ASSESSING THE EFFECTIVENESS OF LAND USE REGULATIONS IN PROMOTING ENVIRONMENTAL SUSTAINABILITY IN KENYA

 \mathbf{BY}

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DECLARATION

I **TONUI PAUL KIPKEMOI**, the undersigned student of Registration Number **G62/82325/2015** do hereby declare that this research project is my own work and has not been presented before any other university or academic institution. All the sources relied on have to the best of my knowledge been adequately acknowledged by way of complete references.

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DEDICATION

To Family and Friends... You make Life worth Living.

ACKNOWLEDGEMENT

In the course of this academic endeavour, it is no doubt that have accumulated debts that need repaying. No human enterprise, more so academia, is ever a result of individual effort, first I must thank those scholars and researchers who came before me and gave me a platform to build on their noble efforts. I salute you.

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LIST OF ABBREVIATIONS AND ACRONYMS

AFFA - Agriculture, Fisheries and Food Authority

AG - Attorney General

ASDS - Agricultural Sector Development Strategy

EIA - Environmental Impact Assessment

GoK - Government of Kenya

ICEL - International Council on Environmental Law

IPCC - Intergovernmental Panel on Climate Change

IUCN - World Conservation Union

KFS - Kenya Forests Service

KSIF - Kenya Strategic Investment Framework

KWS - Kenya Wildlife Service

MEAs - Multilateral Environmental Agreements

NCCAP - National Climate Change Action Plan

NCCRS - National Climate Change Response Strategy

NCCRS - National Climate Change Response Strategy

NEMA - National Environmental Management Authority

NGO's - Non-governmental Organisations

NLC - National Land Commission

REDD - Reduced Emissions from Deforestation and Degradation

SLM - Sustainable land management

UN - United Nations

UNCCD - United Nations Convention on Combating Desertification

UNEP - United Nations Environment Programme

UNFCCC - United Nations Framework Convention on Climate Change

WCED - World Commission on Environment and Development

WHO - World Health Organisation

WWF - World Wide Fund for Nature

LIST OF CONSTITUTIONS AND STATUTES

Community Land Act, No. 27 of 2016.

Constitution of Kenya, 2010

Environmental Management and Coordination (Amendment) Act, 2015)

Environmental Management and Coordination Act (EMCA), Act No. 8 of 1999

Land Act, No. 6 of 2012

Land Control Act, Cap. 302

Physical and Land Use Planning Act, No. 13 of 2019

The Environment and Land Court Act, No. 19 of 2011

The National Land Commission Act, No. 5 of 2012

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African Commission on Human and Peoples' Rights v Republic of Kenya, ACtHPR, Application No. 006/2012 (2017)

Centre for Minority Rights Development (Kenya) and Minority Rights Group International on behalf of Endorois Welfare Council v Kenya, 276/2003

Daniel Ngotiek Nchui & 3 others v National Oil Corporation of Kenya & another [2019] eKLR.

Friends of Lake Turkana Trust v Attorney General & 2 others [2014] eKLR

Isaack E. N. Okero & 4 Others v Attorney General of the Republic of Uganda (Sued on behalf of the Republic of Uganda) & 2 others, The East African Court of Justice at Arusha, Reference Number 14 of 2020 filed on 22nd May, 2020

Kenya Bus Service Ltd & 2 Others v The Attorney-General & 2 Others (2005) eKLR

KM & 9 others v Attorney General & 7 others [2020] eKLR.

Luo Council of Elders & 7 others v Cabinet Secretary Water & Irrigation & 13 others [2017] eKLR.

Mbole Nzomo Anthony & 3 Others v Shreejii Enterprises Ltd & 4 Others HC, Civil Suit 265 of 2010

Mohammed Said v County Council of Nandi [2013] eKLR

Mui Coal Basin Local Community & 15 others v Permanent Secretary Ministry of Energy & 17 others [2015] eKLR.

Nairobi Golf Hotels (Kenya) Ltd v Pelican Engineering and Construction Co. Ltd HCCC 706 of 1997

Republic v National Land Commission; Lake Naivasha Riparian Association (Interested Party) Ex Parte Geoffrey Muhoro [2020] eKLR

Rodgers Muema Nzioka & 2 Others v Tiomin Kenya Limited HCCC 97 of 2001

Save Lamu & 5 others v National Environmental Management Authority (NEMA) & another [2019] eKLR

Simion Swakey Ole Kaapei & 89 others v Commissioner of Lands & 7 others [2014] eKLR Wangari Maathai & 2 Others v City Council of Nairobi & 2 Others (1994) 1 KLR (E&L)

LIST OF INTERNATIONAL INSTRUMENTS AND CONVENTIONS

African Charter on Human and Peoples' Rights ("Banjul Charter") CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982) entered into force on 21 October 1986

Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa, 22 April 1998

Convention on Biological Diversity (CBD) opened for signature on 5th June, 1992 (Kenya became a signatory on 11th June, 1992

Declaration of the United Nations Conference on the Human Environment, Stockholm, 16 June 1972, A/RES/2994 published on 15 December 1972

Draft International Covenant on Environment and Development, Fifth Edition, 2017 by IUCN Commission on Environmental Law

Johannesburg Declaration on Sustainable Development, adopted at the 17th plenary meeting of the World Summit on Sustainable Development, on 4 September 2002; for the discussion, see chap. VIII of the Summit Report.

Rio Declaration on Environment and Development, UN Doc. A/CONF.151/26 (vol. I), 31 ILM 874 (1992) adopted on 14 June, 1992 at Rio de Janeiro, Brazil, 1992 United Nations Conference on Environment and Development/Rio Earth Summit

United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa, Paris, 14 October 1994.

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

World Charter for Nature, 28 October 1982, A/RES/37/7

ABSTRACT

Land use planning and management, has globally been credited with the success of capitalism in western democracies and equally identified as the missing link in nascent democracies i.e. Kenya. In that regard, this research paper is founded on the take off point that the existence of a comprehensive, specific and coordinated land use planning and management policy is a prerequisite in the fight against climate change, environmental degradation and promoting sustainable use of land and land-based resources.

In that regard, this research will examine the concept of environmental sustainability with a focus on implementation of land use planning and management regulations in Kenya. This approach will be geared at the purpose of assessing the effectiveness of land use regulations in promoting environmental sustainability. Consequently, this research seeks to analyse and seek to balance the fact that excessive emphasis on environmental sustainability using some policies could hurt the economic activities of a country through loss of jobs and societal mishaps while on the other hand too much emphasis on economic growth could result into health risks, global warming and environmental degradation within the society. Sustainable environment and growth can only be achieved through the integration of policies that connect the environment, the economy and the society.

Lastly, upon analysing the inadequacies and lacunas that exist in the availing legislation, the research paper proceeds to recap on some of the overarching concepts of land use planning and management as well the lessons learnt from counter-majoritarian approaches to land use adopted by judicial organs with regard to indigenous communities. Thereafter, the research paper drawing lessons from both the lacunas and the overarching issues discussed, offers some of the ideal recommendations that can be chiselled into the Kenyan legislation.

CHAPTER ONE

INTRODUCTION

1.0. Background

Nowadays, the increasingly foreseeable yet severe environmental, economic and social problems plaguing humanity, have had a ripple effect on the production systems of the world and thus raising concerns on the sustainability of all human activities on the biosphere. This observation is particularly exasperated by the finity of resources on which these activities draw sustenance from and in this case, more particularly, land and land-based resources are not only finite but significantly imbalanced.² Apart from being considered a key and essential factor of production, land and land-based resources are essential for the survival and the wellbeing of the human kind as it is the bedrock of all activities essential for its survival be they social, economic or environmental.³ However, in the recent past, the pressure on land use and over exploitation meted on land and attendant resources from these human activities, have birthed runaway environmental degradation manifested in planetary biodiversity loss, desertification, deforestation, degradation of the global hydrological cycle, alteration of the earths atmospheric chemistry among other ills afflicting humanity.⁴ All these, are happening at a planetary scale and thus of global concern to the whole of the human race, more particularly the loss of biodiversity. As a result, this aggregate of phenomena has precipitated what we now refer to as the sixth mass extinction which is punctuated

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¹ Ingi Runar Edvardsson, Tan Yigitcanlar & Surabhi Pancholi, 'Knowledge City Research and Practice under the Microscope: A Review of Empirical Findings' (2016) 14/4 *Knowledge Management Research & Practice* 537-564.

² Helmut Haberl *et al*, 'Finite Land Resources and Competition' in Seto Karen C., and Anette Reenberg (eds), *Rethinking Global Land Use in an Urban Era* (MIT Press, Cambridge, MA, 2014) 36.

³ See, Maria Craciun, 'Land: A Determining Factor for the Village as a Human Settlement' (2019) 2019 Rev Universitara Sociologie 186.

⁴ FAO, *The State of the World's Land and Water Resources for Food and Agriculture (SOLAW) – Managing Systems at Risk* (Food and Agriculture Organization of the United Nations, Rome and Earthscan, London 2011) Pp. 1 – 60.

majorly by rapid biodiversity loss and extinction of species, more so, plants with the main driving factor being these anthropogenic activities in which their sustainability has been called to question.⁵

Sustainable development remains an existential challenge with the fate of the future generations being in limbo owing to the present hazardous activities of the present generation and thus presenting a delicate balancing act for legislators and policy makers alike. Contemporary society is now faced with accumulated environmental odds pointing to sustainability crisis and thus bolstering the debate on the sustainable use of land and land-based resources to the global limelight. Some of these accumulated problems include but not limited to biodiversity loss, pollution, increased demand for the limited land and land-based resources, increased desertification, deforestation, climate refugees, insecurity and water scarcity among others attributed to climate change. All these represent competing human interests that must be balanced if humanity is to achieve the desired and lasting sustainable management of land and related or attendant resources. As a key factor of production, land supports a vast majority of livelihoods in Kenya in several sectors mainly agriculture and land-based resource exploitation.

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⁵ See generally, Elizabeth Kolbert, *The Sixth Extinction: An Unnatural History* (Henry Holt and Co., New York, 1st Edition 2014).

⁶ Muhammed Tawfiq Ladan, 'Environmental Law and Sustainable Land Use in Nigeria' in Nathalie J. Chalifour, Patricia Kameri-Mbote, Lin Heng Lye and John R. Nolon (eds), *Land Use Law for Sustainable Development*, (Cambridge university Press 2007) 5.

⁷ David L. Callies & Calvert G. Chipchase, 'Water Regulation, Land Use and the Environment' (2007) 30 *University of Hawai'i Law Review* 49; Philip Warburg & James M. McElfish Jr., 'Property Rights and Responsibilities: Nuisance, Land-Use Regulation, and Sustainable Use' (1994) 24 *Environmental Law Reporter News & Analysis* 10520.

⁸ Axelsson Robert *et al*, 'Sustainable Development and Sustainability: Landscape Approach as a Practical Interpretation of Principles and Implementation Concepts' (2012) 4/3 *Journal of Landscape Ecology* 5–30; Kirsten L. Findell, Berg Alexis, Gentine, Pierre *et al*, 'The Impact of Anthropogenic Land Use and Land Cover Change on Regional Climate Extremes (2017) 8 *Nat Commun* 989.

⁹ See, Nixon Sifuna, 'Public Regulation of the Use of Private Land: Opportunities and Challenges in Kenya' (2009) 5/1 *Law, Environment and Development Journal* 38; Oloo, Martin Opondo *et al*, 'Land Administration In Kenya: The Case For Leading and Managing Change' (2021) 11(5) *International Journal of Scientific and Research Publications* 86.

notwithstanding, land and conflict is at the heart of Kenya's integration fault lines, an emotive subject fuelled by its scarcity and its status as a capital asset essential in wealth creation and the overall welfare. ¹⁰ This conundrum, has precipitated increased competition that often end up in conflict and its frequency on the increase. ¹¹

The sources of these pressures to land and related resources vary and have a multiplier effect as manifested in environmental degradation, runaway global warming among other indicators. All these manifestations are as a result of a multiplier effect of population explosion and human activities such as poorly planned settlements, unsustainable agriculture, negative effects of urbanisation. The axis of all these anomalies rests with the principles of sound land administration that guarantee its sustainable use and utilisation. It is along this consensus that capitalism in the west works due to proper land administration as opposed to other spheres of the globe. This evident conclusion buttresses and anchors the basis of this research that sound land use management is integral for sustainable economic development and sustainable exploitation of finite land and land-based resources in Kenya.

1.1. Problem Statement

The need for orderly planning, sustainable and proper land management as a tool for averting environmental and ecological degradation cannot be gainsaid. Without a well-co-ordinated and sustainable land use and management policy, Kenya's finite and scarce land and land-based

¹⁰ See, Tom O. Ojienda, *Coveyancing: Principles and Practice* (LawAfrica Publishing, Nairobi 2010).

¹¹ Philip Onguny and Taylor Gillies, 'Land Conflict in Kenya: A Comprehensive Overview of Literature' (2019) *The East African Review* 1.

¹² T. S. Jayne & Milu Muyanga, 'Land Constraints in Kenya's Densely Populated Rural Areas: Implications for Food Policy and Institutional Reform' (2012) 4 *Food Security* 399−421; T.S. Jayne *et al*, 'Land Pressures, the Evolution of Farming Systems, and Development Strategies in Africa: A Synthesis' (2014) 48 *Food Policy* 1 − 17.

¹³ See generally, Hernando de Soto, *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*, (Basics Books, New York 2002).

resources are at risk of being depleted of its use hampered by environmental and ecological degradation in the wake of global warming and climate change as a result of negative human anthropogenic activities.

In Kenya, despite the enactment of the *Constitution of Kenya*, 2010, which has an elaborate chapter on the aspirations of Kenyans with regard to land and its sustainable use, it has not been translated into comprehensive legislation and policy to give effect to its spirit. As a result, Kenya's land and land-based resources have been continuously exposed to environmental and ecological degradation without regard to sustainable land use practices. This paper is therefore aimed at defending the view that there is need to recognise orderly and sustainable planning of land use in a bid to conserve valuable resources, protect the environment and limit the run-away uncontrolled growth. It also seeks to look into possible new approaches or sustainable incentive policies and/or approaches that try to raise revenues and promote particular land-use objectives. It is imperative for the legislature and other administrative and regulatory organs therefore, to come up with other relevant lands use policies and programs to regulate the sustainable exploitation of different forms of land resources and to preserve specific elements of biodiversity that are integral and indispensable for the survival of the humankind.

1.2. Main Objective of the Study

The main objective of this study is to assess the relevance and success of land use regulations in promoting environmental sustainability in land use in Kenya.

1.3. Specific Objective of the Study

- 1. To identify various minimum land use regulations requirements and the existing gaps in law within the Republic of Kenya.
- **2.** To examine the potential contribution of appropriate land use regulations to uncertainty reduction and the ecologically and socio-economically sustainable efficient use of land.
- **3.** To examine the potential negative effects of strict land use regulations on local environmental sustainability.
- **4.** To explore the appropriate lessons and best practices that can be incorporated in midwifing an appropriate and sustainable land use regulation regime in Kenya.

1.4. Research Questions

- 1. What are the various minimum land use regulations requirements and the existing gaps in law within the Republic of Kenya?
- **2.** What is the potential contribution of appropriate land use regulations to uncertainty reduction and the ecologically and socio-economically sustainable efficient use of land?
- **3.** Which are the potential negative effects of strict land use regulations on local environmental sustainability?
- **4.** What are the appropriate lessons and best practices that can be incorporated in midwifing an appropriate and sustainable land use regulation regime in Kenya?

1.5. Literature Review

The available literature points out to the fact that, in complex and inter-linked society afflicted by a number of societal problems, integrated decision making is at the centre of achieving sustainable development. This approach calls for incorporation of a multi-disciplinary approach i.e. social, economic, environmental and political considerations in the decision making process.¹⁴ This approach is exemplified by Ashford and Hall who argue that national governments need to integrate a wide array of this multi-disciplinary approach such as environmental concerns, health considerations and standard safety regulations with industrial, trade and employment policies into environmental decisions considering that such decisions build up on these components. ¹⁵ In further support and justification, they posit that an integrated approach has the ripple effect of midwifing incremental improvements, bolstering efficiency and overseeing disruptive breakthrough innovations that foster efficient energy use, better sustainable utilisation of resources and yielding meaningful employment translating to adequate purchasing power. ¹⁶ In essence, it is evident that the integration of a number of national objectives transcending the necessary disciplines opens up more space for discussion, consensus and problem solving. Further, chiselling integration into decision making is a catalyst towards innovation and technological advancements because of an expanded range of mutually reinforcing objectives that represent the available options towards achieving sustainability. That being the case, Ashford and Hall further postulate that in achieving the desired policy integration, governments can employ a number to tools at their disposal i.e. legal and policy instruments to regulation fostering innovation to research and development by

¹⁴ Julia E. Gardner, 'Decision Making for Sustainable Development: Selected Approaches to Environmental Assessment and Management' (1989) 9(4) *Environmental Impact Assessment Review* 337-366; John Hegarty & Regis Maubrey 'Decision Making for Sustainable Development' (2020) *Journal of Decision Systems* 1.

¹⁵ Nicholas A. Ashford and Ralph P. Hall, 'The Importance of Regulation-Induced Innovation for Sustainable Development (2011) 3 *Sustainability* 270-292, 282.

¹⁶ Ibid, 285.

removing regulatory barriers to achieving development, tax policies that inform sustainability among others.¹⁷ All these tools act as catalysis to bargaining and consensus before far-reaching and impactful decisions are made.¹⁸ This argument is cognisant of the fact that integration across all levels of government and stakeholders is also important. In that regard, being aware of the collegiality attendant thereto, there is need for a concerted effort to have both vertical and horizontal integration among these collegial institutions. In doing so, the risk of a vertical sabotage i.e. where an inferior government makes a decision that is detrimental to sustainability is averted as there is alignment in policy and legal regulations.¹⁹

Over the last three decades, available literature suggests that there has been a great shift to the integration of ecological, social and economic dimensions in environmental and planning law as a key policy and legal instrument in achieving sustainability.²⁰ This is cognisant of the fact that a quarter of a century ago, the Brundtland Report²¹ and Agenda 21²² renewed the understanding of sustainability and the central role of balancing the competing environmental, social and economic issues in preserving the global natural resources that are under significant strain. This is equally exemplified in the Johannesburg Declaration on Sustainable Development, signed in 2002 in

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Helene Gichenje *et al*, 'Opportunities and Limitations for Achieving Land Degradation-Neutrality through the Current Land-Use Policy Framework in Kenya' (2019) 8 *Land* 115.

²⁰ Campbell Scott, 'Green Cities, Growing Cities, Just Cities? Urban Planning and the Contradictions of Sustainable Development' (1996) 62 *Journal of the American Planning Association* 296, 312; Jepson Edward J, 'Sustainability and Planning: Diverse Concepts and Close Associations' (2001) 15 *Journal of Planning Literature* 499, 510; Naess, Petter, 'Urban Planning and Sustainable Development' (2001) 9 *European Planning Studies* 503-524.

²¹ Brundtland, G.H., 'Our Common Future - Call for Action' (1987) 14 Environmental Conservation 291–294.

²² UNCED (United Nations Conference on Environment and Development), 'Report of the United Nations Conference on Environment and Development' In *Proceedings of the United Nations Conference on Environment and Development, Rio de Janeiro, Brazil*, 3–14 June 1992

recognition of the long-term effects of some of the activities of humans on the biosphere and the impact on land and land-based resources as a global concern.²³

Prior to the Johannesburg Declaration, a similar clarion call for sustainable land use had been sounded by the international community during the U.N. Conference on Environment and Development (UNCED) in 1992,²⁴ where the Rio Declaration on Environment and Development²⁵ was endorsed and adopted Agenda 21 plan for guiding the global populace towards sustainability and sustainable development at the dawn of the 21st Century.²⁶ In that regard, three pillars of the sustainability agenda were agreed upon and crafted as greater economic efficiency, environmental protection and equity. All these pillars, have a futuristic approach seeking to achieve intergenerational equity and preserve the interests of the future generations.

It is therefore evident from the declaration that, in the wake of the global threat and the need to foster sustainable developments, nations of the global community are therefore required to align their domestic laws to the agreed global consensus as exemplified in treaties and conventions as well as customary international law.²⁷ In that regard, the holy grail of sustainable environmental solutions has been identified as the anchorage of laws and regulations into the law and acceptable global standards. Further, this approach is cognisant of the fact that owing to the challenges of jurisdiction, only municipal laws of member states may be invoked in order to enforce compliance

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²⁷ Id Principle 12

²³ World Resources Institute (WRI) 'Ecosystem and Human Well-Being – Synthesis' (*Knowledge Repository*, UNEP 2005) accessed https://wedocs.unep.org/20.500.11822/8701> 19 August, 2022.

²⁴ United Nations Conference on Environment and Development, Rio Declaration on the Environment and Development, U.N. Doc. A/CONF. 151/5/Rev.1 (1992), *reprinted in* 31 I.L.M. 874 (1992) [hereinafter Rio Declaration].

²⁵ Ibid.

²⁶ Report of the United Nations Conference on Environment and Development, U.N. GAOR, 46th Sess., Annex 2, Agenda Item 21, U.N. Doc. A/CONF. 151/26 (1992) [hereinafter Agenda 21].

considering that international law have no universal application or the requisite police power to superintend its compliance.

In furtherance of the above discussion, Agenda 21 is explicit on issues touching on the laws and regulations that have been put in place to suit conditions in specific states and which are among the most important instruments for transforming the desired environmental and development oriented policies into fruition.²⁸ This is also exemplified in the first principle of the 1992 Rio Declaration is that "human beings...are entitled to a healthy and productive life in harmony with nature."²⁹ Similarly, the *African Charter on Human and Peoples' Rights* states that: "All peoples shall have the right to a general satisfactory environment favourable to their development."³⁰ In harmony with the global consensus, Agenda 21 dramatically sets out that the relevance of land use law to achieving sustainable development is: "[a]n adjustment or even a fundamental reshaping of decision-making... may be necessary if environment and development is to be put at the [center] of economic and political decision-making, in effect achieving a full integration of these factors."³¹

With the above in mind, the available literature leaves no doubt that these global instruments have informed the development of the municipal laws in a number of countries. In support of this assertion, Nolon R. John argues that the Rio Declaration and Agenda 21 (Rion Accords) are affecting and informing the process of law making in all countries across all continents.³² In that regard, he observed that the presence of indicators of compliance with the international law

²⁸ Agenda 21, supra note 20, § 8.13.

²⁹ See supra note 20; Cottier, Thomas, *et al*, 'The Principle of Common Concern and Climate Change' (2014) 3:52 *Archiv Des Völkerrechts* 293–324.

³⁰ Organization of African Unity: Banjul Charter on Human and Peoples' Rights, CAB/Leg/6713/Rev, 5 (Jan. 7-19, 1981), 21 I.L.M. 59, 63 (1982), Article 24.

³¹ Agenda 21, *supra* note 29, § 8.2.

³² See generally, Nolon R. John, *Compendium of Land Use Law and Sustainable Development* (Cambridge University Press 2006).

traceable to municipal law is key evidence of the alignment of the global environmental legal system with the desired principles of sustainable development. He further notes that a survey of the most recent adoptions of land use laws in most countries is a reflection of the global consensus and a positive response to the sustainable development agenda initiatives.³³ It is also important to point from his discussion that even though there is a global trend on adoption of these laws, there are some differences and variances attributed to cultural, political, geographical and economic diversity across the world. Further, these initiatives range from framework laws, formal strategy or aspirational reflecting the priorities availing within that jurisdiction.

Notwithstanding the discussion above, literature related to land issues in developing countries and with specific focus to Sub-Saharan Africa, generally denounces the weakness or gaps that afflict land administration, land management and unsuitability of land legislation, limiting then the contribution of land as the motor development of this region of the world.³⁴ In illustrating this apparent criticism, Bierbaum, R *et al* expound that the extent to which these global consensus and aspirations have been implemented at the local level where majority of environmental decisions are made, there is still doubt as to its efficacy.³⁵ He notes that this doubt is in part attributable to the fact that there are challenges in grasping the exact import of the local policy and planning framework which are often unique to a locality or municipality. Similarly, Opp, Susan M., and Kyle L. Saunders in their treatise note that the kind of diversity that abound in the various local/municipal governments within nations, translates to limited knowledge on the extent to which various policy initiatives have been implemented or incorporated into legally binding and

³³ Ibid

³⁴ Byamugisha, F.F.K, 'Securing Africa's Land for Shared Prosperity' (2013) *The World Bank*, Washinton DC, USA; Durand-Lasserve, A. and Le Roy, E, 'La Situation foncière en Afrique à l'Horizon 2050 (2012) *Agence Française de Développement. İmprimerie de Montligeon, Fance* 155.

³⁵ Bierbaum, R *et al*, 'A Comprehensive Review of Climate Adaptation in the United States: More than Before, but Less than Needed' (2013) 18 *Mitigation and Adaptation Strategies for Global Change* 361406.

enforceable municipal schemes thus limiting appraisal on the extent of their permeability as envisaged in the parent global consensus.³⁶

Humanity is a going concern. It therefore means that one generation precedes another in a constant flux. However, this progression is significantly threatened as the actions of one generation impact the other. It is also upon this understanding that one generation comes to terms with the fact that they rely and depend on the same finite resources. In that regard, to safeguard this progression, there has emerged the concept of sustainable development where one generation strives to meet and satisfy its present needs without compromising the ability of the future generation to meet its own future needs. To that end therefore, there has been emerging concern that the approach should move from conventional regulation of land use systems to chiselling environmental sustainability regulations into the fabric of the law. ³⁷

In support of the above discussion, a kindred mind, Morishima expounds that chiselling sustainable environmental management principles offers the opportunity to take into account all the stakeholders whose activities impact on the environment unlike the erstwhile regulatory regime that only targeted land uses and land owners.³⁸ In further exposition of this Kaiser et al illustrates the importance of these laws in what he refers to as the 'land planning game' where there is continuous conflict among key players and various land use stakeholder thus precipitating tension.³⁹ It is therefore the view that environmental law plays a very vital role in the regulation

³⁶ Opp, Susan M., and Kyle L. Saunders, 'Pillar Talk: Local Sustainability Initiatives and Policies in the United States Finding Evidence of the 'Three E's': Economic Development, Environmental Protection, and Social Equity' (2013) 49 *Urban Affairs Review* 678, 717.

³⁷ Supra note 2.

³⁸ Morishima, A. 'Challenges of Environmental Law; Environmental Issues and their Implications to Jurisprudence' in Nathalie J. Chalifour, Patricia Kameri-Mbote, Lin Heng Lye and John R. Nolon (eds), Land *Use Law for Sustainable Development*, (Cambridge university Press 2007).

³⁹ Kaiser J. E., Godschalk, R.D and Chapin F. Jr., *Urban Land Use Planning* (University of Illinois Press, 4th edition 1995).

of these interests as it seeks to protect public interest from the extremes of either of the key players in the realm of land use. 40 Morishima further indicated that the bundle of regulations known as environmental law is desirable and unique as it covers all stakeholder whose activities have a bearing on the environment i.e. governments, private entities, non-governmental organisations and the ordinary citizenry. 41 In that regard, it is evident that owing to its unique and all encompassing nature, it can be customised to deal with specific impacts on the environment attributed to specific stakeholders. In that regard, customisation may oversee the departure from merely restricting land use to deal with greater challenges such as climate change. In summary of this idea Charles Okidi aptly notes that environmental law is required in midwifing a new legal area as a departure from conventional jurisprudence centring in human beings and property. In that regard is conceives environmental law as: -

"the ensemble of norms, rules, procedures and institutional arrangements found in common law, statutes and implementing regulations, case law, treaties and soft law instruments concerned with or relating to the protection, management and utilization of the environment, and natural resources for sustainable development or intergenerational equity."42

In further illustrating the antipodal relationship between environmental and law and conventional land use regulation, Charles Okidi⁴³ paints environmental law as a important tool underpinning environmental management and has its implementation tools as 'preservation', 'conservation' and 'sustainable development' all this signifying departure from the strictures of conventional

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² See, Okidi Charles Odidi, Concepts, Function and Structure of Environmental Law: The East Africa Regional Judicial Colloquium on Environmental Law held between the 10th and 14th of April 2007 at Sarova Whitesands Beach Resort, Mombasa, Kenya.

⁴³ Ibid.

jurisprudence. To further elaborate its unique features, he defines the concept of preservation, conservation and sustainable management as a regulatory tool aimed at achieving sustainable development by managing exploitation, avoiding wastage or keeping stock for the future generation. In essence, it balances the long term and the short term, goals, needs and practices.

In his further thesis, Charles Okidi traces the origin of the umbrella framework of laws known as environmental law and notes that they were developed in western countries in response to the failure of the sectoral laws or function specific statutes often scattered in several legislation. ⁴⁴ He further notes that as notable failures began emerging in the area of enforcement and administration of these laws, coupled with the fact that police powers were excisable only through state agencies, there was need for a regime of law that allowed the populace to enforce their environmental and human rights without the strictures of having to prove standing. In reflection of the Kenyan trajectory in the implementation of environmental laws, Charles Okidi further illustrates that as was the case in western countries, the situation was similar in Kenya till the enactment of The Environmental Management and Co-ordination Act, 1999 (EMCA). 45The enactment of this legislation empowered the quest for environmental justice and strengthened the horizontal enforcement of environmental rights. Nonetheless, Charles Okidi notes that the enactment of environmental laws does not in any way spell the death of sector specific laws. On the contrary he notes that the sector specific laws are to be irrigated by sustainable environmental management principles for sustainable development. In bringing this newfound consensus to bear, it is therefore expected that all the existing sectoral laws together with those to be enacted ought to be revised in

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⁴⁴ Ibid

⁴⁵ Okidi Charles Odidi, et al (eds) Environmental Governance in Kenya: Implementing the Framework Law (East African Educational Publishers, Nairobi, 2008).

order to bring them into harmony with the new conception of environmental law focusing on sustainable development. This position if further given statutory backing by section 148 of EMCA which provides that: -

"Any written law, in force immediately before coming into force of this Act, relating to the management of the environment shall have effect subject to modifications as may be necessary to give effect to this Act, and where the provisions of such law conflict with any provisions of this Act, the provisions of this Act shall prevail",

The foregoing section, is a testament to the importance of environmental law in sustainable management of resources in the wake of climate change and resource scarcity.

It is common ground that in a society of competing interests, there is bound to be conflict and as such, Robert Kibugi points out that there is need to reconcile the socio-economic needs that are inherent in the developmental agenda with environmental protection which centres on sustainability. He correctly notes that the challenge in reconciling these diametrically opposed ideas must be exemplified in the laws of the country which should balance the competing ideas. This reconciliation albeit challenging, ought to impact the decision-making habits of people and the impact that it may have on the environment i.e. sustainable land use practices or sustainable consumption of forest resources. Nathalie J. Chalifour *et al* in concurrence of the existing challenges in the implementation of environmental laws into the sector specific legislation notes that, in developing countries, land use and land use planning laws may exist in the desirable form but are at time plagued by weak or non-existent enforcement measures which in turn fails to

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⁴⁶ Robert Machatha Kibugi, 'Governing Land Use in Kenya: From Sectoral Fragmentation to Sustainable Integration of Law and Policy' (D Phil Thesis, Faculty of Law University of Ottawa, 2011).

⁴⁷ Ibid

translate the law in to the desired result and hampering the sustainable management of resources agenda..⁴⁸ similarly, as William Lafferty & Eivind Hovden note, policy integration requires an analytic framework bringing to for the right to development with environmental protection as peer rights which gives right to the obligation to fulfil both rights together without one shadowing another.⁴⁹ In conclusion, Lafferty and Hovden argue that in balancing these competing interests, there is need for both horizontal and vertical integration. They note that horizontal integration involves that harmonisation of applicable sectoral principles⁵⁰ while on the other hand, vertical integration denotes the trickle down of environmental norms into the sectoral laws and legislation.⁵¹ At this juncture, it can be deduced from the above literature that the perception of the role of the law in setting up a medium playing field for integration of environmental law policies into the land use planning framework cannot be gainsaid.⁵²

With the existential state of affairs characterised by increasingly severe manifestations of climate change and scarcity of resources, the reconciliation of the availing legal and regulatory concepts for sustainable development offers the only viable option for humanity at present. In support on this position Ogolla and Mugabe note that the kind of rights that are assigned to contemporary resources i.e. land tenure and land rights inform the impact that human activities have on the ecological cycle.⁵³ He further notes that the current conceptualisation of land rights may be a

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⁴⁸ Nathalie J. Chalifour *et al, Land Use Law for Sustainable Development* (Cambridge University Press, New York 2009) 1 - 5.

⁴⁹ See, William Lafferty & Eivind Hovden, 'Environmental Policy Integration: Towards and Analytical Framework (2003) 12(3) *Environmental Politics*, 1-22.

⁵⁰ See, William Lafferty & Eivind Hovden, 'Environmental Policy Integration: Towards and Analytical Framework (2003) 12(3) *Environmental Politics*, 1-22.

⁵¹ Ibid.

⁵² See the analysis in, Marie-Claire Cordonier Segger & Ashfaq Khalfan, *Sustainable Development Law: Principles, Practices, & Prospects* (New York: Oxford University Press, 2004) at 103-104.

⁵³ Ogolla, D. and Mugabe, J., 'Land Tenure Systems and Natural Resources Management' in Juma C. and Ogwang J. B. (eds) *Land We Trust: Environment, Private Property and Constitutional Change* (ACTS 1996).

catalyst that promotes harmful environmental practices or a cause for desirable practices that are useful to environmental regeneration. In that regard, the effect of bundles of rights assigned to a resource cannot be gainsaid as they are essential in environmental management and building into the sustainability agenda. ⁵⁴ Nonetheless, striking the necessary balance for these competing ideas has been elusive owing to the fact that there are often variety of demands and difficult concessions to be made in order to accommodate all stakeholders. Further, often environmental conservation measures have been super imposed on the existing sectoral legislation as an appendix rather that reforming the whole legislative or regulatory model to align with the global trends. ⁵⁵ In that regard Chalifour Nathalie notes that decision making processes are still informed by the sectoral legislation and philosophy with environmental legislation taking the back burner – in essence, implementation calls for an equal change in the mindset of the decision makers and the stakeholders. ⁵⁶

The length, depth and breath of environmental law is a concept that cannot be ignored. It transcends almost every conceivable facet of human existence. In that regard, its implementation may at times involve other disciplines i.e. as Patricia Kameri Mbote points out, different methods of implementation are employed including criminal law which is invoked in instances where the administrative channels have failed to yield the desired result.⁵⁷ She further notes that

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⁵⁴ Natural Resources Forum, 'How Important is Security of Land Tenure for Achieving Sustainable Development goals?' 31 (2007) *Natural Resources Forum* (2007) 238–240.

⁵⁵ Ogolla, D. and Mugabe, J., 'Land tenure systems and natural resources management' in Juma C. and Ogwang J. B. (eds) *Land We Trust: Environment, Private Property and Constitutional Change* (ACTS 1996).

⁵⁶ Chalifour Nathalie, 'Ecological Economics, Sustainable Land Use, and Policy Choices' in Nathalie Chalifour, P. Kameri-Mbote, L. Lye, & J. Nolon (eds.), *Land Use Law for Sustainable Development* (Cambridge: Cambridge University Press 2006) pp. 526-554.

⁵⁷ Kameri-Mbote P., 'Land-Tenure and Sustainable Environmental Management in Kenya' in Okidi Charles Odido., et al (eds) Environmental Governance in Kenya: Implementing the Framework Environmental Law (East African Educational Publishers, Nairobi 2008) Pp. 260-280; Patricia Kameri-Mbote, The Use of Criminal Law In Enforcing Environmental Law The East Africa Regional Judicial Colloquium on Environmental Law held between the 10th and14th of April 2007 at Sarova Whitesands Beach Resort, Mombasa, Kenya.

criminalisation of environmental violations is informed by the need to deter harm to others and foster compliance. In the same spirit, Patricia Kameri-Mbote further notes that although criminal law is often used in fostering compliance, it often takes a different trajectory i.e. some environmental violations are strict liability crimes that do not require the proof the there was mens rea or rather the intention to commit the crime.⁵⁸ She further notes that even international law provides for penal provisions and sanctions requiring member states i.e. in the Bamako Convention to legislate on penal sanctions with commensurate penalties to punish and deter undesired or conduct that is detrimental to environmental management.⁵⁹ She notes that for quite some time, Kenya has employed criminal sanctions in the management of the environment albeit being faced with dauting balancing challenges.⁶⁰

Aside the criminalisation of environmental violations, the constitutionalisation of environmental rights is an enforcement too that is equally gaining traction. Charles Okidi notes that the recognition of environmental rights gives the ordinary citizen the power, impetus and the authority to agitate for the protection of those rights and even seek redress for their violation. ⁶¹ With this development, some of the various international principles have been incorporated i.e. the provisions of the Rio Declaration chiselled into section 3(5) of EMCA.⁶²

⁵⁸ Kameri-Mbote, P., 'Land-Tenure and Sustainable Environmental Management in Kenya' in Okidi Charles Odido, et al (eds) Environmental Governance in Kenya: Implementing the Framework Environmental Law (East African Educational Publishers, Nairobi 2008) Pp. 260-280. ⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ Okidi. Charles Odido, Environment, Natural Resources and Sustainable Development in Kenya's Constitution-Making (Nairobi, ILEG and KLA, 2003); Professor Okidi. Concepts, Function and Structure of Environmental Law: The East Africa Regional Judicial Colloquium on Environmental Law held between the 10th and 14th of April 2007 at Sarova Whitesands Beach Resort, Mombasa, Kenya.

⁶² Rio Declaration on Environment and Development in Report of the United Nations Conference on Environment and Development (UNGA OR, A/CONF.151/26 (Vol. I), 12 August 1992).

To better understand the interrelationships between land use regulation and environmental sustainability this thesis will assess the environmental consequences of land use regulation. More specifically, it will empirically examine the selected causal links between land use regulations and environmental sustainability which have not been fully investigated. This inquiry will form the sub-stratum of the work's contribution to the currently existing body of knowledge and seek to inform the proper trajectory in carving out an appropriate and sustainable land use regime in the wake of the threat of climate change and biodiversity loss, a key land-based resource.

1.6. Justification of the Study

The legal, institutional and policy framework under which the environment in Kenya operates needs to be urgently reformed if the desired principles of sustainable development are to be realised. The continued underperformance of successive governments failing to come up with additional relevant lands use policies and programs to regulate the exploitation of different forms of land resources and to preserve specific elements of biodiversity is a clear indication that there is no nexus between the legal and institutional framework under which these policies can reconcile conservation of natural resources with economic development and the successful implementation of such programs.

It is for this reason therefore that this study aims at being a continuation of the significant contribution made by scholars on the different issues raised with regards to the need for sufficient financial resources, skilled people, clearly defined goals that are backed up by adequate legal powers. It also fosters the idea that in order to avert further environmental degradation, there is need for integration of a multi-disciplinary approach to achieve the desired result.

1.7. Significance of the Study

Before the enactment of EMCA in the year 2009, Kenya had no specific environmental legislation spelling out environmental rights, consequences of breach and enforcement mechanisms. In that regard, without a specific framework, any person aggrieved by an environmental violation invoked common law principles as well as the Law of Torts or Contracts to seek redress for the environmental law infractions.⁶³ This position was informed by the fact that environmental matters were considered to be the preserve of the private law realm and thus one was required to prove interest or harm suffered to be able to agitate under the public law sphere.⁶⁴ Further, environmental law and principles were scattered in various legislations and therefore no unifying legislation.⁶⁵ The resultant downside of this fragmentation is therefore that the implementation of the environmental rights became difficult.⁶⁶

To that end therefore, owing to the scant and famished literature on the implementation of environmental rights, this research is specifically momentous for legislative and policy makers in shaping the desired framework incorporating the concerns of all stakeholders. It seeks to contribute to the contemporary debate on the constant quest for the development of appropriate legislation, policy and guidelines aimed at reversing the effects of climate change and environmental degradation as well as fostering sustainable development.

⁶³ See Jackton Boma Ojwang *Environmental Law and Political Change in Kenya* (ACTS Press, African Centre for Technology Studies, 1992) 1 - 30; BD Ogolla 'Environmental Management Policy and Law' (1992) 22 *Environmental Policy and Law* 176.

⁶⁴ Ogolla (n 64 above) 176.

⁶⁵ Ogolla (n 64 above) 176.

⁶⁶ Charles Odido Okidi Review of the Policy Framework and Legal and Institutional Arrangement for the Management of Environment and Natural Resources in Kenya (1994) 6-13; Joel Kimutai Bosek, 'Implementing Environmental Rights in Kenya's New Constitutional Order: Prospects and Potential Challenges' (2014) 14 African Human Rights Law Journal 489-508.

1.8. Research Methodology

This desktop research, qualitative in nature will rely mainly on secondary data. These includes the analysis of law, environmental and books from other disciplines, journal articles, scholarly articles, statutes, subsidiary legislation, policy documents, case laws and internet sources. This analysis is momentous as it is the bedrock of the research showing contemporary discussion, existing gaps and possible solutions to the gaps and problems identified. This logical approach will also assist in identifying the legislative, policy and institutional gaps and the possible solutions to the problems.

The research will also take a best lesson approach and bench mark on the global best practices in other jurisdictions and weigh the successes discerned and how they can be implemented in Kenya or brought to fore to cure the gaps identified. Lastly, by mirroring the gaps identified from the analysis of laws and literature against the best lessons identified globally, the research will distil and suggest reforms in the law, legislative developments and enactments as recommendations on improving Kenya's legal framework on land use planning in order to promote sustainable development.

1.9. Chapter Breakdown

Chapter 1: Introduction

Chapter 1 presents a comprehensive background to the study, problem statement of the research, objective of the study, research questions, rationale and significance of the study, methodology driving the study and finally the literature review on Environmental laws and sustainability. It identifies and anchors the thematic areas of the research and serves as a guard rail for the research.

Chapter 2: Land in Kenya: An Overview

The understanding of the salient features underpinning the conceptualisation of land and land

rights is key. In that regard, this chapter will focus on laying the framework on land tenure system,

conceptualisation of land use regulations as well as how sustainable environmental management

regulations have been chiselled into the framework law. This will for the basis for an audit on the

availing legal framework in order to discern gaps.

Chapter 3: The Legal, Policy and Regulatory Framework on Environmental Governance

and Sustainable Development

Chapter three delves into the legal and regulatory framework on environmental governance and

sustainable development. The chapter conceptualizes the term 'environment' as defined differently

by the Draft International Covenant on Environment and Development, the European Commission, the

Environmental Management and Coordination Act (EMCA), the National Environment Policy and

the Constitution of Kenya. The chapter equally discusses international laws and standards on

environmental governance and sustainable development in a bid to come up with a criterion with

which to assess of national laws and regulations on the same. The chapter also provides an analysis

of the Environmental Management and Coordination Act, the National Environment Policy and

the Constitution of Kenya. A summary of the findings will thereafter be provided under this

chapter. In that regard, the chapter seeks to find and contextualise the current definition of land

and the legal framework availing for sustainable land use.

Chapter four: Over-arching Issues in Responsive Land Use Regulations

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This chapter provides an assessment of the data collected in the previous chapter and thereafter proceeds to discuss those said findings in a more detailed manner using international legislation, codes and standards as the basic lens. Any best practices shall also be identified in this chapter to inform the findings and recommendations of the study. In doing so, the chapter will seek to distil the best global practices availing on sustainable land use and thereon explore their applicability to Kenya.

Chapter five: Conclusion and Recommendations

This chapter shall give recommendations and conclusion of the study. It will collate all the lessons learnt from the previous chapter, summarise the gaps that exist in law with regard to sustainable land uses and thereon, taking into account lessons drawn from best practices, recommend how the Kenyan legal and policy framework may be improved.

CHAPTER TWO

LAND IN KENYA: AN OVERVIEW

2.0. Introduction

The Constitution of Kenya provides a very elaborate clause in the definition of land covering both

surface land, sub surface land, water bodies and resources as well as territorial seas among others.⁶⁷

Globally, land constitutes a critical factor of production and in that regard, Kenya's Vision 2030

blueprint describes its importance as a resource in the socio-economic and political development

of the country.⁶⁸ This position is further exemplified by the statistics that show that approximately

42% of Kenya's Gross Domestic Product (GDP) and 70% of all gainful employment derived from

land and land based resources i.e. natural resource exploitation agriculture and tourism among

others.69

The importance of land to the Kenyan populace cannot be gainsaid, Kenya's Land Policy

exemplifies the economic status of land, its multifarious uses as well as scarcity and the need for

sustainable and productive management for the present and the future generations.⁷⁰ The use of

land by Kenyans in wealth generation gives rise to the concept of 'land use' which vary in nature

depending on the economic activity in question. The use of land yields bundles of rights which are

often competing and belligerent and thus the need for a delicate balancing act.

⁶⁷ Constitution of Kenya, 2010, Article 260; Tom Ojienda, Land Law and Conveyancing: Principles and Practice (LawAfrica Publishing, Nairobi 2015) 6. Article 260 defines land as surface of the earth and the subsurface rock, any body of water on or under the surface, marine waters in the territorial sea and exclusive economic zones, natural

resources completely contained on or under the surface and the airspace above the surface.

⁶⁸ Kenya Vision 2030 Sector Progress Report, 'Marking 10 Years of Progress (2008-2018)' (Kenya Vision 2030, June 2018) < http://vision2030.go.ke/wp-content/uploads/2018/09/Kenya-Vision-2030-Sector-Progress-Project-Updates-June-2018.pdf accessed 22 August, 2018.

⁵⁹Ibid

⁷⁰ Republic of Kenya, 'Sessional Paper No. 3 of 2009 on National Land Policy' (Ministry of Lands 2009).

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The aim of this chapter therefor is to contextualise the land tenure systems in Kenya, land use, regulation and administration and this lay the foundation for discussing the concept of sustainable land use. It will show the underpinnings of Kenya's approach to land use and thereon lay basis for the discussion on the gaps that exist and how the same may be remedied. Further, the definition of some of the terms herein relating to land use, tenure and sustainable land management are essential in laying basis for discussions in the subsequent chapters.

2.1. An Overview of the Land Tenure Systems in Kenya

As earlier pointed out, there are certain specific rights that are assigned to land and gives the owner during the period in which those rights are assigned to use the land, dispose or otherwise deal with it. This is what is referred to as land tenure. It refers to the limits in which an individual can exploit the land, the resources on it to the exclusion of all the others.⁷¹ These bundle of rights that are attendant to the land tenure system, can be acquired either through contractual agreements, licences, leases or grant from the state.⁷² These tenure rights are instrumental in business as a key factor of production as these rights can be assigned, transferred and quantified. That being the case, these bundle of rights as well as an essential governance tool considering that the rights have attendant responsibilities spelt out in laws, restrictions, regulation and obligations.⁷³

With the promulgation of the Constitution of Kenya, 2010, land tenure is spelt out as tripartite i.e. private, public and community land.⁷⁴ It spells out public land as land that is vested collectively

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⁷¹ Migai Akech, 'Land, the Environment and the Courts in Kenya' (Environment and Land Law Reports, February 2006).

⁷² See, Mather Alexander Smith, *Land Use*, (Longman Group (FE) Limited, 1986).

⁷³ Olima W.H.A. and Obala L.M, 'The Effect of Existing Land Tenure Systems on Urban Land Development: A Case Study of Kenya's Secondary Towns, with Emphasis on Kisumu' (Elsevier science limited 1998).

⁷⁴ Constitution of Kenya, 2010, Article 61(2).

on the people of Kenya and includes those that are registered in the names of public institution.⁷⁵ Such public lands although collectively vested in the people of Kenya, is managed by the National Land Commission (NLC) as the trustee for the people of Kenya. In that regard, it flows that any land that does not fall under the tenure of community land ownership or private ownership is deemed public land. On the understanding of private land, it refers to land held by a private individual be it a natural or an artificial person.⁷⁶ Lastly, community land is the latest recognition and refers to land that is held and managed collectively by a given community which often share among other considerations, a common ancestry and culture.⁷⁷

2.2. The Concept of Security of Tenure for Land Rights

From the foregoing conceptualisation of land tenure, it is evident that the tenure rights provide some sort of comfort and certainty to allow economic benefit. This security rights that allow for economic benefit to be derived from land, is what is refereed to as security of tenure. In that regard, the government is under an obligation to protect these rights and thus an individual being a lawful proprietor of land cannot be evicted or arbitrarily be deprived of possession of the land. The concept of security of tenure is anchored both in the Constitution and the statutory framework that offspring from the provisions of the Constitution. Apart from the statutory and constitutional guarantees, customary law as well as societal norms equally play a key role in the land security

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⁷⁵ Collins Odote, 'The Impact of The New Constitution of Kenya and the National Land Policy on Community Conservation Objectives in Kenya: A case Study of the Northern Rangelands Trust' (October, 2010), www.abcg.org/action/document/download?document_id=699>accessed 23rd November 2015.

⁷⁶ Ibid

⁷⁷ Ibid; *Community Land Act*, No. 27 of 2016.

⁷⁸ UN Habitat, Secure Land Rights for All (United Nations 2008) < http://www.responsibleagroinvestment.org> accessed 26 February 2021.

⁷⁹ Darshini Mahadevia, 'Tenure Security and Urban Social Protection Links: India' (2010) 41 (4) *IDS Bulletin* http://agoralogin.research4life.org accessed 14 March 2021.

tenure system.⁸⁰ From the available literature therefore, land tenure security system is a key ingredient in land management and allows a person a sense of certainty, security and insulation from unwarranted interference with the enjoyment of his bundle of rights without due process being followed.⁸¹ These right are also positive in nature i.e. it affords the individual an opportunity to enforce his rights and to seek redress for violation.

It is also important to point out that land security tenure is distinguishable from land rights which denote the right of a registered proprietor to use the land for economic gain or otherwise. ⁸² In that regard, one may have complete security of tenure but constrained by the attendant rights and restrictions i.e. the person may not be allowed to sell, lease, sublet or develop the land while in other instances, one may not have security of tenure but free to sell or develop the land. ⁸³ That notwithstanding, there are certain cardinal elements that underpin land rights i.e. they are inherent in all tenures and include the right of use, right to transfer interest in the land and the right to have control on the usage of the land. ⁸⁴ All these constitute property rights of interest in land and are often registrable and assigned commercial value. ⁸⁵ Upon their registration, they become legally protected and are transferable by the proprietor to another person with or without restrictions depending on the nature of the attendant rights attaching and the tenure system. ⁸⁶ Further, these rights, allows the registered proprietor to made decisions aimed at achieving economic objectives

⁸⁰ Ibid

⁸¹ Ibid

⁸² Kenya Human Rights Commission, *Women and Land Rights in Kenya*, (1998); The International Women's Human Rights Clinic, 'Women's Land and Property Rights in Kenya—Moving Forward into A New Era of Equality: A Human Rights Report and Proposed Legislation' (2009) 40 *Georgetown Journal of International Law* 1.

⁸³ UN Habitat, Secure Land Rights for All (United Nations 2008) < http://www.responsibleagroinvestment.org> accessed 26 February 2021.

⁸⁴ See, Kenya Human Rights Commission, Women and Land Rights in Kenya, (1998).

 ⁸⁵ Ogolla, D. and Mugabe, J., 'Land Tenure Systems and Natural Resources Management' in Juma C. and Ogwang J.
 B. (eds) In Land We Trust: Environment, Private Property and Constitutional Change (ACTS 1996).
 86 Ibid

and deriving wealth from it. ⁸⁷ In essence, the concept of land rights and security of tenure is elastic and depends on a number of circumstances. This observation is exemplified by the observation by the UN-Habitat that security of tenure can either be by fact or by law and vary although the goal is similar i.e. to enable the user utilise the land without fear of eviction or arbitrary deprivation of property. ⁸⁸ This common objective is further backed by the understanding that security of tenure has to be backed by state authority against violation and provide for means of redress in cases of violation. ⁸⁹ In cases of tenure security discernible by fact, the unit of measure is often the concept of actual control of the property regardless of its legal status. ⁹⁰ This tenure by fact is often manifested in the length of time of the occupation, area of occupation or even the nature of occupation i.e. by a community by virtue of ancestry. ⁹¹ At times, this consensus is further corroborated by the conduct of administrative agencies through non-interference or acquiescence. ⁹²

Land tenure security is of monumental importance for the development of rights as well as for economic considerations. A key example to this assertion, is that good land security tenure allows and spurs investment considering that in instances where the security of tenure is wanting, investors may shy away. ⁹³ Further, in instances where the tenure security is wanting, it has the

⁸⁷ Robert Machatha Kibugi, 'Governing Land Use in Kenya: From Sectoral Fragmentation to Sustainable Integration of Law and Policy' (D. Phil, Thesis University of Ottawa, 2011); Oscar A. Angote, 'Environmental Litigation in Kenya: A Call for Reforms' (2019) 3(1) *Journal of Conflict Management and Sustainable Development* 88.

⁸⁸ UN Habitat, Secure Land Rights for All (United Nations 2008) < http://www.responsibleagroinvestment.org accessed 26 February 2014.

⁸⁹ Paul M. Syagga, 'Land Tenure in Slum Upgrading Projects' (Hal Open Science 2012) < http://halshs.archives-ouvertes.fr/docs/00/75/18/66/PDF/Paul Syagga - LAND TENURE IN SLUM UPGRADING.pdf accessed on 18 December 2013.

⁹⁰ Jean-Louis van Gelder, "What Tenure Security? The Case for a Tripartite View" (2010) 27(2) Land Use Policy 449-456.

⁹¹ Ibid

⁹² Ibid

⁹³ Daniel Kwabena Twerefou, Eric Osei-Assibey and Frank Agyire-Tettey, 'Land Tenure Security, Investments and the Environment in Ghana (2011) 3(6) *Journal of Development and Agricultural Economics* 261-273.

ripple effect of increasing the cost of credit where it is used as collateral because the risk is high.

This in effect increases the cost of doing business. 94

2.3. Role of Community and Indigenous Land Rights in Land Use Planning

In Kenya, like many other African nations, communities that share a common geographic location, culture and ancestry often undertake common social and economic activities. ⁹⁵ It is against this backdrop that the Constitution of Kenya recognises that communities as a common enterprise can own land for the purposes of furthering their common economic and social agendas. ⁹⁶ The recognition of community land rights in Kenya exemplifies a radical shift in the administration of land and brought it under the legal protection of Article 40 (3) of the Constitution which provides that: -

The right to property is protected under Article 40 of the Kenyan Constitution 2010. Article 40(3) states that the State shall not deprive a person of property of any description, or of any interest in, or right over, property of any description, unless the deprivation; (a) results from an acquisition of land or an interest in land or a conversion of an interest in land, or title to land, in accordance with Chapter Five; or (b) is for a public purpose or in the public interest and is carried out in accordance with this Constitution and any Act of Parliament that requires prompt payment in full, of just compensation to the person; and allows any person who has an interest in, or right over, that property a right of access to a court of law.⁹⁷

Since community land is based on a common ancestry and culture, community land rights tend to have their basis in the indigenous laws or customary laws of that community. These customary laws represent a complete system comprising social, political and economic order that regulate

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⁹⁴ Chisholm A. H. 'Land Use Choices in a Changing World' (1994) 5 Land Degradation & Rehabilitation 153-178.

⁹⁵ Olanya D. 'Indigenous Peoples and Customary Land Rights: Public Policy Discourse of Large-Scale Land Acquisitions in East Africa.' 10(6) *US-China Law Review*, 2013, 620-638.

⁹⁶ Ibid; Constitution of Kenya, 2010, Article 61(1).

⁹⁷ Constitution of Kenya, 2010, Article 40 (3).

daily enterprise. However, at the heat is this system is that community land access is based on the fact that one must be a member of the specific community or social group. 98 Further, the nature of access granted and the benefit one is entitled to is a preserve of the user rights of the specific community which can be found in their customary laws and norms.⁹⁹

On the political question of governance of the resources, these communities have admirative organs that are often the repositories of the power to grant user rights in line with the customary laws. 100 As such, there repositories, offer an introspect into the social and political dynamics in which these rights intersect. This approach brings to fore the need to understand community property rights in an African perspective as exemplified by H.W.O Okoth Ogeno in his treatise on African agrarian tenure systems in which he notes that: -

"If, as I believe is the case, the idea of a right merely signifies the manner in which claims are asserted in particular fact or jural contexts, or in respect of specific things or objects, then the existence of a right is best understood in terms of a power which society allocates to its various members to execute a particular range or quantum of functions in respect of any given subject matter." 101

From the foregoing, it is generally evident that land rights are clothed in two main elements i.e. Control over the natural resource itself and secondly, power to assert dominion over it to the exclusion of others. In Africa and particularly Kenya as evinced above, these twin concepts are captured by the dynamics that underpin social, cultural and political rules or norms of a society. 102

⁹⁸ Bentsi-Enchill, K, 'Do African Systems of Land Tenure Require a Special Terminology' (1965) 9(2) Journal of African Law 114-139; Bohannan, P., "1963' Land, Tenure and 'Land Tenure'", in D. Biebuyck (ed), African Agrarian Systems (Oxford University Press for the International African Institute, London 1963) Pp. 101-11. 99 Ibid

¹⁰⁰ Ibid

¹⁰¹ Okoth-Ogendo, H.W.O., 'Some Issues of Theory in the Study of Tenure Relations in African Agriculture' (1989) 59(1) *Africa: Journal of the International African Institute* 6-17.

¹⁰² Cousins, B., 'Potentials and Pitfalls of Communal Land Tenure Reform: Experience in Africa and Implications for South Africa' Unpublished Paper prepared for World Bank Conference on Land Governance in Support of the MDGs: Responding to new Challenges" 9-10 March 2009, Washington D.C. (on file with authors).

Therefore, in customary tenure, ownership and the right to assert dominion over it is not placed in the hands of an individual but rather on the community and a person's right to utilise the resource is constrained by the norms that inform such intercourse. ¹⁰³ That being the case, it can be deduced that in terms of land use planning, the merits or demerits of the model employed largely lies on the norms and cultural practices that are the bundle of rights that constitute customary land rights. As such, the only option of chiselling sustainability in the bundle of rights is an audit on the beneficial and harmful norms with a view of promoting and rewarding the beneficial practices and on the other hand, regulate harmful environmental practices.

2.4. A Recap on the Concept of Land Use in the Context of an Anthropogenic Era

Human activity on the biosphere is multifaceted spanning economic, social and political spheres with significant and noticeable effects on the environment. ¹⁰⁴ The results of these activities have at times been negative i.e. through environmental pollution and adverse effects of climate change. ¹⁰⁵ These activities on the biosphere, often involve the utilisation of land and land based resources, cumulatively, thus, these activities may be summed up as land use. More particularly, from a policy perspective, land use can be defined as social economic and cultural practices on land. ¹⁰⁶ These activities are often resources intensive and thus compete for the finite earth's resources leading to a resources strain in what has been termed the Anthropogenic era. ¹⁰⁷ The

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¹⁰³ Okoth-Ogendo 1989, supra note 101 at p. 11.

¹⁰⁴ Suthirat Kittipongvises *et al*, 'Greenhouse Gases and Energy Intensity of Granite Rock Mining Operations in Thailand: A Case of Industrial Rock-Construction' (2020) 18 (1) *Environmental and Climate Technologies* 2255; Edemilson J. Mantoam *et al*, 'Energy Demand and Greenhouse Gases Emissions in the Life Cycle of Tractors' (2016) 151 *Biosystems Engineering* 158-170.

¹⁰⁵ See generally, Dana Desonie, *Climate: Causes and Effects of Climate Change* (Chelsea House Publishers, New York, 2008).

¹⁰⁶ Ibid; Okoth-Ogendo 1989, supra note 101 at p. 11.

¹⁰⁷ Yoann Thomas *et al*, 'Oysters as Sentinels of Climate Variability and Climate Change in Coastal Ecosystems' (2018) 13 *Environmental Research Letters* 104009.

strain in resources is attributed to explosion in population as well as the diverse nature of land-based resources¹⁰⁸ which are often inter-linked and inter-dependent. The era has also been characterised by a change in the global atmospheric chemistry and increase in atmospheric averages.¹⁰⁹ That being the case, the global community has come together to reverse and mitigate on the negative effects of these changes and thus in common accord, agreed on a conceited effort to implement sustainable land use among other parameters aimed at keeping the planet habitable.¹¹⁰ This understanding therefore informs the core of this research that land use ought to be discussed and sound planning and management policies implemented in the context of the holistic approach from an Anthropogenic perspective characterised by severe resource strain.

2.5. An Audit of Land Use Regulation: Reinventing the Concept?

Picking up from the foregoing definition and conceptualisation of land use, regulations are generally defined as '...enforceable assignment and reassignment of rights.' ¹¹¹ In essence, regulations defined and bring a dichotomy between permissible and impermissible actions in a human environment and guides the discourse of human interaction. In that regard, land use regulation flowing from the foregoing definition, includes the primary tools of control that are employed in the management of land i.e. spatial management, access, user rights and limitations i.e. on riparian reserves. This represents a limitation to an individual land user right. In that regard, even though an individual may have an opportunity or a right to exploit the land and the resources in it, such a person is not an island and does not operate in a vacuum and thus bound by rules and regulations that are meant to protect others as well as the environment in general. This brings in

¹⁰⁸ Constitution of Kenya, 2010, Article 260

¹⁰⁹ See, generally, Russel D. Thompson & Allen Perry (Eds.), *Applied Climatology: Principles and Practice* (Routledge Publishing, 1997).

¹¹⁰ See generally, Carl Sagan, Pale Blue Dot: A Vision of Human Future in Space (Ballantine Books Edition, 1997).

¹¹¹ Hopkins L. D., *Urban Development: The Logic of Making Plans* (Island Press, Washington, DC 2001).

the question of government control as an extension of police power as a tool of administration.

These rules, regulations and interventions vary depending on the circumstances and the situation availing.

In the urban sphere, these land regulations are often referred to as urban control or development regulations and dictate the nature of development that can be undertaken on a specific land and also the limitations taking the interests of other key actors into place. ¹¹² With this developmental control tool in mind, local governments are able to move beyond the traditional zoning laws to manage other aspects of land use within their territorial jurisdiction to incorporate desired environmental principles or other considerations. ¹¹³ The thrust behind the considerations employed in a specific regulation vary from one place to another depending on the specific need, challenges faced and the problem to be resolved. This shapes the approach and the tool employed in the form of land use regulation.

A review of the history and the available literature on land use regulations show that public interest has been the driving factor of most of government interventions in land use with the desire to eliminate harmful practices while promoting desirable and sustainable practices. ¹¹⁴ Secondly, owing to the realisation that some of the human activities on the biosphere have negative impacts on the global environment and thus the common concern of the human kind, some of these regulations have focused on instilling the desired environmental practices into legislation. ¹¹⁵ On

¹¹² Goodfellow, T. (2014). Planning and Development Regulation Amid Rapid Urban Growth: Explaining divergent Trajectories in Africa (2014) 48 *Geoforum* Pp. 83-93.

¹¹³ Platt, R. H., *Land Use and Society: Geography, Law, and Public Policy* (Island Press Washington, DC: 1996); Rudel, T. K., *Situations and Strategies in American Land Use Planning*, (Cambridge University Press, New York 1989).

¹¹⁴ Stull, W. J., 'Community Environment, Zoning, and the Market Value of Single-Family Homes' (1975) 18(2) *Journal of Law and Economics* 535–558.

¹¹⁵ Randolph, J., Environmental Land Use Planning and Management, (Island Press, Washington D.C. 2004).

the other hand, land being the main factor of production, a number of economic factors that touch on supply and demand, often piggy back on the policies attendant to land use and in that regard, governments have viewed it as a way of controlling market dynamics i.e. in making goods and services available to the common public. ¹¹⁶ Lasty, related to the economic aspect, land use regulations have been used as a tool to bring certainty to land transactions and thus complementing the role of the security of tenure and this making the cost of doing business certain and affordable by reducing uncertainty in transactions. ¹¹⁷

A key example that demonstrates a departure from the traditional zoning laws that were merely focused on negative externalities, the newfound planning spectrum is geared towards informing certain developmental patterns that take into account various disciplines and issues. In that regard, various theoretical conceptions have been developed backed by empirical data aimed at bolstering the effectiveness of these regulations in seeding the expected outcome in terms of developmental patterns or environmental concerns.

The contention behind land use regulation among communities and particularly those facing new development projects i.e. indigenous communities cannot be gainsaid. It involves delicate balancing acts and trade-offs between the rights of individuals and public interest that focus on the conservation of the environment as well as a balance between the rights of the future and present generations. It is often argued that land use regulation as a tool of environmental protection is a key tool of regulating the encroachments into forests, open places, degradation of wetlands among

¹¹⁶ Burchell, R. W., A. Downs, and B. McCann, (eds.), *Sprawl costs: Economic Impacts of Unchecked Development*, (Island Press Washington, DC 2005).

¹¹⁷ Dawkins, C. J., 'Transaction Costs and the Land Use Planning Process (2000) 14(4) *Journal of Planning Literature* 507–518.

¹¹⁸ Warden-Fernandez, Janeth, 'Indigenous Communities Rights and Mineral Development,' (2005) 23 (4) *Journal of Energy & Natural Resources Law*, 395-426.

other environmental vices that negate the newfound approach of land regulation in the wake of the anthropocentric environmental and climate change concerns. This is on the premise that lack of land use regulation or uncontrolled development often results in degradation of the natural environment, and hampering of long-term economic growth. On the other hand critics of land use regulation argue that the concept of overblown thus further fuelling the already high stakes in the debate. 119

That being the case, with the competing interests at stake, it behoves policy makes and legislators to ward off the invitation to attribute the 'irregular' land use statistics to market failure that in turn opens floodgates for stringent land use regulations that may stifle functional market forces. In that regard, with the emergent concept of judicial environmentalism, it falls on these critics to identify the sources of these market failures and the adverse effects of mega developments and be able to address them from their foundational origins. ¹²⁰ In that regard, it follows that in getting to the genesis of the problem complained of, there must be a deliberate effort to balance between the interests in private and public property as well as the attendant socio-political interests.

On the specifics and models of land use regulations, it is not in doubt that it can take different forms. From the foregoing discussion, the first model it can take is the traditional quintessential approach of control through urban zoning regulations, user density restriction as well as other methods that involve a direct control of the use of land. Even thought over time this approach has been heralded as effective, they have been faulted for resulting in social welfare imbalances such as lack of affordable housing and inefficient land use patterns that do not respond to the evolving

¹¹⁹ Wu, J., and Cho, S., 'The Effect of Local Land Use Regulations on Urban Development in the Western United States (2007) 37 *Regional Science and Urban Economics* 69–86.

¹²⁰ Gathii, James Thuo, 'Saving the Serengeti: Africa's New International Judicial Environmentalism' (2016) 16 (2) *Chicago Journal of International Law*, 386-438.

land use needs. ¹²¹ On the other hand, taking into account the market dynamics and the need for incentive and reward, policies have been developed in a manner that takes advantage of market forces in influencing decisions. These incentives promote voluntary compliance and on the other hand assist regulators in bolstering the desired result and curing the shortcomings of the traditional zoning approach. ¹²² Nonetheless, for effective land use regulations, a hybrid of these two approaches ought to be employed in order to take advantages of each and for complementary synergies.

2.6. Land Use Administration as a Tool for Sustainable Development

For a long time, Kenya has had a fragmented land regulation and registration regime. This position persisted until the promulgation of the *Constitution of Kenya*, 2010 and soon thereafter, in the year, 2012, there was a consolidation of a number of procedural and substantive land statutes. ¹²³ However, this consolidation did not do much to alleviate the situation i.e. alleviate the fragmentation of land use administration regime which remains scattered in various legislations. Some of these legislations are sectoral in nature and include *County Government Act*, No. 17 of 2012, *The Physical and Land Use Planning Act*, No. 13 of 2019, *Agriculture and Food Authority Act*, No. 13 of 2013, *The Forest Conservation and Management Act*, No. 34 of 2016, *The Wildlife Conservation and Management Act*, No. 47 of 2013, the *Water Act*, No. 43 of 2016, the *Mining Act*, No. 12 of 2016 and the *National Museums and Heritage Act*, No. 6 of 2006.

¹²¹ Cheshire P., and Sheppard S., 'The Welfare Economics of Land Use Planning (2002) 52 *Journal of Urban Economics* 242–69.

¹²² Wu J., and Irwin, E., 'Optimal Land Development with Endogenous Environmental Amenities (2008) 90 *American Journal of Agricultural Economics*, 232–248.

¹²³ Tom Ojienda, Land Law and Conveyancing: Principles and Practice (LawAfrica Publishing, Nairobi 2015) 6.

These statutes are sector specific and provide for the sector specific land use management and environmental protection. To complement these instruments, a number of subsidiary legislations have been enacted to prescribe land use principles and bolster sustainable environmental protection. Sticking out of this myriad of rules and legislations, is the Sessional Paper No. 3 of 2009 which has ingrained in the existing framework the need for a National Land Use Policy. Complementary to this manifestation, are the statutes that were enacted after the promulgation of the Constitution of Kenya, 2010 i.e. *Urban Areas and cities Act*, 2011; *County Government Act*, 2012; *Land Act*, 2012; *Land Registration Act*, 2012; *National Land Commission Act*, 2012; *Land (Amendment) Act*, 2016; and *Community Land Act*, 2015 have ingrained provisions on land use management and have been enacted on the backdrop of environmental activism and the global awareness on climate change.

This global perspective did not escape the drafter of the Constitution of Kenya, 2010 which is evinced by the provisions of Article 60 under chapter five dealing with land and environment. The Constitution provides that that land in Kenya is to be managed equitably, efficiently, productively and sustainably. To further give effect to these provisions, the Constitution under articles 66, 68 and 69 provides for the regulation of land uses as well as reading the constitutional provisions into the sectoral laws for sustainable development and conservation of finite natural resources. Further, considering that these natural resources are scarce, the Constitution requires that they be shared equitably. From an audit perspective, while there have been considerable results as discussed above, the implementation has been hampered by lack of coordination at the institutional level and a harmonised approach on the provisions of statute. This is exemplified by the conflict in the provisions of a number of statutes i.e. on management of riparian land. ¹²⁴ In the said case, at

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¹²⁴ Milimani Splendor Management Limited v National Environment Management Authority & 4 others [2019] eKLR.

paragraph 48 of the judgement, Justice Kossy Bor noted that that there are conflicting laws with regard to the measurement of riparian reserves and therefore the need for parliament to remedy this conflict through appropriate reform. To that end therefore the clamour for a national land use policy has its roots in the need to provide the much-needed coordination of institutions that implement various land use planning regulations and measures across all sectors of relevance.¹²⁵

2.7. Sustainable Land Use from a Land Tenure Approach

A holistic analysis of the land use and land tenure dynamics, show that there is an apparent disjoint on the end goal of these concepts. However, this apparent disjoint and conflict is not irredeemable. There is a possibility of a mutual relationship between land tenure and land use. ¹²⁶ In that regard, with the balancing of interests, these two are mutually complementary and with a sound policy framework, can contribute towards the sustainable use and management of natural resources. On the other hand, while private rights are inherently believed to create incentives for resource mobilisation, without a sound regulatory framework, they can be a cause for resource erosion especially where there is uncontrolled exploitation of natural resourced driven by the need for profit without regard to the environment. With this existential reality in mind, an appropriate land use policy regime mediates these competing interests and is critical for sustainable development. ¹²⁷ In essence, these regulations underscore that rights in land are not absolute and that a right holder needs to utilise his land in a manner that is not prejudicial to other or the environment. ¹²⁸ In

¹²⁵ See, Republic of Kenya, Ministry of Lands and Physical Planning: Sessional Paper, No. 1 of 2017 on National Land Use Policy.

¹²⁶ See, Patricia Kameri-Mbote, 'Land Tenure, Land Use, and Sustainability in Kenya: Toward Innovative Use of Property Rights in Wildlife Management' in Nathalie J. Chalifour *et al, Land Use Law for Sustainable Development* (Cambridge University Press, 2009).

¹²⁷ Patricia Kameri-Mbote, 'Land Tenure and Sustainable Environmental Management in Kenya', in Charles O. Okidi, Patricia Kameri-Mbote and Migai Akech, *Environmental Governance in Kenya: Implementing the Framework Law*, (East Africa Eduvational Publishers LTD, 2008)

¹²⁸ ibid

essence, these land controls exist mainly to curb the misuse of land that is injurious to other and an the environment, incentivise land use that promotes sustainable development and discourage disuse or promote reuse of otherwise abandoned land.¹²⁹

Taking the debate further on the reconciliation between land use and land tenure, it is evident that since land tenure determines land access and the related land-based resources, in a continuum of sustainable development, it is a key tool in the environmental conservation and management agenda. ¹³⁰ As a control tool, land tenure also determines the range of persons controlling and managing resources and thus can be used as a limiting factor for undesired actors. ¹³¹ This is further buttressed by the fact that since any ecosystem is vast and delicate, the tenure system can be used to control activities on the land and thus contribute to sustainable management in the process of exploiting the resources therein. ¹³² A key example of this control through the use of the land tenure system is the debate on whether squatting and spontaneous land settlements are compatible with sound practices on sustainable land use. ¹³³ These spontaneous settlements illustrate the conundrum brough about by the lack of fiscal planning as a result of failure of the tenure system and thus impacting on land use and environmental management in general. ¹³⁴ Crystalising from the foregoing analysis it is evident that the concepts are interlinked and interdependent.

¹²⁹ Charles Abrams et all., Urban Land Problems and Policies, Housing and Town and Country Planning Bulletin 7, United Nations, (1953) as quoted by Stuart Chapin F. Jr., *Urban Land Use Planning* (2nd edition), University of Illinois Press, (1965).

¹³⁰ Ogolla, D. and Mugabe, J., 'Land tenure systems and natural resources management' in Juma C. and Ojwang J. B. (eds) *In Land We Trust: Environment, Private Property And Constitutional Change* (ACTS 1996)

¹³¹ Patricia Kameri-Mbote, 'Land Tenure and Sustainable Environmental Management in Kenya', in Charles O. Okidi, Patricia Kameri-Mbote and Migai Akech, *Environmental Governance in Kenya: Implementing the Framework Law*, (East Africa Educational Publishers LTD, 2008).

¹³² Ibid

¹³³ Kivutha Kibwana, 'Land Tenure, Spontaneous Settlement and Environmental Management in Kenya" in Smokin C. Wanjala (ed.), *Essay on Land Law: The Reform Debate in Kenya* (University of Nairobi Press, Nairobi 2000) P. 105.

¹³⁴ Ibid

2.8 Regulating Land Use for Sustainable Environmental Management

The sum total of the foregoing discussion is that land use regulation is an integral concept of sustainable environmental management. The limitation on the use acts as a check and safeguard against the excess of unbridled use that arise from a land tenure system that would otherwise give the owner unlimited right of use. The justification for this control has been the use of police power by the state which is often exercised under the auspices of social contract on the one hand and eminent domain on the extreme end. 135 These concepts are the residual powers that are inherent in the state and are used in the control of the activities of its citizenry. They have their basic conceptions in the idea of the social contract where certain powers are given to the common sovereign in order to facilitate law and order. 136 The development control powers constitute the police powers that are employed by the state to superintend and ingrain sustainable development for environmental conservation and management. On the other hand, eminent domain refers to the power of the state to compulsorily acquire private property for public purposes. ¹³⁷ All these concepts bring to for the fact that ownership is constrained and that there is no absolute ownership of land without the attendant restrictions. ¹³⁸ Finally, as a natural consequence, when police power is employed, there is bound to be harm and inconvenience, however, where such harm or inconvenience is as a result of lawful action, then it is valid i.e. in cases of compulsory acquisition, it is limited to public need. 139 Further, as a general principle, the subject of reasonableness takes

¹³⁵ Ellen Frankel Paul, *Property Rights and Eminent Domain*, (Transaction Publishers, 1987)

¹³⁶ KAPI Limited & another v Pyrethrum Board of Kenya [2013] eKLR.

¹³⁷ Patricia Kameri-Mbote, 'Land Tenure and Sustainable Environmental Management in Kenya' in Charles O. Okidi, Patricia Kameri-Mbote and Migai Akech, *Environmental Governance in Kenya: Implementing the Framework Law*, (East Africa Educational Publishers LTD, 2008).

¹³⁸ Ibid; Eric V. J. Makokha & 4 others v Lawrence Sagini & 2 others [1994] seKLR

¹³⁹ Albert Mumma, 'The Continuing Role of Common Law in Sustainable Development', in Charles O. Okidi, Patricia Kameri-Mbote and Migai Akech, *Environmental Governance in Kenya: Implementing the Framework Law*, (East Africa Educational Publishers 2008).

centre stage in determining the legality of police power and underscoring whether the same is arbitrary or not and whether the restriction is commensurate to the desired result. ¹⁴⁰

In conclusion, the role of land use management in achieving sustainability in development cannit be gainsaid. The example of informal settlements where there is irresponsible development without due regard to the environment is compounded by the fact that in such settlements, there is always the threat of eviction due to lack of tenure rights. ¹⁴¹ This being the case, the application of environmental law is somewhat limited because of the tenure systems that at times insulates the application of certain regulations for public good. ¹⁴² With the enactment of the Constitution of Kenya, 2010, this position no longer holds since police power is now constitutionally entrenched under article 66(1) of the Constitution. The state thus has the responsibility or regulating land use to ensure sustainable development and environmental conservation.

2.9. Conclusion

Emerging from the above discussion, it is evident that there is an undeniable relationship between land tenure and land use. It is evident that at present, from the available literature on the subject, that the outreach of environmental law into the vistas of protected land tenure systems is limited owing to the prominence of protected bundles of rights attached to land tenure systems. ¹⁴³ In that regard, there is an evident need to link environmental law in the nature of land use control with the land tenure regime as to allow penetration of control measures in order to combat

¹⁴⁰ Robert R. Wright, *Land Use in a Nutshell*, (West Publishing Company, College & School Division, 1994).

¹⁴¹ Kivutha Kibwana, 'Land Tenure, Spontaneous Settlement and Environmental Management in Kenya' in Smokin C. Wanjala (ed), *Essay on Land Law: The Reform Debate in Kenya*, (University of Nairobi Press, Nairobi 2000) P. 105

¹⁴² Ibid

¹⁴³ Simion Swakey Ole Kaapei & 89 others v Commissioner of Lands & 7 others [2014] eKLR.

environmental degradation.¹⁴⁴ This concept has been encapsulated in the emergent concept of judicial environmentalism that embodies a counter-majoritarian approach to environmental concerns arising from land use and developmental endeavours.¹⁴⁵ Considering that sustainable land use is a critical factor that affects larger ecosystems transcending boundaries backs the need for a holistic approach to tame environmental degradation.¹⁴⁶ This conclusion has been exemplified in environmental litigation that bring out the frailties of the environment and the gap posed by the lack of a co-ordinated land use mechanism.¹⁴⁷ This chapter therefore comes a preliminary conclusion that there is no coordination and mutuality between land use in Kenya and land tenure systems thus limiting the application of environmental law controls to tame environmental degradation and promote sustainable use of land and land based resources. Chapter three will further this discussion by looking at the specific legislations that obtain and as a result, either approve or disapproved of this preliminary finding from existing literature.

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¹⁴⁴ Save Lamu & 5 others v National Environmental Management Authority (NEMA) & another [2019] eKLR.

¹⁴⁵ See, James T. Gathii, 'Saving the Serengeti: Africa's New International Judicial Environmentalism' (2016) 16/2 *Chicago Journal of International Law* 386.

¹⁴⁶ See, Luo Council of Elders & 7 others v Cabinet Secretary Water & Irrigation & 13 others [2017] eKLR.

¹⁴⁶ Isaack E. N. Okero & 4 Others v Attorney General of the Republic of Uganda (Sued on behalf of the Republic of Uganda) & 2 others, The East African Court of Justice at Arusha, Reference Number 14 of 2020 filed on 22nd May, 2020.

¹⁴⁷ See, Friends of Lake Turkana Trust v Attorney General & 2 others [2014] eKLR; Isaack E. N. Okero & 4 Others v Attorney General of the Republic of Uganda (Sued on behalf of the Republic of Uganda) & 2 others, The East African Court of Justice at Arusha, Reference Number 14 of 2020 filed on 22nd May, 2020; Luo Council of Elders & 7 others v Cabinet Secretary Water & Irrigation & 13 others [2017] eKLR; Republic v National Land Commission; Lake Naivasha Riparian Association (Interested Party) Ex-Parte Geoffrey Muhoro [2020] eKLR

CHAPTER THREE

LEGAL, POLICY AND REGULATORY FRAMEWORK ON ENVIRONMENTAL GOVERNANCE AND SUSTAINABLE DEVELOPMENT

3.0. Introduction

Environmental legislation in Kenya is a relatively new entrant in Kenya's legal and constitutional order that came to the limelight with the enactment of the Environmental Management and Coordination Act, 1999 and later, the Constitution of Kenya, 2010. 148 As such, its development is still nascent and evolving in light of the 2010 constitutional dispensation guided by among others, the principle of sustainable development and entrenchment of environmental protection in the bill of rights. 149 Previously, environmental conservation or protection measures were fragmented and contained in various legislation and thus implementation of environmental rights as a means to sustainable development was elusive. 150 Therefore, owing to these historical accidents on the fragmented legal framework, for a long time, Kenya has not had a coordinated and comprehensive land use legislation of policy entrenching sustainable development. ¹⁵¹ This, coupled with the

¹⁴⁸ Joel Kimutai Bosek, 'Implementing Environmental Rights in Kenya's New Constitutional Order: Prospects and Potential Challenges' (2014) 14 African Human Rights Law Journal 489 - 508; Jackton Boma Ojwang, 'Environmental law and political change in Kenya (1992); BD Ogolla 'Environmental Management Policy and Law' (1992) 22 Environmental Policy and Law 176.

¹⁴⁹ Benard Sang 'Tending Towards Greater Eco-protection in Kenya: Public Interest Environmental Litigation and its Prospects within the New Constitutional Order' (2013) 57 Journal of African Law 29-30; Constitution of Kenya, 2010, Article 43.

¹⁵⁰ Charles Odido Okidi, 'Review of the Policy Framework and Legal and Institutional Arrangement for the Management of Environment and Natural Resources in Kenya (1994) 6-13; Water Act, 2006; Kenya Wildlife Service Act, 1989; Forests Act, 2005; Wangari Maathai & 2 Others v City Council of Nairobi & 2 Others (1994) 1 KLR (E&L); Nairobi Golf Hotels (Kenya) Ltd v Pelican Engineering and Construction Co. Ltd HCCC 706 of 1997; Rodgers Muema Nzioka & 2 Others v Tiomin Kenya Limited HCCC 97 of 2001; Mbole Nzomo Anthony & 3 Others v Shreejii Enterprises Ltd & 4 Others HC, Civil Suit 265 of 2010; Kenya Bus Service Ltd & 2 Others v The Attorney-General & 2 Others (2005) eKLR.

¹⁵¹ A. Angwenyi 'An Overview of the Environmental Management and Co-ordination Act' in Charles Odido Okidi et al, (eds) Environmental Governance in Kenya: Implementing the Framework Law (University of Nairobi Press, 2008) 143.

available literature, informed the finding in chapter two above that Kenya's land tenure and user rights have superseded and overshadowed the conservation efforts and thus stifled the development of sustainable land use regime.

In that regard, the aim of this chapter is to pick up from chapter two and the preliminary finding that the from the available literature and the historical accidents spanning the colonial and post-colonial administration, the development of the legal and policy regime on sustainable land use and management has been famished. Thus, to achieve the objective of the research on pinpointing out the key and specific deficiencies and seeking to answer the question on the legal gaps that exist, the chapter will analyse the obtaining legal and policy framework in Kenya touching on sustainable land use and thereon either affirm or dismiss the preliminary finding or conclusion in chapter one that Kenya lacks a comprehensive legal and policy framework on sustainable land use and management that is a key ingredient in environmental conservation and sustainable development.

3.1. Conceptualizing Environment

The term 'environment' is defined as all the physical, chemical and biological factors external to a person, and all the related behaviour¹⁵². The *Draft International Covenant on Environment and Development* ¹⁵³defines environment to mean "the totality of nature and natural resources, including the cultural heritage and infrastructure essential for social-economic activities." ¹⁵⁴

¹⁵² World Health Organization, *Preventing Disease Through Healthy Environments* (World Health Organization, Geneva, 2006).

¹⁵³ 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.

¹⁵⁴ 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, section 2.

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..." The European Commission defines the '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'. Close to home, the *Environmental Management and Coordination Act* (EMCA)¹⁵⁷, 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. Is

The National Environment Policy¹⁵⁹ defines environment as; "a *broad term representing the totality of the surrounding such as plants, animals microorganisms, socio economic and cultural factors. It includes the physical factors of the surroundings of human beings such as land, water, atmosphere, sound, odour, taste, the biological factors of animals and plants and the social factors of aesthetics and includes both the natural and the built environment".*

In line with the dictates of the Constitution of Kenya, 2010, the National Land Policy of 2009 echoes the principles of land use in Kenya i.e. that land shall be held, used and managed in an

¹⁵⁵ Webster's *New World Dictionary* (Cleveland College, 3rd ed Cleveland, 1998), p. 454; See also Bernie P. *et al*, *International Law & the Environment*, (Oxford University Press, 3rd ed., Oxford, 2009) p. 3.

¹⁵⁶ 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).

¹⁵⁷ Environmental Management and Coordination Act (EMCA), Act No. 8 of 1999, Laws of Kenya; See also Environmental Management and Coordination (Amendment) Act, 2015).

¹⁵⁸ Ibid

¹⁵⁹National Environment Policy, Sessional Paper No. 10 of 2014 on the National Environment Policy (2014) *Ministry of Environment Water and Natural Resources*, Republic of Kenya.

equitable manner, efficiently, productively and sustainably, and in accordance with a number of principles including equitable access to land; security of land rights; and transparent and cost-effective administration of land. ¹⁶⁰

Having laid the foundation for the discussion of the obtaining legal and legislative framework, this chapter will therefore proceed to analyse the specific constitutional provisions, legislations and policy frameworks obtaining in relation to the present regime on sustainable land use and management to foster sustainable development and environmental conservation.

3.2. An overview of the Essential Legal, Policy and Institutional Framework on Sustainable Land Use Management

3.2.1. Constitution of Kenya, 2010

As earlier elaborated in the introduction to the chapter, Kenya enacted a transformative constitutional charter in the year 2010.¹⁶¹ The charter, among other things ushered in the constitutionalisation of environmental rights and its enforcement as one of the key aspects emergent in international environmental law.¹⁶² With this widespread consensus, constitutions across the globe have increasingly incorporated these rights which are also traceable in international instruments and convention. It is against this background that the *Constitution of Kenya*, 2010 outlines the state's obligations to protect the environment, sustainably manage the

 $^{^{160}}$ Constitution of Kenya (2010), Article 60 (1).

¹⁶¹ Speaker of The Senate & Another vs. Hon. Attorney-General & Another & 3 Others Advisory Opinion Reference No. 2 of 2013 [2013] eKLR.

¹⁶² See generally, Boyd, D.R., 'The Effectiveness of Constitutional Environmental Rights, (2013) Yale UNITAR Workshop, April 26/27, https://environment.yale.edu/content/documents/00003438/Boyd-Effectiveness-of-Constitutional-Environmental-Rights.docx?1389969747 Accessed on 23 July 2016; See also Daly, E. & May, J.R., 'Comparative environmental constitutionalism,' (2015) 6(1) Jindal Global Law Review 9–30; See also, Mwenda, A. & Kibutu, T.N., 'Implications of the New Constitution on Environmental Management in Kenya,' (2012) 8(1) Law, Environment and Development Journal 78.

utilisation of resources¹⁶³ equitable distribution and sharing of resources, protection of indigenous rights and biodiversity¹⁶⁴ as well as general environmental protection and conservation¹⁶⁵ through monitoring the environmental processes to eliminate harmful practices, environmental impact assessments among others.¹⁶⁶

The architecture of the *Constitution of Kenya*, 2010 offers a deep contrast when mirrored against its predecessor that had no express provision on the environment and environmental protection. ¹⁶⁷ Thus, its enactment and transformative nature has revolutionised environmental litigation in Kenya and bolstered the implementation of environmental rights. ¹⁶⁸ This recognition has thus, emboldened sustainable development efforts i.e. vide the thrust of Article 42 of the Constitution, which recognises the right to a clean and healthy environment breakthroughs for environmental injustices such as the Owino Uhuru lead poisoning case in Mombasa have emerged bringing to fore the question of sustainable land use. ¹⁶⁹ Thus, the implementation and enforcement of this

¹⁶³ 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).

¹⁶⁴ 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). ¹⁶⁵ 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. ¹⁶⁶ Constitution of Kenya, Article 69(1).

¹⁶⁷ Joel Kimutai Bosek, 'Implementing Environmental Rights in Kenya's New Constitutional Order: Prospects and Potential Challenges' (2014) 14 *African Human Rights Law Journal* 489 – 508.

¹⁶⁸ See, Friends of Lake Turkana Trust v Attorney General & 2 others [2014] eKLR; Republic v National Land Commission; Lake Naivasha Riparian Association (Interested Party) Ex Parte Geoffrey Muhoro [2020] eKLR; Luo Council of Elders & 7 others v Cabinet Secretary Water & Irrigation & 13 others [2017] eKLR.

¹⁶⁸ Isaack E. N. Okero & 4 Others v Attorney General of the Republic of Uganda (Sued on behalf of the Republic of Uganda) & 2 others, The East African Court of Justice at Arusha, Reference Number 14 of 2020 filed on 22nd May, 2020; Simion Swakey Ole Kaapei & 89 others v Commissioner of Lands & 7 others [2014] eKLR.

¹⁶⁹ KM & 9 others v Attorney General & 7 others [2020] eKLR.

constitutional dictate has bolstered the efforts of promoting inter and intra-generational equity¹⁷⁰ as well as fulfilment of obligations relating to the environment.¹⁷¹

In its general architecture, the Constitution is a blue print that gives the general principles that are to be chiselled in the administrative framework on the environment. First, it imposes obligations in respect of the environment and outlaws harmful processes and actions likely to imperil the environment.¹⁷² To achieve this, it codifies the desired environmental practices in the form of substantive rights that are enforceable. ¹⁷³ Lastly, to give effect to these substantive rights, it gives avenues of redress by providing for the means of enforcement of these rights. 174 Against this understanding, in order to take into account the needs of each and every person, it provides for public participation.¹⁷⁵ From the foregoing, it is also evident from the general reading of the constitution that sustainable land use and management for sustainable development and environmental conservation is not an isolated exercise and calls to fore the efforts of all persons as every individual bears the burden as enumerated in the preamble. 176 Thus, in relation to the foregoing obligations, every person bears the obligation of cooperating with state organs in achieving an ecologically sustainable development and use of natural resources through mutual cooperation.¹⁷⁷ As a rider, the Constitution is alive to the fact that all these environmental guarantees can only be achieved if robust enforcement measures are guaranteed 178 and trickled

¹⁷⁰ 48 Art 42(a) ibid.

¹⁷¹ 49 Art 42(b) ibid.

¹⁷² Art 69 ibid.

¹⁷³ Art 42 ibid.

¹⁷⁴ Art 70 ibid; Mohammed Said v County Council of Nandi [2013] eKLR.

¹⁷⁵ See, Constitution of Kenya, 2010, Fourth Schedule to the Constitution on devolution; Nairobi Law Monthly Company Limited V Kenya Electricity Generating Company & 2 Others [2013] eKLR.

¹⁷⁶ 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:....

¹⁷⁷ Constitution of Kenya, 2010, Article 69(2).

¹⁷⁸ 213 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)

down to the operative legislation.¹⁷⁹ The discussion below therefore seeks to decipher whether the individual legislations have carried forth and given life to the spirit and aspirations of the Kenyan people as posited in their social contact, the Constitution.

3.2.2. Environmental Management and Coordination Act, No. 8 of 1999

Before the enactment of the *Environmental Management and Coordination Act (EMCA)*, environmental law was scattered in various legislations and policy documents. ¹⁸⁰ In that regard, in order to consolidate these legislations and to bring certainty in the administration of environmental law, parliament enacted the law establishing the National Environmental Management Authority (NEMA) as the agency mandated with the implementation and coordination of all policies relating to the environment. ¹⁸¹ This law reform, was necessitated by the consensus that the environmental protection law was wanting and below the best global best standards with the main shortcomings being that developmental and industrial growth being given preference over the need for a clean and healthy environment. ¹⁸² However, under the new dispensation ushered by EMCA, the right to

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

¹⁷⁹ Environmental Management and Co-ordination Act, No. 8 of 1999, Laws of Kenya, Section 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).

¹⁸⁰ Caleb Mireri, Sammy Letem, 'Review of Environmental Governance in Kenya: Analysis of Environmental Policy and Institutional Frameworks' in James W. Adoyo and Cole I. Wangai (eds), *Kenya: Political, Social and Environmental Issues* (Nova Science Publishers, 2012).

¹⁸² Kamau, Evanson Chege, 'Environmental Law and Self-Management by Industries in Kenya' (2005) 17/2 *Journal of Environmental Law* 229–44.

a clean and healthy environment has been elevated and now equated to the right to life.¹⁸³ It also for the first time recognised that environmental management, which encompasses scientific, policy and socio-economic instruments, is an integral towards the attainment and realisation of the right to a clean and healthy environment.¹⁸⁴

It is evident from the Act and the Constitution that environmental conservation and sustainable land use management is cross-cutting i.e. falls on both the county and national governments. 185 This existential reality has the effect of demanding for a coordinated approach in order to get the desired result as originally intended by ECMA. 186 The clamour for a coordinated approach that factors in public participation in order to take into account the wishes of the locals have emerged in counter majoritarian approaches through court decisions rather than flowing from legislation thus showing the key flaw in the Act. A key example to this is the case of *Mui Coal Basin Local Community & 15 others v Permanent Secretary Ministry of Energy & 17 others* where the court held that the national government must not only involve the locals but also county governments in matters touching on land use and exploitation of natural resources for sustainable development and environmental conservation. 187 It is thus evident that without proper public participation and information necessary to meaningly participate, the constitutional guarantees remain a mirage. 188 Emerging therefore, it is evident that even though the Act was aimed at coordinating various

¹⁸³ See, Peter K. Waweru v Republic, Misc. Civil Application No. 118 of 2004, (2006) eKLR.

¹⁸⁴ See generally, Muigua. K., Wamukoya. D., & Kariuki. F., *Natural Resources and Environmental Justice in Kenya* (Glenwood Publishers Limited, 2015)

¹⁸⁵ Anne Angwenyi, 'An Overview of the Environmental Management and Coordination Act' in Charles Okidi, Patricia Kameri-Mbote and Migai Akech (eds), *Environmental Governance in Kenya: Implementing the Framework Law* (East African Educational Publishers 2008).

¹⁸⁶ Wambua Kituku , Collins Odote, Charles Okidi & Patricia Kameri-Mbote, 'Title Sectorial Coordination in Kenya's Municipal Solid Waste Management: A Horizontal Assessment' (2020) 16 *Law, Environment & Development Journal* 55.

¹⁸⁷ Mui Coal Basin Local Community & 15 others v Permanent Secretary Ministry of Energy & 17 others [2015] eKLR.

¹⁸⁸ Daniel NgotiekNchui & 3 others v National Oil Corporation of Kenya & another [2019] eKLR.

environmental initiatives, the act has failed in seamlessly implementing several conflicting and often competing land use management initiatives scattered in various legislation thus hampering sustainable and coordinated land use management for environmental conservation and sustainable development.

3.3.3. Environment and Land Court Act, No. 19 of 2011

From the foregoing analysis of the environmental guarantees envisaged in the Constitution, the enforcement of environmental rights through courts of law is prominent. ¹⁸⁹ Therefore, to actualise the inherent right of access to justice which cannot be divorced from environmental rights, in the year 2011, Parliament enacted the *Environment and Land Court Act* in order to bring to existence the specialised court established under 162 (2) (b) of the Constitution with the mandate of adjudicating environmental cases or issues relating to, among other things, environmental planning and protection, trade, climate issues, land use planning, and mining minerals. ¹⁹⁰ The mandate and jurisdiction of the court is expanded as envisaged by the Constitution including the right to hear and adjudicate in the breach of a fundamental rights or freedom provided that the matter relates to the environment and the use and occupation of, and title to, land. ¹⁹¹ Further, in entrenching the best practices and principles of environmental law, the Act injuncts that in deciding cases the Court is guided by the principles of sustainable development, which is defined as incorporating the principle of public participation, equity and the polluter pays principle. ¹⁹²

¹⁸⁹ Kariuki Muigua & Francis Kariuki, 'Towards Environmental Justice in Kenya' (2017) 1 *Journal of Conflict Management and Sustainable Development* 1.

¹⁹⁰ Environment and Land Court Act, No. 19 of 2011, Section 7.

¹⁹¹ See, Mohammed Said v County Council of Nandi [2013] eKLR at paragraph 22.

¹⁹² The Environment and Land Court Act, No. 19 of 2011, Section 18.

Despite these guarantees that are derived from the spirit of the Constitution, the legislation has its shortcomings in relation to sustainable land use and planning. The Act other than stating the general principles of environmental law that are applicable and universally accepted, it fails to provide and legislate on the home grown and indigenous environmental concerns that are germane in a developing country as enunciated by the Environmental Tribunal in the *Save Lamu & 5 others v National Environmental Management Authority (NEMA) & another* where the nexus between sustainable land use management and the need for a social licence in seeding the desired environmental management and conservation practices was emphasised and needed to be incorporated into the Environmental Impact Assessment (EIA) framework.¹⁹³

3.3.4. National Land Commission Act, No. 5 of 2012

From the foregoing discussions, it is evident that the Constitution of Kenya, 2010 has elaborate provisions on land and environment under Chapter Five. Within it, the principles of sound land use are stipulated. In the management of land, Article 67 creates the National Land Commission (NLC) to give effect to the provisions of Article 60. In order to operationalise the establishment, Parliament enacted the *National Land Commission Act* as the trustee for the management of public land in Kenya. ¹⁹⁴ Under the Act, the functions of the National Land Commission are outlined and the said functions are indicated as geared towards the sustainable management of land for the present and the future generations. ¹⁹⁵

At this juncture, it is important to note that other than the vague provision that public land shall be administered sustainably, there is no other provision on sustainable land use that is sufficiently

¹⁹⁵ National Land Commission Act, No. 5 of 2012, Section 5(2) (c).

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¹⁹³ Save Lamu & 5 others v National Environmental Management Authority (NEMA) & another [2019] eKLR.

¹⁹⁴ The National Land Commission Act, No. 5 of 2012, Section 3.

detailed as to offer an appropriate roadmap. This finding is further elaborated by the facts that played out in the case of *Mulungusi Muthembwa Mutunga v Managing Director, Kenya Wildlife Service & 2 others* where questions of public land use and access to genetic resources were raised in the pleadings. ¹⁹⁶ This contrast shows the lack of incorporated sustainable land management use and practices that take into account indigenous land uses considering that certain indigenous communities have co-exited with their environment in harmony and thus best suited as the conservators. ¹⁹⁷

3.4.5. Climate Change Act, No. 11 of 2016

Climate change is an existential global phenomenon. ¹⁹⁸ It is no doubt that the global atmospheric averages are on the rise and severe strain of resources, especially land-based resources are being experienced at a global scale. ¹⁹⁹ As such, since combating climate change and environmental degradation is a global effort, at the national level, states are under obligation to chisel the global measures into enforceable domestic legislation. ²⁰⁰ To that end therefore, in the year 2016, parliament enacted the *Climate Change Act* with the purpose of enhancing climate change response and to provide for mechanisms and measures to achieve a low carbon environment. ²⁰¹ In the climate change agenda, the main concern is human activity on the biosphere which is intricately linked with land use and sustainable land use management in combating environmental

¹⁹⁶ Mulungusi Muthembwa Mutunga v Managing Director, Kenya Wildlife Service & 2 others [2017] eKLR.

¹⁹⁷ African Commission on Human and Peoples' Rights v Republic of Kenya, ACtHPR, Application No. 006/2012 (2017).

¹⁹⁸ See generally, Alanna Mitchel, *Seasick: Ocean Change and the Extinction of Life on Earth* (University of Chicago Press, Chicago 2009).

 ¹⁹⁹ See, Carl Sagan, Pale Blue Dot: A Vision of Human Future in Space (Ballantine Books Edition, 1997) Pp. 35-36.
 200 See generally, David Wallace-Wells, The Unihabitable Earth: Life after Warming (Tim Duggan Books, New York 2019); Dana Desonie, Climate: Causes and Effects of Climate Change (Chelsea House Publishers, New York, 2008); Suthirat Kittipongvises et al, 'Greenhouse Gases and Energy Intensity of Granite Rock Mining Operations in Thailand: A Case of Industrial Rock-Construction' (2020) 18 (1) Environmental and Climate Technologies 2255; Edemilson J. Mantoam et al, 'Energy Demand and Greenhouse Gases Emissions in the Life Cycle of Tractors' (2016) 151 Biosystems Engineering 158-170.

²⁰¹ Climate Change Act, No. 11 of 2016, Preamble.

degradation.²⁰² A reading of the Act renders it grossly inadequate in dealing with the issues of sustainable land use management since it does not provide for the use of the best practices to reduce the negative effect of human activities on the biosphere. As such, the observation of the National Environmental Tribunal in the case of *Save Lamu & 5 others v National Environmental Management Authority (NEMA) & another* that regulation of human activities on the biosphere within the ambit of sustainability s critical combating climate change remains unaddressed.²⁰³ To that end therefore, it can be concluded that the availing Kenyan law on climate change, does not offer a comprehensive framework on the question of sustainable land use management in order to combat climate change and environmental degradation.

3.3. Environmental Sustainability and Sustainable Land Use and Management

From the foregoing selected introspection into the prevailing legal, institutional and policy framework, it is evident that sustainability and sustainable land use practices have not been chiselled into the law. This finding shows that there is a glaring lacuna on the policy on sustainability, a negation from the global approach where the concept is taking root. ²⁰⁴ The aftermath of the 1972 Stockholm conference on the biosphere, ushered in the approach of interlinking environmental concerns to social and economic issues as means of informing policy. It is at this conference that the term sustainable development was introduced. ²⁰⁵ Later, the World

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²⁰² See generally, Elizabeth Kolbert, *The Sixth Extinction: An Unnatural History* (Henry Holt and Co., New York, 1st Edition 2014).

²⁰³ Save Lamu & 5 others v National Environmental Management Authority (NEMA) & another [2019] eKLR.

²⁰⁴ Edmond A. Mathez and Jason E. Smerdon, *Climate Change: The Science of Global Warming and our Energy Future* (Columbia University Press, New York 2018) P. 13.

²⁰⁵ International Union for the Conservation of Nature (IUCN); United Nations Environment Programme (UNEP); World Wide Fund for Nature (WWF). World Conservation Strategy; IUCN/UNEP/WWF: Gland, Switzerland, 1980.

Commission on Environment and Development (WCED), expanded on the subject and came up with the modern and celebrated definition of sustainable development as: -

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." This has led to the rise of related concepts such as 'Worth-Living Development' that seeks to ensure that "each generation will hand over to the next one a better place to live in." ²⁰⁷

Two decades later, at the 1992 Rio Earth Summit, in realisation of the dire environmental situation across the globe and the need to reverse the negative effects of climate change, member states agreed to chisel sustainable development into their municipal laws guided by the Rio accords i.e. Agenda 21, Biodiversity Convention and the Climate Change Convention. This international commitment has over time translated to municipal laws that are being implemented in member states. ²⁰⁸ These aspirations have since been renewed in the year 2015 through the adoption of the Sustainable Development Goals²⁰⁹ as a development from the Millennium Development Goals among environmental, social and economic links. ²¹⁰

3.4. Case of Sustainable Land Management (SLM)

Having established above that from the selected analysis of the main legislation touching on environmental rights and enforcement of environmental rights, it is evident that the desired land use management policies have not been firmly chiselled into the main legislations. That being the case, to foster a case of sustainable land management in Kenya, it is imperative to look how these

²⁰⁶ World Commission on Environment and Development (WCED), *Report of the World Commission on Environment and Development: Our Common Future* (United Nations, New York, NY, USA, 1987).

²⁰⁷ Kanakoudis, V.; Karatzas, G.; Keramaris, E., 'International Conference on Efficient & Sustainable Water Systems Management toward Worth Living Development' (2016) *Procedia Eng.* 162, 1–2.

²⁰⁸ Howes, M., *Politics and the Environment: Risk and the Role of Government and Industry* (Allen & Unwin: Sydney, Australia, 2005).

²⁰⁹ United Nations (UN), Sustainable Development Goals (United Nations: New York, NY, USA, 2015).

²¹⁰ Fukuda, S.; Murakami, M.; Noda, K.; Oki, T. 'How Achieving the Millennium Development Goals Increases Subjective Well-Being in Developing Nations' (2016) 8 *Sustainability* 189.

desired policies have been anchored in policy as well as other sectoral legislation that have a bearing on sustainable land use management and environmental conservation.

To begin with, the Kenya Strategic Investment Framework (KSIF) on SLM which is linked to national development priorities outlines a strategy for incentivising investments, interventions and actions for the management of the country's natural capital in a sustainable manner. Sustainable Land Management (SLM) is defined as "the adoption of land use systems that, through appropriate management practices, enables land users to maximize the economic and social benefits from the land while maintaining or enhancing the ecological support functions of the land resources".

In Kenya, there are a number of development plans implemented that informs the concept of SLM with the country's investment framework. This framework does not operate in isolation but rather, it mirrors other national development agendas such as National Climate Change Response Strategy (NCCRS) which seeks to implement climate change adaptation strategies and mitigation measures in line with the Kyoto Protocol linked to the United Nations Framework Convention on Climate Change (UNFCCC).²¹¹ Further, through the National Climate Change Action Plan (NCCAP), a number of issues and actions have taken the forefront and have been prioritised in order to actualise the agenda in the NCCRS which is geared towards institutionalisation of SLM and a key adaptation measure as well as conservation of biodiversity in line with the dictates of the Convention on Biodiversity (CBD) and the Cartagena Protocol on Biosafety. Owing to the multidisciplinary nature of climate change and the response strategies, the framework on response to climate change in the context of SML must as of consequence chisel in the provisions of the United Nations

²¹¹ Republic of Kenya, National Climate Change Response Strategy. Executive Brief. Government of Kenya (2010).

Convention on Combating Desertification (UNCCD) as well as other strategies to end drought emergencies. ²¹²

In operationalising and institutionalising SLM tricling down from international consensus, municipal laws remain the most effective and appropriate mechanism owing to existence of enforcement powers. In that regard, Kenya has enacted a number of these municipal laws with the supreme law of the land being at the apex as a green document advocating for sustainable land use, conservation of biodiversity among other guarantees. ²¹³ These principles apply both under the national and devolved government. However, most of the responsibility for environmental and agricultural activities fall on the county governments thus giving them a higher stake in the implementation of SLM practices. ²¹⁴ Flowing from the Constitution, other laws that support SLM include *Agriculture, Fisheries and Food Authority* (AFFA), ²¹⁵ the *Environmental Management and Co-ordination Act* (EMCA), ²¹⁶ the *Land Act*, ²¹⁷ the *Forest Conservation and Management Act*, ²¹⁸ the *Water Act*, ²¹⁹ the *Wildlife (Conservation and Management) Act*, and the *Occupational Health and Safety Act*. This myriad of legislation shows that the concept of SLM albeit supported loosely in these sectoral pieces of legislation is a concept that is gaining traction. This move is further supported in policy documents such as Agricultural Sector Development Strategy

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²¹² United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa, Paris, 14 October 1994.

²¹³ The Constitution of Kenya (2010) The Government of the Republic of Kenya.

²¹⁴ Government of Kenya, *Devolution in Kenya: Opportunities and Challenges for the Water Sector* (Water and Sanitation Program Policy Note, 2013).

²¹⁵ Act No. 13 of 2013.

²¹⁶ Act No.8 of 1999.

²¹⁷ No. 6 of 2012.

²¹⁸ No. 24 of 2016.

²¹⁹ No.43 of 2016.

(*ASDS*)²²⁰, the National Environment Policy²²¹, the Land Policy²²², the National Policy for the Sustainable Development of Northern Kenya and other Arid Lands (2012) and the National Climate Change Response Strategy (NCCRS) among others.

3.5. Conclusion

The foregoing analysis lends itself to certain discernible conclusions. First, it is evident that the legal and policy framework on sustainable land use and management is still nascent as the implementation and enforcement of environmental law in Kenya. There is ample evidence that albeit being provided for in various legislations and policy documents, there is no coordination and coherence in the manner of implementation. Further, it is evident from a reading of the main legislations and the policy documents that albeit the general provisions of sustainable land use and management being provided for, there is no specificity in the particular principles that should underpin decision making. This being the case, the lack of specificity lends a wide berth to interpretation and discretion which creates fault lines for regression in implementation of sustainable land use management principles which are often sacrificed at the altar of developmental and infrastructural projects. From this analysis therefore that albeit being provided for, sustainable land use management principles are not adequate and adequately specific to guide implementation of sustainable measures that have historically been overshadowed.

²²⁰ Government of Kenya, Agricultural Sector Development Strategy (2010–2020), 2010.

²²¹ Republic of Kenya, *National Environment Policy* (Ministry of Environment, Water and Natural Resources, Nairobi 2013).

²²² Republic of Kenya, Sessional Paper No. 3 of 2009 on National Land Policy (Ministry of Lands, Nairobi 2009).

CHAPTER FOUR

OVER ARCHING ISSUES IN RESPONSIVE LAND USE REGULATIONS

4.0. Introduction

Chapter three above sought to look at how specific legislation provides for and incorporates sustainable land use management in Kenya. The inevitable conclusion is that at present, integration, specificity of sustainable land use regulations and management is still wanting. In essence, land use management as a concept is an idea that is taking shape albeit at a very slow pace which is not commensurate with the desired measures and the urgency that is required in reversing the effects of climate change. In that regard, responsive land use regulations as presented in this study is centred on the outline and crucial features for execution. Despite this, it cannot be overlooked that there are certain overarching themes or concepts that are key in achieving the desired result. They are cross-cutting issues, applicable to all elements and stages of the land use planning process, and they relate to capacity building and development, public participation, access to justice and other serious environmental concerns amongst others. In that regard, the aim of this chapter is to bring out some of the salient features that are crucial for the implementation of sustainable land use management measures as well as bringing out some of the salient features arising from counter-majoritarian measures aimed at conserving the environment and fostering sustainable utilisation of sustainable land resources.

4.1. Capacity Building and Development for Sound Land Use Planning

Capacity represents the know-how and the capability inherent in a person or an organisation to undertake a specific task or assignment. In land use planning, inadequate capacity more so in the

financial and technical sector is one of the key obstacles to implementing appropriate policy. That being the case, the need for capacity building cannot be gainsaid. Capacity is often built and achieved through a number of ways that involve training, collaborations among others. According to a report published by GIZ²²³ "Capacity development for successful land use planning implies improvements in a vast number of institutions as well as increased knowledge, new skills and changes in attitudes in an even bigger number of individuals." All these efforts are geared towards the strengthening of key player institutions in land use planning. On the most appropriate approach, statistics and research point out to trainings with an understanding of the municipal or local context yielding the most desired result. ²²⁴ That being the case, resources and conceited efforts are critical in capacity building that translates to better results and facilitate land use planning that is responsive to the needs of the day. ²²⁵

4.2. Financing as a Tool of Achieving Sustainable Land Use Planning

Human activity on land, cannot be undertaken without the requisite financing in order to pool together factors that support production i.e. labour and technology.²²⁶ To that end therefore, working towards the halting of the loss of tropical forests, desertification and tackling climate change, while at the same time nurturing sustainable agriculture to feed an exploding global population presents a very pertinent challenge to policy makes of the day²²⁷ that being the case, in order to cope and adapt to these vagaries of climate change, a number of measures have been

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²²³ Deutsche Gesellschaft für Internationale Zusammenarbeit 'Land Use Planning: Concept, tools and applications' (2012) *Eschborn: GIZ.* p. 185.

Gebrie, T. N., 'Assessment of Land Use Planning to Improve Tenure Security in Squatter Settlement Neighbourhoods of Addis Ababa' (MSc. Thesis, Chair of Land Management, Technische Universität München 2015). ²²⁵ Ibid.

²²⁶ See, United Nation Environment Programme, 'Why Financing Sustainable Land Use Matters' online at <a href="https://www.unep.org/explore-topics/forests/what-we-do/financing-sustainable-land-use/why-financingsustainable-land-use/why-financin

proposed and key among them is the development is new land use models that are informed by the Sustainable Development Goals and the Paris Climate Change Agreement.²²⁸ Climate change finance has been termed as one of the viable solutions geared towards informing sustainable land use planning and uses by discouraging harmful practices such as deforestation and encouraging sustainable agricultural practices.²²⁹ In the same spirit, UNEP introduced the Land Use Finance Programme aimed at unlocking private finance for sustainable land use.²³⁰ This involves providing incentives to small scale farmers as well as other players in order to cut down in harmful land uses such as deforestation.²³¹

The sources of this financing are varied and range from municipal sources i.e. the funds from the national government to sectoral budgets in the local governments (counties) and others from external funding from international actors and non-governmental organisations. They are broken down as follows.

4.2.1. County, Regional Budgets

Administratively, the territory of Kenya is divided into forty-seven counties which constitutes devolved administrative units governed by a County Government.²³² Even though these counties are empowered and can raise their own revenue through taxation, the revenue yield is often low and thus, they rely mostly on financing from the National Governments. That being the case, most of these devolved units often face challenges of adequate financing to be able to incentivise

²²⁹ Ibid.

²²⁸ Ibid.

²³⁰ United Nations Environment Programme, 'Financing Sustainable Land Use for People and Planet: Leveraging and Unlocking Private Finance for Sustainable Commodity Production Improves Rural Livelihoods, Protects Forests and Restores Degraded Land' (2019) *United Nations Environment Programme* 1-28.

²³¹ Deutsche Gesellschaft für Internationale Zusammenarbeit (2012). Land Use Planning: Concept, tools and applications. Eschborn: GIZ p. 178

²³² See, *Constitution of Kenya*, Article 176 and the First Schedule.

sustainable practices in land use. ²³³ Gaps attributed to these finding deficits, can be seen in instances such as the lead poisoning in Owino Uhuru Mombasa where poor planning was the root cause of the environmental degradation. ²³⁴ Away from these apparent deficiencies, there are hopes for funding in collaborations between county governments and private entities in public-private partnerships agreements. ²³⁵

4.2.2. Budget of the Central Government

From time immemorial, funding if land use planning has been undertaken by the Central government until the advent of devolution that gave rise to devolved governments. The general assumption has been that the central government has the financial strength to undertake such financing through the respective sector ministries and government agencies.

4.2.3. External Funding

Aside from the funding from government agencies, funding can come from external sources such as the private sector, Non-Governmental Organisations (NGOs), donors and foreign governments through aids and grants. In cases of donor funding, financing mostly take the form of bilateral agreements and programmes or projects i.e. from development banks or charitable organisations. The existence of sound land use planning management is thus a key pillar that aids in attracting funding and driving the sustainable development agenda. ²³⁶

²³⁵ OECD, 'Recommendation of the Council on Principles for Public Governance of Public-Private Partnerships' (2012) OECD 1 – 28.

²³³ GLTN/UN-Habitat, 'Count Me In: Surveying for tenure security and urban land management' (Unoted Nations, Nairobi 2010).

²³⁴ KM & 9 others v Attorney General & 7 others [2020] eKLR.

²³⁶ GLTN/UN-Habitat, 'Count Me In: Surveying for Tenure Security and Urban Land Management' (United Nations, Nairobi 2010).

4.3. Legal and Policy Issues

There are varied legal matters relating to establishing effective land use regulations that promote environmental sustainability in Kenya. Key among them, is the legal underpinnings of each undertaking that allows for determination of what is legal and permitted. A good grasp of the legal and policy issues is key in understanding the applicable property laws, regulations, legislative history as well as planning and municipal laws for order. Since land use planning is premised mostly on limitation of the rights of the owner of the land, an appreciation of the permitting legal framework is key in midwifing a regime that is compliant with the laws of the land. The need for this understanding is further compounded by multifaceted nature of environmental law that cuts across several areas hence the limiting element in the relevant regulation. ²³⁷

To that end therefore, it is evident that the law prescribes both the legal underpinnings of the regulation desired to be established and on the other hand, and also provides for the means of implementation of the regulations. Some of the tools that are employed in the planning process i.e. eminent domain, police power and other restrictions to the right to property, have jurisprudential underpinnings in the legal development. In essence, the law has been used both as a prescription and the means of achieving the desired results i.e. implementation. It goes also without saying that land use planning is wide and involves various sectors. With this in mind, the coordination of these various sectors can therefore only be achieved through legal and policy coordination. ²³⁸ These legal and policy considerations are therefore Key in drawing up a framework with legally enforceable implementation strategy that is responsive to the needs of the society. ²³⁹

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²³⁷ Ibid

²³⁸ GLTN/UN-Habitat, 'Count Me In: Surveying for tenure security and urban land management' (Unoted Nations, Nairobi 2010).

²³⁹ Ibid

4.4 Environmental Concerns in the Wake of Climate Change

In the recent past, manifestations of climate change has raised various environmental concerns and challenges touching on land use planning and management. To illustrate this position, the High Court of Kenya sitting at Nakuru in the case of *Simion Swakey Ole Kaapei & 89 others v Commissioner of Lands & 7 others*²⁴⁰ noted that conflict is often brought about by 'dwindling resources, land, caused by and large a burgeoning population which has caused human conflict, but also degradation of the environment through encroachment of forest cover and thus enhancing climate change.' ²⁴¹ Population explosion has been touted as one of the factors that create a high demand and strain of natural resources as well as living space that contribute mainly to degradation of the natural environment such as reserves, forests, wetlands and other ecologically sensitive zones. ²⁴² These effects have further been exasperated by the dire effects and conditions associated with climate change and thus the need to implement natural resource management to better harness the best of these scarce resources in mitigating the impact of climate change.

Other concerns have been on the question of invasive species attributed to land use mismanagement or improper use. ²⁴³ These invasive species have had the effect of altering ecosystems leading to decline in biodiversity, driving of some species to extinction and increasing competition for resources. ²⁴⁴ These concerns show that environmental concerns have become

²⁴⁰ Simion Swakey Ole Kaapei & 89 others v Commissioner of Lands & 7 others [2014] eKLR.

²⁴¹ Paragraph 33 of Simion Swakey Ole Kaapei & 89 others v Commissioner of Lands & 7 others [2014] eKLR.

²⁴² See, Andrew K. Githeko *et al, Review of Research and Policy for Climate Change Adaptation in the Health Sector in East Africa* (AfricaInteract: Enabling research-to-policy dialogue for adaptation to climate change in Africa, 2014) 19.

²⁴³ United States Environmental Protection Agency, *EPA's 2008 Report on the Environment. National Centre for Environmental Assessment*, (EPA, Washington, D.C. EPA/600/R-07/045F 2008) < http://www.epa.gov/roe> accessed on 22 August 2022.

²⁴⁴ Supra note 179

paramount in discussing land use planning and management.²⁴⁵ It informs the contemporary issues that afflict humanity and points out the way forward in alleviating the known adverse effects.

4.5. Connections between Land Use Changes and Infectious Disease

The rise of zoonotic diseases associated with environmental degradation have brought to the limelight the need for a conceited effort in sustainable land use. A key example is the fragmentation of forest habitats into smaller patches separated by agricultural activities or developed land increases the "edge effect" and encourages the contact among pathogens, vectors and hosts. ²⁴⁶ The above citation is an indication that, apart from its adverse impacts on biodiversity, inappropriate land use has consequences for human health. Land use planning should control inappropriate land uses (and the changes they cause), so that their adverse effects (on the climate, air, flora and fauna, water, humans etc.) are minimised. ²⁴⁷

Further, the use of certain chemicals i.e. mercury in small artisanal mining and purification of minerals such as gold poses great concerns over land use management and adherence to the provisions of the Minamata convention on the use of mercury.²⁴⁸ Even though not linked to zoonotic diseases, there have been several health and environmental concerns over these metals.

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²⁴⁵ Chigbu, U.E., F. Masum, A. Leitmeier, S. Mabikke, D. Antonio, J. Espinoza and A. Hernig 'Securing Tenure Through Land-Use Planning: Conceptual framework Evidences and Experiences from Selected Countries in Africa, Asia and Latin America (2015) Paper presented at the 2015 World Bank Conference on Land and Poverty, March 23-27, Washington D.C.

²⁴⁶ United States Environmental Protection Agency, 'EPA's 2008 Report on the Environment. National Centre for Environmental Assessment, (Washington, D.C.; EPA/600/R-07/045F 2008) pp. 13-14 < http://www.epa.gov/roe accessed on 22 August 2022.

²⁴⁷ Chigbu, U.E., F. Masum, A. Leitmeier, S. Mabikke, D. Antonio, J. Espinoza and A. Hernig, 'Securing Tenure Through Land-Use Planning: Conceptual Framework Evidences and Experiences from Selected Countries in Africa, Asia and Latin America (2015) Paper presented at the 2015 World Bank Conference on Land and Poverty, March 23-27, Washington D.C.

²⁴⁸ Olivia A. Osiro *et al*, 'Implications of the Minamata Convention on Mercury on Oral Health in Kenya' (2020) 1 *Kenya Policy Briefs* 1.

4.6. Indigenous Communities and Land Use Management

In the recent past, several activities geared towards the exploitation of natural resources have pitted developmental rights against the rights of indigenous communities.²⁴⁹ These competing interests, have led to the discrimination of indigenous communities in land use management and exploitation of land-based resources. As a direct consequence, the indigenous communities have either been seen as a hinderance to environmental conservation or developmental agendas as evinced by the conduct of the Kenyan successive governments in the *Ogiek*²⁵⁰ and *Endorois*²⁵¹ Cases. From a reading of the facts presented before the African Court of Human Rights and the African Commission on Human and Peoples' Rights, it is evident that the approach that has been taken by the government with regard to land use and indigenous communities has been below the internationally agreed standard i.e. that indigenous communities are integral in the management, conservation and land use of land and land based resources in which they have resided on and lived since time immemorial.²⁵² It therefore emerges that there is need to be conscious of the environmental rights of indigenous communities and chisel them into land use management as required of international best standards and practices.

4.7. Conclusion

The analysis above brings some inevitable conclusions to fore. First, it is evident that there are a number of lessons that can be learnt from a look at the overarching features in land use

²⁴⁹ Holden William, and Allan Ingelson, "Disconnect between the Philippine Mining Investment Policy and Indigenous Peoples' Rights." 25(4) *Journal of Energy & Natural Resources Law*, 2007, 375-391.

²⁵⁰ African Commission on Human and Peoples' Rights v Republic of Kenya, ACtHPR, Application No. 006/2012 (2017).

²⁵¹ Centre for Minority Rights Development (Kenya) and Minority Rights Group International on behalf of Endorois Welfare Council v Kenya, 276/2003.

²⁵² Paragraph 174, Ogiek Case, 2017.

management and counter-majoritarian approaches from judicial bodies. In light of the Corona Virus Disease of 2019 (COVID-19) there is an undeniable link between zoonotic diseases, spillover and sustainable land use management – an undeniable link between biodiversity and human health.²⁵³ This further bolsters the debate on the need for sustainable land use management policy that harmonises several aspects of biodiversity conservation and at the same time making sure that land-based resources are utilised sustainably. It is evident therefore that the time for the development of a comprehensive and sustainable land use management policy has come of age in order to bring harmony and certainty as well as specificity to the competing interests and scattered and often conflicting policies on land use management. This need ties to the last finding of the chapter that the legal, policy and institutional framework on the incorporation of the unique role played by indigenous communities in land use and conservation has not been taken into account in crafting the land use management policy. In that regard, it is imperative that in implementing the recommendations of the African Court in the Ogiek Case there is need to incorporate indigenous communities into the land use management framework.

²⁵³ See, Rajan R Patil et al, 'Biodiversity Loss: Public Health Risk of Disease Spread and Epidemics' (2017) 10/6 Annals of Tropical Medicine and Public Health 1432-1438.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.0. Introduction

Crystallising from the findings and conclusions of the previous chapters, this being the last chapter aims at summarising the findings of the research, identify the gaps that exist, decipher the lessons learnt and thereon propose the recommendations to be taken into account to remedy the gaps identified. In making a summary of the research, the chapter will also draw conclusions as regards the hypothesis of the study. The conclusions and the findings will either validate or invalidate the hypothesis of the study. Lastly, being a research paper, the chapter will suggest further research areas that are complementary in order to aid in the development of literature in the field and to foster understanding of the delicate idea of land use management that is an integral component of civilisation.

5.1. Conclusions

From a holistic analysis of the applicable law and the literature analysed in the research herein, it is evident that sustainable land use management has not been adequately chiselled into Kenya's legal, policy and institutional framework. The main shortcoming of this prevailing phenomenon is attributed to the baggage spill-over from the previously famished legal order that had no concrete provisions on the protection of the environment. In summary, it is evident from the research that Kenya's legal. Policy and institutional framework on land use management is still nascent owing to the historical infancy in the development of environmental law in Kenya. That notwithstanding, there have been various positive developments witnessed in a number of legislation and policies

that have a bearing on land use and environmental conservation. These provisions are mainly sectoral and apply to specific areas, situations or phenomena. As a result, there is no coherence and coordination on the applicable measures, standards or policies as concerned institutions are often autonomous and do not leverage on complementary synergies. The foregoing summary of the findings and conclusions of the research will therefore inform the recommendations of the study as here below.

5.2. Recommendations

Having summarised and rehashed in summary the conclusions of the research above, it goes without saying that there is room for improvement and law reform in order to cure and to alleviate the lacunas that exist in law. The following are some of the recommendations of the research.

5.2.1. Law Reform and Legislative Amendments

The research came to the conclusion that the legal framework on sustainable land use is wanting. It observed that the provisions presently availing are not adequate to reverse or halt the negative effects that have taken toll on the environment as a result of prominence accorded to tenure and user rights over environmental and sustainable measures. In that regard, the research proposes the formation of a task force to inquire into the entire legal regime and propose re-organisation of NEMA established under the *Environmental Management and Coordination Act* to bring coherence and promote collegiality on the implementation of land use management policies and measures.

Further, in order the bring specificity to the desirable aspects of sustainable land use management, the research proposes to law reform as a result of research and public participation to chisel specific

measures that are applicable to various parts of the country with sufficient precision and prescription so as not to leave room for discretion which allows for compromise in decision making. Lastly, the research proposes the amendment of the *Climate Change Act* to bring on board specific measures such as obligation on tree cover as a sustainable land use management in order to achieve the desired carbon sinks to reverse the negative impacts of climate change.

5.2.2. Ratification and Domestication of the Minamata Convention on the Use of Mercury

From an analysis at chapter four of the research, it is evident that there is an undeniable link between land use management and human health. The emergence of global pandemics has raised concerns over land use management and more particularly the role of buffer zones that are fast disappearing. Incidental to that, it is also evident that Kenya is yet to ratify and domesticate the Minamata Convention on the use of Mercury as a sustainable land use management measure informed by the experience of the Owino Uhuru lead poisoning case in Mombasa. ²⁵⁴ In that regard, the research recommends that Kenya moves to ratify and domesticate the Minamata Convention in the use of Mercury in order to ensure sustainable land use management especially for artisanal mines that use mercury to the detriment of the environment and land-based resources.

5.2.3. Multidisciplinary Research into the Restoration of Wetlands

In the recent past, rift valley lakes namely Lake Nakuru, Lake Bogoria and Lake Baringo have experienced flooding in the basins and lakes raising grave concerns on management of wetlands

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²⁵⁴ KM & 9 others v Attorney General & 7 others [2020] eKLR.

and water catchment areas.²⁵⁵ As a result, pertinent questions have been raised relating to sustainable land use management in the upstream and more particularly the hydrological cycle. Consequently, as the case on the same is pending before the East African Court of Justice, it is imperative that further research be commissioned into the area which preliminary pointers show that the future of our regional water bodies and land-based resources lie.

5.2.4. Integration of Cultural Land Use in the Sustainable Land Use Framework

As demonstrated by the African Court in the *Ogiek Case*, the role of indigenous communities has not been taken into account while crafting or implementation environmental conservation measures or sustainable land use initiatives. As a consequence, indigenous communities have been unjustly vilified and viewed as key catalysts in the degradation of the environment. However, this misconception has been dispelled by the African Court of Justice. This position was also alluded to earlier by the decision of the African Communion in Human and People's Rights in the *Endorois* Case where it was observed that the Endorois had been the caretakers of the Lake Bogoria ecosystem and Mochongoi forest for eons, they had suddenly and wrongly been viewed as a thorn in the conservation efforts. ²⁵⁶ To further drive this recommendation home, far from being a Kenyan problem, the Inter American Court of Human Rights in the case of *Case of the Kaliña and Lokono Peoples v Suriname* buttressed this point noting that conservation and indigenous rights are mutually symbiotic. In that regard, in the wake of climate change and unsustainable land use practices, focus has been turned to traditional and indigenous methods that have existed for eons

²⁵⁵ See, *Isaack E. N. Okero & 4 Others v Attorney General of the Republic of Uganda (Sued on behalf of the Republic of Uganda) & 2 others*, The East African Court of Justice at Arusha, Reference Number 14 of 2020 filed on 22nd May, 2020

²⁵⁶ Centre for Minority Rights Development (Kenya) & Minority Rights Group International on behalf of the Endorois Welfare Council v The Republic of Kenya, Communication 276/2003.

i.e. fishing methods in order to save the dwindling resources and allow for their regeneration. With this in mind, the integration of sustainable land use management in conservation cannot be gainsaid. In that regard, there is need to incorporate indigenous communities in land use management policies and recognise their unique role in conserving the environment that they have co-existed with since time immemorial.

5.3. Further Research

It is customary that any research is the beginning of another concept that ought to be furthered for the benefit of literature, science or knowledge in a specific field. From this research, it is evident that there is an undeniable link between land use management and climate change. In that regard, this research recommends further research on how land use management and planning can be instrumental in the fight against climate change.

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