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SCHOOL OF LAW

EFFICACY OF SOLID WASTE MANAGEMENT IN KAJIADO COUNTY

A CASE STUDY OF KITENGELA WARD.

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Table of Contents

Declaration	6
Dedication	7
Acknowledgements	8
Abbreviations	9
Table of Cases	10
List of Statutes and Official Documents	11
International Conventions, Treaties and Other International Instruments	12
1. CHAPTER ONE: RESEARCH PROPOSAL	13
1.1. Introduction	13
1.2. Background to the Study	15
1.3. Statement of the Problem	20
1.4. Theoretical/ Conceptual Framework	22
1.5. Literature Review	23
1.6. Objectives of the Research	27
1.7. Assumptions or Hypotheses	27
1.8. Research Questions	28
1.9. Research Methods to be used	28
1.10. Chapter Breakdown	28
1.11. Scheduling	29
2. CHAPTER TWO: INEFFICACY OF WASTE DISPOSAL REGULATION IN KENYA	30
2.1. History of Waste Disposal Regulation in Kenya	30
2.1.1. <i>Environmental Management and Co-ordination Act</i>	31
2.1.2. <i>Beyond EMCA</i>	31
2.2. Waste Management Regulation in Kenya	32
2.3. International Conventions on waste management: Ratification, Compliance mechanisms and Enforcement	32
2.3.1. <i>Agenda 21</i>	32
2.3.2. <i>The Basel Convention on the Control of Trans-boundary Movement of Hazardous Waste and their Disposal</i>	32
2.3.3. <i>Bamako Convention on the Ban of the Import into Africa and the Control of Trans-Boundary Movement of Hazardous Wastes within Africa, 1991</i>	33
2.3.4. <i>The African Convention on the Conservation of Nature and Natural Resources (Revised Edition) 2003</i>	34

2.3.5.	Vienna Convention for the Protection of the Ozone Layer	34
2.3.6.	<i>The Stockholm Convention on Persistent Organic Pollutants (POPs)</i>	35
2.3.7.	<i>Efficacy of the Compliance Mechanisms under the above Conventions</i>	35
2.3.8.	<i>Montreal Protocol on Substances that Deplete the Ozone Layer</i>	36
2.3.8.1.	<i>Efficacy of the Compliance Mechanisms under the Montreal Protocol</i>	37
2.4.	National Legislation	37
2.4.1.	<i>Constitution of Kenya, 2010</i>	37
2.4.1.1.	<i>Constitutional Provisions relating to Waste Management</i>	38
2.4.1.2.	<i>Efficacy of Constitutional Provisions in the Management of Waste</i>	38
2.4.2.	<i>Environmental Management and Coordination Act</i>	40
2.4.3.	<i>Public Health Act</i>	41
2.4.4.	<i>Water Act</i>	41
2.4.5.	<i>Wildlife Conservation and Management Act</i>	42
2.4.6.	<i>Forest Conservation and Management Act</i>	42
2.4.7.	<i>The Nairobi City County Solid Waste Management Act</i>	42
2.4.8.	<i>The Traffic Rules (1953) under the Traffic Act</i>	43
2.4.9.	<i>Environmental Management and Co-ordination (Waste Management) Regulations, 2006</i> 43	
2.4.10.	<i>Environmental Management And Co-Ordination(Wetlands, River Banks, Lake Shores And Sea Shore Management) Regulations, 2009</i>	43
2.4.11.	<i>Efficacy of the Statutory Provisions in Management of Waste</i>	43
2.5.	Conclusion	44
3.	CHAPTER THREE:	45
3.1.	Introduction	45
3.2.	Definitions	46
	<i>Waste</i>	46
	<i>Waste Management</i>	46
	<i>Waste Management Activity</i>	47
	<i>Interpretation</i>	47
	<i>Implementation</i>	48
	<i>Enforcement</i>	48
3.3.	The Institutions in charge of Interpretation, Implementation and Enforcement of Waste Disposal Management Regulation	49

3.3.1.	<i>Who is charged with Interpretation, Implementation and Enforcement of Waste Disposal Management Regulation in Kenya?</i>	49
3.3.1.1.	<i>The High Court</i>	50
3.3.1.2.	<i>The Magistrate’s Court</i>	52
3.3.1.3.	<i>The Director of Public Prosecutions (DPP)</i>	53
3.3.1.4.	<i>Officers appointed by EMCA</i>	54
3.3.1.5.	<i>National Environment Tribunal, (NET)</i>	54
3.4.	What Challenges do the institutions face in interpreting and enforcing waste management laws? 55	
3.4.1.	<i>Lack of Specialized Training</i>	55
3.4.1.1.	<i>The Courts and Tribunals</i>	55
3.4.1.2.	<i>The Prosecutors</i>	57
3.4.1.3.	<i>Officers appointed under EMCA</i>	58
3.4.2.	Capacity	59
3.4.3.	Multiplicity of Laws.....	61
3.5.	How do the challenges above affect waste management?	62
4.	CHAPTER FOUR: WHAT NEXT?	63
	EFFICACY OF PERSONAL, RELIGIOUS AND COMMUNAL BELIEFS AS ALTERNATIVE METHODS OF MANAGING WITH WASTE DISPOSAL	63
4.1.	Introduction	63
4.2.	Communal Beliefs as elucidated by Non-governmental organizations and their role in waste disposal management	64
4.2.1.	Non-Governmental Organizations (NGOs)	64
4.3.	Personal and Societal Beliefs and their role in waste disposal management	66
4.3.1.	<i>Christians</i>	66
4.3.1.1.	<i>The Bible</i>	66
4.3.1.2.	<i>Laudato Si</i>	67
4.3.2.	<i>Muslims</i>	68
4.3.2.1.	<i>The Quran</i>	68
4.3.3.	<i>Atheists</i>	69
4.3.4.	<i>Hindu teachings on the environment</i>	69
4.3.5.	<i>Traditions</i>	69
4.4.	Institutional measures that promote behavioral change as opposed to the law.	70
4.4.1.	<i>Rewards (carrot) as opposed to stick</i>	70

4.5. Comparative analysis with other East African countries where measures other than law enforcement is used to encourage proper waste disposal	70
4.5.1. Rwanda	70
4.5.2. <i>Possibility of adopting the Umugunda in Kenya.....</i>	<i>71</i>
4.6. Efficacy of other methods of dealing with waste disposal management	71
4.7. Findings and Analysis:	72
4.8. Conclusion	72
4.9. Recommendations	73
5. Bibliography	75

Declaration

I, Linda Nafula Namiinda, do hereby declare that this is my original work and it has neither been submitted, nor is it pending submission for a degree or diploma in any other institution other than the University of Nairobi, School of Law.

Signed

Date:

This Dissertation has been submitted with my approval as the University Supervisor.

Supervisor: Dr Kariuki Muigua

Signed:

Date:

Dedication

I dedicate this Thesis to God without whom it would not have been possible, to my late Daddy, Eng Stephen Wekesa Namiinda, who taught me the importance of education, to my Mum, Mrs Justine Namiinda for her prayers and constant encouragement, to my sisters Barbara and Winnie for their financial and emotional support, to my brother Tony who constantly follows in my footsteps thereby encouraging me to soar and to my mentor and friend Dima Wilson Dima who has walked with me throughout this postgraduate journey.

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God Bless You abundantly.

Abbreviations

CFCs:	Chlorofluorocarbons
DPP:	Director of Public Prosecutions
EMCA:	Environmental Management and Co-ordination Act
GHG:	Greenhouse gases
MOPs:	Meeting of Parties
NEMA:	National Environment Management Authority
NET:	National Environment Tribunal
NGO:	Non-Governmental Organizations
POPs:	Persistent Organic Pollutants
SDG:	Sustainable Development Goals
UNCED:	United Nations Conference on Environment and Development
UNCHE:	United Nations Conference on the Human Environment
UNEP:	United Nations Environmental Program
UNFCCC:	United Nations Framework Convention on Climate Change

Table of Cases

1. *African Centre for Rights and Governance (ACRAG) & 3 others v. Municipal Council of Naivasha* [2017] eKLR.
2. *Jamii Bora Charitable Trust & Another v. Director General National Environment Management Authority & Another* [2006] eKLR.
3. *Lopez Ostra v Spain* (1995) App no 16798/90, A/303-C, [1994] ECHR 46, (1995) 20 EHRR 277, IHRL 3079 (ECHR 1994), 9th December 1994, European Court of Human Rights [ECHR].
4. *Republic v. Minister for Transport & Communication & 5 others ex parte Waa Ship Garbage Collector & 15 others* (2004) 1 KLR (E&L).
5. *Thuita Mwangi & 2 others v. Republic* [2015] eKLR.
6. *Waste and Environment Management Association of Kenya (WEMAK) v. Nairobi City Council & National Environment Management Authority* [2016] eKLR.

List of Statutes and Official Documents

1. Environment and Land Court Act, No 19 of 2011.
2. Environment, Management and Coordination Act, No 8 of 1999.
3. Environmental Management and Co-ordination (Waste Management) Regulations, 2006
4. Environmental Management And Co-Ordination(Wetlands, River Banks, Lake Shores And Sea Shore Management) Regulations, 2009
5. Forests Act, No 7 of 2005 (Repealed).
6. Forests Conservation and Management Act, No 34 of 2016.
7. Income Tax Act, Chapter 470.
8. Kenya National Assembly Official Record (Hansard) for 4 Dec 2001, comments by Mr Kajwang and Mr Musila.
9. Kenya School of Law Act, No 26 of 2012.
10. Legal Education Act No 27 of 2012
11. Magistrate's Court Act, No 26 of 2015.
12. Nairobi City County Solid Waste Management Act, 2015
13. National Environmental Management Authority, 2005, Strategic Plan 2005-2010, Abridged version.
14. Public Health Act, Cap 242.
15. The Kenya Gazette Vol CXIX-No 180 of 8th December, 2018, gazette notice number 11930 dated 5th December 2017
16. Water Act, No 43 of 2016.
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International Conventions, Treaties and Other International Instruments

1. African Convention on the Conservation of Nature and Natural Resources (Revised Edition) 2003 1001 UNTS 3.
2. Agenda 21.
3. Bamako Convention on the Ban of the Import into Africa and the Control of Trans-Boundary Movement of Hazardous Wastes within Africa; 1991 30 ILM 773.
4. Basel Convention on the Control of Trans-boundary Movement of Hazardous Waste and their Disposal 1673 UNTS 126; 28 ILM 657 (1989).
5. Montreal Protocol on Substances that Deplete the Ozone Layer 1522 UNTS 3; 26 ILM 1550 (1987).
6. Stockholm Convention on Persistent Organic Pollutants (POPs) 2256 UNTS 119; 40 ILM 532 (2001).
7. Rio Declaration on Environment and Development (1992).
8. Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, 1999.
9. United Nations Declaration on the Human Environment, Stockholm, 1972
10. Vienna Convention for the Protection of the Ozone Layer 1513 UNTS 293 / [1988] ATS 26 / 26 ILM 1529 (1987).

1. CHAPTER ONE: RESEARCH PROPOSAL

1.1. Introduction

Annie Leonard¹ once stated; *“There is no such thing as ‘away’...when we throw anything away, it goes somewhere.”* This somewhere could be a dustbin, dumpsite, backyard, water body, landfill or public road. The thing thrown could be referred as to waste since the person has lost use for it. This paper will be discussing whether waste is properly managed particularly in Kitengela ward, Kajiado County, Kenya.

Waste is an inevitable part of our daily lives.² Its continued production makes it an important area of discussion and management. It cannot be ignored. In fact, waste (and its proper management or mismanagement) has recently been linked to protection of fundamental human rights in other jurisdictions.³ In Kenya, our Constitution gives every Kenyan the right to a clean and healthy environment⁴ which encompasses an environment free from waste.

Waste is defined as *“... any matter whether liquid, solid, gaseous or radioactive, which is discharged, emitted or deposited in the environment in such volume, composition or manner likely to cause an alteration of the environment.”*⁵ Solid waste has been defined as *“...any waste in solid form which is deposited in the environment in such volumes or composition likely to cause an alteration of that environment.”*⁶ Municipal waste is a form of solid waste and generally includes waste *“generated by households, shops, offices and other commercial units and*

¹ Executive Director, Greenpeace, USA see <<https://www.weal.org/Newsletters/2016%20April%20Newsletter.pdf>> accessed 19th November, 2018.

² Ed hardy at <<https://www.fec-energy.co.uk/news/waste-inevitable-product-living-or-useful-resource>> accessed 17th November, 2017.

³ See the case of Lopez Ostra v Spain (1995) App no 16798/90, A/303-C, [1994] ECHR 46, (1995) 20 EHRR 277, IHRL 3079 (ECHR 1994), 9th December 1994, European Court of Human Rights [ECHR].

⁴ Article 42 of the Constitution of Kenya, 2010.

⁵ Section 2 of the Environmental Management and Co-ordination Act, No 8 of 1999.

⁶ Nairobi City County Solid Waste Management Act, 2015.

*includes paper and cardboard, glass, plastics, metals, organic matter and putrescible material”.*⁷

The amount of waste generated in Kenya inevitably grows as the population continues to grow.⁸ An increase in waste is also directly proportional to the rate of industrialization.⁹ In 2016, the Population in Kenya increased by about 1,200,000; the annual Population growth rate being approximately 2.65%.¹⁰ In Kitengela ward, our area of study, the human population is said to have been growing at the rate of 3.8% per annum.¹¹

With the population growing at such a high rate, the amount of municipal waste emitted predictably rises. Waste disposal management therefore becomes a key factor in ensuring sustainable development. If properly managed, waste disposed may lead to massive recycling, energy production and job creation. If mismanaged it would undoubtedly result in massive destruction of the environment including production of greenhouse gases which leads to global warming and eventually climate change.

Depending on the mode of disposal of waste, several outcomes would occur. Other than recycling and reusing, waste could be disposed into landfills¹² or through incineration.¹³ Waste could also end up in compost pits, water bodies, drainages, backyards, public roads, empty or

⁷ Philippe Sands, *Principles of International Environmental Law* 2nd ed (Cambridge: Cambridge University Press, 2003), ISBN: 9780521521062, Chapter 12 pp 557-8.

⁸ *Ibid.*

⁹ *Ibid.*

¹⁰ United Nations Department of Economic and Social Affairs: Population Division; Kenya Population Clock, See <countrymeters.info/en/Kenya> accessed 25th November, 2016.

¹¹ See <www.researchkenya.or.ke/api/content/abstract/Kitengela%2C+Kenya> accessed 17th November, 2018.

¹² A landfill refers to the final placement of waste in or on the land in a controlled or uncontrolled way according to different sanitary, environmental protection and other safety requirements, see Glossary of Environment Statistics, Studies in Methods, Series F, No. 67, United Nations, New York, 1997 at <https://stats.oecd.org/glossary/detail.asp?ID=1495> accessed 16th November, 2018.

¹³ A waste treatment technology, which includes the combustion of waste for recovering energy see <<http://www.wrfound.org.uk/articles/incineration.html>> accessed 16th November, 2018.

undeveloped parcels of land and dumpsites. Waste deposited into landfills produces methane which is a greenhouse gas (GHG)¹⁴ which causes global warming thereby contributing to climate change.¹⁵ Such waste deposited into landfills also produces leachates,¹⁶ that is “...*liquid that passes through a landfill and has extracted dissolved and suspended matter from it...*”¹⁷ Being in liquid form, leachates could cause significant damage to surface and ground water.¹⁸ Incineration also produces greenhouse gases just like the landfills. It also leads to “...*air pollution due to generation of dust, acidic gases, vaporized metals, metal salts and dioxins and furans.*”¹⁹ Other than being an eyesore, waste that ends up in drainages, backyards, public roads and dumpsites could be breeding grounds for pests and insects. It could also cause drainage blockages. Such methods of disposal also lead to production of methane as well as leaches whose consequences are discussed above.

1.2. Background to the Study

Kitengela ward is situated in Kajiado East Constituency, Kajiado East Sub County, Kajiado County, Kenya.²⁰ It is approximately 25 kilometers from Nairobi. A few years back, it was heavily inhabited by wildlife which would roam about from the Nairobi National Park. Today, few wild animals still roam around the area including antelopes, gazelles, zebras, wildebeests,

¹⁴ Philippe Sands, Principles of International Environmental Law 2nd ed (Cambridge: Cambridge University Press, 2003), ISBN: 9780521521062, Chapter 12 pp 558.

¹⁵ Why Methane Matters 07 AUG, 2014 see <https://unfccc.int/news/new-methane-signs-underline-urgency-to-reverse-emissions> accessed 16th November, 2018.

¹⁶ Philippe Sands, Principles of International Environmental Law 2nd ed (Cambridge: Cambridge University Press, 2003), ISBN: 9780521521062, Chapter 12 pp 558.

¹⁷ Safaa M.Raghab, Ahmed M.Abd El Meguid, Hala A.Hegazi Treatment of leachate from municipal solid waste landfill, HBRC Journal Volume 9, Issue 2, August 2013, Abstract; see <<https://www.sciencedirect.com/science/article/pii/S168740481300031X>> accessed 16th November, 2018.

¹⁸ *Ibid.*

¹⁹ Philippe Sands, Principles of International Environmental Law 2nd ed (Cambridge: Cambridge University Press, 2003), ISBN: 9780521521062, Chapter 12 pp 558.

²⁰ See <<https://www.kajiado.go.ke/sub-county-admins/>> accessed 17th November, 2018.

tortoises, monkeys and baboons.²¹ The main community living in the area was the Maasai community who owned huge chunks of land and co-existed with the wildlife since they are mainly pastoralists. The Maasais however got into the business of subdividing and selling their land leading to many other communities settling in the area.²² This contributed to the increase in population in the area which led to an increase in social amenities including entertainment joints, malls, hospitals, financial institutions, learning institutions and other various small and medium enterprises.²³ Other than the Maasais selling their land, the high growth rate has also been linked to Kitengela's proximity to Nairobi as well as the Jomo Kenyatta International Airport. It has since been ranked top three among the most rapidly growing suburbs around Nairobi²⁴

Unfortunately, and as expected, waste, particularly solid waste has continued to be a menace within the Kitengela area. Despite the population growth, the dumpsite remains one and garbage collection is yet to be enhanced and/or decentralized. Although some residents have come up with private arrangements to collect their waste, other residents still grapple with waste mismanagement. One cannot walk for more than a kilometer without encountering solid waste particularly from the households improperly disposed as evidenced in the picture below.

²¹ The researcher viewed these animals while on a weekend drive past Yukos from Kimalat moving towards Kisaju area when the wild animals were seen on both sides of the Nairobi-Namanga main highway.

²² This is evidenced by the number of conveyancing transactions handled by most of the advocates in the Kitengela area which have almost all vendors being Maasais.

²³ James Wanzala, Kitengela grows amidst infrastructural constraints, June 5th 2014 See <<https://www.standardmedia.co.ke/business/article/2000123608/kitengela-grows-amidst-infrastructural-constraints>> accessed 16th November, 2018.

²⁴ The capital city of Kenya.



25

However, the rapid growth in Kitengela must not be an excuse for the improper handling of waste. Principle 3 of the Rio Declaration on Environment and Development²⁶ provides that “...the right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations”²⁷ This means that even as the little town grows, it must not ignore protection of the environment not just for the current generation but even for the generations to come. Further, the Sustainable Development Goals²⁸ (SDGs) particularly goal six on clean water and sanitation and goal eleven on sustainable cities and communities come into play. Improper disposal of waste could lead to pollution of water sources thereby denying residents clean water and sanitation. There is also need to “improve urban planning and management” and create “green public spaces”²⁹ for us to achieve sustainable cities as envisaged by goal eleven. As much as the small town is growing and developments are

²⁵ The picture shows an example of waste improperly disposed in a residential area at Alcante drive, off Balozi Road.

²⁶ 1992.

²⁷ <http://www.unesco.org/education/pdf/RIO_E.PDF> accessed 17th November, 2018.

²⁸ On 25th September, 2015, one hundred and ninety three (193) world leaders adopted Seventeen goals to ensure sustainable development by the year 2030 See <<http://www.undp.org/content/undp/en/home/presscenter/pressreleases/2015/09/03/global-goals-campaign-2015.html>> accessed 14th January, 2017.

²⁹ See <<http://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-11-sustainable-cities-and-communities.html>> accessed 28th December, 2016.

on the rise, such growth must be sustainable and proper management of waste plays a big role in ensuring such sustainability.

Matters touching on the environment such as waste disposal are paramount to, not only the protection of the environment, but also the sustainable development of any city or country. The inclusion of matters related to waste disposal in the SDGs also shows that waste management is a global concern.

Waste disposal and its management is not only a legal issue but also a social, economic and political issue. The state, through waste disposal regulation and other measures, plays an important role in waste disposal management. However, the role played by others such as non-governmental organizations, international organizations, local communities and individual households should not be overlooked.

Kenya has a series of Waste disposal regulations ranging from treaties and conventions, the Constitution, primary legislation and common law. Some of the International Conventions which Kenya has ratified include “*The Basel Convention on the Control of the Trans Boundary Movements of Hazardous Wastes and their Disposal*”,³⁰ , “*The Bamako Convention on the Ban of the Import into Africa and the Control of Trans-Boundary Movement of Hazardous Wastes within Africa*”;1991,³¹ “*The African Convention on the Conservation of Nature and Natural Resources*” (Revised Edition) 2003³², “*Vienna Convention for the Protection of the Ozone Layer*”³³ and “*The Montreal Protocol on Substances that Deplete the Ozone Layer*”,³⁴ “*The*

³⁰ 1673 UNTS 126; 28 ILM 657 (1989).

³¹ 30 ILM 773.

³² 1001 UNTS 3.

³³ 1513 UNTS 293 / [1988] ATS 26 / 26 ILM 1529 (1987).

³⁴ 1522 UNTS 3; 26 ILM 1550 (1987).

Stockholm Convention on Persistent Organic Pollutants” (POPs)³⁵; and “*The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade*”.³⁶

Primary legislation specifically related to waste disposal and its management includes the Constitution of Kenya (CoK),³⁷ the Environmental Management and Coordination Act,³⁸ and its subsidiary Regulations on Waste Management,³⁹ the Environment and Land Court Act,⁴⁰ and the Public Health Act, 1986.⁴¹ Common law that is applicable to the environment includes the doctrine of the Duty of Care⁴² and other aspects of Tort law such as the tort of nuisance, the tort of trespass and the rule in *Rylands versus Flether*.⁴³

Ideally, these laws, should be sufficient. In fact, one would argue that waste disposal and its management is well-regulated. But on the ground, it is clear that waste is still a menace and the presence of numerous laws may or may not result in efficiency in waste disposal.

³⁵ 2256 UNTS 119; 40 ILM 532 (2001).

³⁶ 2244 UNTS 337 / [2004] ATS 22/ 38 ILM 1 (1999).

³⁷ The main articles on Environmental rights and protection and by extension waste disposal management include Article 10 which lists sustainable development as a national principles Article 69 which provides for State obligations in relation to the Environment, Article 70 on Enforcement of Environmental Rights, Article 72 and 162 on the establishment of an Environment and Land Court to hear disputes relating to the environment.

³⁸ Act No 8 of 1999, Laws of Kenya.

³⁹ 2006.

⁴⁰ Act No 19 of 2011.

⁴¹ Chapter 242, Laws of Kenya.

⁴² The duty of Care emanates from the Polluter Pays Principle whereby the producer can no longer escape liability by passing the waste to someone else. See Rosalind Malcolm, *A Guidebook to Environmental Law*, (London, Sweet and Maxwell,1994.).

⁴³ [1861-73] ALL ER REP 1.

1.3. Statement of the Problem

*“The protection and improvement of the human environment is a major issue which affects the well-being of peoples and economic development throughout the world; it is the urgent desire of the peoples of the whole world and the duty of all Governments.”*⁴⁴

A clean environment is vital for the development of any state. Every person would prefer living in a country where waste is recycled or properly disposed, dumping sites are well managed and where those who have little or no respect for the environment are shunned and prosecuted in Courts of Law. Such a country would be rated as well developed.

Unfortunately, in Kenya for example, we have very minimal recycling of our waste. Less than sixty percent (60%) of the total waste is collected.⁴⁵ Less than a quarter of the collected waste is deposited in the legal dumpsites while the rest is unaccounted for.⁴⁶ According to a report by the United Nations Environmental Program (UNEP) in Nairobi, only eight percent (8%) of the recyclable and five percent (5%) of the compostable waste is recovered. Additionally, **although statistics as well as the situation on the ground in our area of study clearly show that waste is not being disposed of in the manner prescribed by the law, there seems to be very few prosecutions in our courts of law.** The residents of Kitengela do not seem to have a problem with openly dumping waste. If there is no one collecting waste, they throw it “away” in the manner they deem most convenient.

⁴⁴ United Nations Declaration on the human Environment, Stockholm, 1972 See <<http://www.unep.org/documents.multilingual/default.asp?documentid=97&articleid=1503>> accessed 12th January, 2017.

⁴⁵ N. Gakungu et al Solid Waste Management In Kenya: A Case Study Of Public Technical Training Institutions ICATOR Journal of Engineering Vol. 5, No. 3 (2012) 127 – 138 *Department of Environmental and Biosystems Engineering University of Nairobi, Nairobi, Kenya, Abstract* see <https://profiles.uonbi.ac.ke/bnknjoroge/files/gakungu_paper.pdf> accessed, 12th, January, 2017.

⁴⁶ See <<http://www.entrepreneurstoolkit.org/index.php?title=Kenya: Solid waste Management>> accessed 12th January, 2017.

Several possibilities could support these propositions; either the regulation is ineffective in terms of how legal sanctions are framed, or there are issues with bringing the waste disposal offenders to book. This could be due to the back log of cases in our courts as well as the attitude of judicial officers towards environmental offences in comparison to other offences.⁴⁷ It could also be that the regulations in place are sufficient and those found guilty of waste mismanagement are prosecuted but waste disposal offences continue to increase nonetheless. Another possibility is that there is inadequate reporting of waste disposal prosecutions.

This research will examine the current laws as drafted or framed by the legislature and consider whether the said laws play a role in the efficient management of waste disposal. Once this is done, the research will discuss the role, if any, that the judiciary and quasi-judicial bodies play in the management of waste disposal. Here, the researcher will critically analyze the steps taken by the two bodies in the management of waste disposal. Finally, the research will explore personal and communal behavioral changes, as alternative methods of managing waste disposal in an attempt to come up with best possible solutions and workable recommendations to effectively deal with waste disposal management.

Effective management of waste disposal is intrinsically related to sustainability of the environment. A clean and healthy environment is not only a constitutional right in Kenya but also a human right issue globally. Inability to manage waste disposal effectively would have adverse effects on future generations. Proper waste management on the other hand would result in a clean and healthy environment.

⁴⁷ See generally Philippe Cullet (2003) *Differential Treatment in International Law and its Contribution to the Evolution of International Law*, Aldershot: Ashgate (pages1-20).

1.4. Theoretical/ Conceptual Framework

The main arguments propounded by sociological jurists is that law does not exist in a vacuum, rather, it is influenced by the society in which it operates. They are concerned with the law in action in contrast with the rules as presented in text books.⁴⁸ Legal Realism as an area in sociological jurisprudence explains the relationship between judicial decisions and the judge's societal and economic background. According to Glendon Schubert on judicial behaviouralism, judges agree or disagree, not because they reason in similar ways but because they have similar or dissimilar attitudes; contrary to the principle of *stare decisis*.⁴⁹ We can therefore deduce that, judges faced with similar facts, may come up with dissimilar judgments because they have different attitudes on the matter thereby; bringing about unpredictability in judicial pronouncements.

In relation to waste disposal management, the judicial arm of government is tasked with enforcement and implementation of existing regulation. However, the burden seems to be on a group of persons whose decisions may be unpredictable and highly influenced with their attitudes to different aspects to life. These attitudes, more often than not, may not exactly be pro-protection of the environment. The result is, environmental offences related to waste disposal and its management may not be given the importance they deserve as compared to say, property offences. Consequently, the efficacy of waste disposal management regulation is dependent on the attitude of and the importance that a certain judicial officer attaches to the preservation of the environment.

⁴⁸ Freeman, M.D.A: *Lloyd's Introduction to Jurisprudence*, 8th ed. (London: Stevens & Sons, 2001) at pp 835.

⁴⁹ Freeman, *op. cit* at pp 1002.

While conceptualizing municipal waste management, one cannot ignore Sustainable development as the main theory propagating the case for efficacious waste management. We have already established that population growth and industrialization have a direct impact on municipal waste production. Sustainable Development has been described as “*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*”⁵⁰

When parties met for the Rio Declaration, they were in agreement that the human being was *at the centre of concerns for sustainable development*.⁵¹ They recognized that the world was developing at a very fast rate, but that development, if not carried out sustainably, would bring harm in future. They agreed that environmental protection was to constitute an integral part of the development process.⁵²

Sustainability is at the core of proper waste management. Improper waste management in the long run could lead to climate change which is associated with crop failure and sea-level rise among other adverse impacts.⁵³

1.5. Literature Review

Waste disposal management as a topical issue has been discussed by several authors both within and without Kenya. However, there is as yet to have a scholar looking at solid waste management regulation and enforcement in Kitengela Ward. The following areas have previously been considered:

⁵⁰ See <http://legal.un.org/avl/ha/dunche/dunche.html> accessed 17th November, 2019.

⁵¹ Principle 1 of the Rio Declaration

⁵² Principle 4 of the Rio Declaration.

⁵³ Kariuki Muigua, (2015) *Nurturing our Environment*, Chapter Six, Climate Change and Sustainable Development, at pp 134-135, Nairobi, Glenwood Publishers Limited.

a.) Inefficiency of Waste Disposal Regulation in Kenya

In “*Review of Municipal Solid Waste Management: A Case Study of Nairobi, Kenya*,” the authors are of the view that the private sector in Solid Waste Management is unregulated. According to them, the existing regulation at the national level on solid waste management is “few” and “scattered”.⁵⁴ In the review, there is no clear opinion as to whether the said law is efficacious but from its tone, we may presume that the authors opine that the few existing laws are not sufficient.

In “*Evolution of Solid Waste Management Policy Landscape in Kenya: Analysis Of evolution of policy priorities and strategies*”, the authors merely outline the legal framework on solid waste management in Kenya without necessarily stating whether the said framework is efficient or not.⁵⁵

In “*An Assessment of the Existing Policies and Legislative Framework for the Management of Solid Waste: The Case of Nairobi City, Kenya*”, the study is centralized in that it only evaluates the efficiency of laws affecting Nairobi City County as opposed to the entire country as the researcher intends to do.⁵⁶

⁵⁴ Kimani MW, Njoroge BNK, Ndunge D. "Review of Municipal Solid Waste Management: A Case Study of Nairobi, Kenya." Research Inventory: International Journal of Engineering and Science. 2014;4(2):16-20. See <https://profiles.uonbi.ac.ke/mkimani65/publications/review-municipal-solid-waste-management-case-study-nairobi-kenya> accessed 19th January, 2017.

⁵⁵ Tilahun Nigatu Haregu, Blessing Mberu, Abdhahah K. Ziraba, *Evolution of Solid Waste Management Policy Landscape in Kenya: Analysis Of evolution of policy priorities and strategies* Working Paper #7 African Population and Health Research Center, Nairobi, Kenya March 2016.

⁵⁶ UNEP, *An Assessment Of The Existing Policies And Legislative Framework For The Management Of Solid Waste: The Case Of Nairobi City, Kenya*, November, 2009 see < https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwju0pLeks_RAhXmJ8AKHYH_C3IQFggeMAA&url=http%3A%2F%2Fwww.unep.or.jp%2Fietc%2Fspc%2Factivities%2FGPWM%2Fdata%2FT3%2FIS_6_2_AssessmentOfExistingPolicies_Nairobi.pdf&usg=AFQjCNG1YDNWRq2XFG-VtaElZC5QS9sLYQ&sig2=kx5YPe4cNNgwrdcRO4eQLw> accessed 20th January, 2017.

Rosalind Malcolm in her book “*Guidebook to Environmental Law*” discusses the waste regime in the United Kingdom.⁵⁷ However, she focuses on what the law provides but does not state how effective the said laws are in the management of waste. Her case study is also different as she dwells on the United Kingdom while this paper intends to discuss the Kenyan situation.

Kameri Mbote in her article “*The use of Criminal Law in Enforcing Environmental Law*” discusses the criminal offences and sanctions that exist in Kenya and internationally which relate to the environment.⁵⁸ However, she does not comment on the effectiveness of such provisions. Further, the area discussed is Environmental Law generally and not particularly Waste Disposal Management as the researcher here intends to do.

Whereas my starting point will be the overregulation of waste management, Ibrahim Otieno and Elijah Omwenga in their article, “*E-waste management: Challenges and Opportunities*” argue that there is in fact lack of sufficient regulation to deal specifically with e - waste management.⁵⁹

b.) Inefficiency in the Interpretation, Implementation and Enforcement of Waste Disposal Management Regulation

In the Article “*Implementing environmental rights in Kenya’s new constitutional order: Prospects and potential challenges*”, Bosek J. K. is of the view that inclusion of Environmental Rights in the new Constitution has led to better enforcement of Environmental Rights by the Courts and also through administrative action.⁶⁰ However, he argues that implementation of the

⁵⁷Rosalind Malcolm, 1994, *A Guidebook to Environmental Law*, London, Sweet and Maxwell.pp 193-209.

⁵⁸C. O. Okidi, P. Kameri Mbote, Migai Aketch (2008) *Environmental Governance in Kenya: Implementing the Framework Law*, East African Educational Publishers Limited, Nairobi, Kampala, Dar es Salaam.

⁵⁹ Ibrahim Otieno, Elijah Omwenga (2015) *Journal of Emerging Trends in Computing and Information Sciences* Vol. 6, in “E-Waste Management in Kenya: Challenges and Opportunities” University of Nairobi, Nairobi, Kenya.

⁶⁰ African Human Rights Law Journal (2014) “Implementing environmental rights in Kenya’s new constitutional order: Prospects and potential challenges”, 14 AHRLJ 489-508.

constitutional provisions on environmental protection may face challenges. His discussion is based generally on enforcement and implementation of Environmental law and not specific to waste disposal.

In the paper “*The Role of the Judiciary in Promoting Environmental Compliance and Sustainable Development*”, Justice JB Ojwang explains that the role of the judiciary in the interpretation and enforcement of environmental rights is more often than not limited by the technicalities of civil procedure and civil litigation.⁶¹ He explains that civil litigation is structured in such a way that a judge may only deliberate on issues pleaded and thereafter proved by the claimant. This means that even where a matter touches on environmental issues, the court is limited by what is before it and not their otherwise important role of implementation and enforcement of environmental law to ensure sustainable development. Again, the writer here speaks of the environment generally as opposed to enforcement of waste disposal regulation.

c.) Efficacy of alternative methods of dealing with waste disposal management

In “*Community-Based Waste Management for Environmental Management and Income Generation in Low-Income Areas: A Case Study of Nairobi, Kenya*” Kim Peters opines that the then local government (currently County Government) was tasked with waste collection and management.⁶² However, these failed and urban dwellers had to look to Community Based Organizations and other forms of waste management. As to whether these alternative means have been successful has not been discussed.

⁶¹ Justice J. B. Ojwang, “The Role of the Judiciary in Promoting Environmental Compliance and Sustainable Development”, Paper presented at the Judicial Colloquium on Environmental Law and Access to Justice, Great Rift Valley Lodge, Naivasha.

⁶² Kim Peters “Community-Based Waste Management for Environmental Management and Income Generation in Low-Income Areas: A Case Study of Nairobi, Kenya” in association with Mazingira Institute Nairobi, Kenya March 1998, Published by City Farmer, Canada's Office of Urban Agriculture. See <http://www.cityfarmer.org/NairobiCompost.html> accessed 27th January, 2017.

In the book “*Natural Resources and Environmental Justice in Kenya*”, several tenets of Environmental Justice are discussed including various ways of dispute resolution where conflict arises as well as access to environmental justice.⁶³ However, the discussions here generally concern environmental justice as a whole and are not specific on regulation of waste management.

1.6. Objectives of the Research

This paper seeks to

- I. Establish the effectiveness Waste Disposal Regulation;
- II. Examine the role played by the judiciary in ensuring proper management of waste disposal;
and
- III. Investigate the efficiency of personal, religious and communal beliefs as alternative methods of managing with waste disposal.

1.7. Assumptions or Hypotheses

The main assumptions or hypotheses in this Research are that first, Waste Disposal Regulation in Kenya is not properly drafted so as to ensure compliance and enforcement.

Second, the judiciary inefficiently discharges its role in the adjudication of waste disposal regulation.

The third and last assumption is that other methods of dealing with waste management such as behavioral changes would be most efficient.

⁶³ Kariuki Muigua, Didi Wamukoya, Francis Kariuki (2015) *Natural Resources and Environmental Justice in Kenya*, Chapter Four, Nairobi, Glenwood Publishers Limited.

1.8. Research Questions

The Researcher will be seeking to answer the following questions;

- I. Does Waste Disposal Regulation in Kenya contribute in the inefficiency of Waste Disposal Management in Kenya?
- II. What is the role played by the judiciary in ensuring proper management of waste disposal?
- III. How efficient are personal, religious and communal beliefs in managing with waste disposal in Kenya?

1.9. Research Methods to be used

The researcher intends to use desktop research particularly library research and internet sources as the main research method of data collection. The researcher will also use a number of primary data collection methods particularly interviews, and the observation method to collect primary data.

1.10. Chapter Breakdown

Chapter One will introduce the topic of discussion, give a brief background to the issue at hand, have a problem statement, theoretical framework, objectives the researcher intends to meet as well as hypotheses and assumptions that the researcher will rely on. The chapter will also explain the methods of research to be utilized and give a chapter breakdown of the entire thesis.

Chapter Two will discuss the drafting and efficacy of waste disposal regulation in Kenya.

Chapter Three will focus on the role the Judiciary plays in waste disposal management.

Chapter Four will examine the efficiency of alternative methods of managing waste disposal while giving recommendations on the way forward to ensure proper disposal of waste.

1.11. Scheduling

21.12.2016	.....	Submit Draft Research Proposal
21.12.2017	.....	Meet Supervisor to discuss Proposal
21.12.2017 – 6.2.2017	.....	Revise Proposal into Chapter 1 and resubmit
6.2.2017	.....	Meet Supervisor to discuss Chapter One
7.2.2017-14.1.2017	.....	Make changes following discussion and Submit Chapter 2
14.2.2017	.....	Meet Supervisor to discuss Chapter Two
15.2.2017 – 28.2.2017	.....	Make changes following discussion and Submit Chapter 3
28.2.2017	.....	Meet Supervisor to discuss Chapter Three
1.3.2017-15.3.2017	.....	Make changes following discussion and Submit Chapter 4
15.3.2017	.....	Meet Supervisor to discuss Chapter Four
16.3.2017-31.3.2017	.....	Make changes following discussion
1.4.2017-15.4.2017	.....	Submit compiled chapters
15.4.2017	.....	Meet with Supervisor to discuss completion;
	.....	Print and Bind 3 copies
15.4.2017-30-4-2017	.....	Oral Defence and Corrections

2. CHAPTER TWO: INEFFICACY OF WASTE DISPOSAL REGULATION IN KENYA

2.1. History of Waste Disposal Regulation in Kenya

The history of waste disposal may be deduced from the history of environmental law as the two are somewhat related. The importance of protection of the environment internationally came about during the industrial era in the 1960s. During this time, it was noted that industrialization was leading to industrial pollution which had adverse effects on the environment.⁶⁴ This realization led to the convening of the United Nations Conference on the Human Environment which conference led to the Stockholm Declaration of 1972.⁶⁵ This conference established the United Nations Environmental Program⁶⁶ which was later transferred from New York to Nairobi in 1974.⁶⁷

The setting up of the United Nations Environmental Program headquarters did not seem to have a direct effect on environmental legislation and particularly, waste management law in Kenya. It was not until 1999 when the Environmental Management and Co-ordination Act⁶⁸ was enacted, which Act sought to consolidate most environmental provisions. The Act also gave the Cabinet Secretary in charge of matters environment the power to enact waste management regulations.⁶⁹

⁶⁴ Kenya Law Resource Centre, *History of Modern Environmental Law*. See <www.kenyalawresourcecenter.org/2011/07/history-of-modern-environmental-law.html> accessed 3rd April, 2017.

⁶⁵ United Nations, 1972, Report of the United Nations Conference on the Human Environment, Stockholm, 5-16 June 1972, UN doc. A/CONF. 48/14/Rev.1.

⁶⁶ Established by General Assembly resolution 2997 (XXVII) of 15 December 1972. See <<http://research.un.org/en/docs/environment/unep>> accessed 1st May, 2017.

⁶⁷ Kenya Law Resource Centre, *History of Modern Environmental Law*. See <www.kenyalawresourcecenter.org/2011/07/history-of-modern-environmental-law.html> accessed 3rd April, 2017.

⁶⁸ No 8 of 1999, Laws of Kenya, see <<http://kenyalaw.org/lex//index.xql#E>> accessed 6th May, 2017.

⁶⁹ See Sections 86, 91 and 92 of the Environmental Management and Coordination Act, No 8 of 1999, Laws of Kenya.

2.1.1. *Environmental Management and Co-ordination Act*

The enactment of the *Environmental Management and Co-ordination Act*⁷⁰ (EMCA) was a milestone in the environmental arena. At the time, the state's environment was deteriorating as socio-economic inequities were having a negative impact on the environment.⁷¹ The Act harmonized about 77 sectoral statutes, which addressed aspects of the environment enhancing penalties and making adequate provisions for prosecution of environmental offenders.⁷² It is noteworthy to state that the Act established the National Environmental Tribunal among other administrative structures whose main function was to ensure expeditious access to environmental justice.⁷³

2.1.2. *Beyond EMCA*

Since 1999, there have been efforts to come up with detailed subsidiary legislation on waste management in Kenya after the enactment of the *Environmental Management and Coordination Act*, 1999. The regulations apply to most categories of waste including “*industrial wastes, hazardous and toxic wastes, pesticides and toxic substances, biomedical wastes, and radioactive substances*”.⁷⁴

Further, in 2010, a new Constitution was promulgated which, among other environmental related provisions, included the “*right to a clean and healthy environment*” in Chapter Four (4) under the Bill of Rights.

⁷⁰ No 8 of 1999, Laws of Kenya.

⁷¹ National Environmental Management Authority, 2005, Strategic Plan 2005-2010, Abridged version.

⁷² See <<http://www.environment.go.ke/>> accessed 1st May, 2017.

⁷³ Kameri Mbote, 2005, Towards Greater Access to Justice in Environmental Disputes in Kenya: Opportunities for Intervention, *IELRC Working paper*, see <<http://www.ielrc.org/content/w0501.pdf>> accessed 1st May, 2017.

⁷⁴ Environmental Management and Co-ordination (Waste Management) Regulations, 2006.

2.2. Waste Management Regulation in Kenya

The environmental regulatory framework in Kenya particularly on waste management consists of the Constitution of Kenya 2010, ratified international conventions, applicable statutes and common law. The writer intends to demonstrate whether the said regulatory framework plays a role in the proper management of waste, if at all.

2.3. International Conventions on waste management: Ratification, Compliance mechanisms and Enforcement

In this section, the author will look at selected International Conventions and treaties on waste management ratified by Kenya as well as other Declarations that may be applicable.

2.3.1. Agenda 21

The Earth Summit (United Nations Conference on Environment and Development) addressed the issue of management of solid/municipal waste and sewage related issues. It proposed that large cities *develop appropriate solid waste disposal capacities*. Unfortunately, Agenda 21 was only an Action Plan which states are advised to take up as opposed to laws that they must abide by.

*2.3.2. The Basel Convention on the Control of Trans-boundary Movement of Hazardous Waste and their Disposal.*⁷⁵

Kenya acceded to the Basel Convention in the year 2000.⁷⁶ The Convention came into force the same year. Article IV of the Convention gives general direction to parties concerning transporting hazardous waste across national borders. Sub Article 2 of Article IV obligates each party to “*minimize generation of hazardous waste and ensure adequate disposal facilities for*

⁷⁵ 1673 UNTS 126; 28 ILM 657 (1989).

⁷⁶ Parties to the Basel Convention on the Control of Transboundary Movement of Hazardous Waste and their Disposal see www.basel.int/Countries/StatusofRatifications/PartiesSignatories/tabid/4499/Default.aspx accessed 6th May, 2017.

environmentally sound management of hazardous waste". Further, contracting parties are expected to prohibit handling of hazardous wastes by non-authorized persons.

To ensure compliance, there is the "*Protocol on Liability and Compensation for Damage Resulting from Trans-boundary Movements of Hazardous Wastes and Their Disposal*". Article 24 of the Protocol establishes a *Meeting of the Parties* whose mandate includes ensuring compliance with the Protocol and provision of guidelines and procedures for reporting.

2.3.3. *Bamako Convention on the Ban of the Import into Africa and the Control of Trans-Boundary Movement of Hazardous Wastes within Africa, 1991*⁷⁷

The Bamako Convention was adopted by African Governments with the approval of the Organization of African Unity in order to give effect to the positions taken under the Basel Convention.⁷⁸ Kenya is one of the signatories to the convention.⁷⁹

Article 3 of the Convention obligates contracting parties to define hazardous wastes. Article 4 prohibits importing of hazardous wastes into African countries. This Article makes it illegal to import such hazardous wastes and requires contracting parties to report on the importation of such wastes. The same Article provides that hazard waste generators should be reported and there should be strict liability on such waste generators. Article 5 requires contracting parties to "*establish a competent authority and a focal point and to appoint a national body to act as a dump watch*". Article 15 establishes the Conference of Parties, whose role is to "*ensure effective implementation of the Convention*".

⁷⁷ 30 ILM 773.

⁷⁸ Philippe Sands, *Principles of International Environmental Law* 2nd ed (Cambridge: Cambridge University Press, 2003), ISBN: 9780521521062, Chapter 10 pp572.

⁷⁹ Kwadwo Tutu ECA, *Presentation on the Bamako Convention and Good Management of Hazardous wastes: A Case for Sustainable Development*.

2.3.4. *The African Convention on the Conservation of Nature and Natural Resources (Revised Edition) 2003*⁸⁰

The African Convention which was acceded to by Kenya in 1969⁸¹ has one of its objectives as enhancement of environmental protection.⁸² The Convention which was agreed upon by the Heads of State and Government of the Member States of the African Union has a few provisions on waste disposal thus relevant to this discussion. First, parties to the Convention are “*to take effective measures to conserve and ensure sustainable use of land resources by ensuring disposal of waste does not result in erosion, pollution or any other form of land degradation*”.⁸³ Second, parties are “*to take appropriate measures to prevent, mitigate and eliminate the detrimental effects of the environment from radioactive, toxic and other hazardous substances and wastes*”.⁸⁴ Finally, Parties are expected “*to take concerted action regarding the trans-boundary movement, management and processing of hazardous wastes*”.⁸⁵ Article XXVI of the Convention establishes a Conference of Parties to enhance Compliance.

2.3.5. *Vienna Convention for the Protection of the Ozone Layer*⁸⁶

Kenya ratified the Convention in 1998. Article 2 of the Convention states the general obligations of parties. Here parties are to “*take appropriate measures to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer*”. To this end, parties are to exchange relevant information and adopt legislative and administrative measures. Article 6 establishes the

⁸⁰ 1001 UNTS 3.

⁸¹See <kenyalaw.org/treaties/4/AFRICAN-CONVENTION-ON-THE-CONSERVATION-OF-NATURE-AND-NATURAL-RESOURCES> accessed 19th May, 2017.

⁸²See <kenyalaw.org/treaties/4/AFRICAN-CONVENTION-ON-THE-CONSERVATION-OF-NATURE-AND-NATURAL-RESOURCES> accessed 19th May, 2017.

⁸³ Article VI of the Convention

⁸⁴ Article XIII of the Convention.

⁸⁵ Article XXII of the Convention.

⁸⁶ 1513 UNTS 293 / [1988] ATS 26 / 26 ILM 1529 (1987).

Conference of Parties, tasked with establishing the mode and intervals for submitting the data required to be shared. Article 11 requires disputes to be settled through negotiations.

2.3.6. *The Stockholm Convention on Persistent Organic Pollutants (POPs)*⁸⁷

Kenya signed the Convention in 2001 and ratified it in 2004, after which it came into force in 2005. This convention is meant to protect human health and the environment from Persistent Organic Pollutants.⁸⁸ To this end, contracting parties are obligated to prohibit or take necessary steps to eliminate production, use, importation and exportation of any chemicals exhibiting characteristics of POPs.⁸⁹ Such chemicals can only be imported for purposes of environmentally sound disposal or other permitted purposes. Article 6 is more precise on waste disposal and management, particularly waste containing chemicals. The Article obligates contracting parties to come up with a strategy for purposes of identifying stockpiles and wastes which contain chemicals. The contracting parties are also to take appropriate measures to ensure such wastes are generally handled in an environmentally sound manner. Further, the disposal should be that any POPs contained in the waste are either destroyed or irreversible transformed. Article 17 provides that the Conference of Parties is to come up with measures to ensure compliance.

2.3.7. *Efficacy of the Compliance Mechanisms under the above Conventions*

From most of the Conventions discussed above, we see the establishment of a Conference of Parties which is tasked with ensuring compliance of each Convention. Contracting parties are given obligations under the convention, which may include, but are not limited to setting up state agencies, coming up with regulations and reporting on the states' status with regard to the obligations. More often than not, states would need to come up with domestic legislation in order

⁸⁷ 2256 UNTS 119; 40 ILM 532 (2001).

⁸⁸ Article 1 of the Stockholm Convention on POPs.

⁸⁹ Article 3 of the Stockholm Convention on POPs.

to be compliant. As we speak, Kenya is yet to enact domestic legislation in compliance with any of the five conventions discussed above.⁹⁰ The most that the Conference of Parties can do in ensuring compliance is issuing warnings and maybe declaring a state non-compliant. However, states are under no obligation to sign the convention. Further, the compliance mechanisms are non-enforceable. States may only co-operate so as to be in good books with other contracting parties, not because of the compliance mechanisms put in place.⁹¹

2.3.8. *Montreal Protocol on Substances that Deplete the Ozone Layer*⁹²

Kenya is a signatory to this protocol whose main aim is to control the production of substances that deplete the ozone layer. The Protocol seeks to limit the amount of harmful substances consumed and produced gradually. Article 11 of the Protocol provides for Meeting of the Parties (MOPs) to the Protocol. Paragraph 4 of Article 11 provides that the function of such MOPs is to examine compliance measures and review implementation.

In the thirteenth meeting of the parties, Kenya was said to be one of the countries which was not compliant.⁹³ Apparently, Kenya was presumed non-compliant since “[it] had reported data on CFC consumption for either the year 1999 and/or 2000 that was above [its] individual baselines” and thereafter had failed to provide further clarification after the same was sought through the Secretariat of the implementation Committee of the Protocol.⁹⁴ The country was warned that if it continues to be non-compliant, stern measures such as cutting the supply of CFCs would be explored.⁹⁵

⁹⁰ See <<http://kenyalaw.org/treaties/>> accessed 21st May, 2017.

⁹¹ See generally Andrew Watson Samaan, Enforcement of International Environmental Treaties: At Analysis Fordham, 2011, *Environmental Law Review*, Volume 5, Number 1 Article 1.

⁹² 1522 UNTS 3; 26 ILM 1550 (1987).

⁹³ 2006 Handbook for the Montreal Protocol on Substances that Deplete the Ozone Layer, 7th Ed.

⁹⁴ *Ibid.*

⁹⁵ *Ibid.*

2.3.8.1. *Efficacy of the Compliance Mechanisms under the Montreal Protocol*

In line with the Montreal Protocol, contracting parties are expected to report on production and consumption of substances that deplete the ozone layer in their own countries. There might be the temptation by a country to either under report or misrepresent facts. Contracting parties can then only rely on the good faith of each other in reporting the situation in their countries.

Further, the protocol can only be enforced in countries that are contracting parties. This means that, the implementation committee may not be able to cut the supply of a non-compliant state if the importing state is not a signatory or party to the Montreal Protocol. Further, a country cannot be forced to be a signatory; it is voluntary and as an act of good faith. Hence, if a country chooses not to be a signatory, very little can be done by the international state. However, as has been argued by some environmental law scholars, a country may agree to be a signatory and try to be compliant just so that it “looks good”.⁹⁶

2.4. National Legislation

2.4.1. *Constitution of Kenya, 2010*

The Constitution of Kenya⁹⁷ 2010 has included Environmental Rights under Chapter 4 on the Bill of Rights. Article 42 provides that “...every person has the right to a clean and healthy environment...” Article 22 expands the *locus standi* of persons allowed to institute Constitutional Petitions for infringement of fundamental rights and freedom including the right to a clean and healthy environment. Article 23 gives the High Court exclusive jurisdiction to hear and determine constitutional Petitions. It also enumerates the appropriate reliefs that a Court may grant, particularly, “*a declaration of rights, an injunction, a conservatory order, a declaration of*

⁹⁶ Observation made by Dr. Kariuki Muigua during a Seminar on Trans-boundary Natural Resources at the University of Nairobi, Parklands Campus on 27th March, 2017.

⁹⁷ 2010.

invalidity of any law that denies, violates, infringes, or threatens a right or fundamental freedom in the Bill of Rights and is not justified under Article 24, an order for compensation or an order of judicial review.”

2.4.1.1. Constitutional Provisions relating to Waste Management

Article 10 of the Constitution includes Sustainable Development as a national value and principle of governance *binding all state organs, state officers and public officers* and any other person where such person *interprets the Constitution, enacts, applies or interprets any law or makes or implements public policy decisions*. As explained in the previous chapter, proper waste management is essential in ensuring sustainable development.

Article 69(2) gives every person *“the duty to cooperate with State Organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources”*. Article 70 provides for *“the enforcement of environmental rights.”*

Part 2 of the Fourth Schedule 9of the Constitution devolves waste management as it tasks the County government with County health services, particularly *“...refuse removal, refuse dumps and solid waste disposal.”*

2.4.1.2. Efficacy of Constitutional Provisions in the Management of Waste

The Constitution is the *supreme law of the Republic which binds all persons and all state organs at both levels of government.*⁹⁸ Consequently, *any law that is inconsistent with the Constitution is void to the extent of its inconsistency; and any act or omission in contravention of the Constitution is invalid.*⁹⁹ It is therefore laudable that the drafters of the Constitution saw it fit to

⁹⁸ Constitution of Kenya, 2010, Article 2(1), Government Printer, Republic of Kenya.

⁹⁹ Constitution of Kenya, Article 2(4) *Op. Cit.*

include provisions on the protection of the environment and the right to a clean and healthy environment in the Constitution.

However, as to whether the said provisions ensure efficient management of waste is questionable. Article 42 for instance, gives every person *a right to a clean and healthy environment*. First and foremost, this right is limited as it is not stated under Article 25 of the Constitution which enumerates the rights that cannot be limited. This then implies that one's right to a clean and healthy environment may be infringed upon in some instances.

Second, it is unclear as to who is to ensure the right to the clean and healthy environment. It may be rather easy to go to Court and demand compensation from a person who is making one's environment unclean or unhealthy, but what happens where the environment in which one lives is already unclean? Whose responsibility is it to clean it? Can someone, for instance, sue the state for the mismanagement of the Dandora dumpsite¹⁰⁰?

Third, some of the reliefs listed by Art 23(3) as those which the Court may grant may not be of any use. For instance, how would it assist a person when the Court grants a Declaration that one's environmental rights have been infringed? According to some authors, a declaration of any fundamental right is meaningless without effective machinery to enforce the rights.¹⁰¹ If such a relief is not accompanied with an injunction or a conservatory order or an order for

¹⁰⁰ See Jared Onyari, Special Report for #closedumpsites: Kenya's Dandora Dumpsite - a Health and Environmental Tragedy, International Solid Waste Association , 2017 at <<https://www.iswa.org/home/news/news-detail/article/special-report-for-closedumpsites-kenyas-dandora-dumpsite-a-health-and-environmental-tragedy/109/>>.

¹⁰¹ Role of Indian Judiciary in Waste management at pp 219 see <http://shodhganga.inflibnet.ac.in/bitstream/10603/93649/14/14_chapter%206.pdf> accessed 16th July, 2017.

payment/compensation; which in fact have to be prayers sought in the Constitutional Petition, then a declaration of rights would be quite ineffective.¹⁰²

Finally, Article 69(2) states that “*every person has the duty to cooperate with state organs and other persons to protect and conserve the environment*”. This provision seems more like a guideline than an enforceable provision. How would the prosecution, for instance, determine or prove that an accused person failed to cooperate with a state organ charged with waste collection?

2.4.2. *Environmental Management and Coordination Act*

The main statute on waste management in Kenya is the Environmental Management and Coordination Act.¹⁰³ Other than defining waste, Section 57 of the Act provides for fiscal incentives including *tax rebates to industries and other establishments that invest in plants, equipment and machinery for pollution control and recycling of waste.*

Another provision directly touching on waste under the Act is Section 72, which prohibits water pollution. A person found contravening the section would be “*liable to imprisonment for a term not exceeding two years or a fine of one million shillings or both*”. The person may also be asked to pay the cost incurred to remove the waste from such waters.

Section 86 provides for standards for waste while section 87 prohibits dangerous handling and disposal of waste. Section 87 prohibits disposal of waste in a manner that causes pollution to the environment. Subsection 4 provides that “*a person whose activities generate waste shall employ measures essential to minimize wastes through treatment, reclamation and recycling.*”

¹⁰² It is important to note that some declarations would be self-sufficient for instance where certain piece of legislation is declared unconstitutional or where it is declared by a court of law that a certain body is infringing a person’s rights.

¹⁰³ Act No 8 of 1999, Laws of Kenya.

Subsection 5 provides the penalty for contravening the section to be “*imprisonment for a term of not more than two years or a fine of not more than one million or both such imprisonment and fine*”.

Section 91 of the Act provides for the classification of hazardous wastes and section 92 empowers the Cabinet Secretary to enact regulations on hazardous and toxic waste. Section 93 prohibits discharge of hazardous wastes and chemicals. Section 125 establishes the National Environmental Tribunal whose mandate is limited to *issuance of licenses, payment of prescribed fees or orders for restoration of the environment imposed on appellants*.

2.4.3. *Public Health Act*¹⁰⁴.

Part IX of the Public Health Act covers the tort of nuisance in relation to municipal waste. Section 115 of the Act prohibits nuisance which section ought to be read together with section 118(1)(e) which includes municipal waste, particularly “*...any noxious matter, or waste water, flowing or discharged from any premises, wherever situated, into any public street, or into the gutter or side channel of any street, or into any nullah or watercourse, irrigation channel or bed thereof not approved for the reception of such discharge*” as nuisance. The penalty for a person causing nuisance and who refuses to remove the nuisance shall be guilty of an offence and liable to a fine not exceeding One Thousand Five Hundred Shillings for each day the nuisance continues as per section 121 of the Act.

2.4.4. *Water Act*¹⁰⁵

Section 143 of the Water Act makes it an offence to “*...throw, convey, cause or permit to be thrown or conveyed, any rubbish, dirt, refuse, effluent, trade waste or other offensive matter or thing into or near to any water resource in such manner as to cause, or be likely to cause,*

¹⁰⁴ Chapter 242.

¹⁰⁵ No 43 of 2016.

pollution of the water resource.” A person who commits such an offence shall be liable “...to a fine not exceeding one million shillings or to imprisonment for a term not exceeding two years, or to both such fine and imprisonment”.

2.4.5. *Wildlife Conservation and Management Act*¹⁰⁶

Section 89 of this Act provides that any person who “...discharges any hazardous substances or waste or oil into a designated wildlife area contrary to the provisions of this Act and any other written law commits an offence and shall be liable upon conviction to a fine of not less than two million shillings or to imprisonment of not less than five years or to both such fine and imprisonment.”

2.4.6. *Forest Conservation and Management Act*¹⁰⁷

Section 67(8)(b) of the Act provides that “Any person who, in any forest area ...dumps any solid, liquid, toxic or other wastes in a forest without authority of the forest manager ...commits an offence and is liable on conviction to a fine of not less than three million shillings or to imprisonment for a term of not less than ten years, or to both such fine and imprisonment.”

2.4.7. *The Nairobi City County Solid Waste Management Act*¹⁰⁸

Nairobi City County has set a precedent for other counties by enacting the Nairobi City County Solid Waste Management Act. The Act provides for owners and occupiers of dwelling places to provide waste containers where waste ought to be placed.¹⁰⁹ In the Act, the county government has the authority to collect waste directly from the streets and other public spaces.¹¹⁰ Section 25 provides for the separation of waste by all waste generators while section 30 gives the county the duty to dispose waste “...depending on the type, quality and quantity of the waste.”

¹⁰⁶ No 47 of 2013.

¹⁰⁷ No 34 of 2016.

¹⁰⁸ 2015.

¹⁰⁹ Section 22.

¹¹⁰ See section 16.

2.4.8. *The Traffic Rules (1953) under the Traffic Act*¹¹¹

Section 66(m) of the subsidiary legislation to the Traffic Act which regulates passengers conduct while in a motor vehicle prohibits the passengers from “...throw[ing] out of the omnibus or matatu any bottle, liquid or litter or any article or thing likely to cause danger, injury or annoyance to any person or damage to any property;” This may be construed to mean waste.

2.4.9. *Environmental Management and Co-ordination (Waste Management) Regulations, 2006*

The Waste Regulations provide for segregation of waste by a waste generator and disposal of such waste in a facility provided by the local authority.¹¹² Section 10 provides that disposal sites be handled in an environmentally sound manner while section 11 provides for treatment of waste at the disposal sites to minimize their adverse effects to public health, natural resources and the environment generally.

2.4.10. *Environmental Management And Co-Ordination(Wetlands, River Banks, Lake Shores And Sea Shore Management) Regulations, 2009*

Regulation 24 of these subsidiary Regulation provide for the management of solid waste and waste waters in lake shores, river banks and sea shores. The local Authority is tasked with coming up with by-laws to control the same. The regulation also mentions shared water bodies wherein it provides that minimum sanitation standards ought to be set.

2.4.11. *Efficacy of the Statutory Provisions in Management of Waste*

It is commendable that some of the statutory provisions create incentives such as tax rebates for establishments investing in recycling of waste. Arguably, in matters environmental law and waste management, co-operative regulation and persuasion and rewards would be more

¹¹¹ Cap 403.

¹¹² Section 6.

effective.¹¹³ However, most of the other provisions are a “command and control” kind of mechanism.¹¹⁴ Hefty fines and long imprisonment terms have been put in place for the non-compliant as seen in most of the Acts above. It has previously been argued that that would automatically deter those who had the intent of engaging in certain activities.¹¹⁵ Practically, we still see waste being mismanaged despite the fines. It seems like the hefty fines only serve to increase the amount of bribes offenders will be willing to part with to stay out of trouble, and not, in fact to stop the wrongful act.¹¹⁶

2.5. Conclusion

From the discussion, as much as the International Law governing waste disposal and management is soft law therefore unenforceable in sovereign states, it is evident that waste management is sufficiently if not overregulated in Kenya. One cannot claim that it is an ungoverned area. Everyone role is specified and clear sanctions issued where there is breach of such roles. What then comes to mind is whether these sanctions are actually enforced by our courts of law. The next Chapter will focus on the challenges in implementing and enforcing these laws.

¹¹³ Kariuki Muigua, Didi Wamukoya, Francis Kariuki (2015) *Natural Resources and Environmental Justice in Kenya*, Chapter Four, Nairobi, Glenwood Publishers Limited.

¹¹⁴ Kariuki Muigua et al *Op. Cit.* This is where the environmental protection and by extension, waste management, relies on laws, regulations and penalties; regulations backed by criminal sanctions. See pages 37-44.

¹¹⁵ Kenya National Assembly Official Record (Hansard) for 4 Dec 2001, comments by Mr Kajwang and Mr Musila.

¹¹⁶ Samuel Karanja, 2015, *Matatu Operators Want Fines for Traffic Offences Reduced to Curb Bribery*, Daily Nation, August, 19th 2015 see <http://www.nation.co.ke/news/matatu-operators-reduce-fines/-/1056/2839164/-/format/xhtml/-/oy13pw/-/index.html> accessed 23rd March, 2017.

3. CHAPTER THREE: INEFFICIENCY IN THE INTERPRETATION, IMPLEMENTATION AND ENFORCEMENT OF WASTE DISPOSAL MANAGEMENT REGULATIONS

3.1. Introduction

If an enactment of a statute is to have its proper or intended effect, it must be well drafted by the parliamentarians, then well read and understood by the user.¹¹⁷ Just as a judicial officer cannot give an order in vain, it would be unwise to draft a law that cannot be implemented or enforced.¹¹⁸ The problem arises when the law is not so properly drafted such that it is open to more than one interpretation; or it is drafted in such a way that it cannot possibly be interpreted without causing any injustice.

In the previous Chapter, the author discussed the loopholes in the manner in which a section of the laws on waste management have been drafted, both soft and hard law. In this Chapter, the Author intends to focus on the difficulties experienced in the enforcement of the said laws.

The author will first define main terms, and then discuss the main players tasked with interpreting, enforcing and implementing waste management law. She will then focus on the challenges these players face. Finally, the author will evaluate whether the challenges faced do in fact contribute to the inefficacy of waste management in Kenya.

¹¹⁷S. H. Bailey and M. J. Gunn, 1996, Smith & Bailey *on The Modern English Legal System*, 3rd Ed, Sweet and Maxwell, London at pp 351.

¹¹⁸ See *Thuita Mwangi & 2 others v Republic* [2015] eKLR at pp 2 and 5.

3.2. Definitions

Waste

The National Waste Management Bill¹¹⁹ 2017 defines **waste** as “...*any substance, material or object, that is unwanted, rejected, abandoned, discarded or disposed of, or that is intended or required to be discarded or disposed of, by the holder of that substance, material or object, whether or not such substance, material or object can be re-used, recycled or recovered and includes all wastes as municipal waste, domestic waste, waste from agriculture, horticulture waste, aqua culture waste, forestry waste, biomedical, hazardous, industrial waste, pesticide and toxic substances, but does not include radioactive waste...*” **Solid waste** has been defined as “...*any waste in solid form which is deposited in the environment in such volumes or composition likely to cause an alteration of that environment.*”¹²⁰

Waste Management

Waste management has been defined as the “...*planning, handling, treatment, processing and disposal, including the supervision of these operations, as well as the measures for protection of the environment and of human life and health during the operation of the facilities and installations for waste disposal, and the care taken after the termination of their operations, generation and of its negative impact on the environment, human life and health, including waste handling...*”¹²¹

¹¹⁹ See <<http://www.environment.go.ke/wp-content/uploads/2017/07/2017-NATIONAL-WASTE-MANAGEMENT-DRAFT-BILL.doc>> accessed 7th August, 2017.

¹²⁰ *Nairobi City County Solid Waste Management Act, 2015*

¹²¹ Muhammed Tawfiq Ladan, 2015, Legal Issues in Environmental Sanitation and Waste Management in Nigeria: - Role of Environmental Courts. See <file:///C:/Users/Sean/Downloads/LEGAL_ISSUES_IN_ENVIRONMENTAL_SANITATION.pdf> accessed 16th July, 2017.

Solid Waste Management is defined as “...the activities, administrative and operational, that are used in the handling, packaging, treatment, conditioning, reducing, recycling, re-use, storage and disposal of the solid waste so as to protect the environment against the possible resultant adverse effects...”¹²²

Waste Management Activity

The National Waste Management Bill¹²³ defines **waste management activity** to include “the importation and exportation of waste, the generation of waste, including the undertaking of any activity or process that is likely to result in the generation of waste, the accumulation and storage of waste, the collection and handling of waste, the reduction, re-use, recycling and recovery of waste, the trading, transportation, transfer, treatment, and disposal of waste”

Interpretation

To interpret law is to give it life or to apply it to a given situation. The rules¹²⁴ as to interpretation of statutes are different from normal rules of interpretation of say, a statement.¹²⁵

The Constitution being the sovereign law of the land¹²⁶ has different standards of interpretation in comparison with ‘normal’ statutes. It demands from the judicial officers a liberal, novel, broad and wide interpretation.¹²⁷ The rules or methods of statutory interpretation are not regulated by

¹²² *Nairobi City County Solid Waste Management Act, 2015.*

¹²³ *Ibid.*

¹²⁴ There are three main rules of statutory interpretation. The mischief rule where the Court must consider the mischief that parliament sought to remedy in enacting the said law; the literal rule where the Courts would take the strict view or meaning of the statute; (See **County Government of Nyeri & Another Vs. Cecilia Wangechi Ndungu** [2015] eKLR where it was held that: “The cardinal rule for construction of a statute; that is, a statute should be construed according to the intention expressed in the statute itself.”) and the golden rule where the Court is allowed to depart from the ordinary meaning where the same would lead to absurdity. See S. H. Bailey and M. J. Gunn, 1996, *Smith & Bailey on The Modern English Legal System*, 3rd Ed, Sweet and Maxwell, London pp 358-361.

¹²⁵ CK Law Library, 2015, LAW AND LANGUAGE IN THE KENYAN PERSPECTIVE see <<http://www.ckadvocates.co.ke/2015/03/law-and-language-in-the-kenyan-perspective/>> accessed 7th August, 2017.

¹²⁶ Article 2 of the Constitution of Kenya, 2010.

¹²⁷ Kariuki Muigua and Kariuki Francis in Safeguarding Environmental Rights in Kenya see <<http://www.kmco.co.ke/attachments/article/100/A%20Paper%20on%20Safeguarding%20Environmental%20Rights%20in%20Kenya.pdf>> accessed 7th August, 2017.

Parliament; they have been developed by the judges.¹²⁸ This is because, more often than not, the role or burden of interpreting the laws rests on the judicial officers in their duty of administering justice. In fact, the main role of the judiciary is to interpret and apply the law.¹²⁹

Implementation

To implement a law is to do whatever the law requires to be done or what the law makes provision for. A law does not exist in a vacuum; it has to be applicable or implementable. For instance, Article 162 of the Constitution of Kenya, 2010 provided for the establishment of special courts to deal with “*the environment [emphasis mine] and the use and occupation of, and title to, land.*” The said Article was implemented when the Environment and Land Court was established in 2011 under section 4 of the *Environment and Land Court Act*.¹³⁰ Implementation is a public function normally undertaken by a public institution or public official.¹³¹ Normative and institutional mechanisms are normally put in place for a certain law to be implemented.¹³² Other than laws, a policy or sessional paper or recommendations given under a government formed workforce could also be implemented.

Enforcement

Enforcement (of environmental law) has been defined as “*the range of procedures and actions employed by a State, its competent authorities and agencies to ensure that organizations or*

¹²⁸ S. H. Bailey and M. J. Gunn, 1996, Smith & Bailey *on The Modern English Legal System*, 3rd Ed, Sweet and Maxwell, London pp 354.

¹²⁹ Role of Indian Judiciary in Waste management see http://shodhganga.inflibnet.ac.in/bitstream/10603/93649/14/14_chapter%206.pdf accessed 16th July, 2017

¹³⁰ No. 19 of 2011.

¹³¹ S. H. Bailey and M. J. Gunn, 1996, Smith & Bailey *on The Modern English Legal System*, 3rd Ed, Sweet and Maxwell, London.

¹³² Joel Kimutai Bosek, 2014, Implementing environmental rights in Kenya’s new constitutional order: Prospects and potential challenges AFRICAN HUMAN RIGHTS LAW JOURNAL, 14 489-508.

persons, potentially failing to comply with environmental laws or regulations, can be brought or returned into compliance and/or punished through civil, administrative or criminal action.”¹³³

3.3. The Institutions in charge of Interpretation, Implementation and Enforcement of Waste Disposal Management Regulation

3.3.1. Who is charged with Interpretation, Implementation and Enforcement of Waste Disposal Management Regulation in Kenya?

Generally, interpretation of the law is the main role of the judiciary and quasi-judicial bodies. Implementation would be the role of different agencies within the state. Parliament for instance would play a role in the implementation of a certain law by drafting laws¹³⁴. The State could also set up a commission or establish a corporation in order to implement a certain law or in obeying recommendations of a certain commission of enquiry or policy instrument.¹³⁵ Enforcement would be left to officers and other agencies.

In Kenya, interpretation of Waste management laws is undertaken by the Environment and Land Court Judges, and other judges sitting in the different divisions of the High Court. The High Court is divided in to several divisions in Kenya. In Nairobi for instance, we have the Commercial, Tax and Admiralty Division, the Civil Division, the Anti-corruption and Economic Crimes Division, Judicial

¹³³ Enforcement of Environmental Law: Good Practices from Africa, Central Asia, ASEAN Countries and China see <<http://wedocs.unep.org/bitstream/handle/20.500.11822/9968/enforcement-environmental-laws.pdf?sequence=1&isAllowed=y>> accessed 7th August, 2017. The author of this Article goes ahead to define compliance “*as meaning: the state of conformity with obligations, imposed by a State, its competent authorities and agencies on the regulated community, whether directly or through conditions and requirements in permits, licences and authorizations.*”

¹³⁴ The Environment and Land Court Act was enacted to give effect to Article 162(2)(b) of the Constitution thereby implementing the said section.

¹³⁵ Following the recommendations in Sessional Paper No. 4 of 2004 on Energy, the government registered Kenya Electricity Transmission Company Limited (KETRACO) which was wholly owned by the government in order to liberalize transmission of power which was previously monopolized by the Kenya Power and Lighting Company. See <<http://www.ketraco.co.ke/about/history.html>> accessed 12th August, 2017.

Review Division, and the Family Division.¹³⁶ In Kajiado, we have only one High Court judge¹³⁷ who hears commercial, civil, family and succession, judicial review as well as criminal matters. We also have one Environment and Land Court judge¹³⁸ who hears all land and environment matters. The Interpretation of the law on waste management as opposed to constitutional interpretation may also be carried out by the magistrates¹³⁹ or the Chair of the National Environmental Tribunal. The Court in which a case to do with waste management will be filed will depend on the subject matter of the suit, the orders sought and the pecuniary, territorial or other jurisdiction of the particular Court. In Kajiado County, we have four magistrates courts all based in Kajiado. We have the Chief Magistrate, a Senior Principal Magistrate, a Senior Resident Magistrate and a Resident Magistrate.

Enforcement is carried out by the police officers, officers appointed under EMCA as well as the prosecution office, which also assists in the enforcement. Kajiado County has five NEMA Officers¹⁴⁰ and Four prosecutors¹⁴¹.

3.3.1.1. The High Court

Where an issue is to do with the right to ownership of a dumping site, for instance, the same may be administered upon by the Environment and Land Court. If a person is of the view that their right to a clean and Healthy Environment has been infringed or a certain law on waste management is unconstitutional, ideally, such a Constitutional Petition could either be filed in

¹³⁶ See <kenyalaw.org/kl/index.php?id=8281> accessed 22nd November, 2018.

¹³⁷ Currently Justice Reuben Nyambati Nyakundi.

¹³⁸ Justice Christine Atieno Ochieng.

¹³⁹ Section 6 of the Magistrate's Court Act, No 26 of 2015 Laws of Kenya, provides for the criminal jurisdiction of the Magistrate's Courts. Other than serious offences such as murder (Section 203 and 204 of the Penal Code) and treason (section 40 of the Penal Code), where the punishment is death if found guilty, other offenders are normally arraigned before the Magistrate's Courts. All the same, Magistrates can hear robbery with violence (Section 296(2) of the Penal Code) cases which carries the death penalty.

¹⁴⁰ Information obtained from the NEMA office in Kajiado.

¹⁴¹ Information Obtained from the Director of Public Prosecutions Office in Kajiado.

the Environment and Land Court despite it being a Constitutional Petition,¹⁴² or before the Constitutional and Human Rights Division of the High Court.¹⁴³

If the person seeks a certain decision to be quashed, for instance, where a permit has been denied unreasonably, the suit may be filed in the Judicial Review division of the High Court.¹⁴⁴ Appeals from any of the above courts with the status of the High Court would lie in the Court of Appeal. Since Kajiado Law Courts only have one High Court, there are no such divisions so the matters to do with the Environment, whether constitutional petitions, judicial review or ownership of land all land in the Environment and Land Court. Appeals from the Environment and Land Court in Kajiado lie in the Court of Appeal in Nairobi.

In the case of *Malindi Law Society v Attorney General & 4 others*,¹⁴⁵ the High Court sitting at Malindi declared Section 2 of the *Statute Law (Miscellaneous Amendments) Act 2015* null and void as the same was inconsistent with the spirit of the constitution. Essentially, the judges were of the view that judges appointed to the High Court would not have the jurisdiction to hear and determine matters relating to the Environment, Land and Employment and vice versa. Moreover, as per the judgment, subordinate courts did not have the jurisdiction to hear and determine the Environment, Land and Employment matters. This then means that issues of waste management, being environmental issues could only be heard by the Environment and Land Court judges appointed to serve in the Environment and Land Court. The said decision was appealed and the Court of Appeal held that magistrates indeed have jurisdiction to hear employment, environment

¹⁴² See *African Centre for Rights and Governance (ACRAG) & 3 others v Municipal Council of Naivasha* [2017] eKLR.

¹⁴³ See *Waste and Environment Management Association of Kenya (WEMAK) v Nairobi City Council & National Environment Management Authority* [2016] eKLR.

¹⁴⁴ See *Republic v Minister for Transport & Communication & 5 others ex parte Waa Ship Garbage Collector & 15 others* (2004) 1 KLR (E&L).

¹⁴⁵ [2016] eKLR.

and land matters and the special Courts established under Article 162 of the Constitution are more of Appellate Courts as regards those employment, environment and land matters).¹⁴⁶ The Appellate Court nonetheless upheld the issue of lack of jurisdiction by High Court judges to hear Environment and Land matters and Employment and Labour Relations matters. Further to this decision, the Chief Justice issued a gazette notice¹⁴⁷ commissioning Magistrates above the Principal Magistrate Rank to hear Environment and Land cases taking into consideration their pecuniary jurisdiction as per the Magistrate's Courts Act¹⁴⁸.

3.3.1.2. The Magistrate's Court.

The Magistrates Courts have jurisdiction to hear criminal matters relating to waste. For instance, where a person is arrested for failing to transport waste contrary to section 87 (2) (b) of EMCA, the accused person will be arraigned before a magistrate Court for plea taking and for the criminal proceedings. Offences under the Public Health Act such as nuisance would also be heard before the magistrates' courts. So would other offences relating to improper disposal of waste as discussed in the previous chapter under the Water Act, Wildlife Conservation and Management Act, and Forest Conservation and Management Acts.

An interview with the Senior Principal Magistrate in Kajiado revealed that she had only handled criminal matters emanating from the Public Health Act particularly discharge of waste water into public roads contrary to section 115 as read with section 118(1)(e) of the said Act. Such matters, she explained, have never reached the judgment stage since the matters are normally withdrawn

¹⁴⁶ Civil Application No. 65 of 2016, the Law Society of Kenya-Nairobi Branch and Malindi Law Society & 6 Others. Ruling delivered on 19th October, 2017.

¹⁴⁷ See the Kenya Gazette Vol CXIX-No 180 of 8th December, 2018 gazette notice number 11930 dated 5th December 2017.

¹⁴⁸ No 26 of 2015.

once the nuisance ceases.¹⁴⁹ This was confirmed by the Public Health Officer, Kajiado County¹⁵⁰ who explained that once there was a complaint, he would visit the scene and give recommendations on how the nuisance could be avoided. The magistrate was however concerned that such matters are repeatedly mentioned in court to confirm compliance or cessation of the nuisance thereby wasting judicial time.¹⁵¹

The Resident magistrate who was posted in Kajiado early 2018 stated that he had never heard any matter, criminal or otherwise to do with waste disposal since such posting.¹⁵²

3.3.1.3. *The Director of Public Prosecutions (DPP)*

One cannot refer to criminal proceedings without mentioning the prosecutor. The role of the prosecutor is “*to institute and undertake criminal proceedings against any person before any court in respect of any offence alleged to have been committed*”.¹⁵³ Thus, any criminal proceedings, other than those in a court martial and those instituted by private individuals, are prosecuted by the DPP.

The Prosecutor allocated to the Senior Principal Magistrate Court in Kajiado confirmed that the only waste-related prosecutions she has come across were to do with nuisance. She explained that such matters are normally brought to the attention of the Court by the Public Health Officials as opposed to the normal police.¹⁵⁴

¹⁴⁹ Information obtained on 14th November, 2018 in the morning in Court 2 Chambers before the open court session began.

¹⁵⁰ Mr Mugo

¹⁵¹ Comments made by Hon Margaret Kasera in open court during a mention of one such public health matter on 27th November, 2018.

¹⁵² Information obtained on 14th November, 2018 in the morning in Court 4 Chambers before the open court session began.

¹⁵³ Article 157(6)(a) of the Constitution of Kenya, 2010.

¹⁵⁴ Information obtained on 14th November, 2018 via a telephone interview.

3.3.1.4. *Officers appointed by EMCA*

Section 16 of the *Environmental Management and Coordination Act*¹⁵⁵ provides that the *National Environmental and Management Authority* shall appoint officers to ensure proper discharge of [the Authority's] functions under EMCA. It would therefore be upon the Officers appointed under section 16 to arrest any person disposing or discharging any waste in a manner that would pollute the environment or committing any other offence under EMCA. Once such an arrest is made, the person would be arraigned in a court of law within 24 hours.¹⁵⁶ The DPP takes up the matter from arraignment to either acquittal or sentencing. We can safely presume that only officers mandated under EMCA have powers to arrest persons who commit offences related to EMCA.¹⁵⁷

Considering the magistrates in Kajiado stated that they were yet to hear any criminal matter brought under EMCA, we can safely assume that the officers at NEMA Kajiado have not arrested any accused person for the time that the said magistrates have been at the Kajiado station.

3.3.1.5. *National Environment Tribunal, (NET)*

The jurisdiction of the National Environment Tribunal is provided for under Section 129 of the National Environmental and Management Act.¹⁵⁸ The jurisdiction of the Tribunal is restricted to Appeals from issues of issuance of licenses,¹⁵⁹ permits, payment of fees and directions on

¹⁵⁵ No 8 of 1999.

¹⁵⁶ Article 49(1)(f) of the Constitution of Kenya 2010.

¹⁵⁷ In 2015 when the County Government of Nairobi planted grass along Uhuru Highway and Mombasa Road within Nairobi City County, the then Governor of Nairobi Dr. Evans Kidero set up an Environmental Monitoring and Enforcement team to arrest persons found dumping, littering or stepping on the grass but this was short-lived. See Cyrus Ombati, **2015**, *100 more arrested for littering and stepping on 'Kidero grass'* published Tuesday, 15th August, 2015 at <https://www.standardmedia.co.ke/article/2000173306/100-more-arrested-for-littering-and-stepping-on-kidero-grass>.

¹⁵⁸ No 8 of 1999.

¹⁵⁹ Some of the licenses include a license to transport waste or a license to operate a waste disposal site.

restoration orders by NEMA.¹⁶⁰ The Tribunal will also have power to exercise its jurisdiction where the Director-General, the NEMA or Committees of the NEMA or its agents have been empowered to make decisions which decisions a person has been aggrieved with.¹⁶¹ Appeals from the Tribunal lie with the Environment and Land Court.¹⁶² From this, we see that the Tribunal will most probably be approached by the person seeking or denied a license. Issues of waste and their disposal would therefore not be in the purview of the NET.

3.4. What Challenges do the institutions face in interpreting and enforcing waste management laws?

3.4.1. Lack of Specialized Training

3.4.1.1. The Courts and Tribunals

From the above, it is clear that other than the Environment and Land Court, other Courts (and Tribunals) may be tasked with the interpretation of waste management regulation. It is within their ambit. The judges of the Environment and Land Court possess not only the qualifications of the ‘normal’ judges of superior Courts,¹⁶³ but they must also have “*at least ten years’ experience as a distinguished academic or legal practitioner with knowledge and experience in matters relating to environment or land.*”¹⁶⁴ They are tasked with “ensuring compliance with the rule of law for effective environmental protection, a healthier nation and promoting sustainable development for the benefit of the present and future generations.”¹⁶⁵ We can therefore assume

¹⁶⁰ Section 129(1) (a-e).

¹⁶¹ Section 129(2).

¹⁶² Section 130 of EMCA, SEE also Tribunal Referral Net 2/3/2005 reported as *Jamii Bora Charitable Trust & Another V Director General National Environment Management Authority & Another* [2006] eKLR on the subject matter of the appeals that lie to the Tribunal and the right to Appeal from the Tribunal as provided for by Section 130 of EMCA.

¹⁶³ Article 166(2) of the Constitution of Kenya.

¹⁶⁴ Section 7(1) (b) of the Environment and Land Court Act.

¹⁶⁵ Muhammed Tawfiq Ladan, 2015, Legal Issues in Environmental Sanitation and Waste Management in Nigeria: - Role of Environmental Courts. See

that the ELC judges are well equipped to handle waste management matters in their respective Courts.

However, there is no prerequisite for the judges in the Constitutional and Human rights Division and the Judicial Review Divisions of the High Court to have specialized training in matters land and environment. Although an advocate must have ten years' experience in the legal field; whether in private practice or academia before being appointed as a judge, it is possible for a person not to have interacted with environmental law in those ten years for the following, among other reasons. First, Environmental Law as an area of study is not a compulsory unit when undertaking a bachelor of laws degree; it is normally offered as an optional unit.¹⁶⁶ Second, Environmental law is not one of the core units required before enrolment at the Kenya School of Law.¹⁶⁷ Neither is it offered as a unit examinable under the Bar exams.¹⁶⁸ So it is very possible to be admitted to the roll of advocates without having interacted with Environmental Law as an area of study at all.¹⁶⁹ Once admitted as an Advocate, one may choose not to practice in Environmental related matters. Thus, when the person is appointed as a judge of the High Court, they will only have a chance to interact with EMCA where a Petitioner challenges the constitutionality of a certain section of the said EMCA or such other matters.

A person who has interacted with matters environmental law would be better placed to appreciate the importance of considering environmental principles while adjudicating upon

<file:///C:/Users/Sean/Downloads/LEGAL_ISSUES_IN_ENVIRONMENTAL_SANITATION.pdf> accessed 16th July, 2017.

¹⁶⁶ In the University of Nairobi, International Environmental Law is offered as an optional unit to fourth year students.

¹⁶⁷ See Prospective Student Information on the Kenya School of Law Website particularly the ATP Application form <<http://www.ksl.ac.ke/index.php/prospective-student-information>> accessed 26th August, 2017.

¹⁶⁸ See Regulation 10 of the Kenya School of Law (Training Programmes) Regulations, 2015 under Kenya School of Law Act No 26 of 2012, Laws of Kenya.

¹⁶⁹ See Section 12 and 13 of the Advocates Act, Cap 16 Laws of Kenya on the requirements for admission as an Advocate in Kenya.

matters environment.¹⁷⁰ A person who has studied environmental law would have a very different approach when faced with waste management disputes. Only in very few cases such as in *Peter K. Waweru v Republic* will you see the judicial officers going the extra mile to deliberate on environmental issues and principles even when the same have not been raised by litigating counsel.¹⁷¹ The challenge (of lack of appreciation of environmental matters by those who have not interacted with it) is not only faced by judges but also the magistrates who are tasked with criminal matters where the offence is related to waste and the environment in general.¹⁷²

As for the chair and the members of the National Environmental Tribunal, Section 125(1)¹⁷³ provides that they be conversant with matters of the Environment to qualify for appointment to the Tribunal. This cushions those seeking redress from the said tribunal, as they are certain of competency in relation to environmental matters.

3.4.1.2. The Prosecutors

In Kenya, the office of the Director of Public Prosecutors normally recruits Advocates who have practiced for about three years. It matters not whether the person previously practiced criminal litigation, civil litigation, conveyancing or was an in-house counsel. In short, specialized experience over the three years qualification period required is not of the essence. Unfortunately,

¹⁷⁰ In the case of *Karisa Chengo, Jefferson Kalama Kengha & Kitsao Charo Ngati v Republic* [2015] eKLR, the Court of Appeal attempted to give the advantages of specialization particularly when it came to the Judges hearing matters relating to the Environment, Land and Employment matters in obiter as such “...*The scheme of the constitution was to appoint specialized persons to deal with matters of land, environment and employment. Such judges would come with appropriate experience which they would build on and trail-blaze jurisprudence for the new court. This objective may not be achieved if judges are not considered to be judges of the special courts they are appointed to but simply treated as just judges, who can then be moved across to the High Court and vice versa. The essence of building up a culture and jurisprudence for those courts may very well be lost forever. There are of course advantages and disadvantages in specializing. An obvious advantage is that the judge ends up being an expert in a particular field.*”

¹⁷¹ [2006] eKLR.

¹⁷² Information acquired from the Resident Magistrate, Thika Law Courts within the month of August, 2017.

¹⁷³ Environment, Management and Coordination Act, No 8 of 1999.

anyone who has hit three years post admission to the bar qualifies. This is probably due to the high demand of prosecutors all over the country. The recruits are then trained for about three months before being attached to a law court.¹⁷⁴ The training is generally on the criminal process and their role as prosecutors. Environmental offences are seldom discussed if at all. This means that not only do these prosecutors lack experience in criminal matters; but also they would be totally lost when faced with a technicality relating to waste management offences.

This situation was evident in the unreported case of *Republic v National Environment Management Authority & another ex-Parte Philip Kisia & City Council of Nairobi*.¹⁷⁵ In that case, the Judge proceeded to clarify that the DPP's role when it comes to the prosecution of matters under EMCA and other waste related Acts is supervisory in nature. The actual prosecution is left to an environmental inspector/officer, public health officer or forest officer depending on the offence. This would be an ideal situation, save for the fact that the person being supervised knows much more than he who is tasked with the supervisory role.

3.4.1.3. Officers appointed under EMCA

In *Republic v National Environment Management Authority & another ex-Parte Philip Kisia & City Council of Nairobi*, Mr. Philip Kisia, the then Town Clerk of the City Council Nairobi had been charged with two counts. In Count 1, he was charged with “*failing to exercise due diligence and efficiency to ensure compliance contrary to Section 145(1) as read with Section 144 of Environmental Management and Co-ordination Act No. 8 of 1999*”.¹⁷⁶ In the 2nd Count,

¹⁷⁴ Information acquired from the prosecutors from the Prosecutors in Kajiado Law Courts, Kisii Law Courts, Naivasha Law Courts, Nakuru Law Courts and Mavoko Law Courts on diverse dates between January 2017 and November, 2018.

¹⁷⁵ [2013] eKLR

¹⁷⁶ The particulars of the charge allege that on diverse dates between 13th June, 2011 and 28th September, 2011 at Enterprises and Lunga Lunga road, in Makadara District of the Nairobi Province being the Town Clerk of the City Council of Nairobi the 1st Applicant failed to exercise due diligence and efficiency to ensure compliance by not

he was accused of “*failing to comply with a lawful order by an environmental inspector contrary to Section 137(b) of the Environmental Management and Coordination Act No. 8 of 1999*”.¹⁷⁷

Mr. Kisia instituted Judicial Review Proceedings because the prosecution at Kibera Resident Magistrate Court was unlawful, Wednesbury unreasonable, illogical, and actuated by malice. The Judge agreed with the Mr. Kisia and the Criminal proceedings were halted. In allowing the prayers of certiorari sought by the Applicant, the judge noted that the offences were not only brought under the wrong section of the law but the correct procedure was not followed. Interestingly, the criminal proceedings were brought forth by an environmental inspector who ought to have known better than to charge a person under wrong sections being conversant with EMCA. This means that even those working under NEMA may also be in need of further specialized training.

3.4.2. Capacity

3.4.2.1 *The number of arresting officers*

As discussed above, NEMA appoints officers and staff to assist in the execution of its duties. Although the criteria for such appointment is not outlined, we may presume that such officers would have basic training on protection of the environment as well as some basic training on law enforcement. We could refer to them as environmental-sensitive police officers. However, these officers are too few in comparison with the amount of enforcement needed under EMCA. As earlier stated, the Kajiado NEMA office has only five (5) officers. The ideal situation would be

collecting domestic waste at the collection sites thereby causing pollution to the environment thus contravening the EMCA.

¹⁷⁷ The particulars of the offence are that on 13th September, 2011 at City Hall within Starehe District of the Nairobi Province the 1st Applicant being the Town Clerk of the City Council of Nairobi, failed to comply with a lawful order issued by an environmental inspector namely Sophie Mutemi directing him to stop illegal dumping and restore the environment along Enterprises Road and Lunga Lunga Road in contravention of EMCA.

to devolve the officers so that every ward or at least constituency in the Country has an Environmental officer appointed under NEMA.

Being few and only in some sections of the country and county, it is difficult for them to effect the orders of the Environment and Land Court particularly to do with issues of waste management. In Kajiado County, the five environmental officers only have one motor vehicle manning the entire county.¹⁷⁸ Kajiado County covers a large geographical area including Oloitoktok, Namanga Kajiado, Ngong, Kitengela and Ongata Rongai. With only one motor vehicle, their mobility is greatly limited.

3.4.2.2 *The Environment and Land Courts*

The Environment and Land Courts are also few in the Country as opposed to other Courts. Kajiado county has only one Environment and Land court which tasked with dealing with all land matters where the land is more than Twenty Million Kenya Shillings (Kshs 20,000,000) as well as all cases relating to conservation and/or preservation of the environment as far as they are not criminal in nature.

3.4.2.3 *Judicial Behaviouralism*

As earlier established, judicial officers may decide a case before them based on their personal inclinations and attitudes as opposed to precedent. Considering issues regarding ownership of land, are quite emotive in our country, a judicial officer would generally give not only priority

¹⁷⁸ Information obtained from the receptionists at NEMA offices in Kajiado. None of the Environmental Officers were present at the time.

but also more seriousness to such a case in comparison to a case involving waste management and protection of the environment.¹⁷⁹

3.4.3. Multiplicity of Laws

Another challenge in the enforcement of waste management regulation is multiplicity of laws. We have seen in the previous Chapter that several other Acts provide for waste disposal and management other than EMCA including the Forests Conservation and Management Act,¹⁸⁰ the Public Health Act,¹⁸¹ the Water Act,¹⁸² the Wildlife Conservation and Management Act¹⁸³ and the Traffic Rules of 1953 as revised in 2018. This means that other officers, other than those appointed under NEMA may be charged with waste management. The challenge here would be when for instance, where waste is dumped in a forest or a water body or in the public, would it be upon the Forest officers, Public Health Officers or the NEMA officers to arrest the offender. Several officers enforcing one piece of legislation could be beneficial due to increased manpower, however, it could lead to conflicts where it is not clear who is to do what or even complacency as each player would assume that another player would deal with the issue and in the end, none of the different players may enforce the same.

¹⁷⁹ The Chief Magistrate and Senior Principal Magistrates Kajiado County have often made remarks on the delicate nature of land matters when such files are placed before them.

¹⁸⁰ No 34 of 2016, Section 67(8)(b) provides that “Any person who, in any forest area ...dumps any solid, liquid, toxic or other wastes in a forest without authority of the forest manager ...commits an offence and is liable on conviction to a fine of not less than three million shillings or to imprisonment for a term of not less than ten years, or to both such fine and imprisonment.”

¹⁸¹ Cap 242, Section 115 prohibits nuisance and such nuisance is described under Section 118(1)(e) to include “any noxious matter, or waste water, flowing or discharged from any premises, wherever situated, into any public street, or into the gutter or side channel of any street, or into any nullah or watercourse, irrigation channel or bed thereof not approved for the reception of such discharge”.

¹⁸² No 8 of 2002, Section 94(1)(b) prohibits polluting water particularly through conveying or throwing rubbish, dirt, refuse, effluent or trade waste into or nearby a water resource.

¹⁸³ No 47 of 2013, Section 30 prohibits any activity polluting the environment particularly seepage of toxic waste into streams, rivers, wetlands and lakes. Section 89(1)(a) prohibits discharging of hazardous substances and waste into designated wildlife areas.

3.5. How do the challenges above affect waste management?

Waste production is inevitable for both natural persons and legal personalities. Every person produces waste, the type and amount is what varies. When issues of enforcement of waste management regulation are left to environmental inspectors, and implementation of waste management regulation is the purview of Environment, and Land Court judges, waste management cannot be done in an efficient manner. There is already a backlog of cases in our courts¹⁸⁴, filing more cases to combat waste mismanagement may not be a solution to the waste menace in the country. Instead, we must consider alternative forms of ensuring proper waste disposal. We ought to ask ourselves, if indeed we have the laws, we have the officers and the courts but no prosecutions even as waste continues to be mismanaged, how can we change the people's behavior?

From the foregoing, it is evident that proper waste management should not be left to few individuals or the mainstream institutions. It should be everyone's responsibility. It ought to be taught in schools and preached in churches. Mismanagement of waste ought to be a vice, not just an offence. It should be frowned upon.

In the next Chapter, the author will look at alternative means of managing waste particularly through behavioral changes.

¹⁸⁴ The Environment and Land Court of Kajiado as well as the Chie Magistrate's Courts have been conducting a service week so as to dispense of matters which were filed in court more than five years ago but are still pending hearing and/or determination.

4. CHAPTER FOUR: WHAT NEXT?

EFFICACY OF PERSONAL, RELIGIOUS AND COMMUNAL BELIEFS AS ALTERNATIVE METHODS OF MANAGING WITH WASTE DISPOSAL.

4.1. Introduction

A law ought to either encourage a certain behavior such as payment of taxes¹⁸⁵ or deter certain behaviors such as theft¹⁸⁶. One would imagine that the country with the best laws ought to have the best system of government, the least corruption and the most development; but this is not always the case.¹⁸⁷ Our Environment Management and Coordination Act makes provision for very hefty fines in the event of breach¹⁸⁸, and one wonders why our country is not the cleanest. It may be time we looked into alternative methods of enforcing proper waste disposal and protecting the environment.

In the previous two Chapters, the author concentrated on a command and control approach.¹⁸⁹ She examined the existing law on waste management in Kenya and discussed the challenges faced in interpreting and enforcing these laws. In this Chapter, the author explores other options other than the law to ensure proper waste management.

¹⁸⁵ See the long title of the Income Tax Act Chapter 470, Laws of Kenya, Revised 2017.

¹⁸⁶ See section 275 of the Penal Code, Chapter 63 of the Laws of Kenya.

¹⁸⁷ According to transparency international, good legislation may not be enough to ensure that a country has the best systems of government. Beside law enforcement, fighting corruption would also involve public participation and transparency mechanisms such as disclosure of information. See <<http://blog.transparency.org/2011/12/07/what-makes-new-zealand-denmark-finland-sweden-and-others-%E2%80%9Ccleaner%E2%80%9D-than-most-countries/>> accessed 20th August, 2017.

¹⁸⁸ See part XIII of the Environmental Management and Co-ordination Act, Number 8 of 1999 on Environmental Offences.

¹⁸⁹ Kariuki Muigua, Didi Wamukoya, Francis Kariuki (2015) *Natural Resources and Environmental Justice in Kenya*, Chapter Four, Nairobi, Glenwood Publishers Limited at pp 36-44.

4.2. Communal Beliefs as elucidated by Non-governmental organizations and their role in waste disposal management

4.2.1. Non-Governmental Organizations (NGOs)

NGOs in Kenya are regulated by the NGO Act.¹⁹⁰ They are defined as “...a private voluntary grouping of individuals or associations, not operated for profit or for other commercial purposes but which have organized themselves nationally or internationally for the benefit of the public at large and for the promotion of social welfare, development charity or research in the areas inclusive of, but not restricted to, health, relief, agriculture, education, industry and the supply of amenities and services...”¹⁹¹. From the above definition, the main intent of establishing an NGO is for the public good.

Some of the non-governmental organizations previously involved in waste management in Kenya include the Foundation of Sustainable Development in Africa, the Uvumbuzi Club, and the Undugu Society Kenya¹⁹².

According to a research done by the Mazingira Institute in 1998, it was established that urban communities would be willing to organize themselves in order to provide services such as waste management where the local authorities fail them.¹⁹³ Non –governmental Organizations, in providing advice, training and credit to such communities play a big role in these waste management activities.¹⁹⁴

Uvumbuzi Club for instance had an environmental lobbying campaign titled “Garbage is money” whose main strategy was composting of community organic waste. Foundation of Sustainable

¹⁹⁰ Although the Public Benefits Organizations Act, 2013 was assented into law on 14th January, 2013, it is yet to be operationalized 5 years later. CPA Evaline Otindo, PBO ACT 2013 AND NGO ACT TAX MANAGEMENT FOR NPOs 11 -12 MAY 2017. See <file:///C:/Users/AC8/Downloads/Documents/PBO-ACT-AND-NGO-ACT-CPA-Evaline-Otindo.pdf> accessed 3rd January, 2018.

¹⁹¹ Section 2 of the Non-Governmental Organizations Co-ordination Act Number 90 of 1990.

¹⁹² See <http://www.globenet.org/preceup/pages/ang/chapitre/capitali/cas/kenyacom.htm> accessed 16th July, 2018.

¹⁹³ Kim Peters (in association with Mazingira Institute Nairobi, Kenya) Community-Based Waste Management for Environmental Management and Income Generation in Low-Income Areas: A Case Study of Nairobi, Kenya, March 1998, see <http://www.globenet.org/preceup/pages/ang/chapitre/capitali/cas/kenyacom.htm> accessed 7th September, 2018.

¹⁹⁴ *Ibid.*

Development in Africa worked with Uvumbuzi Club in its campaign “Garbage for money” and particularly published a booklet and posters illustrating composting instructions. Undugu Society Kenya equally worked with the two aforementioned non-governmental organizations particularly in training the communities on composting which is an effective method of waste management.¹⁹⁵

Undugu Society Kenya has a branch office in Kitengela ward. Some of the activities it has participated in is training the locals in Kitengela ward on methods of re-using and recycling waste. According to one of the interns in Undugu Society Kenya, Kitengela branch, it is not difficult to convince low income earners to participate in an activity which would either reduce spending or earn them a little extra money. Consequently, Kitengela ward locals are warming up to the idea of re-using and recycling waste though this is just an idea which is yet to be actualized.

Soroptimist International-Kenya is not necessarily an NGO but rather a “...*global volunteer movement working together to transform the lives of women and girls.*”¹⁹⁶ It has branches all over the world including *Soroptimist International of the Americas, Soroptimist International of Europe, Soroptimist International of Great Britain & Ireland and Soroptimist International of the South West Pacific.*¹⁹⁷ In Kenya, the Club has branches in Nakuru, Nairobi – Karen, Kisumu, Nairobi Milimani, Nairobi, Mombasa and Kakamega. Kitengela area is covered by the Nairobi

¹⁹⁵ *Ibid*

¹⁹⁶ See <<https://www.soroptimistinternational.org/about-us/>> accessed 23rd November, 2018.

¹⁹⁷ See <<https://www.soroptimistinternational.org/about-us/>> accessed 23rd November, 2018.

Club.¹⁹⁸ The club has in the recent past plant trees within Kitengela ward and built washrooms for girls schools in Kitengela in an effort to ensure sanitary disposal of human waste. They have also conducted several trainings for girls to educate them on the best disposal methods appreciating the fact that women are more often than not home makers.

4.3. Personal and Societal Beliefs and their role in waste disposal management

Different religions and beliefs also have something to say about protection of the environment. The author considered the Bible, the *Laudato Si*, the Quran, the Gita and quotes by atheists touching on the environment. The Author also visited nearby churches, the mosque as well as a number of private and public learning institutions in Kitengela ward. It is the author's contention that personal beliefs and societal expectations as opposed to written laws would more likely influence their ways of life particularly the manner in which they co-exist with the environment.

4.3.1. Christians

4.3.1.1. The Bible

The Bible clearly stipulates that the land and everything in or on it belongs to God.¹⁹⁹ The Lord gave man the Garden of Eden and instructed Adam and Eve to work it and keep it.²⁰⁰ It prohibits pollution of the land whether by blood or otherwise.²⁰¹ Finally, those who destroy the earth will be destroyed on the judgment day.²⁰²

For those who believe in God, they fear God more than any law or regulation. They would have regard to environmental protection for fear of God's wrath as opposed to payment of fines. It is believed that God is omnipresent, He sees all and hears all. It is impossible to hide from him.

¹⁹⁸ Information obtained from one of the Club members who is also the outgoing delegate for Soroptimist International Nakuru Club.

¹⁹⁹ Psalms 1-2

²⁰⁰ Genesis 2:15

²⁰¹ Numbers 35:33-34 New International Version (NIV)

²⁰² Revelation 11:18

Readers of the Bible and followers of Christ²⁰³ believed that those who disobey God would be destroyed on judgment day. There would therefore be more compliance of waste management as taught in the Bible for Christians than that implemented by law enforcers. In the event existing regulation was obeyed, this would be as a result of the Christian teachings of obedience of authority as opposed to fear of man or earthly punishments.

4.3.1.2. *Laudato Si*²⁰⁴

The *Laudato Si* is a text written by Pope Francis to all Catholic faithfuls being their worldwide religious leader. It explains how serious destruction of the environment is since God has entrusted the “mother” earth to us. He speaks about the “throw away culture” which quickly “reduces things to rubbish.” He cites the example of paper waste which is disposed instead of being recycled. He insists that we must not only love one another but also love God’s creation.

Catholics take their religious doctrines very seriously and hold the Pope in high regard. A true Catholic would not find it difficult to be guided by principles laid down by the Holy Father, otherwise known as the Pope.

4.3.1.3. *St Monica Noonkopir Catholic Church – Kitengela*

As guided by the Holy Bible as well as the *Laudato Si*, catholic members of the said church engage in several activities for the preservation of the environment including tree planting and waste collection activities. The youth, specifically, have an annual program wherein they organize themselves and do a clean-up of Kitengela market place which is situated just a few hundred metres from the church.²⁰⁵

²⁰³ The son of God who came down to save mankind.

²⁰⁴ Encyclical letter of the Holy Father Francis on Care for our Common Home.

²⁰⁵ Information obtained from the receptionist at the church as well as one of the assisting parish priests on 22nd November, 2018

4.3.2. Muslims

4.3.2.1. The Quran

The Quran equally advocates for protection of the Environment. It states that Allah created the sky (including the ozone layer).²⁰⁶ Allah is also the Lord of the worlds.²⁰⁷ He forbids abusing the earth.²⁰⁸ The Qu'ran also forbids corrupting the land.²⁰⁹ Prophet Muhammed²¹⁰ in particular is known as a pioneer of the Environment.²¹¹ He left behind *Ecological Sunnah* which refers to verbal teachings of the prophet on protection of the environment.²¹² The *Hadiths* (sayings of the prophet Muhammed) contain warnings against polluting water sources such as lakes and rivers. The sayings also prohibit *urinating* near water sources, roads, resting areas and trees.²¹³ It further advises those who rear animals to keep them at a safe distance from wells and other water sources.²¹⁴ These acts forbidden in Islam ensure that staunch Muslims have recourse to environmental protection particularly through managing their waste.

4.3.2.2. Madrasatul Khairat Al-Islamia Kitengela - Kenya

In the Muslim teachings, according to Sheikh Faisal, elderly men normally play the guiding role. Therefore, when it comes to activities such as picking litter, it is the youth and ladies who participate. Such activities are common in the Madrasa Salaam Kitengela which is the local mosque and the same is done at least once a year.²¹⁵

²⁰⁶Qu'ran 21:32.

²⁰⁷ Qu'ran 40:64.

²⁰⁸Qu'ran 2:60.

²⁰⁹ Qu'ran 28:77.

²¹⁰ A trusted religious man who received God's revelations through Angel Gabriel when he was 40 years old. The Revelations are collectively known as the Quran. See <https://www.islam-guide.com/ch3-8.htm> accessed 7th September, 2018.

²¹¹ See <http://www.islamvision.org/prophet-muhammad1.html> accessed 7th September, 2018.

²¹² See <http://www.islamvision.org/prophet-muhammad1.html> accessed 7th September, 2018.

²¹³ See <http://www.islamvision.org/prophet-muhammad1.html> accessed 7th September, 2018. See also Bukhara, "Vudu" B.68; Muslim, "Taharat" H.No: 95-96.

²¹⁴ See <http://www.islamvision.org/prophet-muhammad1.html> accessed 7th September, 2018.

²¹⁵ Information obtained from one of the Muslim faithfuls at her tailoring shop, Tawfiq Tailoring, along Balozi Road, off Nairobi-Namanga Highway.

4.3.3. *Atheists*

An atheist is a person who “*disbelieves or lacks belief in the existence of God or gods*”.²¹⁶ Unlike theists who believe in life after death, atheists are only certain of the life they are currently living. They would therefore be most concerned about caring for the world or earth they currently live in.²¹⁷ According to one atheist,²¹⁸ they (atheists) do not really have a common stand as regards environmental issues. However, his personal view was that environmental protection secures the interest of future generations as well as biodiversity. So as much as they did not believe in the afterlife, they would participate in protecting the environment for the sake of their offspring.

4.3.4. *Hindu teachings on the environment*

According to Hinduism, the earth is a “*manifestation of goddess*” thus must be treated with respect.²¹⁹ Any person who carelessly disposes waste would be seen as disrespecting the land and the goddess by extension.

4.3.5. *Traditions*

Kenya has about 42 tribes with diverse culture. However, most if not all these tribes have some reverence to nature. They believe that God is manifested through the sun, moon, stars, clouds, thunder, lightning, trees, mountains and hills, rivers, lakes, the sea and other aspects of nature. In the circumstances, these natural occurrences would be protected and held in high regard.²²⁰

²¹⁶Oxford living dictionaries see <https://en.oxforddictionaries.com/definition/atheist> accessed 4th January, 2017.

²¹⁷ See <<http://atheistnexus.org/forum/topics/why-should-an-atheist-care>> accessed 4th January, 2017.

²¹⁸ Name and description withheld on request.

²¹⁹ See <https://www.huffingtonpost.com/pankaj-jain-phd/10-hindu-environmental-te_b_846245.html> 4th January, 2017.

²²⁰ Julius Gathogo Environmental management and African indigenous resources: echoes from Mutira Mission, Kenya (1912-2012) in *Histories Of The Church And The Environment*, Studia Hist. cc. vol.39 n.2 Pretoria Feb. 2013 ISSN 1017-0499.

4.4. Institutional measures that promote behavioral change as opposed to the law.

4.4.1. Rewards (carrot) as opposed to stick

The Command and control approach discussed in the previous Chapters is a “stick” kind of approach as opposed to the “carrot”.²²¹ One example of institutions that use the carrot or reward system to boost compliance is the Institute of Certified Secretaries. The Institute is the body mandated by law to promote, develop and regulate corporate governance, which includes corporate environmental responsibility, in Kenya.²²² To date, we are yet to pass any specific laws enforcing corporate governance in companies. The Institute has however come up with a Champion of Governance Award which is held every year to reward institutions who performed exemplarily in matters governance.²²³ This has encouraged Kenyan companies to practice good corporate governance despite the absence of laws governing that particular area.

4.5. Comparative analysis with other East African countries where measures other than law enforcement is used to encourage proper waste disposal

4.5.1. Rwanda

Rwanda is the second smallest country in Africa and the smallest in East Africa. It is well known for being the cleanest country in East Africa.²²⁴ This cleanliness has been achieved due to the principle of “*Umuganda*”. This principle was began shortly after independence and could be equated to the Kenyan principle of “*harambee*”.²²⁵ In Rwanda, every last Saturday of the month is *Umuganda* day. Everything comes to a standstill as the citizens and even those visiting the country come together to clean up the State.²²⁶ This instills some sort of discipline as opposed to where the state hires works to clean up after adults; hence the very high cleanliness standards in

²²¹ The carrot and stick expression emanates from the story of a man trying to make their donkey move forward; they could either dangle a carrot in front of the donkey or hit the donkey with a stick. A stick in our case would be equivalent to sanctions under criminal law while a carrot would be tax incentives, a clean environment, savings and other benefits that one would derive from proper waste management. See Extrinsic Theories at <<https://moptivation3250sep12.wikispaces.com/Extrinsic+Theories>> accessed 16th July, 2018.

²²² See preamble of the Certified Public Secretaries Act, Cap 534 of 1988, Laws of Kenya.

²²³ See <<https://www.ics.ke/champions-of-governance-cog-awards/>> accessed 16th July, 2018.

²²⁴ See <<http://www.allaboutrwanda.com/umuganda.html>> accessed on 16th July, 2018.

²²⁵ Both principles could be loosely translated to mean “coming together to achieve a common goal”.

²²⁶ See <<http://www.allaboutrwanda.com/umuganda.html>> accessed on 16th July, 2018.

Rwanda. Although the practice is compulsory and those who fail to attend severally without good cause are fined,²²⁷ the practice is lauded as increasing self-discipline such that the participants would be more reluctant to mismanage waste. The country's outstanding cleanliness has been attributed to this principle.

4.5.2. *Possibility of adopting the Umugunda in Kenya*

In Kenya, different organizations including private establishments as well as public entities such as counties have tried to come up with alternative methods of waste management. In early 2018, Rwanda High Commission to Kenya in partnership with Nairobi City County organized and carried out²²⁸ the "Umuganda" exercise. Although successful, the exercise has never been repeated. In fact, the county boss at the time was away attending to other duties showing how unimportant he considered the event.

4.6. Efficacy of other methods of dealing with waste disposal management

Depending on one's background, societal and/or personal beliefs, different approaches may be used to ensure proper waste management. For those who believe in the existence of a higher being, they would be more cautious to protect the environment for fear of calamities and/ or bad luck. Others would be more inclined to keeping their environment clean due to their general upbringing, the estates they dwell in or their corporate culture. Very few would be cautious about the environment because of the future generations.

This Chapter explored non-legal methods of ensuring proper waste management as an alternative to regulation and its enforcement. From the material gathered, the researcher concluded that religious beliefs could actually play a role in the manner in which a person treats the environment and by extension, how they would manage their waste.

²²⁷ See <<http://perilofafrica.com/umuganda-rwandas-day-community-cleaning/>> accessed 16th July, 2018.

²²⁸ See <<https://www.standardmedia.co.ke/article/2001267487/nairobi-county-joins-rwandans-in-umuganda-cleaning-exercise>> accessed 16th July, 2018.

The assumption that a majority of Kenyans would abstain from waste mismanagement if threatened with an arrest or a huge fine²²⁹ may only work for a section of the people.

4.7. Findings and Analysis:

The researcher confirmed that the existing legal framework sufficiently covered waste management as discussed in Chapter 2. When it came to enforcement, it was quite evident that the implementation and enforcement of waste management regulations faced institutional challenges as evidenced in Chapter 3. The judicial officers interviewed stated that they had never handled a matter to do with improper disposal of waste such as littering or dumping. Based on these findings, the researcher considered whether religious or societal beliefs and institutional practices would influence how Kitengela locals treated the environment in Chapter 4. We have established that most religions (and other non-believers) uphold protection of the environment and by extension, proper disposal and where possible, recycling of waste.

We have seen NGO's promoting reusing and recycling of waste and religious institutions such as churches and waste organizing clean ups within Kitengela ward. The researcher also observed that learning institutions including Kenya College of Accounting – Kitengela branch, Kitengela international school and the Environmental club of Acacia crest academy Kitengela have successfully organized clean ups where they went round in the more populous areas of Kitengela ward picking up solid waste that had been dumped.

4.8. Conclusion

The researcher concludes that: first, there is an extensive legal framework in place, particularly statutory provisions which regulate solid waste disposal and management. Second, enforcers of the legal framework face many challenges which result in very few prosecutions when it comes

²²⁹ **Pauline Kairu**, Will we triumph in the war on plastics? Sunday September 17 2017 <<https://www.nation.co.ke/lifestyle/dn2/Plastic-bag-ban-Have-the-cows-finally-come-home/957860-4099846-pip5dpz/index.html>> accessed 16th July, 2018

to offences related to waste disposal. Third that we can fall back to beliefs and communal practices to encourage proper waste disposal.

4.9. Recommendations

Man, being a social being, would be more concerned about what their religion or society demands as opposed to statute law. This could be because of the origin of religious law, which in most religions is a supernatural being who is greatly revered. Statute law on the other hand being drafted by human beings, may not “scare” religious men (and women) as much. This may be the reason why people, particularly staunch theists, are more likely to do or to refrain from doing something because their respective “holy books” say so. Going by this argument, and having passed several laws but still grappling with poor waste management, the state ought to consider alternative forms of mechanisms to ensure proper waste management. We ought to ask ourselves; what would inspire *Wanjiku* to utilize proper methods of waste disposal rather than dumping.

First, the benefits of proper waste management ought to be taught in school from tender ages so that waste management is seen as the norm rather than a form of avoiding legal sanctions. The children ought to be involved in waste management activities and the benefits demonstrated practically. Cleaning up exercises carried out by schools such as Kitengela International and Acacia Crest and Kenya College of accountancy should not only be encouraged but also supported by local leaders. The ward could come up with a schedule to include all schools within the region to clean up the area every week. The learning institution who maintains the cleanest week could then be awarded. That would make waste disposal a fun activity rather than a boring core for the young learners. In any event, these young learners would be the most disadvantaged most if waste was not managed properly considering they have relatively more time left on earth.

Second, and relatedly religious organizations could be encouraged to carry on with the clean up exercise in collaboration with the government so that citizens realize that the responsibility of a clean environment begins with them. Religious institutions have a way of getting to the masses. Almost all average believer makes a point to attend their place of worship at least once a week. The area chiefs and members of county assemblies can take steps to reach out to the masses through their religious institutions to promote proper waste disposal. They could also promote the members of these religious institutions when they go on clean up exercises by maybe joining them, providing security, providing garbage bags as well as transportation of the said waste to proper disposal sites.

As regarding enforcement of waste regulation, different departments need diversified assistance. To curb the growing number of judicial officers, prosecutors and even advocates lacking basic training on waste disposal and its management, the Council of Legal Education²³⁰ could consider International Environmental Law as a core subject for any student undertaking the Bachelor of Laws degree.

The Environmental Officers in NEMA, particularly in the Kajiado Office also need to be increased in number and probably a motor vehicle or two added so as to increase their performance. It would also be a good idea to set up NEMA offices each with an officer in every ward or constituency as opposed to one county office with five officers as is the case in Kajiado.

²³⁰ Established under Section 4 of the Legal Education Act, No 27 of 2012 whose core mandate includes regulate legal education and training in Kenya offered by legal education providers as per section 8(1)(a) of the said Act.

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