impacts, and Resolutions,' *FASID Discussion Paper 2005-12-002*, available at [www3.grips.ac.jp/~yamanota/Land Conflicts in Kenya \(FASID DP\).pdf](http://www3.grips.ac.jp/~yamanota/Land Conflicts in Kenya (FASID DP).pdf) [Accessed on 17/01/2016].

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from the other party.⁷ However, abundance of resources, just like scarcity, can also cause conflicts. The African continent is awash with examples of countries that have suffered from “curse of natural resources” – where countries with great natural resource wealth tend to grow more slowly than resource-poor countries.⁸

It has been argued that conflicts associated with natural resources are often due to different perceptions regarding who should benefit from the conflicts, and are an indicator of resource availability, evolution of tenure rights and systems, accessibility and control over the resource.⁹ They are believed to result from an imbalance in the power structure, where these power imbalances can exhibit themselves through unequal distribution of natural resource use and tenure rights.¹⁰ Further, it is asserted that conflicts show transition within societies, which can be positive if it expresses need for change or the ability of institutions to adapt to social, economic and/or environmental conditions. On the other hand, conflicts can have a negative impact if the changes that result from them cause further marginalisation of certain groups of society, such as the poor, women and minorities.¹¹

Where conflict cannot be contained in a functional way, it can erupt in violence, war, and destruction, loss of life, displacements, long-term injuries,

⁷ See Ayling, R.D. & Kelly, K., ‘Dealing with conflict: natural resources and dispute resolution,’ *The Commonwealth Forestry Review*, Vol. 76, No. 3, 1997, pp. 182-185.

⁸ Sachs, J.D & Warner, A.M, ‘Natural Resources and Economic Development: The curse of natural resources,’ *European Economic Review*, Vol. 45, Issues 4-6, May 2001, PP. 827-838 AT P. 827. For instance, there have been internal natural resource conflicts that may be attributed to resource abundance: South Sudan, Liberia, Sierra Leone, Democratic Republic of Congo, Congo -Brazzaville, Central African Republic, amongst others; See also generally, King, G. & Lawrence, V., Africa, “A Continent in Crisis: The Economic and Social Implications of Civil War and Unrest among African Nations,” *EDGE*, Final Spring 2005, June, 2005; see also, Jenkins, M. & Umoh, E., Africa in Conflict and Crisis: Critical Perspectives on the Role of Conflict Diamonds and Oil on the Livelihood of Sierra Leone and Nigeria.’ Autumn, 2002; *Wiwa v. Royal Dutch Petroleum Co.*, 226 F.3d 88 (2d Cir. 2000), cert. denied, 532 U.S. 941(2001); Institute for Environmental Security, “What is Environmental Security?” Available at http://www.envirosecurity.org/activities/What_is_Environmental_Security.pdf [Accessed on 17/1/2016].

⁹ Traore, S. & Lo, H., ‘Natural Resource Conflicts and Community Forestry: A West African Perspective,’ in FAO, *Annex C - Summary of Discussion Papers*, available at <http://www.fao.org/docrep/005/ac697e/ac697e13.htm#TopOfPage> [Accessed on 2/01/2016].

¹⁰ Ibid.

¹¹ Ibid.

psychological effects as a result of trauma suffered especially in case of violent conflicts, and deep fear, distrust, depression, and sense of hopelessness.¹²

Conflict also often produces significant environmental degradation.¹³ It is difficult to justify environmental protection when other more immediate concerns exist as a result of the conflict. Therefore, environmental damage from accelerated resource extraction may be severe.

Scholars have stressed that human needs are among the major causes of conflicts. It is argued that deep-rooted conflicts are caused by the absence of the fundamental needs of security, identity, respect, safety, and control which many find non-negotiable.¹⁴ As such, if they are absent, the resulting conflict will remain intractable until the structure of society is changed to provide such needs to all. For instance, the need for identity has been described as a fundamental driver of intractable conflict.¹⁵ Threats to identities often invite very negative responses from people who see the same as a way of protecting their essence.¹⁶

The clash of interests can take many forms. For instance, it could be over resources such as land, food, territory, water, energy sources, and natural resources.¹⁷ Such conflicts range from, to whom the resources should be distributed to, to whether the resources should be distributed and how the distribution should be undertaken. Conflict could also arise over power and control of the resources.¹⁸ There are also conflicts over identity.¹⁹ These concern the cultural, social and political communities to which people feel tied. Conflicts

¹² See Machel, G. & Mkapa, B., *Back from the Brink: the 2008 mediation process and reforms in Kenya*, (African Union Commission, 2014).

¹³ Ballet, J., et al, 'Social Capital and Natural Resource Management: A Critical Perspective,' *The Journal of Environment & Development*, Vol. 16, No. 4, December 2007, pp. 355-374, p. 367.

¹⁴ Burton, J., *Conflict: Human Needs Theory* (New York: St. Martin's Press), 1990; Kelman, H., *International Behavior: A Social Psychological Analysis* (New York: Holt, Rinehart and Winston), 1965.

¹⁵ Rothman, J., *Resolving Identity-Based Conflicts* (San Francisco: Jossey Bass), 1997. See also Lederach, J.P., *Building Peace: Sustainable Reconciliation in Divided Societies* (United States Institute of Peace), 1998.

¹⁶ Chidhakwa, Z., 'Managing conflict around contested natural resources: a case study of Rusitu Valley area, Chimanimani, Zimbabwe,' op cit, p. 202.

¹⁷ Buckles, D. & Rusnak, D., 'Conflict and collaboration in natural resource management,' (International Development Research Centre, 2005), p. 2.

¹⁸ Ibid, p. 2.

¹⁹ See Rothman, J., *Resolving Identity-Based Conflict: In Nations, Organizations, and Communities*. (San Francisco: Jossey-Bass Publishers, 1997).

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over status may arise and have to do with whether people believe they are treated with respect and dignity and whether their traditions and social position are respected.²⁰ In addition, the conflicts could be caused by differences of values, particularly those embodied in systems of government, religion, or ideology.²¹ Further, conflicts have been associated with the changing norms, values, and world views about property rights within formerly subsistence-based (or pastoralist) communities.²² Indeed, this scenario is not new to Kenya, where recently, there was witnessed violence in areas around Kajiado town with Maasai community seeking to 'evict foreigners' in the area.²³ The alleged foreigners are people who have bought land for residential homes and commercial purposes, through real estate land developers. They felt that their land was being taken away. Such incidences require collaborative conflict management techniques considering that there are deep-rooted issues and harboured feelings of alienation and discrimination that need to be adequately addressed. There is need to strike a balance between community interests and national interests on development. Otherwise, without such a balance, erupting conflicts subsequently affect the course of development in the country.

There is also a school of thought that believes that public policy can also lead to natural resource conflicts. It is argued that specific policies, government programs, and their implementation have, in some areas, generated or aggravated conflicts, even when the intention was to reduce the conflict.²⁴ A good example of such policies would be those touching on property ownership, especially land, and where there is need to balance conservation and access to the

²⁰ EAIM, 'Peace and Stability Are Prelude to Economic Development and Prosperity,' available at <http://www.togoruba.org/togoruba1964/mainTogorubamap/mainMap/headingMap/English/2006/ArticlesFeb-2006/1802EAIM06-06EA.html> [Accessed on 10/02/2016].

²¹ Adamu, A & Ben, A., 'Migration and Violent Conflict in Divided Societies: Non-Boko Haram violence against Christians in the Middle Belt region of Nigeria,' *Nigeria Conflict Security Analysis Network (NCSAN) Working Paper No. 1*, (World Watch Research, Abuja, Nigeria, March 2015).

²² Armitage, D., 'Adaptive Capacity and Community-Based Natural Resource Management,' *Environmental Management*, Vol. 35, No. 6, pp. 703-715, p. 710.

²³ Sayagie, G., 'Tension as different clans from Narok, Kajiado both claim Nguruman,' *Sunday Nation*, November 9, 2014, (Nation media Group, Nairobi, 2014). Available at <http://www.nation.co.ke/counties/Narok-Kajiado-clans-Nguruman/-/1107872/2516170/-/c6b4t5/-/index.html> [Accessed on 10/02/2016]; Daily Nation, 'Clashes in Kitengela as traders fight over market,' (Nation media Group, Nairobi, September 8, 2015). Available at <http://www.nation.co.ke/photo/-/1951220/2865112/-/ffaabnp/-/index.html> [Accessed on 10/02/2016].

²⁴ Tyler, S.R., 'Policy Implications of Natural Resource Conflict Management,' available at <http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan022237.pdf> [Accessed on 10/01/2016].

resources by communities. A government policy to relocate people forcefully may degenerate into conflicts as witnessed in Mau forest eviction in Rift Valley Kenya.²⁵ There may be accusations of discriminatory relocation by the Government where some communities feel alienated. Indeed, such views may not be alien to the Kenyan scenario. For instance, according to the Business and Human Rights Resource Centre, an independent international human rights organisation, when Kenya discovered oil, there were fears that the legal regime was inadequate to regulate the industry and ensure that it does not fuel conflict within Kenya.²⁶ However, with the enactment of the current Constitution 2010, it was expected that this would change as it makes provisions for natural resource management and calls for community participation in the management of natural resources.²⁷

In homogenous societies constitutional provisions on natural-resource ownership are expected to address national development or how natural resources are shared between governments and private interests. However, in divided societies, the constitutional treatment of natural resources is more concerned with how natural-resource wealth is shared among often antagonistic communities.²⁸ Conflicts do not occur in vacuum and to a large extent, they are dependent on the context. Indeed, it has been argued that the governance of natural resources is especially important in the context of divided societies because control over the benefits from local natural resources is often a chief motivator of ethnic or identity-based conflicts.²⁹ Natural resource conflicts also are, directly and indirectly connected to and/or impact human development factors and especially the quest for social-economic development.³⁰

²⁵ Amnesty International, et al, 'Nowhere to go: Forced Evictions in Mau Forest, Kenya,' *Briefing Paper*, April 2007; Sang J.K., Case study 3-Kenya: The Ogiek in Mau Forest, April 2001.

²⁶ Business and Human Rights Resource Centre, 'Steep Rise in Allegations of Human Rights Abuse as Boom in Investment Brings Hope of Prosperity Business and Human Rights in Eastern Africa: A Regional Briefing Paper,' April 2014, p. 7. Available at <http://business-humanrights.org/sites/default/files/media/documents/eastern-afr-briefing-bus-human-rights-apr-2014.pdf> [Accessed on 19/01/2016].

²⁷ *Ibid*, p. 7.

²⁸ Haysom, N. & Kane, S., 'Negotiating natural resources for peace: Ownership, control and wealth-sharing,' Centre for Humanitarian Dialogue Briefing Paper, October 2009, p. 8.

²⁹ Haysom, N. & Kane, S., 'Negotiating natural resources for peace: Ownership, control and wealth-sharing,' *op cit*, p. 5.

³⁰ Wilson, C. & Tisdell, C., 'Conflicts over Natural Resources and the Environment: Economics and Security,' *Working Papers on Economics, Ecology and the Environment*, Working Paper No. 86, September

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The Sustainable Development Goals (SDGs) recognise this connection and provide that sustainable development cannot be realized without peace and security; and peace and security will be at risk without sustainable development.³¹ The SDGs go ahead to state that the new Agenda recognizes the need to build peaceful, just and inclusive societies that provide equal access to justice and that are based on respect for human rights (including the right to development), on effective rule of law and good governance at all levels and on transparent, effective and accountable institutions. Factors which give rise to violence, insecurity and injustice, such as inequality, corruption, poor governance and illicit financial and arms flows, are addressed in the Agenda. The aim is to redouble the efforts to resolve or prevent conflict and to support post-conflict countries, including through ensuring that women have a role in peacebuilding and State building.³² They also call for further effective measures and actions to be taken, in conformity with international law, to remove the obstacles to the full realization of the right of self-determination of peoples living under colonial and foreign occupation, which continue to adversely affect their economic and social development as well as their environment.³³ Thus, conflicts management should be one of the key issues that should be addressed in the quest for sustainable development.

Within the Kenyan context, one of the most important natural resources is land and the Constitution provides that land in Kenya is to be held, used and managed in a manner that is equitable, efficient, productive and sustainable, and in accordance with the following principles: equitable access to land; security of land rights; sustainable and productive management of land resources; transparent and cost effective administration of land; sound conservation and protection of ecologically sensitive areas; elimination of gender discrimination in law, customs and practices related to land and property in land; and encouragement of communities to settle land disputes through recognised local community initiatives consistent with the Constitution.³⁴ This is in recognition of

2003; Lumerman, P., et al, 'Climate Change Impacts on Socio-environmental Conflicts: Diagnosis and Challenges of the Argentinean Situation,' (Initiative for Peacebuilding 2011).

³¹ United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, A/RES/70/1, para. 35.

³² Ibid.

³³ Ibid.

³⁴ Constitution of Kenya 2010, Article 60(1).

the fact that Kenya is a divided society with different communities who hold different values, attitudes and beliefs towards the land and its resources.

Further, it is also been observed that conflicts between biodiversity conservation and other human activities are intensifying as a result of growing pressure on natural resources and concomitant demands by some for greater conservation.³⁵ Consequently, approaches to reducing conflicts are increasingly focusing on engaging stakeholders in processes that are perceived as fair, i.e. independent and where stakeholders have influence, and which in turn can generate trust between stakeholders.³⁶ It is, thus, believed that increased trust through fair participatory processes makes conflict resolution more likely.³⁷ Arguably, central governments who are genuinely concerned about the sustainable use of their country's natural resources must, at a minimum, involve local communities in their management.³⁸ This means taking local communities into confidence and having confidence in them; it means engaging with their ideas, experiences, values, and capabilities and working with them, not on their behalf, to achieve resource-conservation objectives and community benefits.³⁹ It means being prepared to adjust national policies so that they can accommodate local interests, needs, and norms that are compatible with the long-term preservation of national ecosystems and their biological diversity.⁴⁰

The Constitution of Kenya requires the States to, inter alia: ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits; encourage public participation in the management, protection and conservation of the environment; and utilise the environment and natural resources for the benefit of the people of Kenya.⁴¹ Further, every person has a constitutional duty to cooperate with State organs and other persons to protect and conserve the

³⁵ Young, J.C., et al, 'The role of trust in the resolution of conservation conflicts,' *Biological Conservation*, Vol. 195, March 2016, pp. 196-202.

³⁶ Ibid.

³⁷ Ibid.

³⁸ Buckles, D. (ed), *Cultivating Peace: Conflict and Collaboration in Natural Resource Management*, (International Development Research Centre 1999), pp. vii-viii.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Constitution of Kenya 2010, Article 69(1).

environment and ensure ecologically sustainable development and use of natural resources.⁴²

It is, therefore, arguable that one of the way of stemming natural resource conflicts would be striking a balance between conservation measures and access to resources by communities, through employing approaches that help in understanding the needs of the particular people and responding appropriately and consequently building trust within communities and between communities and the national government. It has also been argued that for conflict management to be successful there is need to conduct a historical analysis (with the participation of local people) so that the major issues can be identified, analysed and discussed.⁴³

While conflicts cannot be avoided, there is a need to effectively manage them so as to ensure harmony amongst people and to prevent violence and the potential loss of lives and property. Management of natural resource conflicts also ensures security in terms of a guarantee of continued access to and use of the environmental resources necessary for to survival from generation to generation.

13.3 Defining Concepts in Conflict Management

Conflict is viewed as a process of adjustment, which itself can be subject to procedures to contain and regularize conflict behaviour and assure a fair outcome.⁴⁴ Conflict has been defined as a struggle over values or claims to status and resources, in which the aim of the conflicting parties is not only the desired values but also neutralize, injure or eliminate their rivals.⁴⁵ Conflict is seen as an inevitable phenomenon in human society's sphere of life since the entire life of humankind is manipulated by the prevalence of conflict within the society when people set opinion against opinion, run interest against interests.⁴⁶ It has been observed that almost all societies, regardless of their location in time and space,

⁴² Ibid, Article 69(2).

⁴³ Chidhakwa, Z., 'Managing conflict around contested natural resources: a case study of Rusitu Valley area, Chimanimani, Zimbabwe,' *Natural Resource Conflict Management Case Studies: An Analysis of Power, Participation and Protected Areas*, (Southern Alliance for Indigenous Resources).

⁴⁴ Rummel, R.J., 'Principles of Conflict Resolution,' Chapter 10, *Understanding Conflict and war: Vol. 5: The Just Peace*.

⁴⁵ Mengesha, A.D., et al., "Indigenous Conflict Resolution Mechanisms among the Kembata Society." op cit, at pp. 225-226.

⁴⁶ Ibid, p.226.

have laws and mechanisms for handling disputes/conflicts and achieving resolution of differences.⁴⁷

Conflict management is defined as the practice of identifying and handling conflicts in a sensible, fair and efficient manner that prevents them from escalating out of control and becoming violent.⁴⁸ Conflict management is seen as a multidisciplinary field of research and action that addresses how people can make better decisions collaboratively.⁴⁹ Thus, the roots of conflict are addressed by building upon shared interests and finding points of agreement.⁵⁰

Conflict transformation focuses on long-term efforts oriented towards producing outcomes, processes and structural changes. It aims to overcome revealed forms of direct, cultural and structural violence by transforming unjust social relationships and promoting conditions that can help to create cooperative relationships.⁵¹

Conflict settlement deals with all the strategies that are oriented towards producing an outcome in the form of an agreement among the conflict parties that might enable them to end an armed conflict, without necessarily addressing the underlying conflict causes.⁵² Settlement is an agreement over the issues(s) of the conflict which often involves a compromise.⁵³ Parties have to come to accommodations which they are forced to live with due to the anarchical nature of society and the role of power in the relationship. Basically, power is the defining factor for both the process and the outcome.⁵⁴

⁴⁷ Ibid, p. 226.

⁴⁸ Engel, A. & Korf, B., 'Negotiation and mediation techniques for natural resource management,' Prepared in the framework of the Livelihood Support Programme (LSP), An interdepartmental programme for improving support for enhancing livelihoods of the rural poor, (Food And Agriculture Organization Of The United Nations, Rome, 2005), available at http://peacemaker.un.org/sites/peacemaker.un.org/files/NegotiationandMediationTechniquesforNaturalResourceManagement_FAO2005.pdf [Accessed on 9/01/2016].

⁴⁹ Anderson, J., et al, 'Addressing Natural Resource Conflicts through Community Forestry: Setting the Stage,' available at <http://www.fao.org/docrep/005/ac697e/ac697e13.htm#TopOfPage> [Accessed on 17/01/2016].

⁵⁰ Ibid.

⁵¹ Engel, A. & Korf, B., 'Negotiation and mediation techniques for natural resource management,' op cit.

⁵² Ibid.

⁵³ Bloomfield, D., "Towards Complementarity in Conflict Management: Resolution and Settlement in Northern Ireland", *Journal of Peace Research*, Vol. 32, No. 2(May, 1995), p.152.

⁵⁴ Baylis, C., and Carroll, R., "Power Issues in Mediation", *ADR Bulletin*, Vol. 1, No.8 [2005], Article1, p.135.

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Settlement may be an effective immediate solution to a violent situation but will not thereof address the factors that instigated the conflict. The unaddressed underlying issues can later flare up when new issues or renewed dissatisfaction over old issues or the third party's guarantee runs out.⁵⁵ Settlement mechanisms may not be very effective in facilitating satisfactory access to justice (which relies more on people's perceptions, personal satisfaction and emotions). Litigation and arbitration are coercive and thus lead to a settlement. They are formal and inflexible in nature and outcome.⁵⁶

Conflict resolution deals with process-oriented activities that aim to address and resolve the deep-rooted and underlying causes of a conflict.⁵⁷ Conflict resolution mechanisms include negotiation, mediation in the political process and problem solving facilitation.⁵⁸ It has rightly been observed that whereas concerns for justice are universal, views of what is just and what is unjust are not universally shared, and as such, divergent views of justice often cause social conflicts.⁵⁹ This is attributed to the fact that frequently, the parties involved in conflicts are convinced that their own view is the solely valid one.⁶⁰ It is, thus, suggested that since there is no access to an objective truth about justice, conflicts may be reconciled by the judgement of an authority accepted by all parties or by a negotiated agreement between the parties: agreements are just when the parties are equally free in their decision and equally informed about all relevant facts and possible outcomes.⁶¹

Natural resource conflicts are defined as social conflicts (violent or non-violent) that primarily revolve around how individuals, households, communities and states control or gain access to resources within specific economic and political

⁵⁵ Bloomfield, D., "Towards Complementarity in Conflict Management: Resolution and Settlement in Northern Ireland", op. cit. p. 153; See also Mwagiru, M., *Conflict in Africa: Theory, Processes and Institutions of Management*, (Centre for Conflict Research, Nairobi, 2006), p. 42.

⁵⁶ See generally Mwagiru, M., *Conflict in Africa: Theory, Processes and Institutions of Management*, op. cit.

⁵⁷ Engel, A. & Korf, B., 'Negotiation and mediation techniques for natural resource management,' op cit.

⁵⁸ Kenneth Cloke, "The Culture of Mediation: Settlement vs. Resolution", *The Conflict Resolution Information Source*, Version IV, December 2005.

⁵⁹ Montada, L., 'Justice, Conflicts, and the Justice of Conflict Resolution,' *International Encyclopedia of the Social & Behavioral Sciences* (Second Edition, 2015), pp. 937-942.

⁶⁰ Ibid.

⁶¹ Ibid.

frameworks.⁶² They are the contests that exist as a result of the various competing interests over access to and use of natural resources such as land, water, minerals and forests. Natural resource conflicts mainly have to do with the interaction between the use of and access to natural resources and factors of human development factors such as population growth and socio-economic advancement.⁶³

Natural resource conflicts can, arguably, involve three broad themes: actors (or stakeholders, groups of people, government structures and private entities), resource (land, forests, rights, access, use and ownership) and stakes (economic, political, environmental and socio-cultural).⁶⁴ As a result, it is contended that conflicts can be addressed with the actor-oriented approach, resource-oriented approach, stake-oriented approach or a combination of the three.⁶⁵ Despite this, there are key principles such as, inter alia, participatory approaches⁶⁶, equitable representation, capacity building, context of the conflict and increased access and dissemination of information, that must always be considered.⁶⁷

Natural resource conflicts are sensitive considering that they arise from the need for people to satisfy their basic needs.⁶⁸ To them, justice would mean affording them an opportunity to get what they feel entitled to and anything less, means that they resort to other means of possessing the same. This way, conflicts become inevitable. Conflict resolution mechanisms such as negotiation and mediation affords the parties an opportunity to negotiate and reach a compromise

⁶² Funder, M., et al, 'Addressing Climate Change and Conflict in Development Cooperation Experiences from Natural Resource Management,' p. 17, (Danish Institute for International Studies, DIIS, 2012), available at <https://www.ciaonet.org/attachments/20068/uploads> [Accessed on 10/01/2016].

⁶³ Toepfer, K., "Forward", in Schwartz, D. & Singh, A., *Environmental conditions, resources and conflicts: An introductory overview and data collection* (UNEP, New York, 1999). p.4

⁶⁴ Anderson, J., et al, 'Addressing Natural Resource Conflicts through Community Forestry: Setting the Stage,' *Annex C - Summary of Discussion Papers*, (FAO), available at <http://www.fao.org/docrep/005/ac697e/ac697e13.htm#TopOfPage> [Accessed on 2/01/2016].

⁶⁵ Ibid.

⁶⁶ Participatory approaches are defined as institutional settings where stakeholders of different types are brought together to participate more or less directly, and more or less formally, in some stage of the decision-making process. (Hove, SVD, 'Between consensus and compromise: acknowledging the negotiation dimension in participatory approaches,' *Land Use Policy*, Vol. 23, Issue 1, January 2006, pp. 10-17.

⁶⁷ Anderson, J., et al, 'Addressing Natural Resource Conflicts through Community Forestry: Setting the Stage,' op cit.

⁶⁸ FAO, 'Negotiation and mediation techniques for natural resource management,' available at <http://www.fao.org/3/a-a0032e/a0032e05.htm> [Accessed on 07/02/2016].

agreement, where all sides get satisfactory outcome.⁶⁹ This is particularly important in ensuring that there will be no future flare-up of conflict due to unaddressed underlying issues.⁷⁰

It is, therefore, arguable that resolution mechanisms have better chances of achieving parties' satisfaction when compared to settlement mechanisms. However, it is important to point out that these approaches should not be used mutually exclusively but instead there should be synergetic application of the above approaches. Further, conflict management processes are not mutually exclusive and one can lead to another.⁷¹ Each of the approaches has their success story where they have been effectively applied to achieve the desired outcome.

13.4 Nature of Environmental and Natural Resource Conflicts

The causes of environmental conflicts vary across the globe and their manifestations differ considerably. Causes can range from control over vital environmental resources to contestations over natural resources at the community and/or household level.⁷² It therefore follows that such mechanisms are informed by knowledge originating from within such communities. TEK comes in handy when such communities are to deal with environmental conflicts.

There is also documented evidence to the effect that that if conservation and environmental management policies are not formulated and implemented in a holistic way to balance the needs and interests of conservation and people, it can lead to conflict.⁷³ Environmental deficiencies supply conditions which render conflict all the more likely. They can serve to determine the source of conflict, they can act as multipliers that aggravate core causes of conflict, and they can help to shape the nature of conflict. Moreover they can not only contribute to

⁶⁹ Warner, M., 'Conflict Management in Community-Based Natural Resource Projects: Experiences from Fiji and Papua New Guinea,' *Working Paper No. 135*, (Overseas Development Institute, April, 2000), p. 16.

⁷⁰ See generally Mwangi, M., *Conflict in Africa: Theory, Processes and Institutions of Management*, op. cit.

⁷¹ Chidhakwa, Z., 'Managing conflict around contested natural resources: a case study of Rusitu Valley area, Chimanimani, Zimbabwe,' *Natural Resource Conflict Management Case Studies: An Analysis of Power, Participation and Protected Areas*, (Southern Alliance for Indigenous Resources).

⁷² Bob, U & Bronkhorst, S., 'Environmental conflicts: Key issues and management implications,' *African Journal on Conflict Resolution*, Special Issue on Environment and Conflict, Vol. 10 No. 2, 2010, pp. 9-30 at p. 10.

⁷³ *Ibid*, p. 15.

conflict, they can stimulate the growing use of force to repress disaffection among those who suffer the consequences of environmental decline.⁷⁴

While environmental conflicts take on different forms and have multiple and varying impacts in different contexts, the key points of conflict are in relation to climate change, conservation, water quality and availability, air quality and management aspects.⁷⁵ Communities have special relationship with the environment in their areas and any adverse effect on such environment directly interferes with the livelihoods of the community. Shocks to natural systems are anticipated and where rights and processes are uncertain, this may lead to conflict.⁷⁶ Such conflict can be between similar resource users (e.g. between pastoralists), or between users with different needs (farmers versus pastoralists), or even within families where gender based violence appears to surge with climate stresses.⁷⁷

13.5 Environmental and Natural Resource Conflicts Management in Kenya

Over the years, Kenya has been faced with conflicts over natural resources such as water, forests, minerals and land among others. Natural resource conflicts are unique and require being resolved expeditiously since they involve livelihoods of people. Communities depend heavily on natural resources for their livelihoods.⁷⁸ Renewable and non-renewable natural resources have conflict generating potential. Renewable resources include crop land, fresh water, free wood and fish. None renewable resources include petroleum and minerals.⁷⁹ Scarcities of agricultural land, forests, fresh water, and fish are those which

⁷⁴ Myers, N., "Environmental Security: What's New and Different?"

Available at <http://www.envirosecurity.org/conference/working/newanddifferent.pdf> [Accessed on 11/10/2015], p.4.

⁷⁵ Bob, U & Bronkhorst, S., 'Environmental conflicts: Key issues and management implications,' op cit, p. 27.

⁷⁶ Crawhall, N., 'Indigenous knowledge in adaptation: conflict prevention and resilience-building,' op cit. p. 4.

⁷⁷ Ibid, p. 2.

⁷⁸ Tyler, S. (ed), *Communities, Livelihoods, and Natural Resources: Action Research and Policy Change in Asia*, (International Development Research Centre, 2006).

available at <http://www.idrc.ca/EN/Resources/Publications/openbooks/230-9/index.html> [Accessed on 17/01/2016]; Gomes, N., 'Access to water, pastoral resource management and pastoralists' livelihoods: Lessons learned from water development in selected areas of Eastern Africa (Kenya, Ethiopia, Somalia),' (Food and Agriculture Organization of the United Nations, 2006), available at <ftp://ftp.fao.org/docrep/fao/009/ah247e/ah247e00.pdf> [Accessed on 17/01/2016].

⁷⁹ Gizewski, P (1997) *Environmental Scarcity and Conflict*, Toronto, Canadian Security Intelligence Service p. 1.

contribute to the most violence. This can be partly attributed to lack of effective conflict management mechanisms that are respected by the people who are involved in the use and access to the resources aforesaid. Various groups, communities, developers, government and other organisations have differing ideas of how to access and utilize environmental resources. The conflicts if not addressed can escalate into violence, cause environmental degradation and undermine livelihoods.⁸⁰

There is a legal and institutional framework in Kenya that is supposed to deal with natural resource conflicts and either resolve or manage them. These institutions include the courts of law, tribunals under various Acts,⁸¹ the National Environmental Management Authority,⁸² National Environmental Complaints Committee, Environment Tribunal and other various informal community based resource governance bodies.⁸³ The existing legal mechanism for managing natural resource conflicts as enshrined in the environmental law statutes include the courts of law both under civil and criminal law,⁸⁴ statutory tribunals set up under various laws (such as the Land Adjudication Boards)⁸⁵ and customary law systems of conflict management.⁸⁶

Some of the above conflict management mechanisms and institutions have not been very effective in managing natural resource conflicts. Courts, for instance, are formal, inflexible, bureaucratic and expensive to access. They address strict legal rights rather than the interest of the parties. The court system is adversarial in nature with limited room for negotiation and agreement on issues of interest to the parties. Law itself, has at times been a source of conflict rather than a

⁸⁰ See generally Matiru, V. *Conflict & Natural Resource Management*, Food & Agriculture Organisation (FAO, 2000); Buckles, D. & Rusnak, D. "Cultivating Peace: Conflict and collaboration in Natural Resource Management" IDRC/World Bank, 1999, p. 3 & 4; Thayer, D.M., "Nature of Conflict over nature: Protected Areas, Transfrontier Conservation and the meaning of Development" Saratunga Skidmore College-The School for International Training, 2003.

⁸¹ They include the Central Land Appeals Board under the Land Control Act (Cap 302), amongst others.

⁸² Established under S.7 of the EMCA (Cap 8 of 1999).

⁸³ Some communities like the Meru, Maasai, Giriama etcetera still have councils of elders who sit and resolve disputes that erupt within their respective communities.

⁸⁴ Environmental Management and Co-ordination Act, Act. No. 8 of 1999, Part XIII Ss. 137-146

⁸⁵ Established under Land Adjudication Act, Cap. 284, Laws of Kenya.

⁸⁶ Mbote, P.K., 'Towards greater Access to Justice in Environmental Disputes in Kenya: Opportunities for Intervention,' IELRC Working 2005-1.

Available at <http://www.ielrc.org/content/w0501.pdf> [Accessed on 10/02/2016].

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conflict solver since it insists on pursuing personal rights rather than reaching agreed compromise and implementation of various laws may also lead to conflicting outcomes.⁸⁷ This is not to say that personal rights are to be ignored for what would be seen as the greater good of the community. However, there are instances where realisation of such personal rights may compromise the general stability of the society.

For instance, in the traditional community setup, there was need to balance community interests with that of individuals especially where such rights are claimed against the interests of an entirely different community. In such instances, the concerned communities will not look at those rights as accruing to individuals but to the community as a whole. Even where a threat arises, they perceive it as a threat to the whole community.⁸⁸

A bottom-top approach to natural resource management, including conflict management, creates an opportunity to involve the local people who may have insiders' grasp of the issues at hand. It is for this reason that this chapter advocates for use of conflict management approaches that incorporate public participation. Litigation, which is a state-sponsored approach to conflict management, not afford the affected parties a reasonable and fair opportunity to participate in finding a lasting solution. This is because, apart from the coercive nature of the process, litigation is also subject to other procedural technicalities which may affect its effectiveness.⁸⁹

The national legal systems have been associated with a number of limitations which include, inter alia: inaccessibility to the poor, women, marginalized groups and remote communities because of cost, distance, language barriers, political obstacles, illiteracy and discrimination; failure to consider indigenous knowledge, local institutions and long-term community needs in decision-

⁸⁷ Tyler, S.R., 'Policy Implications of Natural Resource Conflict Management,' 2006, available at <http://www.idrc.ca/> [Accessed on 10/02/2016].

⁸⁸ Ejizu, C.I., 'African Traditional Religions And The Promotion of Community-Living in Africa,' available at <http://www.afrikaworld.net/afrel/community.htm> [Accessed on 10/02/2016]; See also Baland, J.M & Platteau, J.P., 'Compensations and Customary Rights in the Context of the Concessionaire Companies: An Economic Approach,' (International Growth Centre, September 25, 2013).

⁸⁹ Ojwang, J.B., "The Role of the Judiciary in Promoting Environmental Compliance and Sustainable Development," 1 *Kenya Law Review Journal* 19 (2007), pp. 19-29, p. 29.

making; use of judicial and technical specialists who lack the expertise, skills and orientation required for participatory natural resource management; use of procedures that are generally adversarial and produce win - lose outcomes; providing only limited participation in decision-making for conflict parties; likely difficulty to reach impartial decisions if there is a lack of judicial independence, corruption among State agents, or an elite group that dominates legal processes; and use of highly specialized language of educated elite groups, favouring business and government disputants over ordinary people and communities.⁹⁰

Conflicts need to be managed through interactive, participatory and inclusive approaches for the sake of balancing interests, power and adjusting parties' expectations, in order to avoid the potentially negative effects of conflict in a society. There is a need to strike a balance among the three component parts of a conflict, namely, goal incompatibility, attitudes and behaviour, in order to ensure a peaceful society where groups do not unduly use their power to suppress the perceivably weak groups or individuals.

In Kenya, where these conflicts are clan-based or community based, courts offer little help in terms of achieving lasting peace due to the settlement nature of the outcome. Thus, conflicts are likely to flare up later.⁹¹ There have been frequent and well documented reports of violent conflicts over access to and use of land in Kenya.⁹² For example, recently, Narok and Kwale Counties suffered natural resource conflict albeit in varying degrees. In Narok, Kenya, clashes between Maasai and Kipsigis in Olposimoru, Narok County in December 2015 over what is believed to be natural resource related conflict resulted in human casualties and displacement.⁹³ In Kwale County, there have also been cases of violence

⁹⁰ FAO, 'Negotiation and mediation techniques for natural resource management,' op cit.

⁹¹ See generally Mwangi, M., *Conflict in Africa: Theory, Processes and Institutions of Management*, op. cit.

⁹² The Akiwumi Report of the Judicial Commission Appointed to Inquire into Tribal Clashes in Kenya (31st July, 1999) notes the contribution of the issue of land to violent conflicts in Kenya due to the way it is treated with fervent sentimentality and sensitivity and in many ways, considered explosive. The Report at pg. 53 notes that "Whereas, the constitution guarantees the right of ownership of property anywhere in the country, the peaceful co-existence of the forty two tribes that live within our national borders, appears to have been profoundly undermined by diverse man-made problems that are either directly or indirectly connected to land."

⁹³ Agutu, N., 'GSU deployed in Narok after two killed in Maasai, Kipsigis clashes,' *The Star Newspaper*, Dec. 26, 2015, 3:00 pm, Nairobi, available at http://www.the-star.co.ke/news/2015/12/26/gsu-deployed-in-narok-after-two-killed-in-maasai-kipsigis-clashes_c1265922 [Accessed on 2/01/2016]; see also AfriQua, 'Narok land disputes threaten water

related to natural resource exploitation.⁹⁴ In such instances, one may find that a few herdsmen may have been accused of 'trespassing' to graze in another community's territory and were thus attacked. The resultant chaos in retaliation affects the whole community. For them, it is not about arresting the involved individuals and arraigning them in court. It is about protecting the interests of the whole community and thus, any approaches to managing the conflict must involve the whole community or their representatives and address all of their concerns.

Despite the fact that the existing legal and institutional framework in the country is meant to deal with natural resource conflicts, it has not offered much in stemming the natural resource conflicts, due to inadequacies within the structure. Natural resource conflicts in Kenya are still prevalent and a cause of much concern. It has been noted that the contribution of the issue of land to violent conflicts in Kenya is due to the way land is "treated with fervent sentimentality and sensitivity and in many ways considered explosive."⁹⁵ The emergence of multi-party politics in Kenya was perceived by many communities as a move to marginalize and dispossess them of land. The multi-party politics were thus influenced by tribal considerations with their roots in economic and considerations making it easier to incite politically based tribal violence.⁹⁶

Land clashes that occurred in Kenya in 1992 and 1997 have been attributed to inequitable allocation of land resources and poor government policies and programmes perceived as favouring some factions at the expense of others. The issues of the use of environmental resources underlie the numerous conflicts that

resources,' 18/03/2015, available at <http://onesafedrop.org/192/narok-land-disputes-threaten-water-resources/> [Accessed on 2/01/2016]; Khamadi, S., 'Counties struggle to gain control over local natural resources in Kenya,' Wednesday January 9th, 2013, available at <http://landquest.internewskenya.org/counties-struggle-to-gain-control-over-local-natural-resources-in-kenya/> [Accessed on 2/01/2016].

⁹⁴ Musyoka, A., 'Kenya: Four Killed at Kinango in Clash Over Grazing Land,' The Star Newspaper, Dec. 19, 2014, Nairobi, available at <http://allafrica.com/stories/201412190701.html> [Accessed on 2/01/2016]; See also generally, Constitution and Reform Education Consortium (CRECO), *Building a Culture of Peace in Kenya: Baseline Report On Conflict-Mapping and Profiles of 47 Counties in Kenya*, April, 2012, ISBN: 978-9966-21-158-3. Available at https://www.humanitarianresponse.info/system/files/documents/files/CRECO_2012.pdf [Accessed on 3/01/2016].

⁹⁵ Republic of Kenya, Report of the Judicial Commission Appointed to Inquire into Tribal Clashes in Kenya, 31st July, 1999.

⁹⁶ Ibid.

have occurred in Kenya. The post-election violence in 2007-08 can be traced, to a large extent, to contests over access to and use of natural resources in Kenya and the harboured feelings of alienation and discrimination in access and benefit sharing of the accruing benefits.⁹⁷

13.6 Alternative Dispute Resolution (ADR) and Natural Resource Conflicts Management

There have been convincing arguments that Africa had, from time immemorial, evolved its own mechanisms and institutions for managing and resolving disputes and conflicts in ways that preserved the fabric of society and encouraged peaceful co-existence. Indeed, the argument is that the concept and practice of peace and conflict resolution is not new in Africa, but rather it is the institutionalization of peace and conflict studies at African Universities and schools and civil society organizations, that is the new phenomenon.⁹⁸ All African communities have had rules to ensure that individuals lived in harmony with one another and that justice was done when conflict broke out.⁹⁹

With the promulgation of the 2010 Constitution of Kenya, the law makers created an opportunity for exploring the use of ADR mechanisms and Traditional Dispute Resolution Mechanisms (TDRMs) in managing natural resource conflicts.¹⁰⁰ Notably, one of the principles of land policy as envisaged in the Constitution is encouragement of communities to settle land disputes through recognised local community initiatives consistent with the Constitution.¹⁰¹ The implication of such provisions is that before a matter is referred for court adjudication, communities are required to make legitimate attempts to resolve the matter using the most appropriate mechanisms available to them. This is also reinforced by the fact that one of the functions of the National Land Commission is to encourage the application of traditional dispute resolution mechanisms in

⁹⁷ See Machel, G. & Mkapa, B., *Back from the Brink: the 2008 mediation process and reforms in Kenya*, (African Union Commission, 2014).

⁹⁸ *Ibid*, p. 229.

⁹⁹ *Ibid*, p. 229; See also Irobi, E.G., 'Ethnic Conflict Management in Africa: A Comparative Case Study of Nigeria and South Africa,' May, 2005, available at <http://www.beyondintractability.org/casestudy/irobi-ethnic> [Accessed at 23/04/2016]; Mengesha, A.D., 'The Role of Sidama Indigenous Institutions in Conflict Resolution: In the Case of Dalle Woreda, Southern Ethiopia,' *American Journal of Sociological Research*, Vol. 6 No. 1, 2016, pp. 10-26.

¹⁰⁰ Constitution of Kenya 2010, Article 159(2) (c).

¹⁰¹ *Ibid*, Article 60 (1) (g).

land conflicts.¹⁰² This is a significant provision considering that land conflicts form the bulk of natural resource conflicts reported in the country, and the land issue is an emotive one.¹⁰³

ADR and Traditional dispute resolution mechanisms, especially negotiation and mediation, have been effective in managing conflicts where they have been used. Their relevance in natural resource conflicts has been recognized in the constitution.¹⁰⁴ They are mechanisms that enhance Access to Justice. Some mechanisms such as mediation and negotiation bring about inclusiveness and public participation of all members of the community in decision-making. Their effective implementation as suggested herein and in line with the constitution will bring about a paradigm shift in the policy on resolution of conflicts towards enhancing access to justice and the expeditious resolution of conflicts without undue regard to procedural technicalities.¹⁰⁵ This is especially so where natural resource-related conflicts are involved, unless the same are intractable and violent conflicts, where the coercive mechanisms, such as court system, may come in handy. These mechanisms should thus be applied and linked up well with courts and tribunals to promote access to justice and public participation.

It is also noteworthy that SDGs seek to promote participation of local communities in natural resource management.¹⁰⁶ Negotiation and mediation have more value to the local communities than just being means of conflict management. At least, they are means of sharing information and participating in decision-making. The two mechanisms have the unique and positive attributes which include their participatory nature that can be used to manage natural resource conflicts and ensure that Kenyans achieve sustainable development. Furthermore, the affected communities, in cases of decision making, can have guaranteed and meaningful participation in the decision making process by

¹⁰² Ibid, Article 67(2) (f).

¹⁰³ Government of Kenya, *Report on the Commission of Inquiry into Land Law Systems in Kenya on Principles of a National Land Policy Framework, Constitutional Position of Land and New Institutional Framework for Land Administration* (Government Printer Nairobi, 2002); See also Akiwumi, A.M., et al, *Report of the Judicial Commission Appointed to Inquire into Tribal Clashes in Kenya*, 31st July, 1999.

¹⁰⁴ See Article 60(1) (g); Article 159.

¹⁰⁵ Constitution of Kenya, Article 159(2).

¹⁰⁶ Ibid, Goal 6b.

presenting proof and reasoned arguments in their favour, as tools for obtaining a socio-economic justice.¹⁰⁷

Article 33 of the *Charter of the United Nations* outlines the conflict management mechanisms in clear terms and it forms the legal basis for the application of Alternative Dispute Resolution (ADR) mechanisms in disputes between parties be they States or individuals. It outlines the various conflict management mechanisms that parties to a conflict or dispute may resort to. It provides that the parties to any dispute should, first of all seek a solution by *negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice* (emphasis added).¹⁰⁸ Despite this, ADR mechanisms have not been adequately utilized in management of natural resource conflicts in Kenya.

The phrase alternative dispute resolution refers to all those decision-making processes other than litigation including but not limited to negotiation, enquiry, mediation, conciliation, expert determination, arbitration and others. To some writers, however, the term '*alternative dispute resolution*' is a misnomer as it may be understood to imply that these mechanisms are second-best to litigation which is arguably not true.¹⁰⁹

Alternative Dispute Resolution (ADR) mechanisms include mediation, conciliation, negotiation and traditional/community based dispute management mechanisms. ADR methods have the advantages of being cost effective, expeditious, informal and participatory. Parties retain a degree of control and relationships can be preserved. Conflict management mechanisms such as mediation encourages "win-win" situations, parties find their own solutions, they pursue interests rather than strict legal rights, are informal, flexible and attempts to bring all parties on board.¹¹⁰

¹⁰⁷ Ristanić, A., 'Alternative Dispute Resolution And Indigenous Peoples: Intellectual Property Disputes in the Context of Traditional Knowledge, Traditional Cultural Expressions and Genetic resources,' (Lund University, April 2015), available at [https://www.law.lu.se/webuk.nsf/%28MenuItemById%29/JAMR32exam/\\$FILE/Alternative%20Dispute%20Resolution%20and%20Indigenous%20Peoples.%20Intellectual%20Property%20Disputes%20in%20the%20Context%20of%20Traditional%20Knowledg.pdf](https://www.law.lu.se/webuk.nsf/%28MenuItemById%29/JAMR32exam/$FILE/Alternative%20Dispute%20Resolution%20and%20Indigenous%20Peoples.%20Intellectual%20Property%20Disputes%20in%20the%20Context%20of%20Traditional%20Knowledg.pdf) [Accessed on 08/01/2016].

¹⁰⁸ United Nations, *Charter of the United Nations*, 24 October 1945, 1 UNTS XVI.

¹⁰⁹ Fenn, P., "Introduction to Civil and Commercial Mediation", in Chartered Institute of Arbitrators, *Workbook on Mediation*, (CI Arb, London, 2002), pp. 50-52.

¹¹⁰ Fenn, P., "Introduction to Civil and Commercial Mediation", op. cit, p.10.

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As such ADR mechanisms allow public participation in enhancing access to justice as they bring in an element of efficiency, effectiveness, flexibility, cost-effectiveness, autonomy, speed and voluntariness in conflict management. Some like mediation and negotiation are informal and not subject to procedural technicalities as does the court process. They are effective to the extent that they will be expeditious and cost-effective compared to litigation.¹¹¹ The use of mediation in natural resource conflicts management is especially common in Canada.¹¹²

ADR Mechanisms are arguably most appropriate in enhancing access to justice as they allow the public to participate in the managing of their conflicts. This way less disputes will get to the courts and this will lead to a reduction of backlog of cases.

TDRMs include informal mediation, negotiation, problem-solving workshop, council of elders, consensus approaches among others. It has been observed that where traditional community leadership was strong and legitimate it had positive impacts in promoting local people's priorities in natural resource management.¹¹³ The traditional and customary systems for managing conflict are associated with a number of strengths which include: they encourage participation by community members, and respect local values and customs; are more accessible because of their low cost, their flexibility in scheduling and procedures, and their use of the local language; they encourage decision-making based on collaboration, with consensus emerging from wide-ranging discussions, often fostering local reconciliation; they contribute to processes of community empowerment; informal and even formal leaders may serve as conciliators, mediators, negotiators or arbitrators; and finally, long-held public legitimacy provides a sense of local ownership of both the process and its outcomes.¹¹⁴

¹¹¹ Article 159 (2) (d) provides that justice shall be administered without undue regard to procedural technicalities.

¹¹² Dorsey, A.H.J. & Riek, C.L., 'Negotiation-Based Approaches to the Settlement of Environmental Disputes in Canada,' *Workshop on Political Theory and Policy Analysis*, 1987; Berkes, F., et al, 'Co-Management: The Evolution Of The Theory And Practice of Joint Administration Of Living Resources,' TASSO Research Report, Second Series, No. 1, *Paper Presented at the Second Annual Meeting of IASCP University of Manitoba, Winnipeg, Canada*, Sept. 26-29, 1991.

¹¹³ Shackleton, S., et al, 'Devolution And Community-Based Natural Resource Management: Creating Space for Local People to participate and Benefit?' *Overseas Development Institute Natural Resource Perspectives*, No. 76, March 2002, p.4.

¹¹⁴ FAO, 'Negotiation and mediation techniques for natural resource management,' op cit.

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While most of the foregoing ADR mechanisms can effectively be applied in the management of natural resource conflicts management, this chapter is biased towards negotiation and mediation and explores at a greater length the application of the two mechanisms in conflicts. This is because the author is not keen on settlement mechanisms but resolution mechanisms and the two main approaches in resolution are negotiation and mediation.

The process of managing natural resource conflicts is an off-shoot of the right to access to environmental justice and by extension, environmental democracy. The right of access to justice is essential as it affords the means by which the public challenge application of and implementation of environmental laws and policies.¹¹⁵

Natural resource conflicts are unique as they involve people's lives. Left to escalate, suffering and death may be the undesirable result. The conflict management mechanisms referred to herein as ADR have certain advantages that make them suitable for use in resolution of natural resource conflicts. For example, the mechanisms that allow for maximum party autonomy such as negotiation, conciliation and mediation are cost effective flexible, informal and leave room for parties to find their own lasting solutions to problems. They are thus particularly suitable for the resolution of natural resource conflicts.

Courts and formal tribunals are sometimes inflexible, bureaucratic and do not foster the maintenance of cordial relations between the parties. Parties come out of the proceedings before such courts and tribunals bitter and discontented. It has been argued that through ADR, multiparty "win-win" options are sought by focusing on the problem (not the person) and by creating awareness of interdependence among stakeholders.¹¹⁶ This is justified on the fact that among the issues that influence negotiation attitudes, interdependence is of central importance, as actors' attitudes and behaviour are shaped by the fact that they will need to coexist after the period of negotiation.¹¹⁷ Notably it can be said that the attributes of party autonomy, flexibility, all-inclusiveness, informality and acceptability by all parties can be exploited to come up with acceptable solutions

¹¹⁵ *Ibid.*

¹¹⁶ Buckles, D. (ed), *Cultivating Peace Conflict and Collaboration in Natural Resource Management*, (International Development Research Centre 1999), p.5.

¹¹⁷ *Ibid*, p. 110.

to environmental problems and natural resource conflicts. It has compellingly been suggested that mediation, through the intervention of an impartial third party into a dispute, deals well with significant value differences, which are considered extremely difficult to resolve where there is no consensus on appropriate behaviour or ultimate goals.¹¹⁸ Further, ADR, drawing on the strengths of mediation techniques such as identification and reframing, can address value conflict, through specific techniques which include: transforming value disputes into interest disputes; identifying superordinate goals (both short- and long-term); and avoidance.¹¹⁹

It is against this background that the author examines the opportunities that ADR mechanisms and particularly negotiation and mediation present in realising the goal of effectively managing natural resource conflicts in Kenya.

13.6.1 Negotiation and Natural Resource Conflicts Management

Negotiation is a process that involves parties meeting to identify and discuss the issues at hand so as to arrive at a mutually acceptable solution without the help of a third party. This refers to a process where parties themselves attempt to settle their differences using a range of techniques from concession and compromise to coercion and confrontation. It is also described as a process involving two or more people of either equal or unequal power meeting to discuss shared and/or opposed interests in relation to a particular area of mutual concern.¹²⁰ Negotiation is also defined as a process by which states and other actors communicate and exchange proposals in an attempt to agree about the dimensions of conflict termination and their future relationship.¹²¹

There are various approaches to negotiation which include: positional negotiation; principled negotiation; and interest-based negotiation.¹²² Positional

¹¹⁸ Daniels, S.E. & Walker, G.B., 'Collaborative Learning And Ecosystem-Based Management,' *Environ Impact Asses Rev*, Vol. 16, 1996, pp. 71-102, p. 82.

¹¹⁹ *Ibid.*

¹²⁰ Negotiations in Debt and Financial Management 'Theoretical Introduction to Negotiation: What Is Negotiation?', Document No.4, December 1994. Available at http://www2.unitar.org/dfm/Resource_Center/Document_Series/Document4/3Theoretical.htm [Accessed on 13/12/2015].

¹²¹ Bercovitch, J. & Jackson, R., 'Negotiation or Mediation?: An Exploration of Factors Affecting the Choice of Conflict Management in International Conflict,' *Negotiation Journal*, January 2001, Vol. 17, Issue 1, pp 59-77, p. 60.

¹²² R. Fisher, *et al*, *Getting to Yes: Negotiating an Agreement without Giving In*, *op cit*, pp. xxvi-xxvii.

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negotiation is associated with firstly, separating the people from the problem; secondly, focusing on interests, not positions; thirdly, inventing options for mutual gain; and finally, insisting on objective criteria.¹²³ As such the focus of negotiations is the common interests of the parties rather than their relative power or position. The goal is to avoid the overemphasis of how the dispute arose but to create options that satisfy both the mutual and individual interests.¹²⁴ Principled negotiation on the other hand, decides issues on their merits rather than through a haggling process focused on what each side says it will and will not do. It suggests that a negotiator should look for mutual gains whenever possible, and that where various interests conflict, negotiators are encouraged to have a result based on some fair standards independent of the will of either side.¹²⁵

Interest-based negotiation shifts the focus of the discussion from positions to interests, raising a discussion based on a range of possibilities and creative options, for the parties to arrive at an agreement that will satisfy the needs and interests of the parties.¹²⁶

Since the aim of negotiation as discussed within the context of this chapter is to arrive at "win-win" solutions, positional bargaining is not recommended as the general approach to negotiation because arguing over hardline positions may produce unwise agreements, prove inefficient, endanger an ongoing relationship and also lead to formation of coalition among parties whose shared interests are often more symbolic than substantive.¹²⁷

Negotiations are seen as preferable due to their unstructured often lack of formal procedures, suggesting a format which caters to the uniqueness of each

¹²³ Fisher, R. & Ury, W., *Getting to Yes-Negotiating Agreement Without Giving in*, op cit., p. 42; See also Ireland Law Reform Commission, *Consultation Paper on Alternative Dispute Resolution*, July 2008, p. 43.

¹²⁴ Ibid.

¹²⁵ Ibid.

¹²⁶ UNESCO-IHP, "Alternative Dispute Resolution Approaches And Their Application In Water Management: A Focus On Negotiation, Mediation And Consensus Building" Abridged version of Yona Shamir, *Alternative Dispute Resolution Approaches and their Application*, Accessible at <http://unesdoc.unesco.org/images/0013/001332/133287e.pdf> [Accessed on 19/01/2016].

¹²⁷ Ibid, p.23.

negotiation.¹²⁸ The import of this is that due to the flexibility nature of the process, it is possible for parties to agree to settle on what works for them in a given scenario. Negotiation affords parties autonomy in the process and over the outcome for purposes of ensuring that they come up with creative solutions. By taking a collaborative rather than a competitive approach to negotiation, parties can attempt to find a solution satisfactory to both parties-making both sides feel like winners.¹²⁹ The outcome of a collaborative approach to negotiations is: improved relationships; a better chance of building trust and respect; self-confidence; more enjoyment; less stress; and more satisfactory results.¹³⁰

As a vital first step in negotiation, it is important that the parties have conceptual clarity of the different issues, especially the difference between ownership issues, regulatory-authority control issues, and issues relating to the treatment of natural-resource revenues.¹³¹ Separating people from the issues allows the parties to address the issues without damaging their relationship and also helps them to get a clearer view of the substantive problem.¹³²

With regard to natural resource management, public participation has been described as a form of negotiation, where there is joint decision-making among parties with interdependent yet incompatible interests.¹³³ Principled negotiation has advantages that can facilitate mutual agreement on issues and consequently achieve conflict resolution. Negotiation is hailed as a process that can lead to empowerment of village-level and government participants and increased awareness of the conflicts and their causes.¹³⁴ Through participation of communities in decision-making through negotiation, conflicts can be resolved or averted since each party is afforded an opportunity to raise their concerns in a

¹²⁸ FAO, 'Alternative Conflict Management: The Role of Alternative Conflict Management in Community Forestry,' available at <http://www.fao.org/docrep/005/x2102e/X2102E02.htm>

¹²⁹ French, A., *Negotiating Skills*, (Alchemy, 2003), p. viii.

¹³⁰ *Ibid.*

¹³¹ Haysom, N. & Kane, S., 'Negotiating natural resources for peace: Ownership, control and wealth-sharing,' Centre for Humanitarian Dialogue, Briefing Paper, October 2009, p. 26.

¹³² Fisher, R. & Ury, W., *Getting to Yes-Negotiating Agreement Without Giving in*, op cit., pp. 10-11.

¹³³ Daniels, S.E. & Walker, G.B., 'Collaborative Learning And Ecosystem-Based Management,' *Environ Impact Asses Rev*, Vol. 16, 1996, pp. 71-102, pp. 78-79.

¹³⁴ Castro, A.P. & Nielsen, E. (eds), 'Natural resource conflict management case studies: an analysis of power, participation and protected areas,' (Food and Agriculture Organization of the United Nations, 2003), p. 224.

joint forum where they can all be addressed with the aim of reaching a consensus or compromise.

It has been pointed out that in a conflict-oriented natural resources situation, one must learn and communicate about: technical, legal, and financial issues at hand; procedural issues; perceptions, concerns, and values of other participants; one's own goals, and those of others; personalities; communication styles; one's own set of options; and relative benefits of different strategies.¹³⁵ Thus, the lead negotiators ought to have a good grasp of the issues at hand. This is one of the ways that they can adequately address not only their needs and interests but also those of opponents so as to facilitate a win-win situation.¹³⁶

Negotiation may not always work and as such, parties may be required to try another approach by inviting a third party where they have reached a deadlock and cannot work out a consensus or a compromise. The third party comes in to help the parties clarify issues, interests and needs. Negotiation with the help of a third party is called mediation. Negotiation leads to mediation in the sense that the need for mediation arises after the conflicting parties have attempted negotiation, but have reached a deadlock.¹³⁷

13.6.2 Mediation and Natural Resource Conflicts Management

Mediation is a voluntary collaborative process where individuals who have a conflict with one another identify issues, develop options, consider alternatives and reach a consensual agreement.¹³⁸ Trained and untrained mediators open communications to resolve differences in a non-adversarial confidential manner. It can also refer to a private and non-binding form of conflict management where an independent third party (neutral) facilitates the parties reaching their own agreement to settle a dispute. It is a structured process where the settlement becomes a legally binding contract.¹³⁹

Mediation is also defined as the intervention in a standard negotiation or conflict of an acceptable third party who has limited or no authoritative decision-making

¹³⁵ Ibid, p. 79.

¹³⁶ Ury, W., *Getting to Yes with Yourself and Others*, (HarperThorsons, 2015), pp. 147-148.

¹³⁷ Mwangi, M., *Conflict in Africa; Theory, Processes and Institutions of Management*, (Centre for Conflict Research, Nairobi, 2006), pp. 115-116.

¹³⁸ Merrills, J.G., *International Dispute settlement*, (Cambridge University Press, Cambridge, 1991).

¹³⁹ Fenn, P., "Introduction to Civil and Commercial Mediation," op cit p. 10.

power but who assists the involved parties in voluntarily reaching a mutually acceptable settlement of issues in dispute. Within this definition, mediators may play a number of different roles, and may enter conflicts at different levels of development or intensity.¹⁴⁰ Mediation can be classified into two forms namely: Mediation in the political process and mediation in the legal process.

Mediation in the political process is informed by resolution as against settlement. It allows parties to have autonomy over the choice of the mediator, the process and the outcome. The process is also associated with voluntariness, cost effectiveness, informality, focus on interests and not rights, creative solutions, personal empowerment, enhanced party control, addressing root causes of the conflict, non-coerciveness and enduring outcomes. With these perceived advantages, the process is more likely to meet each party's expectations as to achievement of justice through a procedurally and substantively fair process of justice.¹⁴¹

In relation to natural resource conflicts, it is arguable that an approach that seeks to eliminate the root causes of conflict are to be preferred considering the great importance attached to these resources. Human needs and desires are continuous and therefore, there is need to ensure that the unavoidable conflict that is bound to arise is controlled or eliminated altogether. Scholars believe that participatory and collaborative planning is useful in preventing conflicts resulting from government actions or policies.¹⁴² This view may be validated in relation to Kenya, where the Constitution recognises the significance of public participation in decision-making and governance matters. For instance, among the national values and principles of governance that are binding on all State organs, State officers, public officers and all persons whenever any of them-- applies or interprets this Constitution; enacts, applies or interprets any law; or makes or implements public policy decisions, include inter alia, democracy and participation of the people; equity, social justice, inclusiveness, equality, non-discrimination and protection of the marginalised; good governance, integrity, transparency and accountability.¹⁴³

¹⁴⁰ Moore, C., *The Mediation Process: Practical Strategies for Resolving Conflict*, 3rd, (San Francisco: Jossey-Bass Publishers, 2004).

¹⁴¹ See generally Muigua, K., "Resolving Environmental Conflicts through Mediation in Kenya" Ph.D. Thesis, 2011, *Unpublished*, University of Nairobi.

¹⁴² *Ibid*.

¹⁴³ Article 10, Constitution of Kenya 2010.

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Mediation in the legal process is a process where the conflicting parties come into arrangements which they have been coerced to live or work with while exercising little or no autonomy over the choice of the mediator, the process and the outcome of the process. This makes it more of a settlement mechanism that is attached to the court as opposed to a resolution process and defeats the advantages that are associated with mediation in the political process.¹⁴⁴

The salient features of mediation (in the political process) are that it emphasizes on interests rather than (legal) rights and it can be cost - effective, informal, private, flexible and easily accessible to parties to conflicts. These features are useful in upholding the acceptable principles of justice: *expedition; proportionality; equality of opportunity; fairness of process; party autonomy; cost-effectiveness; party satisfaction and effectiveness of remedies* (emphasis added).¹⁴⁵ This makes mediation a viable process for the actualization of the right of access to justice. While both processes may be recommended for use in resolving natural resource conflicts in Kenya, mediation in the political process is to be preferred due to its obvious advantages, as highlighted above.

Kenya resorted to mediation coupled with negotiation after the post-election conflict through the Koffi Annan initiative¹⁴⁶. Mediation offers a conflict management mechanism where all parties come to the table and with the help of the mediator find their own solutions. It was ADR that saved Kenya from the brink of total anarchy. However, mediation often works best in a conflict in which the parties have had a significant prior relationship or when the parties have an interest in continuing a relationship in the future.¹⁴⁷

In the Koffi Annan initiative, mediation was used in the face of the apparent failure or impotence of the legal and institutional mechanisms for the resolution of political conflict in Kenya. A critical look at ADR methods in the resolution of

¹⁴⁴ Ibid, Chapter 4; See also sec.59A, B, C& D of the Civil Procedure Act on Court annexed mediation in Kenya; See also Mediation (Pilot Project) Rules, 2015.

¹⁴⁵ See Maiese, M., "Principles of Justice and Fairness," in Burgess, G. and Heidi Burgess, H. (Eds.) Conflict Information Consortium, *Beyond Intractability*, University of Colorado, Boulder (July 2003).

¹⁴⁶ Koffi Annan, the former Secretary General of the United Nations mediated the all-out conflict that was labeled the 'post-election' violence in 2007 - 08 in Kenya. Essentially the long-term causes of the conflict were issues relating to access to and use of natural resources. The initiative resulted in the signing of the peace agreement formalized in the National Accord & Reconciliation Act.

¹⁴⁷ Murray, J.S., et al, *Processes of Dispute Resolution: The Role of Lawyers*, University casebook series, Foundation Press, 1989, p. 47.

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natural resource conflicts is worthwhile considering the many positive attributes and potential for involving the public and reaching of acceptable solutions that can withstand the test of time. Mediation is democratic and ensures public participation in decision making, especially in matters relating to natural resources management.

Mediation in the informal context leads to a resolution and in environmental management, it involves parties' participation in development planning, decision making and project implementation. The parties must be well informed so as to make sound judgements on environmental issues. Indeed, it has been observed that natural-resource negotiations are often a high-stakes, high-risk game, and one important role the mediator can therefore play is to empower the parties by providing them with the knowledge to have the confidence to negotiate.¹⁴⁸ The import of this is that they must be well versed with mediation as a process but also the needs of each of the parties. This way, they would be able to know the appropriate approaches and skills to put into play.

It is also important to identify the correct interest groups who are regarded as stakeholders in the allocation of resources and the extent of their respective rewards against the overall importance of natural resources to financing national development must be determined.¹⁴⁹ It is argued that to be successful, a process will need to engage a broad range of actors, including not only those who have legitimate claims to ownership of the resource, but also those who could be affected by the allocation of authorities over the resource or the distribution of its revenues.¹⁵⁰ In the case of Kenya, it would therefore mean going beyond the community especially where the resource in question is of national importance, such as water bodies.

The central quality of mediation is its capacity to reorient the parties towards each other, not by imposing rules on them, but by helping them to achieve a new and shared perception of their relationship.¹⁵¹ In conflict resolution processes like

¹⁴⁸ Haysom, N. & Kane, S., 'Negotiating natural resources for peace: Ownership, control and wealth-sharing,' Centre for Humanitarian Dialogue, Briefing Paper, October 2009, p. 27.

¹⁴⁹ Ibid, p. 28.

¹⁵⁰ Ibid.

¹⁵¹ Fuller, L.L., *Mediation – Its Forms and Functions*, 44 S. CAL. L. REV. 305 (1971) [Quoted in Ray, B., 'Extending The Shadow Of The Law: Using Hybrid Mechanisms To Develop Constitutional Norms In Socioeconomic Rights Cases' *Utah Law Review*, No. 3, 2009, pp.802-803.

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mediation, the goal, then, is not to get parties to accept formal rules to govern their relationship, but to help them to free themselves from the encumbrance of rules and to accept a relationship of mutual respect, trust, and understanding that will enable them to meet shared contingencies without the aid of formal prescriptions laid down in advance.¹⁵²

One criticism, however, is that in mediation, power imbalances in the process may cause one party to have an upper hand in the process thus causing the outcome to unfavourably address his or her concerns or interests at the expense of the other.¹⁵³ Nevertheless, in any type of conflict, it is a fact that power imbalances disproportionately benefit the powerful party. However, it may be claimed that inequality in the relationship does not necessarily lead to an exercise of that power to the other party's disadvantage.¹⁵⁴ Another weakness of mediation is that it is non-binding. It is thus possible for a party to go into mediation to buy time or to fish for more information. However, in *Thakrar V Cir Cittero Menswear plc (in administration)*, {2002} EWHC 1975 (*ch*), the English High Court held that a mediated settlement was an enforceable contract.¹⁵⁵ To deal with the problem of unenforceability, it has been affirmed before the parties go into mediation, there must be firstly, a mediation agreement binding the parties to mediation. After mediation, there is an agreement containing the terms of mediation. This agreement must be signed by all the parties to the mediation. In the agreement the parties agree that they were bound with the resolutions reached by the mediator. This final agreement is a document which can be tabled in court to show that one party is reneging from the agreed resolutions.¹⁵⁶ The results of mediation must be a mutual agreement between the parties to the dispute.¹⁵⁷ To achieve this, the mediator may consider incorporation of consensus building into the mediation, which seeks to build the capacity of

¹⁵² Fuller, L.L., *Mediation – Its Forms and Functions*, 44 S. CAL. L. REV. 305 (1971) [Quoted in Ray, B., 'Extending The Shadow Of The Law: Using Hybrid Mechanisms To Develop Constitutional Norms In Socioeconomic Rights Cases' *Utah Law Review*, No. 3, 2009, pp.802-803.

¹⁵³ See generally, Fiss, O., "Against Settlement" 93 *Yale Law Journal*, 1073 (1984).

¹⁵⁴ Abadi, S.H., The role of dispute resolution mechanisms in redressing power imbalances - a comparison between negotiation, litigation and arbitration, p. 3, *Effectius Newsletter*, Issue 13, (2011)

¹⁵⁵ As quoted in *Kenya Plantation & Agricultural Workers Union V Maji Mazuri Flowers Ltd* [2012] eKLR, Cause 1365 of 2011.

¹⁵⁶ *Greenhouse Management Limited v Jericho Development Company Limited* [2015] eKLR, Civil Case 49 of 2015.

¹⁵⁷ *Ibid*; See also *Stephen Kiprotich Saina v Francisco Okutoyi Ayot & another* [2014] eKLR, E&L 348 of 2013.

people to develop a dialogue with each other, either directly or indirectly, to find a way forward based on consensus which generates mutual gains for all parties with the minimum of compromise and trade-off.¹⁵⁸ This can ensure that even when they reach the final stage, chances of having an outcome acceptable to all sides are enhanced.

13.7 Enhancing the Use of Negotiation and Mediation in Natural Resource Conflicts Management in Kenya

Whereas natural resource conflicts may not be fully eliminated but they can be managed in such a way that Kenya avoids the violence that has been witnessed in the recent past in contests involving access to and use of natural resources. Peace can be achieved through the use of negotiation and mediation to facilitate conflict resolution and transformation.

It is also noteworthy that ADR can only work in appropriate cases. There is a need to strengthen the existing legal and institutional framework for the resolution of natural resource conflicts so as to make it effective in the face of the ever increasing natural resource conflicts. Kenya should learn from other jurisdictions that have combined the legal and institutional frameworks with the tenets of ADR and gone on to manage natural resource conflicts effectively.¹⁵⁹ Kenya can learn and benefit from the case of Rwanda's mandatory mediation framework where carrying the agenda of local ownership of conflict resolution, the Rwandan government passed *Organic Law No. 31/2006* which recognises the role of *abunzi* or local mediators in conflict resolution of disputes and crimes.¹⁶⁰ The Constitution of Rwanda provides for the establishment in each Sector a "Mediation Committee" responsible for mediating between parties to certain disputes involving matters determined by law prior to the filing of a case with the court of first instance.¹⁶¹ The Mediation Committee comprises of twelve

¹⁵⁸ Warner, M., 'Conflict Management in Community-Based Natural Resource Projects: Experiences from Fiji and Papua New Guinea,' op cit, p. 16.

¹⁵⁹ For example, Canada where it is provided under Rule 24.1 for Mandatory Mediation under Regulation 194 of the Revised Regulations of Ontario of 1990 made under the courts of Justice Act.

¹⁶⁰ Mutisi, M., "Local conflict resolution in Rwanda: The case of *abunzi* mediators", in Mutisi, M., & Greenidge, K.S., (eds), *Integrating Traditional and Modern Conflict Resolution: Experiences from selected cases in Eastern and the Horn of Africa*, pp. 41-74 at p.41, African Centre for the Constructive Resolution of Disputes (ACCORD), Africa Dialogue Monograph Series No. 2/2012.

Available at <http://accord.org.za/images/downloads/monograph/ACCORD-monograph-2012-2.pdf> [Accessed on 20/01/2016].

¹⁶¹Article 159, Constitution of Rwanda, 2003.

residents of the Sector who are persons of integrity and are acknowledged for their mediating skills.¹⁶²

In other jurisdictions, there has been adoption of management approaches which attempts to mitigate resource development conflict involving disputed territory known under several names, such as *co-management*, *joint management*, or *joint stewardship* (emphasis added).¹⁶³ Co-management is an inclusionary, consensus-based approach to resource use and development. Through this approach, there is sharing of decision-making power with nontraditional actors in the process of resource management, whose nontraditional actors include those other than either state managers or industry, such as local resource users, environmental groups, or aboriginal people.¹⁶⁴ This approach is also lauded for the fact that it stresses negotiation rather than litigation as a means to resolve conflict and its ability to combine western scientific knowledge and traditional environmental knowledge for the purpose of improving resource management.¹⁶⁵ Arguably, this can create feelings of mutual trust and participation, with room to raise and address concerns from all the involved parties. Natural resource conflicts are thus minimized or eliminated. Indeed, communities have often asserted their rights in natural resource exploitation and participation, and with success.¹⁶⁶ Trust does not however emerge simply through increased interactions (interpersonal trust) but from a genuine willingness to share power, in terms of knowledge and decision implementation, especially in situations where local stakeholders are dependent on and knowledgeable about natural resources.¹⁶⁷ Such trust-building, it is argued, requires effort and resources however, as well as developing

¹⁶²*Ibid.*

¹⁶³ Campbell, T., 'Co-management of Aboriginal Resources,' (Adopted from *Information North*, Vol 22, no.1 (March 1996), Arctic Institute of North America), available at <http://arcticcircle.uconn.edu/NatResources/comanagement.html> [Accessed on 20/01/2016].

¹⁶⁴ *Ibid.*

¹⁶⁵ *Ibid.*

¹⁶⁶ Loon, J.V., 'Canada Natives Block Energy Projects: 'We Own It All'', *Bloomberg Markets*, January 27, 2014. Available at <http://www.bloomberg.com/news/Articles/2014-01-27/harper-collides-with-native-canadians-natural-resources-claims> [Accessed on 20/01/2016]; See also Amnesty International, et al, 'Nowhere to go: Forced Evictions in Mau Forest, Kenya,' *Briefing Paper*, April 2007; Sang J.K., Case study 3-Kenya: The Ogiek in Mau Forest, April 2001; *Centre for Minority Rights Development (Kenya) and Minority Rights Group International on behalf of Endorois Welfare Council v. Kenya*, 276/2003, African Commission on Human and Peoples' Rights, 4 February 2010.

¹⁶⁷ Young, J.C., et al, 'The role of trust in the resolution of conservation conflicts,' *op cit.*

opportunities for appropriate dialogue between stakeholders to identify shared problems and in turn shared solutions.¹⁶⁸

Lessons from various jurisdictions can be used to enhance our conflict management capabilities. However, it is noteworthy that currently, there are efforts by the legal fraternity in Kenya to enhance legal and institutional frameworks governing mediation in general.¹⁶⁹ The *Civil Procedure Act*¹⁷⁰ provides for mediation of disputes.¹⁷¹ There are also the *Mediation (Pilot Project) Rules, 2015*¹⁷² which are meant to apply to all civil actions filed in the Commercial and Family Divisions of the High Court of Kenya at Milimani Law Courts, Nairobi, during the Judiciary's Pilot Project.¹⁷³ The Rules provide that every civil action instituted in court after commencement of the Rules, should be subjected to mandatory screening by the Mediation Deputy Registrar and those found suitable and may be referred to mediation.¹⁷⁴

Non-Governmental Organisations (NGOs) have played an important facilitative and capacity building role in other jurisdictions, helping to bridge divergent views between local people and government agencies and manage conflict within

¹⁶⁸ Ibid, p. 202.

¹⁶⁹ Mutunga, W., Chief Justice & President Of The Supreme Court Of Kenya, 'Alternative Dispute Resolution and Rule of Law' For East African –Prosperity,' remarks By The Chief Justice At The East African Arbitrators Conference September 25, 2014. pp. 3-4. Available at <http://www.judiciary.go.ke/portal/assets/files/CJ%20speeches/Cjs%20Speech%20ADR%20-%20Sept.%2025,%202014,%20Windsor.pdf> [Accessed on 20/01/2016]; "Judiciary to adopt alternative dispute resolution mechanism," People Correspondent, *People Daily Newspaper*, 10 March, 2015. Available at <http://mediamaxnetwork.co.ke/peopledaily/139823/judiciary-adopt-alternative-dispute-resolution-mechanism/> [Accessed on 20/01/2016]. The Chief Justice of Kenya Dr. Willy Mutunga appointed twelve members to the Mediation and Accreditation Committee. The Committee is chaired by a serving Judge and it is responsible for determining the criteria for the certification of mediators, proposing rules for the certification of mediators, maintaining a register of qualified mediators, enforcing such code of ethics for mediators as may be prescribed and setting up appropriate training programmes for mediators.

¹⁷⁰ Cap 21, Laws of Kenya.

¹⁷¹ S.s 2 and 59 Civil Procedure Act as Amended by the Statute Law (Miscellaneous Amendments) Act No. 17 of 2012, Government Printer, Nairobi, 2012, at pp.1092-1097.

¹⁷² Legal Notice No. 197 of 2015, *Kenya Gazette Supplement No. 170*, 9th October, 2015, pp. 1283-1291 (Government Printer, Nairobi, 2015).

¹⁷³ Rule 2. "Pilot project" means the mediation program conducted by the court under these Rules. (R. 3).

¹⁷⁴ Rule 4(1).

or among communities.¹⁷⁵ NGOs working with local communities often have good will from the local people and hence, it is recommended that where there are negotiation and mediation talks, such organisations can play a major role in enhancing the communities' participatory capacity and boost the chances of reaching a mutually agreed outcome. They can achieve this through enhancing communities' access to information for informed decision-making as well as helping the community to understand the complex aspects of the law.¹⁷⁶

Environmental democracy which involves giving people access to information on environmental rights, easing access to justice in environmental matters and enabling public participation in environmental decision making, inter alia, is desirable in the Kenyan context.¹⁷⁷ With regard to public participation in natural resource management, it has been argued that since most resource issues today are less dependent on technical matters than they are on social and economic factors, if a state is to maintain the land's health, they must learn to balance local and national needs.¹⁷⁸ It is argued that the state must learn to better work with the people who use and care about the land while serving their evolving needs.¹⁷⁹ In *The Matter of the National Land Commission [2015] eKLR*, the Supreme Court observed that the dominant perception at the time of constitution-making was that the decentralization of powers would not only give greater access to the social goods previously regulated centrally, but would also open up the scope for

¹⁷⁵ Shackleton, S., et al, 'Devolution And Community-Based Natural Resource Management: Creating Space for Local People to participate and Benefit?' op cit., p.4.

¹⁷⁶ See Maia, M., 'NGOs as Mediators: Their role in expertise, language and institutional exemption in urban development planning,' Working Paper No. 77, May 1996; See also Ahenkan, A., et al, 'Improving Citizens' Participation in Local Government Planning and Financial Management in Ghana: A Stakeholder Analysis of the Sefwi Wiawso Municipal Assembly,' *Journal of Public Administration and Governance*, Vol. 3, No. 2, 2013.

¹⁷⁷ See generally, Hazen, S., *Environmental Democracy*, (<<http://www.ourplanet.com>>). [Accessed on 18/01/2016]. Washington DC. Csaba Kiss and Michael Ewing (eds), "Environmental Democracy: An Assessment of Access to Information, Participation in Decision-making and Access to Justice in Environmental Matters in Selected European Countries." European Regional Report (published by The Access Initiative Europe.) available at <http://www.accessinitiative.org> [Accessed on 18/01/2016]; See also Article 69(1) (d) of the Constitution of Kenya, 2010. The Constitution supports the notion of environmental democracy by providing that one of the obligations of the State in relation to the environment is to encourage public participation in the management, protection and conservation of the environment.

¹⁷⁸ Daniels, SE & Walker, GB, 'Rethinking public participation in natural resource management: Concepts from pluralism and five emerging approaches,' p. 2. Available at <http://dev.mtnforum.org/sites/default/files/publication/files/260.pdf> [Accessed on 3/01/2016].

¹⁷⁹ Ibid; Haysom, N. & Kane, S., 'Negotiating natural resources for peace: Ownership, control and wealth-sharing,' Centre for Humanitarian Dialogue, Briefing Paper, October 2009, p. 5.

political self-fulfilment, through an enlarged scheme of actual participation in governance mechanisms by the people thus giving more fulfilment to the concept of democracy.¹⁸⁰

Sustainable development will need to draw upon the best knowledge available from the relevant scientific and stakeholder communities.¹⁸¹ Public participation is required as it provides a forum whereby the scientific information and values of the public and the agency can be integrated so that the final decision is viewed as both desirable and feasible by the broadest portion of society.¹⁸² However, there should be fairness in public participation which means that all those affected by certain decisions are represented and, importantly, that procedures enable them to have an input into the format and content of discussions.¹⁸³

The traditional approaches, which were mostly based on top down resource management approaches may leave out the necessary elements of meaningful public participation. This is because, they provide for formal public participation process in which it is assumed that a government agency makes decisions and the general public can give their comments without necessarily affording them a meaningful opportunity to do so.¹⁸⁴ An example of such approaches is what is provided in the Environmental Management and Coordination Act, 1999 (EMCA).¹⁸⁵ These include such tools as the use of Environmental Impact Assessment (EIA)¹⁸⁶ in environmental management and conservation efforts.

¹⁸⁰ In *The Matter of the National Land Commission* [2015] eKLR, para. 21; See also Muigua, K., *et al*, (2015) *Natural Resources and Environmental Justice in Kenya*, (Glenwood Publishers Limited, 2015, Nairobi).

¹⁸¹ Daniels, SE & Walker, GB, 'Rethinking public participation in natural resource management: Concepts from pluralism and five emerging approaches,' *op cit*, p. 4.

¹⁸² *Ibid*, p.4.

¹⁸³ Young, J.C., *et al*, 'The role of trust in the resolution of conservation conflicts,' *op cit*, p. 197. Young, J.C., *et al*, argue that in situations where values or interests conflict, for example over conservation objectives, two aspects of fairness are important: 'independence' and 'influence.' In the context of conservation conflicts, they define an 'independent' participatory process as one which is unbiased, i.e. where certain participants are not imposing their interests at the expense of others. They define 'influence' as a process that allows those involved to have an input that has a genuine impact on the process and outcomes of participation, one potential outcome being conflict resolution (p. 297).

¹⁸⁴ *Ibid*, p. 4.

¹⁸⁵ Act No. 8 of 1999, Laws of Kenya.

¹⁸⁶ EIA is defined as an environmental management tool aiming at identifying environmental problems and providing solutions to prevent or mitigate these problems to the acceptable levels and contribute to achieving sustainable development (Al Ouran, N.M., 'Analysis of Environmental

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While acknowledging that EIA can be a powerful tool for keeping the corporate including corporations in check, the general public should be empowered through more meaningful and participatory ways such as negotiation and mediation. This is the only way that the affected sections of population appreciate their role in conflict management and decision-making processes. The general public should also be involved in Strategic Environmental Assessment (SEA) which is the process by which environmental considerations are required to be fully integrated into the preparation of policies, plans and programmes and prior to their final adoption.¹⁸⁷ The objectives of the SEA process are to provide for a high level of protection of the environment and to promote sustainable development by contributing to the integration of environmental considerations into the preparation and adoption of specified policies, plans and programmes.¹⁸⁸ Public participation in Strategic Environmental and Social Assessment (SESA) ought to be a more effective tool since it integrates the social issues that are likely to emerge and not just the environmental considerations.¹⁸⁹ These exercises, where conducted properly, should not be done as a mere formality and paper work.¹⁹⁰ The affected communities should be afforded an opportunity to

Health linkages in the EIA process in Jordan,' *International Journal of Current Microbiology and Applied Sciences*, Vol. 4, No. 7, 2015, pp. 862-871, p. 862.)

¹⁸⁷ Environmental protection Agency, 'Strategic Environmental Assessment,' available at <http://www.epa.ie/monitoringassessment/assessment/sea/#.Vi5tmGuJ2CA> [Accessed on 26/10/2015].

¹⁸⁸ Ibid; see also the *Environmental (Impact Assessment and Audit) Regulations, 2003*, Legal Notice 101 of 2003, Regulations 42, 43 & 47.

¹⁸⁹ Notably, the proposed law, *Energy Bill, 2015*, requires under clause 135 (1) (2)(d) that a person who intends to construct a facility that produces energy using coal shall, before commencing such construction, apply in writing to the Authority for a permit to do so. Such an application must be accompanied by, inter alia, a Strategic Environment Assessment and Social Impact Assessment licenses. Also notable are the provisions of s. 57A(1) of the *Environmental Management Co-ordination (Amendment) Act 2015* which are to the effect that all policies, plans and programmes for implementation shall be subject to Strategic Environmental Assessment. If fully implemented, this is a positive step towards achieving environmental security for all.

¹⁹⁰ See generally, United Nations, *Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach*, (UNEP, 2004). Available at <http://www.unep.ch/etu/publications/textONUbr.pdf> [Accessed on 10/02/2016]; See also The World Bank, 'Strategic Environmental Assessment,' September 10, 2013. Available at <http://www.worldbank.org/en/topic/environment/brief/strategic-environmental-assessment> [Accessed on 10/02/2016]. The World Bank argues that policy makers in are subject to a number of political pressures that originate in vested interests. The weaker the institutional and governance framework in which sector reform is formulated and implemented, the greater the risk of regulatory capture. The World Bank observes that in situations such as these, the recommendations of environmental assessment are often of little relevance unless there are constituencies that support them, and with sufficient political power to make their voices heard in the policy process. While strong constituencies are important during the design of sector reform, they are even more

meaningfully participate and give feedback on the likely effects on social, economic and environmental aspects of the community. Engaging them through negotiation and mediation where necessary, would avert future conflicts and allow any developmental activities enjoy social acceptance in the community. Thus, government activities and policies would not clash with the community expectations.

Under Principle 10 of the Rio Declaration the member states are obligated to facilitate the rights of access to information, public participation in decision making and access to justice in environmental matters. Access to justice through litigation is also a potent remedy when access to environmental information or public participation have been wrongly denied or are incomplete. It guarantees citizens the right to seek judicial review to remedy such denial and/or deprivation.¹⁹¹ The Rio Declaration in principle 10 emphasizes the importance of

important during implementation. It follows that effective environmental assessment in sector reform requires strong constituencies backing up recommendations, a system to hold policy makers accountable for their decisions, and institutions that can balance competing and, sometimes, conflicting interests. The World Bank thus affirms its recognition of the strategic environmental assessment (SEA) as a key means of integrating environmental and social considerations into policies, plans and programs, particularly in sector decision-making and reform.

¹⁹¹ See Akech, M., "Land, the environment and the courts in Kenya," *A background paper for The Environment and Land Law Reports*, February 2006, 1 KLR (E&L) xiv-xxxiv. Available at <http://www.kenyalaw.org> [Accessed on 09/01/2016]; *The Fair Administrative Action Act*, 2015 (No. 4 of 2015) which an Act of Parliament to give effect to Article 47 of the Constitution provides under s. 6(1) that every person materially or adversely affected by any administrative action has a right to be supplied with such information as may be necessary to facilitate his or her application for an appeal or review in accordance with s. 5. S. 5(1) provides that in any case where any proposed administrative action is likely to materially and adversely affect the legal rights or interests of a group of persons or the general public, an administrator shall- issue a public notice of the proposed administrative action inviting public views in that regard; consider all views submitted in relation to the matter before taking the administrative action; consider all relevant and materials facts; and (d) where the administrator proceeds to take the administrative action proposed in the notice- (i) give reasons for the decision of administrative action as taken; (ii) issue a public notice specifying the internal mechanism available to the persons directly or indirectly affected by his or her action to appeal; and (iii) specify the manner and period within the which such appeal shall be lodged. In relation to access to information, Article 35(1) (b) of the Constitution guarantees every person's right of access to information held by another person and required for the exercise or protection of any right or fundamental freedom. In addition to the foregoing, the *Access to Information Act*, 2016, seeks to give effect to Article 35 of the Constitution; to confer on the Commission on Administrative Justice the oversight and enforcement functions and powers. Notably, section 2 defines "private body" to mean any private entity or non-state actor that, inter alia, is in possession of information which is of significant public interest due to its relation to the protection of human rights, the environment or public health and safety, or to exposure of corruption or illegal actions or where the release of the information may assist in exercising or protecting any right.

public participation in environmental management through access to justice thus: "Environmental issues are best handled with the participation of all concerned citizens, at the relevant level.... Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.¹⁹² Participatory approaches have been increasingly advocated as effective decision-making processes to address complex environment and sustainable development issues.¹⁹³

The provision of effective avenues for resolution of natural resource conflicts is thus far the most practical way of ensuring access to justice, and by extension adhering to public participation principle. Scholars have asserted that participatory approaches should be thought of as located somewhere on a continuum between consensus-oriented processes in the pursuit of a common interest and compromise-oriented negotiation processes aiming at the adjustment of particular interests.¹⁹⁴

Cultural, kinship and other ties that have always tied Kenyans together as one people have not died out. In many parts of the country Kenyans still believe in the principles of reciprocity, common humanity, and respect for one another and to the environment. However, it has been observed that the success of customary natural resource management strategies in managing conflict often depends on the enforcement capacities of traditional authorities. When the authority of traditional elite groups is declining, the capacities of those groups to render or enforce a decision may also be reduced.¹⁹⁵ It is also argued that customary practices institutionalized within broader national legal frameworks may provide a good starting point to enhance traditional authorities' ability to deal with the challenges of contemporary natural resource management.¹⁹⁶ With regard to this, Kenya may be better positioned due to the Constitutional recognition for the application of TDRMs.¹⁹⁷ This may, therefore, help reposition the traditional authority especially as far as resolution of land conflicts within

¹⁹² United Nations Conference on Environment and development, *Rio Declaration on Environment and Development*, Rio de Janeiro, Brazil, 1992.

¹⁹³ Hove, SVD, 'Between consensus and compromise: acknowledging the negotiation dimension in participatory approaches,' *Land Use Policy*, Vol. 23, Issue 1, January 2006, p.10.

¹⁹⁴ *Ibid*, p.16.

¹⁹⁵ FAO, 'Negotiation and mediation techniques for natural resource management,' *op cit*.

¹⁹⁶ *Ibid*.

¹⁹⁷ Article 159.

communities, as contemplated under Article 60(1) (g) of the Constitution, is concerned.

Mediation in the informal context was and has been an informal process. Informality of mediation as a conflict resolution mechanism makes it flexible, expeditious and speedier, it fosters relationships and is cost-effective. It also means that since parties exhibit autonomy over the process and outcome of the mediation process, the outcome is usually acceptable and durable. Similarly, mediation addresses the underlying causes of conflicts preventing them from flaring up later on. These positive attributes of mediation can only be realized if mediation is conceptualized as an informal process as it was in the customary, communal and informal context and not as a legal process.

In the informal set up mediation is seen as an everyday affair and an extension of a conflict management process on which it is dependent. Conflict management is thus heavily embedded in the way of life of most Kenyan communities. Mediation in the customary, communal and informal setting has operated and functioned within the wider societal context in which case it is influenced by factors such as the *actors, their communication, expectations, experience, resources, interests, and the situation in which they all find themselves* (emphasis added).¹⁹⁸ It is thus not a linear cause-and-effect interaction but a reciprocal give-and-take process.¹⁹⁹ Legislation should not kill mediation by annexing it to the court system and making it a judicial process but should instead strive towards creating a more conducive environment to make it more effective and receptive to the needs of the people. Informal mediators may still have a big role to play in making mediation work in Kenya especially in relation to resolution of natural resource conflicts.

It has been suggested that government policies can create opportunities for mediation during disputes.²⁰⁰ However, they must include mechanisms for judging the prospects of success at the outset and adopting contingencies to

¹⁹⁸ United Nations Development Programme, et al, 'Informal Justice Systems: Charting A Course For Human Rights-Based Engagement,' 2012; see also Albrecht, P., et al (eds), 'Perspectives on Involving Non-State and Customary Actors in Justice and Security Reform,' (International Development Law Organization, 2011).

¹⁹⁹ See Eilerman, D., 'Give and Take - The Accommodating Style in Managing Conflict,' August 2006, available at <http://www.mediate.com/Articles/eilermanD5.cfm> [Accessed on 10/02/2016].

²⁰⁰ Castro, A.P. & Nielsen, E. (eds), 'Natural resource conflict management case studies: an analysis of power, participation and protected areas,' op cit, p. 272.

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ensure the mediators' security if situations deteriorate.²⁰¹ It is also contended that the community also needs the authority of the state to strengthen its ability to deal with large and powerful external interests, such as multinational corporations.²⁰² This is why there is need for the informal conflict mechanisms to work in synergy with the formal systems to ensure that the parties engage constructively. For instance, it has been observed that national legal systems may carry with them the following strengths: use of official legal systems strengthens the rule of State law, empowers civil society and fosters environmental accountability; they are officially established with supposedly well-defined procedures; they take national and international concerns and issues into consideration; they involve judicial and technical specialists in decision-making; where there are extreme power imbalances among the disputants, national legal systems may better protect the rights of less powerful parties because decisions are legally binding; and decisions are impartial, based on the merits of the case, and with all parties having equity before the law.²⁰³

It has been observed that the role, tasks, required skills, and modus operandi of a successful mediator will depend on the specific context of any dispute.²⁰⁴ However, there is need for the mediators to acquire broad scale skills to enable them handle a wide range of issues in natural resource conflicts. The crucial characteristic of an effective mediator-facilitator in natural resource conflicts is said to be credibility with the main parties in the dispute, whether that credibility comes from technical expertise, professional experience, social status, kinship, or wisdom ("authority" is usually a poor criterion for selecting mediators).²⁰⁵

As for negotiation processes, it is also important to enhance capacity building within the communities. Capacity building is believed to be integral to developing a level-playing field, so less powerful stakeholders can participate equitably in a process of consensual negotiation.²⁰⁶ It has been noted that successful problem-solving is a satisfying experience on a human level. Since the

²⁰¹ Ibid.

²⁰² Tyler, S.R., 'Policy Implications of Natural Resource Conflict Management,' op cit.

²⁰³ FAO, 'Negotiation and mediation techniques for natural resource management,' op cit.

²⁰⁴ Tyler, S.R., 'Policy Implications of Natural Resource Conflict Management,' op cit, p. 272.

²⁰⁵ Ibid, p. 273.

²⁰⁶ Warner, M., 'Conflict Management in Community-Based Natural Resource Projects: Experiences from Fiji and Papua New Guinea,' *Working Paper No. 135*, (Overseas Development Institute, April, 2000), p. 30.

intended outcome of the negotiation is a win-win result,¹ the accomplishment of creating an innovative solution that maximizes joint as well as individual gains can be shared with the other side.²⁰⁷ The process of reaching this goal is psychologically unifying, rather than divisive. Negotiation is thus an enjoyable and challenging personal experience, rather than a highly stressful battle of wits and words.²⁰⁸

Communication is seen as capable of only taking place within an interactive process of participation that brings together those holding different standpoints.²⁰⁹ In Kenya, devolution was designed and has been hailed as capable of opening channels for rural dwellers to communicate their priorities to government decision-makers and in some places improved community-government relations.²¹⁰ However, it has been observed that more powerful actors in communities tend to manipulate devolution outcomes to suit themselves.²¹¹ As such, checks and balances need to be in place to ensure that benefits and decision-making do not become controlled by élites.²¹²

Participatory approaches for environment and sustainable development decision-making should extend beyond the realms of advocacy, academic focus and institutional discourses into the realm of real life implementation.²¹³

13.8 Conclusion

Managing natural resource conflicts in Kenya through the enhanced use of negotiation and mediation is an exercise worth pursuing for the sake of attaining Environmental Justice and ultimately sustainable development. In light of Article 159 (2) (c) and in relevant cases, the ADR mechanisms should be used in

²⁰⁷ Murray, J.S., 'Understanding Competing Theories of Negotiation,' *Negotiation Journal*, April, 1986, pp. 179-186 at pp. 183-184.

²⁰⁸ Ibid.

²⁰⁹ Hove, S.V.D., 'Between consensus and compromise: acknowledging the negotiation dimension in participatory approaches,' op cit, p.12.

²¹⁰ Shackleton, S., et al, 'Devolution And Community-Based Natural Resource Management: Creating Space for Local People to participate and Benefit?' op cit., p.2; See also Muigua, 'Empowering the Kenyan People through Alternative Dispute Resolution Mechanisms,' *Paper Presented at the CIArb Africa Region Centenary Conference 2015*, held on 15-17 July, 2015 at Victoria Falls Convention Centre, Zambezi Sun Hotel, Livingstone, Zambia, (www.kmco.ke)

²¹¹ Ibid, p.1.

²¹² Ibid, p.1.

²¹³ Hove, S.V.D., 'Between consensus and compromise: acknowledging the negotiation dimension in participatory approaches,' op cit, p.15.

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managing certain community disputes such as those involving use and access to natural resources among the communities in Kenya, for enhanced access to environmental justice and environmental democracy. Although customary laws vary widely between communities, underlying customary principles or values such as reciprocity, equilibrium, duality and brotherhood/solidarity are quite consistent across different ethnic groups. These principles give rise to the obligation to openly share bio-resources and TK; to reciprocate/ exchange equally; to maintain harmony in society; to help those in need; and to respect nature.²¹⁴

The use of ADR in the resolution of natural resource conflicts is viable and should be exploited to its fullest. ADR is not a panacea to all the natural resource conflicts and environmental problems as it has many limitations and is also faced with many challenges. However ADR is worth working with in the environmental arena. The benefits accruing from ADR processes should be fully utilised in the Kenyan context to minimise or at least manage natural resource conflicts and ensure Kenya realises its goals of sustainable development and the Vision 2030.

Even where the use of ADR and TDR mechanisms is contemplated, there barely exists effective framework to oversee their utilisation. There is need to actualise the use of ADR and particularly negotiation and mediation in managing natural resource conflicts as envisaged in the Constitution. ADR is not fully utilised in the Kenyan context. Therefore, the attributes of cost effectiveness, party autonomy, flexibility, amongst others, are hardly taken advantage of in the environmental arena. There is need to ensure that there is put in place a framework within which communities are actively involved in achieving peace for sustainable development. The Government efforts evidenced by bodies such as the National Cohesion and Integration Commission²¹⁵ should actively involve communities in addressing natural resource conflicts in the country. While acknowledging that negotiation and mediation may not provide holistic solutions to the problem, they can still be used in tandem with other methods of conflict management to address the problem of natural resource conflicts in

²¹⁴ Mengesha, A.D., et al., "Indigenous Conflict Resolution Mechanisms among the Kembata Society." op cit, p. 4.

²¹⁵ This is a Commission established under s. 15 of the National Cohesion and Integration Act, 2008, No. 12 of 2008, Revised Edition 2012 [2008]. One of the functions of the Commission is to promote arbitration, conciliation, mediation and similar forms of dispute resolution mechanisms in order to secure and enhance ethnic and racial harmony and peace (s.25 (2) (g).

Kenya. Alternative Dispute Resolution mechanisms (ADR) and particularly negotiation and mediation, have intrinsic advantages that can facilitate effective management of natural resource conflicts. They are expeditious, cost effective, participatory and all-inclusive and thus, can be used to manage natural resource conflicts in way that addresses all the underlying issues affecting the various parties.

Traditional conflict resolution practices reflect principles of reconciliation based on long-standing relationships and values.²¹⁶ They tend to be effective in addressing intra-community and even inter-community conflict, where relationships and shared values are part of the reconciliation process.²¹⁷ Traditional mechanisms are rooted in the culture and history of the African people. They emphasize group unity, reconciliation of individuals or groups, and peaceful reintegration into the community. Traditional techniques place the interest of the group above that of the individual. They assume that all parties are interested in and affected by the conflict. The goal is to reconcile the parties to the conflict so that there is a return to social harmony—the goal of cosmopolitanism.²¹⁸

It has rightly been argued that social realities within societies should be taken seriously and conflicts should be viewed as non-isolated events in their social contexts. This is because when Africans sit down to discuss a conflict, the talking usually covers all kinds of relevant background and goes into the thoughts and intentions of others. The elders from a family, clan or state see their traditional objectives in conflict resolution as moving away from accusations and counter-accusations, to soothe hurt feelings and to reach a compromise that may help to improve future relationships. They also dwell on values, aspirations, perceptions and visions.²¹⁹

²¹⁶ Myers, L.J. & Shinn, D.H., 'Appreciating Traditional Forms of Healing Conflict in Africa and the World,' *Black Diaspora Review*, Vol. 2(1), Fall 2010.

²¹⁷ Ibid.

²¹⁸ Ibid, p. 3; Schaap, A., 'Reconciliation as Ideology and Politics,' *An International Journal of Democratic and Critical Theory*, 2008. Available at <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8675.2008.00488.x/pdf> [Accessed on 23/04/2016].

²¹⁹ Utne, B.B., 'Indigenous conflict resolution in Africa,' p. 8, *A draft presented to the week-end seminar on indigenous solutions to conflicts held at the University of Oslo, Institute for Educational Research 23 – 24 of February 2001*. Available at http://www.africavenir.org/fileadmin/_migrated/content_uploads/BrockUtneTradConflictResolution_06.pdf [Accessed on 12/04/2016].

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There has been emphasis on the importance of achieving constructive conflict resolution in natural Resource Management (NRM) and highlight the importance of local government structures and traditional leaders in managing conflicts in developing contexts.²²⁰ In this regard, *Community-based approaches to NRM and conflict resolution* are deemed to be useful, particularly to promote locally based, indigenous management strategies.²²¹

Since indigenous mechanisms of conflict management are based on the very values and tenets of the people, they maintain and protect the customs and traditions of the society. Thus, they are able to solve long standing disputes and promote durable peace.²²²

²²⁰ Bob, U & Bronkhorst, S., 'Environmental conflicts: Key issues and management implications,' op cit. p. 25.

²²¹ Ibid.

²²² Azebre, A.I., et al, 'Indigenous Mechanisms of Dispute Resolution among the People of Adaboya Traditional Area,' July 2012, available at <https://www.modernghana.com/news/534448/1/indigenous-mechanisms-of-dispute-resolution-among-.html> [Accessed on 10/04/2016].

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14.1 Introduction

'Sustainability' has mainly been used in this book to refer to: the need for reconciliation between economic development and environmental conservation; the need to place any understanding of environmental concerns within a socio economic and political context; and the need to combine environment and development concerns.¹ Environmental sustainability has also generally been used to refer to a condition of balance, resilience, and interconnectedness that allows human society to satisfy its needs while neither exceeding the capacity of its supporting ecosystems to continue to regenerate the services necessary to meet those needs nor by their actions diminishing biological diversity.² Putting sustainable development into practice means ensuring that economic and social policies deliver both environmental protections and enhanced economic and social wellbeing by: building a sustainable economy; improving quality of life; conserving and enhancing the environment and protecting land and seascape.³

It has been observed that while definitions of sustainability may vary across sectors, their common theme is to change the way resources are exploited or hazards are managed so that adverse impacts downstream or for subsequent generations are reduced.⁴ While building on the previous chapters, this section explores the best international practices and approaches in environmental management to promote and achieve sustainable development.

14.2 Poverty Eradication for Sustainable development

It has rightly been pointed out that at the heart of the concept of sustainable development is the fulfilment of the basic needs of the world's poor without

¹ World Conservation Strategy (IUCN/UNEP/WWF, 1980); the Brundtland Report (World Commission on Environment and Development, 1987).

² Morelli, J., 'Environmental Sustainability: A Definition for Environmental Professionals,' *Journal of Environmental Sustainability*, Vol. 1, Iss. 1, Article 2, 2011, pp. 1-9 at p. 5.

³ Environmental Advisory Council, 'Principles of Sustainable Development,' March 2013, p. 4. Available at https://www.princeedwardisland.ca/sites/default/files/publications/principles_of_sustainable_development.pdf [Accessed on 27/08/2016].

⁴ Burton, I., et al, 'Chapter 18: Adaptation to Climate Change in the Context of Sustainable Development and Equity,' op cit., p. 819.

compromising the capacity of the environment to provide similar benefits for future generations.⁵

In the long term plans, the state should put in place adequate measures to address the chronic poverty in some regions through integrated measures that boost economic status of the people while ensuring environmental sustainability. It has been contended that whereas economic growth has been put forward as the solution to problems such as poverty and that the poor would be better off as the economy grew, economic growth does not necessarily eliminate poverty.⁶ To some of the proponents is this assertion, considering that the richest nations in the world still accommodate some of the poorest people, it is arguable that much poverty results from distributional problems rather than from a nation's lack of wealth.⁷

In promoting sustainable agriculture and rural development, Agenda 21 provides that major adjustments are needed in agricultural, environmental and macroeconomic policy, at both national and international levels, in developed as well as developing countries, to create the conditions for Sustainable Agriculture and Rural Development (SARD). The major objective of SARD is to increase food production in a sustainable way and enhance food security. This will involve education initiatives, utilization of economic incentives and the development of appropriate and new technologies, thus ensuring stable supplies of nutritionally adequate food, access to those supplies by vulnerable groups, and production for markets; employment and income generation to alleviate poverty; and natural resource management and environmental protection.⁸

In areas where communities largely depend on agriculture for livelihood, there is need to create awareness for the diversification of economic activities, and effective agriculture and production methods. Communities, especially those living in ecologically susceptible areas need to be encouraged to engage in

⁵ Mbote, P.K. & Cullet, P., 'Environmental Justice and Sustainable Development: Integrating Local Communities in Environmental Management,' *ELRC Working Paper 1996 - 1*, (International Environmental Law Research Centre, 1996), p. 7.

Available at <http://www.ielrc.org/content/w9601.pdf> [Accessed on 12/09/2016].

⁶ 'The Sustainability principles,' p.16. Available at

<https://www.uow.edu.au/~sharonb/principles%20excerpts/sustainability.pdf> [Accessed on 26/08/2016].

⁷ Ibid.

⁸ Agenda 21, para. 14.2.

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economically viable but environmentally friendly activities. Those that rely exclusively on livestock keeping should be supported to come up with efficient but sustainable production methods that will ensure higher yields while conserving the environment. They should be engaged in planting and nurturing dryland forests which will not only help in environmental restoration but also ensure there will be enough resources for their use.

The Ministry of Environment and Natural Resources, in collaboration with the Ministry of Water and the County governments, can put in place a sustainable plan for supplying water both from the national water reservoirs and drilled boreholes. This will serve the purpose of supporting economic activities as well as supporting reforestation efforts. Such measures should also be accompanied by soil conservation measures.

The *National Land Reclamation Policy*⁹ was informed by the fact that over 80% of Kenyan land surface that include the Arid and Semi-Arid Lands (ASALs) is fragile and has a population of about 11 million people, the great majority of who live below the poverty line and suffer effects of widespread aridity, acute food and water shortage, as well as general insecurity.¹⁰ The remaining 20% of Kenya land mass is non-ASALs and is arable land often referred to as high potential or humid areas, in which the most affected areas are located in hilly and mountainous regions experiencing de-vegetation or clear cutting of forests, diminishing soil fertility due to poor soil management or cultivation on steep slopes, among other impacts.¹¹

In efforts to combat land degradation through, inter alia, intensified soil conservation, afforestation and reforestation activities, Agenda 21 requires governments to, inter alia: implement urgent direct preventive measures in drylands that are vulnerable but not yet affected, or only slightly desertified drylands, by introducing (i) improved land-use policies and practices for more sustainable land productivity; (ii) appropriate, environmentally sound and economically feasible agricultural and pastoral technologies; and (iii) improved

⁹ Republic of Kenya, *National Land Reclamation Policy*, February 2013 (Government Printer, Nairobi, 2013).

¹⁰ Ibid, p. 8.

¹¹ Ibid; See also Republic of Kenya Ministry Of Environment, *Water And Natural Resources, Draft National Forest Policy*, 2015. (Government Printer, Nairobi, 2015).

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management of soil and water resources; carry out accelerated afforestation and reforestation programmes, using drought resistant, fast-growing species, in particular native ones, including legumes and other species, combined with community-based agroforestry schemes.

Further, the Governments at the appropriate level, with the support of the relevant international and regional organizations, are expected to, inter alia: develop land-use models based on local practices for the improvement of such practices, with a focus on preventing land degradation. The models should give a better understanding of the variety of natural and human-induced factors that may contribute to desertification. Models should incorporate the interaction of both new and traditional practices to prevent land degradation and reflect the resilience of the whole ecological and social system; develop, test and introduce, with due regard to environmental security considerations, drought resistant, fast-growing and productive plant species appropriate to the environment of the regions concerned.¹² Community participation in dealing with land degradation is one of the effective ways and channels through which such traditional knowledge on sustainability can be tapped to enhance environmental health and security. They are also in a better position to implement measures directed at eliminating human induced factors that may contribute to environmental degradation.

From the various international environmental instruments, it is important that land degradation problem be addressed urgently, by tackling the contributing factors which include inappropriate anthropogenic activities such as clear-cutting of forest and other vegetation, logging and firewood gathering, bush encroachment, invasion of alien species, charcoal production, mining, human settlement, infrastructural and industrial development, uncontrolled fires, livestock overstocking and overgrazing, among others.¹³ These problems cannot be addressed through legislation without taking tangible measures, in collaboration with the local communities to tackle them. It is time to go beyond legislation and involve the people who are directly affected in coming up with lasting and effective measures.

¹² Ibid, para. 12.19.

¹³ Ibid, p. 8.

14.3 Use of Science, Technology and Innovation for Sustainable Development

It has rightly been asserted that all utilisation of the renewable natural resources must be carried out on a sustained-yield basis; and all disposal of wastes (gaseous, liquid and solid) must be carried out on a sustained-discard basis, that is, at disposal rates not in excess of decomposition rates.¹⁴ While it is difficult to establish such rates, the solution may lie in moving away from the increased use of synthetic waste and other non-decomposing wastes to the easily decomposing technology waste. For instance, in agriculture, it is imperative that the country adopts methods and technology that is friendlier to green economy practices as opposed to the polluting and dangerous chemicals.¹⁵

The need for technology transfer and innovation is well captured in *Maafikiano*, outcome document of the Nairobi UNCTAD 14th Conference, which states that ‘technology, including information and communications technology and innovation, plays a critical role in trade and development, including through its essential contribution to structural transformation, productive capacities, competitiveness and the diversification of production and exports as well as to advancing food security. It is thus a key means of implementation and a component of achieving the Sustainable Development Goals. It is also one of the most important levers of change for achieving inclusive and sustainable development. The development, transfer, dissemination and diffusion of environmentally sound technology to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed, is a means to implement the 2030 Agenda. International arrangements and measures including the Technology Facilitation Mechanism and operationalization of the Technology Bank for the Least Developed Countries as agreed in the Addis Ababa Action Agenda to support the implementation of the Sustainable Development Goals, are welcome.¹⁶ Such measures aimed at promoting technology transfer can facilitate the above, resulting in environmentally friendly agricultural practices and reduced pollution. It is contended that without an inflexible commitment to the sustainable development of resources and the

¹⁴ Westing, A.H., “Environmental Security and Its Relation to Ethiopia and Sudan,” *Ambio*, Vol. 20, No. 5, Environmental Security (Aug., 1991), pp. 168-171, p. 168.

¹⁵ See Republic of Kenya, *Kenya Green Economy Strategy and Implementation Plan (GESIP)*, Maanzoni-1 Draft, May 2015.

¹⁶ *Ibid*, para. 26, UNCTAD, *Nairobi Maafikiano*, ‘From decision to action: Moving towards an inclusive and equitable global economic environment for trade and development,’ Fourteenth session Nairobi, 17-22 July 2016.

sustainable disposal of wastes there can be no environmental security.¹⁷ This is true considering that unsustainable use of resources coupled with unsustainable waste disposal negatively affects the environment and ultimately the quality of life for human beings, plants as well as animals.

14.4 Enhancing Environmental Security for Sustainable Development

Public participation in the management, protection and conservation of the environment, coupled with the protection of genetic resources and biological diversity can be one of the effective ways of achieving environmental security for the present and future generations. It is also an effective way of identifying and eliminating processes and activities that are likely to endanger the environment since communities are conscious of such activities that can compromise their livelihoods. This may be informed by the *principle of subsidiarity*, where, arguably, the local communities are the best placed to address the burning environmental issues such as pollution, degradation and over-utilisation (emphasis added).¹⁸ They only need technical support from the Government and through collaboration, they can come up with lasting solutions. Where they are not well informed, public awareness through civic education and agricultural field trainings can help them identify the issues.

With adequate and meaningful participation in decision making and environmental conservation, all factions in the society feel appreciated and have a sense of belonging. They are also able to voice and address their concerns in diplomatic ways that in turn boost security in a country. With all parties having adequate resources for their livelihoods, none of the communities feel any pressure to attack their neighbours as it is the case with scarce resources. A lasting security solution in some parts of Kenya is closely associated with environmental security.

¹⁷ Republic of Kenya, *Kenya Green Economy Strategy and Implementation Plan (GESIP)*, Maanzoni-1 Draft, May 2015.

¹⁸ See the *East African Community Protocol on Environment and Natural Resources Management*, 2005. Article 4 (2) (p). One of the principles of environment and natural resources management is: the principle of subsidiarity in the management of the environment and natural resources; See also generally, *Protocol (No 2) on the application of the principles of subsidiarity and proportionality*, annexed to the Treaty on European Union and the Treaty on the Functioning of the European Union by the Treaty of Lisbon of 13 December, 2007; See also Article 5 of the Treaty on European Union, C 326/1.

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Where funds are allocated for environmental protection, the local people should adequately be represented in deciding the most urgent issues that ought to be addressed. This will not only boost efficiency but will only curb corruption and ensure better management of the funds. The various sectoral laws, including wildlife, water, forests and wetlands have come up with special kitty to facilitate conservation and effective management of resources. Communities ought to be meaningfully and adequately represented in committees dealing with such kitty to curb corruption and improve management.

There is also need to establish efficient systems of Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA), Environmental Audit and Monitoring of the environment and Environmental Security Assessment (ESA). Strategic Environmental Assessment (SEA) is defined as the process by which environmental considerations are required to be fully integrated into the preparation of policies, plans and programmes and prior to their final adoption.¹⁹ The objectives of the SEA process are to provide for a high level of protection of the environment and to promote sustainable development by contributing to the integration of environmental considerations into the preparation and adoption of specified policies, plans and programmes.²⁰ Environmental impact assessment means a systematic examination conducted to determine whether or not a programme, activity or project will have any adverse impacts on the environment.²¹ Environmental audit means the systematic, documented, periodic and objective evaluation of how well environmental organisation, management and equipment are performing in conserving or preserving the environment.²² Strategic Environmental and Social Assessment (SESA) is a more effective tool since it integrates the social issues that are likely to emerge and not just the environmental considerations.²³

¹⁹ Environmental protection Agency, 'Strategic Environmental Assessment,' available at <http://www.epa.ie/monitoringassessment/assessment/sea/#.Vi5tmGuJ2CA> [Accessed on 26/10/2015].

²⁰ Ibid; See also the *Environmental (Impact Assessment and Audit) Regulations, 2003*, Legal Notice 101 of 2003, Regulations 42, 43 & 47.

²¹ *Environmental Management and Co-Ordination Act*, No 8 of 1999 (Government Printer, Nairobi, 1999), s.2.

²² Ibid.

²³ Notably, the proposed law, *Energy Bill, 2015*, requires under clause 135 (1) (2)(d) that a person who intends to construct a facility that produces energy using coal shall, before commencing such construction, apply in writing to the Authority for a permit to do so. Such an application must be accompanied by, inter alia, a Strategic Environment Assessment and Social Impact Assessment licenses. Also notable are the provisions of s. 57A(1) of the *Environmental Management Co-ordination (Amendment) Act 2015* which are to the effect that all policies, plans and programmes for

These exercises should not be just a matter of formality and paper work.²⁴ The affected communities should be afforded an opportunity to meaningfully participate and give feedback on the likely effects on social, economic and environmental aspects of the community.

Courts have a great and important role to play in facilitating realisation and safeguarding of environmental security. They should be driven by not only anthropocentric arguments for environmental conservation but also ecocentric justifications.

Courts can take proactive measures to ensure conservation and protection of the environment for sustainable development. They can ensure that communities and other private persons enjoy environmental democracy²⁵ especially where such communities approach courts seeking justice and access to environmental information, and demand enforcement of environmental laws or compensation for damage. Courts can work closely with such the local bodies to adequately and peaceably address conflict or disputes.

implementation shall be subject to Strategic Environmental Assessment. If fully implemented, this is a positive step towards achieving environmental security for all.

²⁴ See generally, United Nations, *Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach*, (UNEP, 2004). Available at <http://www.unep.ch/etu/publications/textONUbr.pdf> [Accessed on 26/10/2015]; See also The World Bank, 'Strategic Environmental Assessment,' September 10, 2013. Available at <http://www.worldbank.org/en/topic/environment/brief/strategic-environmental-assessment> [Accessed on 26/10/2015]. The World Bank argues that policy makers in are subject to a number of political pressures that originate in vested interests. The weaker the institutional and governance framework in which sector reform is formulated and implemented, the greater the risk of regulatory capture. The World Bank observes that in situations such as these, the recommendations of environmental assessment are often of little relevance unless there are constituencies that support them, and with sufficient political power to make their voices heard in the policy process. While strong constituencies are important during the design of sector reform, they are even more important during implementation. It follows that effective environmental assessment in sector reform requires strong constituencies backing up recommendations, a system to hold policy makers accountable for their decisions, and institutions that can balance competing and, sometimes, conflicting interests. The World Bank thus affirms its recognition of the strategic environmental assessment (SEA) as a key means of integrating environmental and social considerations into policies, plans and programs, particularly in sector decision-making and reform.

²⁵ Environmental democracy involves the public's right to information, participation in environmental decisions and access to justice in environmental matters. See *The Convention on Access to Information Public Participation in decision-making and Access to Justice in Environmental Matters* (Aarhus Convention), 1998.

14.5 The Green Economy Approach

While there is no universally accepted definition of 'green economy', the most widely used definition conceptualizes green economy as one that results in improved human well-being and social equity while significantly reducing environmental risks and ecological scarcities.²⁶ The green economy incorporates and promotes the principles of sustainable development.²⁷ The United Nations Environment Programme (UNEP) launched the Green Economy Initiative (GEI) in 2008 consisting of global research and country-level assistance aiming at motivating policymakers to support environmental investments as a way of achieving sustainable development.²⁸ According to UNEP (now UNEA), a green economy is one whose growth in income and employment is driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services.²⁹ Arguably, green economies are not based on the demand for sacrifice, but on the idea of qualitative growth, where low-carbon and environmentally friendly technologies, as well as international cooperation in this area play a key role.³⁰ The UNEA maintains that this development path should maintain, enhance and, where necessary, rebuild natural capital as a critical economic asset and source of public benefits, especially for poor people whose livelihoods and security depend strongly on nature.³¹

²⁶ UNEP, 'Green Economy: Pathways to Sustainable Development and Poverty Reduction,' p.16, (United Nations Environment Programme, 2011). Available at http://web.unep.org/greeneconomy/sites/unep.org.greeneconomy/files/field/image/green_economyreport_final_dec2011.pdf [Accessed on 11/09/2016].

²⁷ See generally, United Nations Division for Sustainable Development, UNDESA, *A Guidebook to the Green Economy-Issue 2: exploring green economy principles*, available at https://sustainabledevelopment.un.org/content/documents/743GE%20Guidebook%20%20-%20Principles_final.pdf [Accessed on 11/09/2016]; See also Stoddart, H., et al, 'Principles for the Green Economy: A collection of principles for the green economy in the context of sustainable development and poverty eradication,' *Earth summit 2012 Stakeholder Forum* (IUCN, 2012). Available at https://www.iucn.org/sites/dev/files/import/downloads/green_econ_principles.pdf [Accessed on 11/09/2016].

²⁸ UNEP, 'What is an "Inclusive Green Economy"?' UNEP's Green Economy Initiative (GEI), available at <http://web.unep.org/greeneconomy/what-inclusive-green-economy> [Accessed on 11/09/2016].

²⁹ Ibid.

³⁰ Friedrich-Ebert-Stiftung, 'Green Economy - A Sustainable Concept?' Available at <http://www.fes-sustainability.org/en/discussions/green-economy-sustainable-concept> [Accessed on 11/09/2016].

³¹ UNEP, 'What is an "Inclusive Green Economy"?' op cit.

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At the 2012 UN Conference on Sustainable Development, commonly known as the Rio+20 Conference, the green economy approach was endorsed as an important tool for sustainable development and poverty eradication. After this conference, the UNEP came up with the inclusive green economy concept. According to them, an Inclusive Green Economy is an alternative to today's dominant economic model, which generates widespread environmental and health risks, encourages wasteful consumption and production, drives ecological and resource scarcities and results in inequality.³² It is an opportunity to advance both sustainability and social equity as functions of a stable and prosperous financial system within the contours of a finite and fragile planet.³³ It is a pathway towards achieving the 2030 Agenda for Sustainable Development, eradicating poverty while safeguarding the ecological thresholds, which underpin human health, well-being and development.³⁴

The UNEA argues that a major challenge is reconciling the competing economic development aspirations of rich and poor countries in a world economy that is facing increasing climate change, energy insecurity and ecological scarcity.³⁵ They suggest that green economy can meet this challenge by offering a development path that reduces carbon dependency, promotes resource and energy efficiency and lessens environmental degradation. This is because, as economic growth and investments become less dependent on liquidating environmental assets and sacrificing environmental quality, both rich and poor countries can attain more sustainable economic development.³⁶ In addition, they point out that 'the concept of a 'green economy' does not replace sustainable development, but there is a growing recognition that achieving sustainability rests almost entirely on getting the economy right. Decades of creating new wealth through a 'brown economy' model based on fossil fuels have not substantially addressed social marginalisation, environmental degradation and resource depletion. In addition, the world is still far from delivering on the Millennium Development Goals.'³⁷

³² Ibid.

³³ Ibid.

³⁴ Ibid.

³⁵ UNEP, 'What is an "Inclusive Green Economy"?' op cit., p. 16.

³⁶ Ibid, p. 17.

³⁷ UNEP, 'What is an "Inclusive Green Economy"?' op cit., p. 17.

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Green economy is perceived to be important in the quest for sustainable development as it stresses the importance of integrating economic and environmental policies in a way that highlights the opportunities for new sources of economic growth while avoiding unsustainable pressure on the quality and quantity of the natural assets.³⁸ This involves a mixture of measures ranging from economic instruments such as taxes, subsidies and trading schemes, through regulatory policies, including the setting of standards, to non-economic measures such as voluntary approaches and information provision.³⁹ For instance, in the recently concluded United Nations Conference on Trade and Development (UNCTAD) fourteenth session of the Conference (UNCTAD XIV), the resultant Nairobi Consensus document, known as *the Maafikiano*,⁴⁰ affirms that effective taxation will be critical in the mobilization of resources for implementation of the Sustainable Development Goals and overall economic advancement of developing countries. This includes reducing opportunities for tax avoidance, as well as addressing illicit financial flows and the activities that underlie their occurrence, such as tax evasion, illegal exploitation of natural resources, corruption, embezzlement and fraud.⁴¹

The UNEA maintains that a green economy values and invests in natural capital. Ecosystem services are better conserved, leading to improved safety nets and household incomes for poor rural communities. They also point out that ecologically friendly farming methods improve yields significantly for subsistence farmers. Improvements in freshwater access and sanitation, and innovations for non-grid energy (solar electricity, biomass stoves, etc.), add to the suite of green economy strategies, which can also help alleviate poverty.⁴² Furthermore, a green economy substitutes clean energy and low carbon technologies for fossil fuels, which addresses climate change, creates decent jobs and reduces import dependencies. New technologies promoting energy and resource efficiency provide growth opportunities in new directions, offsetting

³⁸ European Environment Agency, Chapter Three: Green Economy, *Europe's environment – An Assessment of Assessments*, p. 93. <http://www.eea.europa.eu/publications/europes-environment-aoa/chapter3.xhtml> [Accessed on 12/09/2016].

³⁹ Ibid, p. 93.

⁴⁰ UNCTAD, *Nairobi Maafikiano*, 'From decision to action: Moving towards an inclusive and equitable global economic environment for trade and development,' Fourteenth session Nairobi, 17–22 July 2016.

⁴¹ Ibid, para. 25.

⁴² UNEP, 'What is an "Inclusive Green Economy"?' op cit., p. 17.

brown economy job losses. Resource efficiency in both energy and materials use becomes a driving proposition, be it in better waste management, more public transportation, green buildings or less waste along the food chain.⁴³

The outcome document for the United Nations Conference on Sustainable Development 2012, +20 (*The Future we want*) incorporates a chapter on green economy in the context of sustainable development and poverty eradication.⁴⁴ The Conference participants acknowledged that there are different approaches, visions, models and tools available to each country, in accordance with its national circumstances and priorities, to achieve sustainable development in its three dimensions which is the overarching goal.⁴⁵ They asserted that green economy in the context of sustainable development and poverty eradication is one of the important tools available for achieving sustainable development and that it could provide options for policymaking but should not be a rigid set of rules.⁴⁶

Further, they emphasised that it should contribute to eradicating poverty as well as sustained economic growth, enhancing social inclusion, improving human welfare and creating opportunities for employment and decent work for all, while maintaining the healthy functioning of the Earth's ecosystems.⁴⁷ Notably, each country was encouraged to select the best and most appropriate approach in accordance with national sustainable development plans, strategies and priorities.⁴⁸

The transition to green economy needs careful management and engagement by government, business, communities and citizens to ensure its success in achieving a truly sustainable future that promotes social equity, poverty eradication and human well-being.⁴⁹

⁴³ Ibid, p.629.

⁴⁴ A/CONF.216/L.1, Chapter 3 (paras. 56-74).

⁴⁵ Ibid, para. 56.

⁴⁶ Ibid, para. 56.

⁴⁷ Ibid, para. 56.

⁴⁸ Ibid, para. 59.

⁴⁹ Ten B.P., et al, *Nature and its Role in the Transition to a Green Economy*, (United Nations Environment Programme, 2012), p. 48. Available at <http://www.teebweb.org/wp-content/uploads/2013/04/Nature-Green-Economy-Full-Report.pdf> [Accessed on 11/09/2016].

14.6 Embracing Environmental Ethics for Sustainable Development

It has rightly been pointed out that with the increasing deterioration of ecological systems on which human beings rely and the aggravation of the environmental crisis, human beings cannot rely on economic and judicial methods alone to solve the problems of environmental pollution and ecological imbalances; we must also appeal to human beings' limitless internal ethical resources.⁵⁰ Only after adoption of an appropriate attitude towards nature and establishment of a new ethical relationship between human beings and nature will we be able to love and respect nature automatically as well as conscientiously; and only with the guidance of such love and respect can we successfully deal with the issues of environmental pollution and ecological imbalances.⁵¹

One of the fundamental purposes of the Earth Charter is to encourage all peoples to identify with the whole Earth community as well as their local communities and to expand their moral concern and caring to include the present and future well-being of the entire human family and the larger living world.⁵² In other words, it is necessary to embrace environmental ethics. It has been suggested that promoting environmental quality is about more than encouraging sustainable development or adaptive capacity. It is also about transforming use practices for environmental resources into sustainable management practices.⁵³

It is important that the country integrates both anthropocentric and ecocentric approaches to environmental conservation and protection. This will ensure that the environment is not only secure for the sake of satisfying human needs, but also ensuring that it is healthy for the animals and plants.⁵⁴ This approach is envisaged in the Earth Charter⁵⁵ which calls for respect for the Earth and life in all its diversity in recognition of the fact that all beings are interdependent and

⁵⁰ Yang, T., 'Towards an Egalitarian Global Environmental Ethics,' *Environmental Ethics and International Policy*, (ISBN 978-92-3-104039-9, UNESCO, 2006), p.23. Available at <http://publishing.unesco.org/chapters/978-92-3-104039-9.pdf> [Accessed on 11/09/2016].

⁵¹ Ibid, p. 23.

⁵² Rockefeller, S.C., *The Earth Charter*, p. 4, available at <http://users.clas.ufl.edu/bron/pdf--christianity/Rockefeller--Earth%20Charter.pdf> [Accessed on 24/10/2015].

⁵³ Burton, I., et al, 'Chapter 18: Adaptation to Climate Change in the Context of Sustainable Development and Equity,' *op cit.*, p. 819.

⁵⁴ See generally, Oksanen M, 'Should Trees Have Standing? Law, Morality, and the Environment' 174.

⁵⁵ UN General Assembly, *World Charter for Nature*, 28 October 1982, A/RES/37/7.

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every form of life has value regardless of its worth to human beings.⁵⁶ For instance, without the bees, pollination of plants would be almost impossible, and without plants animal lives would be jeopardized. A sustained and secure environment is also useful for the regeneration of resources. The Charter calls for rights with responsibilities and states that there should be care for the community of life with understanding, compassion, and love. It provides that all must accept that with the right to own, manage, and use natural resources comes the duty to prevent environmental harm and to protect the rights of people.⁵⁷

Any attempts aimed at achieving social sustainability must also incorporate environmental sustainability through conscious efforts from the communities towards environmental conservation. This change of attitude and appreciation of the importance of environment should be promoted through environmental education for all persons in a given society.

14.7 Education for Environmental Sustainability and Sustainable Development

There is a close link between environmental degradation, lack of environmental justice and democracy, poverty and low levels of education among the citizenry, and provision of education is the crucial first step towards their elimination.⁵⁸ One way of empowering people is through education to give them alternative means of making a living for social sustainability⁵⁹ as opposed to relying on environment only, as well as enabling them make informed decisions that would contribute positively to environmental sustainability. Education is important for promoting sustainable development and improving the capacity of people to address environment and development issues.⁶⁰ However, it has rightly been

⁵⁶ *World Charter for Nature*, Principle 1.

⁵⁷ *Ibid*, Principle 2.

⁵⁸ See generally UNESCO, 'Educating for a Sustainable Future: A Transdisciplinary Vision for Concerted Action', EPD-97/CONF.401/CLD.1.November 1997.

⁵⁹ Social sustainability has been defined as concerning how individuals, communities and societies live with each other and set out to achieve the objectives of development models which they have chosen for themselves, also taking into account the physical boundaries of their places and planet earth as a whole. (Colantonio, A. & Dixon, T., 'Measuring Socially Sustainable Urban Regeneration in Europe,' (Oxford Brookes University: Oxford Institute for Sustainable Development (OISD), 2009) (As quoted in Woodcraft, S., et. al., 'Design for Social Sustainability: A framework for creating thriving new communities', *Social Life*, 2012, p.16. Available at http://www.futurecommunities.net/files/images/Design_for_Social_Sustainability_0.pdf [Accessed on 12/09/2016].

⁶⁰ UNESCO, 1992, para. 36.3, p. 2 (as quoted in Tilbury, D., 'Environmental Education for

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observed that being informed about the environment and having a positive attitude towards the environment are, although essential, not sufficient in resolving environmental problems. In order for people to be able to act upon their knowledge and awareness they need to become acquainted with a variety of action skills.⁶¹ Therefore, education or information must be followed by actual participation in activities geared towards environmental sustainability.

Environmental justice ensures equitable treatment of people in ensuring access to and sharing of environmental resources and justice in environmental matters.⁶² This may not be possible in a society where people have not been individually empowered to facilitate meaningful participation. However, it is important to point out that it is not to be assumed that a citizenry with education (including environmental education⁶³), either formal, informal or non-formal will automatically become pro-environmental; but it is arguable that it is easier to engage a well-informed people in environmental matters that concern them as compared to an ignorant group. Further, education that imparts special skills means that people can diversify the sources of their livelihoods, thus avoiding over reliance on environmental resources. Education empowers individuals for full development of human personality, and participation in society through acquisition of knowledge, human values and skills. The right to education has close linkage with the right to development, and is a powerful tool in poverty reduction strategies, through sustainable means of production.⁶⁴

Sustainability: Defining the New focus of Environmental Education in the 1990's', *Environmental Education Research*, Vol. 1, No. 2, 1995, 195-212 at p.198.

⁶¹ Ibid, p. 203.

⁶² United States Environmental Protection Agency, 'Environmental Justice Analysis', available at <http://www.epa.gov/sustainability/analytics/environmental-justice.htm> [Accessed on 12/09/2016].

⁶³ Environmental education has been defined as a process that allows individuals to explore environmental issues, engage in problem solving, and take action to improve the environment, thus enabling individuals develop a deeper understanding of environmental issues and have the skills to make informed and responsible decisions. United States Environmental Protection Agency, 'What is Environmental Education?' available at <http://www2.epa.gov/education/what-environmental-education> [Accessed on 12/09/2016]; The *Environmental Management and Co-ordination Act*, 1999 (No. 8 of 1999) defines environmental education to include the process of recognising values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness among man, his culture and his biophysical surroundings. (S. 2.).

⁶⁴ UNESCO, 'The Right to Education', p. 2. Available at <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/right-to-education/> [Accessed on 12/09/2016].

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It has rightly been observed that from local and environmental points of view, traditional knowledge and its technology plays a primary role in poverty alleviation. Traditional knowledge is seen as one capable of yielding better results, technologically speaking, when placed within its environmental and social context. This is because sometimes, it has the most refined technologies, other times, it is very simple but still more appropriate, ecologically compatible and locally manageable.⁶⁵ Local people are arguably the custodians of traditional systems and are therefore well informed about their own situations, their resources, what works and what does not work. Traditional knowledge on environment should, therefore, be treated as equally important as the formalised forms of environmental education in their role of achieving environmental sustainability. There should be a complementarity of traditional and modern knowledge when it comes to environmental and social sustainability.

If empowered through education, people are able to make their own decisions especially in matters relating to exploitation of natural resources, Environmental Impact Assessment (EIA) and other matters that touch on development but have a bearing on the environment and the livelihoods of the people. The local communities would be able to actively engage potential investors in ensuring environmental sustainability. Principles of public participation in governance and environmental democracy as envisaged in the current Constitution of Kenya become easier to implement.

14.8 Promoting Environmental Justice for Sustainable Development

There is also need to achieve environmental justice for all. Environmental justice is touted as the minimum ethical stance of environmental ethics, with two dimensions: distributive environmental justice and procedural/participatory environmental justice.⁶⁶ Distributive environmental justice concerns the equal distribution of environmental benefits and burdens, whereas participatory environmental justice focuses on opportunities to participate in decision-making.⁶⁷

⁶⁵ United Nations Convention to Combat Desertification (UNCCD) (2005), 'Revitalizing Traditional Knowledge: A Compilation of Documents and Reports from 1997 - 2003'. UNCCD, Bonn, Germany, at p. 11.

⁶⁶ Yang, T., 'Towards an Egalitarian Global Environmental Ethics,' *Environmental Ethics and International Policy*, op cit., p. 32.

⁶⁷ Ibid, p. 32.

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It has been suggested that to achieve environmental justice, there are four broad areas where changes in policy and practice are needed: (a) Rights and responsibilities: ensuring a right to a healthy environment is an overarching aim of policy, which must be supported by placing responsibilities on individuals and organisations to ensure this right is achieved; (b) Assessment: projects and policies need to be assessed for their distributional impacts; (c) Participation and capacity: decision-making should involve those affected, and those groups or individuals enduring environmental injustices need support in order to increase their control over decisions which affect them; and (d) Integration: of social and environmental policy aims.⁶⁸

One of the crucial components of environmental justice is that it seeks to tackle social injustices and environmental problems through an integrated framework of policies.⁶⁹ Ideally, having in place the necessary policy, legal and institutional framework is crucial in ensuring environmental justice at the global, regional and national levels. However, even with these, it may not be possible to achieve environmental justice if the people are not meaningfully empowered to utilize these frameworks. People should be able to participate meaningfully and to take advantage of the existing policy, legal and institutional framework. This is not possible where people do not fully appreciate the implications of environmental sustainability on their lives. Environmental education comes in handy in empowering people to participate in finding viable solutions for environmental protection and conservation.

A former Cabinet Secretary, Ministry of Water and Irrigation, in the *National Land Reclamation Policy* observed that sensitizing communities to use sustainable agricultural practices and technologies in order to reduce extensive cultivation associated with low input agriculture, is a pragmatic action to discouraging wanton clearance of forest resources.⁷⁰ She went further to state that while

⁶⁸ ESRC Global Environmental Change Programme, 'Environmental Justice: Rights and Means to a Healthy Environment for All,' *op cit.*, p. 11.

⁶⁹ ESRC Global Environmental Change Programme, 'Environmental Justice: Rights and Means to a Healthy Environment for All,' Special Briefing No.7, University of Sussex., November 2001. Available at

https://www.foe.co.uk/sites/default/files/downloads/environmental_justice.pdf [Accessed on 12/09/2016]; See also Mbote, P.K. & Cullet, P., 'Environmental Justice and Sustainable Development: Integrating Local Communities in Environmental Management,' *op cit.*

⁷⁰ *Ibid.*, p. 2.

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ensuring propagation of farm woodlots, the government will perpetually promote use of improved cooking stoves and green energy like geothermal, wind, solar, and biogas; to stop reliance on wood fuel and charcoal for cooking and heating. These strategies will translate into up-to 10% forest cover and its robust conservation thus increasing carbon storage as well as cutting on greenhouse gases to mitigate effects of climate change such as increased frequency and magnitude of many types of extreme events, including floods, droughts and tropical cyclones.⁷¹ One way of achieving this would be innovation and creativity to actualize the use of improved cooking stoves and green energy like geothermal, wind, solar, and biogas, which will in turn facilitate job creation and improved production and consumption methods.

The Ministry can work with various stakeholders to realise such objectives. Indeed, the Ministry of Environment and Natural Resources is well aware of this and what is required is action. The Environment Permanent Secretary, is on record as stating that there is need to improve adaptive capacities for communities through existing indigenous knowledge in combating the impacts of climate change. He observed that the use of such knowledge is critical in identifying and disseminating innovations which enhance food productivity in the face of climate change.⁷² Communities, with support from the Government, can come up with localized yet effective means of improving production, environmental conservation and reversing the effects of climate change, for enhanced environmental security and poverty eradication.

14.9 Conclusion

It has been suggested that the achievement of sustainability in national development requires a strategic approach, which is both long-term in its perspective and integrated or 'joined-up' in linking various development processes so that they are as sophisticated as the challenges are complex.⁷³ A strategic approach at the national level, it is contended, implies: linking long-term

⁷¹ Ibid.

⁷² The Ministry Of Water and Irrigation, 'Indigenous Knowledge to Tackle Climate Change,' available at <http://www.environment.go.ke/?p=1479> [Accessed on 25/10/2015].

⁷³ Clayton, B.D. & Bass, S., *Sustainable Development Strategies: A Resource Book*, (Organisation for Economic Co-operation and Development, Paris and United Nations Development Programme, New York, 2002), p.6. Available at [http://www.sd-network.eu/pdf/resources/Dalal-Clayton,%20Bass%20\(2002\)%20-%20Sustainable%20Development%20Strategies%20-%20A%20Resource%20Book.pdf](http://www.sd-network.eu/pdf/resources/Dalal-Clayton,%20Bass%20(2002)%20-%20Sustainable%20Development%20Strategies%20-%20A%20Resource%20Book.pdf) [Accessed on 25/10/2015].

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vision to medium-term targets and short-term action; 'horizontal' linkages across sectors, so that there is a coordinated approach to development; 'vertical' spatial linkages, so that local, national and global policy, development efforts and governance are all mutually supportive; and genuine partnership between government, business, and community and voluntary organizations, since the problems are too complex to be resolved by any group acting alone.⁷⁴

It has been suggested that translating any vision into action requires changing the way people work so that: sustainable development is the core principle underpinning the decision making process; critical issues are identified through discussion with key stakeholders; people and communities are at the centre of sustainable development planning; policies and programmes are integrated so that they are mutually reinforcing; funding and grant schemes compliment policy design and planning objectives; spending plans and budget agendas are aimed at achieving key sustainable development outcomes with realistic planning horizons; short term decisions are not contradictory to long-term objectives; the needs and opportunities of all are identified; the root causes and consequences of problems are addressed and the risks of inaction are recognized; successful examples of sustainable development are made mainstream as soon as possible; sustainable development is integrated into education and training programmes, and public understanding and awareness of the meaning of sustainable development and its day-to-day implications is increased.⁷⁵

There is a need to take more action directed at addressing the challenges facing realisation of environmental security in the country. Although the international framework on environmental law has comprehensive and well-meaning provisions and principles that may help countries address environmental insecurity, most of them are merely prescriptive in nature without any force of law. As such they heavily rely on the countries' political goodwill.⁷⁶ It is undeniable that Kenya has done a lot to domesticate the provisions of the international legal instruments but more still needs to be done by way of implementing the same. The response to climate change in Kenya must adhere to

⁷⁴ Ibid, p.11.

⁷⁵ Environmental Advisory Council, 'Principles of Sustainable Development,' March 2013, op cit., p. 5.

⁷⁶ See generally, Lang W, 'UN-Principles and International Environmental Law' (1999) 163 Max Planck UNYB 157.

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the constitutional governance framework and commitment to sustainable development, while addressing the goal of attaining low carbon climate resilient development.

The country needs to closely work with communities, private sector and various stakeholders to promote and ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources. Indeed, a recent announcement by the Environment cabinet Secretary, who called for new stakeholder partnerships to address challenges facing the community based natural resources management, is to be lauded. The cabinet Secretary noted that over-exploitation of natural resources, limited access to markets; poverty and weak policies were rampant in areas endowed with community resources posing challenges in their exploitation. According to the Secretary, the Ministry was committed to support community-based environmental initiatives that recognize equity, fair-trade and benefits sharing of natural resource management.⁷⁷

The United Nations Conference on Sustainable Development, Rio+20 conference participants recognized that farmers, including small-scale farmers and fisherfolk, pastoralists and foresters, can make important contributions to sustainable development through production activities that are environmentally sound, enhance food security and the livelihood of the poor and invigorate production and sustained economic growth.⁷⁸ Such an approach that integrates the efforts of the locals can go a long way in guaranteeing sustainability since they also act as incentives for the communities to shun unsustainable methods of production and utilisation of resources. It would also play a big and positive role in ensuring that there is equitable sharing of the accruing benefits.⁷⁹

Society must decide how best to use its total capital stock today to increase current economic activities and welfare. Society must also decide how much it needs to save or accumulate for tomorrow, and ultimately, for the well-being of future generations.⁸⁰

⁷⁷ Ministry of Environment and Natural Resources, 'Ministry to Support Community Initiatives,' available at <http://www.environment.go.ke/?p=1467> [Accessed on 25/10/2015].

⁷⁸ United Nations Conference on Sustainable Development, Rio+20, Clause 52.

⁷⁹ Benefit Sharing Bill, 2014 contemplates public and community participation in benefits sharing.

⁸⁰ UNEP, 'What is an "Inclusive Green Economy"?' op cit., p. 17.

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There is a need to move beyond the law and adopt other measures aimed at ensuring meaningful development. In conclusion, it is necessary that all stakeholders cooperate in nurturing the environment for the achievement of sustainable development, a prosperous and secure future for all.

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