

**Enhancing Environmental Governance through Law and Other Tools: The  
Efficacy of Kenya's Environmental Management and Coordination Act  
(EMCA)**

---

**Kariuki Muigua**

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's Environmental Management and Coordination Act (EMCA)*

**Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's Environmental Management and Coordination Act (EMCA)**

**Kariuki Muigua\***

**Abstract**

*Kenya's Environmental Management and Coordination Act (EMCA), No. 8 of 1999 came into force in 2000 as a framework law meant to provide for the establishment of an appropriate legal and institutional framework for the management of the environment and for matters connected therewith and incidental thereto. Notably, this Act does not repeal any of the sectoral laws but instead seeks to coordinate any actions meant to regulate access, use and conservation of these resources. While there are sectoral institutional frameworks under different laws, EMCA establishes the National Environment Management Authority (NEMA) as the lead agency in coordination of these conservation and protection measures. Implementation of the framework law as it is has without a doubt come with its fair share of challenges, often resulting in conflicts among laws and the related institutions. This paper seeks to discuss the efficacy of a framework law approach to environmental governance generally. It also discusses the implementation of EMCA as it is and the challenges that arise and through comparative approaches, offers viable reforms that may be considered in order to enhance its effectiveness in ensuring that Kenya achieves its goals in sustainable development agenda. The author generally argues that unless the identified challenges are addressed, Kenya's dream of becoming a model country in effective environmental governance for sustainability will remain a mirage. The author also argues that law alone is not enough to achieve this and thus proposes a hybrid approach that employs both legal and other compliance tools in enhancing environmental governance in the country.*

**1. Introduction**

Environmental governance refers to the laws, customs, guidelines, and institutions that influence how people interact with the environment.<sup>1</sup> Since environmental legislation is a cornerstone for

---

*\*PhD in Law (Nrb), FCI Arb (Chartered Arbitrator), LL. B (Hons) Nrb, LL.M (Environmental Law) Nrb; Dip. In Law (KSL); FCPS (K); Dip. In Arbitration (UK); MKIM; Mediator; Consultant: Lead expert EIA/EA NEMA; BSI ISO/IEC 27001:2005 ISMS Lead Auditor/ Implementer; Advocate of the High Court of Kenya; Senior Lecturer at the University of Nairobi, School of Law [January 2023].*

<sup>1</sup> Environment UN, 'Why Does Environmental Rights and Governance Matter?' (UNEP - UN Environment Programme, 4 September 2017) <<http://www.unep.org/explore-topics/environmental-governance/why-does-environmental-governance-matter>> accessed 6 January 2023.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's Environmental Management and Coordination Act (EMCA)*

environmental sustainability, it is crucial that its objectives be completely attained in light of intensifying environmental challenges.<sup>2</sup>

The actions of many players, including states as well as business, nongovernmental organisations (NGOs), and the public, are increasingly included in environmental governance, which was initially the purview of local and thereafter national governments.<sup>3</sup> Historically, states and/or governments have governed the environment in a largely top-down manner through regulation and the legal system. However, in the last two decades, non-state actors, such as businesses and communities, have become much more directly involved in governance, necessitating the use of alternative strategies that rely on market forces and/or networks of local actors.<sup>4</sup> Globalization has made it easier than ever to close the gap between societies and the condition of their environs. Therefore, it has become imperative that more effective environmental laws and legal frameworks be adopted globally in order to shift economic development and advancement along a path toward environmental sustainability.<sup>5</sup>

This paper examines the effectiveness of the *Environmental Management and Coordination Act (EMCA)*, No. 8 of 1999, being the framework law on environmental governance in Kenya, in responding to the ever increasing environmental challenges in the country, and proffers some recommendations on what future amendments to the Act should consider.

## **2. Place of Law in Governance Matters**

The relationship between law and governance has been conceptualised by certain scholars in broad terms. Law and governance have been successfully connected, according to some, in the manner listed below:<sup>6</sup>

---

<sup>2</sup> Norul Mohamed Rashid, 'Environmental Law' (United Nations and the Rule of Law) <<https://www.un.org/ruleoflaw/thematic-areas/land-property-environment/environmental-law/>> accessed 6 January 2023.

<sup>3</sup> Benson, D. and Jordan, A., "Environmental Governance." In *The International Encyclopedia of Geography*. Wiley, 2017.

<sup>4</sup> Ibid.

<sup>5</sup> Anshu Singh, "Principles and Development of International Environmental Law", Pen Acclaims, Volume 10, May 2020, ISSN 2581-5504, pp.1-2. < <http://www.penacclaims.com/wp-content/uploads/2020/06/Anshu-Singh.pdf>> accessed 6 January 2023.

<sup>6</sup> Bell, C., "Governance and Law: The Distinctive Context of Transitions from Conflict and its Consequences for Development Interventions," *Briefing Paper 4*, (The Political Settlements Programme Consortium, 2015), pp.1-2. Available at [http://www.politicalsettlements.org/wp-content/uploads/2017/09/2015\\_BP\\_4\\_Bell\\_Governance-and-Law.pdf](http://www.politicalsettlements.org/wp-content/uploads/2017/09/2015_BP_4_Bell_Governance-and-Law.pdf) [Accessed on 6/1/2023].

***Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)***

Constitutions provide the framework for the legal and political institutions through which government takes place. They provide- legal 'power-maps' for how power will be held and exercised; a legal framework for accountability, often enforceable by apex courts; a legalized text which embodies the underlying political settlement or elite-level pact from which any political community flows; rights and safeguards for individuals from abuses of power by political actors and institutions; Public institutions of governance are themselves also creatures of law, operating according to law and sometimes even having secondary law-making functions; Good governance depends on a legal platform of both criminal law and civil law, to create the environment – here law's key role is to provide background norms that enable horizontal interactions; International law increasingly impacts on, and increasingly even regulates governance at the state level. This regulation is diverse and multifarious, including- International legal regulation of political change processes (including peace settlements, coup d'état, or other forms of regime change), which attempts to ensure only 'democratic' regime change; International legal requirements for human rights to be protected at the domestic level; Human rights directly impact on the internal governance arrangements of states; International legal requirements for 'inclusion' both in change processes and in the terms of the new political settlement itself; A range of diverse international bodies shape domestic governance in what have been termed 'transnational global administrative spaces' which impact on domestic governance.

Article 10 of the Constitution of Kenya outlines the national values and principles of governance that inform application or interpretation of the Constitution, enacting, application or interpretation of any legislation, or making or execution of public policy.<sup>7</sup> The law thus has a significant impact on governance issues since it not only establishes the necessary governance structures but also specifies how they should operate.

Notably, both formal and informal legal systems are recognised under the Kenyan Constitution.<sup>8</sup>

### **3. Kenya's Legal and Institutional Framework for the Management and Governance of the Environment: Overview**

While there are various sectoral laws which deal with management and governance of wildlife, water, forests and agriculture, among others, and all of which have a bearing on the environment, the main focus of this paper is the 2010 Constitution of Kenya and the Environmental Management and Coordination Act (EMCA)<sup>9</sup>.

---

<sup>7</sup> Art. 10(1), Constitution of Kenya 2010.

<sup>8</sup> Art. 2(4), Constitution of Kenya 2010.

<sup>9</sup> Environmental Management and Coordination Act (EMCA), No. 8 of 1999, Laws of Kenya.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya’s  
Environmental Management and Coordination Act (EMCA)*

**a. The Constitution of Kenya 2010**

The Constitution captures the obligations of the State in respect of the environment which include the duty to: ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources<sup>10</sup>; encourage public participation in the management, protection and conservation of the environment; and establish systems of environmental impact assessment, environmental audit and monitoring of the environment, among others.<sup>11</sup> Notably, every citizen has a constitutional 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.<sup>12</sup>

Although the Constitution calls for communities and the State to work together, decision-making still appears to be mostly top-down, and communities are only given an opportunity to apply for resource user rights, with little to no consultations addressing management and governance issues.<sup>13</sup>

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

The main framework law on environmental governance and management in Kenya is the *Environmental Management and Coordination Act (EMCA)*<sup>14</sup>. It is meant to provide for the establishment of an appropriate legal and institutional framework for the management of the environment and for matters connected therewith and incidental thereto.<sup>15</sup>

The existing legal and institutional framework for environmental management is disjointed

---

<sup>10</sup> The Constitution interprets “natural resources” to mean the physical non-human factors and components, whether renewable or non-renewable, including—sunlight; surface and groundwater; forests, biodiversity and genetic resources; and rocks, minerals, fossil fuels and other sources of energy (Art. 260).

<sup>11</sup> Constitution of Kenya, Art. 69(1).

<sup>12</sup> Constitution of Kenya, Art. 69(2).

<sup>13</sup> Sec. 29 & 47 Water Act, No. 43 of 2016, Laws of Kenya; Forest Conservation and Management Act, 2016 (No. 34 of 2016), sec. 48-52; See also Rouillé-Kielo G, ‘Natural Resources Management in Kenya (Water and Forest): Centralised Policies, Between Exclusion and Participation of the Local Population’ in Marie-Aude Fouéré, Christian Thibon and Marie-Emmanuelle Pommerolle (eds), *Kenya in Motion 2000-2020* (Africae 2021) <<http://books.openedition.org/africae/2515>> accessed 8 January 2023:

“The water and forest users’ associations “participate” in the management activities primarily as auxiliaries to the central government, in order to help achieve the objectives set on a national level, in particular that of a 10% tree cover up to 2022.”

<sup>14</sup> Environmental Management and Coordination Act (EMCA), No. 8 of 1999, Laws of Kenya.

<sup>15</sup> *Ibid*, Preamble.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)*

because different entities are responsible for different aspects of environmental law and policy. EMCA, which was enacted to improve management of Kenya's environmental resources, did little to eliminate the variety of regulatory frameworks in place for various environmental resources. Furthermore, the development of necessary legislation and rules to support the EMCA framework is still far from completion. A misleading impression of the adequacy of laws and institutions to address environmental challenges is created by this multiplicity. EMCA must be revised, and all related laws must be consolidated, so that it will be simpler to assess the efficacy of the legislation and institutions. Proper application of the law through the institutions outlined in this collection of laws still leaves many issues unsolved including overlapping of mandates. Reforms to Kenya's environmental governance policies and institutions are required to guarantee that environmental standards and laws are more strictly enforced.<sup>16</sup>

Part XII,<sup>17</sup> section 125 of EMCA establishes the National Environment Tribunal (NET) which is charged with settling disputes that arises in matters provided for under the Act.<sup>18</sup> However, its decision is not final and any dissatisfied party may appeal to superior courts, starting from Environment and Land Court.<sup>19</sup>

The role of NEMA in the safeguarding environment as established under EMCA was well summarized in the case of *Martin Osano Rabera & another v Municipal Council of Nakuru & 2 others [2018] eKLR*<sup>20</sup> in the following words:

72. Nevertheless, NEMA is not just an investigator and a prosecutor. Its success cannot be measured in terms of successful investigations and prosecutions. It has a bigger mandate: to be the principal instrument of government and the people of Kenya in the implementation of all policies relating to the environment. Indeed, under section 9 (2), NEMA has mandatory obligations to among others co-ordinate with lead agencies to ensure the proper management and rational utilization of environmental resources on a sustainable yield basis for the improvement of the quality of human life in Kenya and to render advice and technical support, where possible, to entities engaged in natural resources management and environmental protection.

---

<sup>16</sup> Kenya Vision 2030, p. 104.

<sup>17</sup> SS. 125-136, No. 8 of 1999.

<sup>18</sup> S. 125, No. 8 of 1999.

<sup>19</sup> Sec. 130, EMCA.

<sup>20</sup> *Martin Osano Rabera & another v Municipal Council of Nakuru & 2 others [2018] eKLR*, Petition No. 53 of 2012.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)*

The policies, laws, and regulations in place in Kenya, some of which have already been mentioned, seem to indicate that the State should be in charge of setting policy in regard to sustainable resource management, particularly when it comes to decision-making, rather than working in partnership with local communities.

**4. Kenya's Environmental Management and Coordination Act (EMCA), No. 8 of 1999:  
Challenges and Prospects in Implementation**

This section highlights some of the issues and challenges that arise in implementation of EMCA, based on the approaches adopted therein as well as the measures it prescribes.

**4.1. Command and Control Approach**

Although this paper does not aim to minimize its importance in some cases, the command-and-control approach to environmental governance focuses primarily on achieving conservation objectives and addressing environmental degradation issues at the expense of also trying to ensure that these resources help achieve social justice for the people with regard to the use of environmental resources.<sup>21</sup> The standards established by numerous legislation for institutional accountability, public participation, and consultations are sometimes taken for granted as mere formality. Social justice-related objectives seem to be put on the back bench.<sup>22</sup>

Where EMCA provides for consultations, the same are mainly meant to be between the state agencies charged with environmental governance as lead agencies with minimal or no input from affected communities.<sup>23</sup> Thus, it is possible to have a scenario where the protectionist approaches adopted in most of these sectoral laws end up undermining efforts towards achieving Sustainable Development instead of boosting the same.

The command and control mechanism therefore involves the 'command' of the law and the legal authority of the State. Typically, it entails regulatory law, backed by criminal sanctions.<sup>24</sup> It

---

<sup>21</sup> Muigua, K., "Revisiting the Role of Law in Environmental Governance in Kenya." (2019) <<http://kmco.co.ke/wp-content/uploads/2019/06/Revisiting-the-Role-of-Law-in-Environmental-Governance-in-Kenya-Kariuki-Muigua-June-2019.pdf>> accessed 6 January 2023.

<sup>22</sup> Ibid; Tyler, T.R., "Social justice: Outcome and procedure." *International journal of psychology* 35, no. 2 (2000): 117-125; Abebe, B.A. and Jones, K., "Social Equity Outcomes in Ethiopia."

<sup>23</sup> See also the *Environmental (Impact Assessment and Audit) Regulations, 2003*, Legal Notice 101 of 2003, Regulation 17 which provides for public participation albeit inadequately.

<sup>24</sup> Hutter, B.M., 'Socio-Legal Perspectives on Environmental Law: An Overview,' *op. cit.*, pp.3 & 5.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's Environmental Management and Coordination Act (EMCA)*

is based on potential coercion rather than voluntary goodwill and on penalties rather than positive incentives.<sup>25</sup> The command and control mechanism is what has predominantly informed the development of Kenya's natural resources protection regime.<sup>26</sup> Its fundamental component is the concentration of power for managing natural resources in the hands of the public authorities, with minimal responsibility being delegated to other authorities or communities and little involvement from local communities.<sup>27</sup>

#### **4.1.1 Effectiveness of Command and Control Mechanisms**

The criminality component of regulation is what makes command and control methods successful.<sup>28</sup> It establishes a form of societal control over the use of natural resources.

New categories of illegal acts and criminal legislation have been developed through command and control systems.<sup>29</sup> Under the penal law in Kenya, when a body corporate commits an offence it is its managers who are held culpable<sup>30</sup> but under environmental law, culpability is assigned to the body corporate in its capacity as such, together with its managers.<sup>31</sup> This is crucial to ensure huge enterprises, which are frequently responsible for pollutants that may have a harmful impact on natural resources, comply with the law.

Under command and control approaches, criminal law is used as a preventative tool by use of punitive sanction.<sup>32</sup> This is because from an economic perspective, criminal sanctions when effectively enforced raise the cost of certain conduct and therefore encourages compliance with laws.<sup>33</sup> The EMCA proposes further sanctions in addition to fines, including the seizure of used

---

<sup>25</sup> Davies J.C. & Mazurek, J., *Pollution Control in the United States: Evaluating the System*, *op. cit.*, p.15.

<sup>26</sup> Ochieng', B.O., 'Institutional Arrangements for Environmental Management in Kenya,' in Okidi C.O., et al, *Environmental Governance in Kenya: Implementing the Framework Law*, (East African Educational Publishers Ltd, 2008), p.200.

<sup>27</sup> Ochieng, B.O, 'Institutional Arrangements for Environmental Management in Kenya,' *op. cit.*, p.200; cf. Ribot, J.C., 'Democratic Decentralization of Natural Resources: Institutionalizing Popular Participation,' *World Resources Institute*, 2002.

<sup>28</sup> Hutter, B.M., 'Socio-Legal Perspectives on Environmental Law: An Overview,' *op. cit.*, pp. 3 & 5; cf. Ashworth, A., 'Conceptions of Over criminalization,' *Ohio State Journal of Criminal Law*, Vol. 5, 2008. pp. 407-425.

<sup>29</sup> See Bethell, E., 'Environmental Regulation: Effective or Defective? Assessing Whether Criminal Sanctions Provide Adequate Protection of the Environment,' *Plymouth Law Review*, 2009, p.1.

<sup>30</sup> S. 23, Penal Code (Cap 63), Laws of Kenya.

<sup>31</sup> S. 145(1), Act No. 8 of 1999.

<sup>32</sup> Mbote, P.K. 'The Use of Criminal Law in Enforcing Environmental Law' in Okidi, C.O., et al, *Environmental Governance in Kenya: Implementing the Framework Law* (East African Educational Publishers Ltd, 2008) 110, p.112.

<sup>33</sup> *Ibid*, p. 110.



***Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)***

products and the termination of licences and licences.<sup>34</sup> Corporations will fear shutting down due to cancelled permits and losing their assets as these will directly impact their profits.

Another reason that makes command and control effective is that, environmental laws are regarded as protective of public good.<sup>35</sup> Most environmental problems, pollution among them, must be solved by government action to avoid the tragedy of the commons.<sup>36</sup> Activities of relatively powerful groups are regulated in favour of a less powerful majority.<sup>37</sup>

#### **4.1.2 Criticisms Against the Command and Control Approach**

One persistent complaint is that regulatory bodies risk becoming "regulatory captured" by the people they are supposed to be protecting if they get overly intertwined with their interests and become less vigilant about upholding the law.<sup>38</sup> The apparent disparity in capabilities between regulatory bodies and the industry they are supposed to supervise also points to regulatory capture.<sup>39</sup> This means that occasionally private enterprises may have an advantage over public regulators because they have more resources, specialized staff, the ability to challenge the regulator more effectively on both technical and legal grounds, and a better understanding of the environmental problem, its scope, and potential technological solutions.<sup>40</sup>

The incapacity of the agencies to carry out their missions is a problem as well due to a lack of staffing resources.<sup>41</sup> There are not enough employees at lead agencies, NEMA and the Kenya

---

<sup>34</sup> S.146, Act No. 8 of 1999.

<sup>35</sup> Hutter, B.M., 'Socio-Legal Perspectives on Environmental Law: An Overview,' *op cit*, pp. 3 & 11.

<sup>36</sup> Krier, J.E. 'The Pollution Problem and Legal Institutions: A Conceptual Overview' in Michael C. Blumm (ed), *Environmental Law* (Dartmouth Publishing Company Limited, 1992) 181, p.181; See also Hardin, G. 'The Tragedy of the Commons,' *Science*, New Series, Vol. 162, No. 3859 (Dec. 13, 1968), pp. 1243-1248, p. 1245.

<sup>37</sup> Hutter, B.M., 'Socio-Legal Perspectives on Environmental Law: An Overview,' *op. cit*, pp. 3 & 11; See also generally Stewart, K. 'Avoiding the Tragedy of the Commons: Greening Governance through the Market or the Public Domain?' Available at [http://www.yorku.ca/drache/talks/pdf/apd\\_stewartfin.pdf](http://www.yorku.ca/drache/talks/pdf/apd_stewartfin.pdf), [Accessed on 6/01/2023].

<sup>38</sup> Ma, H., Shen, G. and Zou, J., "Does Excess Capacity Strengthen Firms' Dependence on the Polluting Path? Evidence from Chinese Iron and Steel Firms," *Evidence from Chinese Iron and Steel Firms*;

<sup>39</sup> *Ibid*.

<sup>40</sup> Hutter, B.M. "A Reader in Environmental Law", (Oxford University Press, 1999); See also Stallworthy, M, *Understanding: Environmental Law* (Sweet & Maxwell, 1<sup>st</sup> ed., 2008), pp. 79-81; See also Laura Tlaiye, L. & Biller, D, 'Successful Environmental Institutions: Lessons from Colombia and Curitiba, Brazil,' *LATEN Dissemination Note*, No.12, December, 1994, p. 5.

<sup>41</sup> See Amechi, E.P., "Poverty, Socio-Political Factors and Degradation of the Environment in Sub-Saharan Africa: The Need for a Holistic Approach to the Protection of the Environment and Realisation of the Right to Environment," *5/2 Law, Environment and Development Journal*, 2009, pp. 119-120.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)*

Wildlife Service to monitor and police any environmental impact. For example, lead agencies' inspectors have the discretion to decide what constitutes an offence and whether to refer a case for prosecution or not. Their interpretation of the law becomes quite important as it constitutes the bridge between the government's decision to intervene and protect the environment and the impact of the intervention upon both the environment and the regulated.<sup>42</sup> In such scenarios, incentive-based mechanisms become more useful.

The fact that command and control systems use a deterrent/sanction approach presents another difficulty in terms of enforcement. In this paradigm, a penal type of enforcement gives prosecution a significant role because its primary goal is to prohibit specific acts. It is also accusatory and intended to apprehend criminals.<sup>43</sup> Standards tend to be less cost-effective, and standards must be regularly amended to be successful, which is not the case as legislation generally does not keep up with change. Additionally, fines for standards violations are typically too light, and enforcement is frequently ineffective.<sup>44</sup>

Due to its simplistic understanding of issues and methods for controlling them, command and control mechanisms have also been criticized for being effective primarily in delivering short-term economic advantages as opposed to long-term benefits.<sup>45</sup> The strategy is said to implicitly presume that the specific issue at hand is well-defined, well-bounded, straightforward, and typically linear in terms of cause and effect.<sup>46</sup> When used in complicated real-world scenarios, it may not provide the intended and expected results, posing a serious ecological, social, and economic danger.<sup>47</sup> Effective natural resource management should promote long-term system viability instead of short-term benefit through command and control. This is based on knowledge of the key processes that structure and drive ecosystems and acceptance of both the natural ranges

---

<sup>42</sup> *Ibid.*

<sup>43</sup> Swaney, J.A., "Market versus Command and Control Environmental Policies," *Journal of Economic Issues*, Vol. 26, No. 2, Jun., 1992, pp. 623-633, p. 624.

<sup>44</sup> Sourced from [http://www.unescap.org/drrpad/vc/orientation/M5\\_10.htm](http://www.unescap.org/drrpad/vc/orientation/M5_10.htm), [Accessed on 6/01/2023]; See also Bethell, E. 'Environmental Regulation: Effective or Defective? Assessing Whether Criminal Sanctions Provide Adequate Protection of the Environment,' *op cit.*

<sup>45</sup> Holling C. S. & Meffe, G.K. "Command and Control and the Pathology of Natural Resource Management," *Conservation Biology*, Vol. 10, No. 2 (Apr., 1996), pp. 328-337, p. 329.

<sup>46</sup> *Ibid*; See also generally Sposito, V.A & Faggian, R., 'Systemic Regional Development-A Systems Thinking Approach,' *Informationen zur Raumentwicklung* Heft, January, 2013. Available at [http://www.researchgate.net/publication/268180957\\_Systemic\\_Regional\\_Development\\_\\_A\\_Systems\\_Thinking\\_Approach](http://www.researchgate.net/publication/268180957_Systemic_Regional_Development__A_Systems_Thinking_Approach) [Accessed on 6/01/2023]

<sup>47</sup> *Ibid.*

***Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's Environmental Management and Coordination Act (EMCA)***

of ecosystem variation and the constraints of that variation for long-term success and sustainability.<sup>48</sup>

Some economists and legal academics contend that excessive bureaucratic centralization and rigidity cause delays and time wasting thus impairing the effectiveness of command and control systems.<sup>49</sup> With little to no responsibility being delegated to local communities, a command and control strategy places the power for environmental management in the hands of public institutions<sup>50</sup> This leaves little room for participation of local communities.<sup>51</sup> In this way, a command and control approach may ignore local and other traditional knowledge relevant in natural resources management, which could be more cost effective and less time consuming.<sup>52</sup>

Generally, events and behaviours that pose a risk of harm are governed by criminal law. To put it another way, a crime can be committed even if no physical injury was done. Due to the intricate technical nature of the activities that are under regulation, it may be challenging to identify the source of an offence even after harm has been done.<sup>53</sup> Under EMCA, any individual who has harmed the environment or who is still doing so may be subject to an environmental restoration order from the court.<sup>54</sup> It, therefore, seeks to regulate a situation where harm has not yet actually occurred.

Aside from that, geographical and chronological considerations make it challenging to assess environmental impact.<sup>55</sup> The government agency evaluates the risk of each activity to determine if regulation is necessary, which is a labour- and resource-intensive process.<sup>56</sup> Industries continuously add to the hundreds of pollutants and hazards already present.<sup>57</sup> EMCA, for example,

---

<sup>48</sup> *Ibid*, p. 335; See also generally Simon A. Black, S. A., *et al*, "Using Better Management Thinking to Improve Conservation Effectiveness," *ISRN Biodiversity*, vol.2013, 2013.

<sup>49</sup> Mintz, J.A., 'Economic Reform of Environmental Protection: A Brief Commend on a Recent Debate' in Michael C. Blumm (ed), *Environmental Law* (Dartmouth Publishing Company Limited, 1992) 343, p. 345.

<sup>50</sup> Ochieng', B.O., 'Institutional Arrangements for Environmental Management in Kenya,' *op. cit*, p. 200.

<sup>51</sup> *Ibid*.

<sup>52</sup> See generally, Berkes, F., 'Alternatives to Conventional Management: Lessons from Small-Scale Fisheries,' *Environments*, Vol. 31, No.1, 2003.

<sup>53</sup> Hutter, B.M., 'Socio-Legal Perspectives on Environmental Law: An Overview,' *op. cit*, pp.3 & 6

<sup>54</sup> S. 111(1), Act No. 8 of 1999.

<sup>55</sup> Hutter, B.M., 'Socio-Legal Perspectives on Environmental Law: An Overview,' *op cit*, pp.3 & 7; See also generally, Koomey, J. & Krause, F., 'Introduction to Environmental Externality Costs,' available at <http://enduse.lbl.gov/Info/Externalities.pdf>[Accessed on 6/01/2023].

<sup>56</sup> Babich, A., 'Understanding the New Era in Environmental Law,' *op cit* p.367; See also, Eskeland, G. S. & Jimenez, E., "Policy Instruments for Pollution Control in Developing Countries," *The World Bank Research Observer*, vol. 7(2) (July 1992), pp. 145-169.

<sup>57</sup> *Ibid*, p. 367.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)*

has legislated on standards for water quality among others.<sup>58</sup> It only identifies poisons, toxic substances<sup>59</sup> and effluent<sup>60</sup> as water pollutants. There are several causes of water contamination, though, that NEMA has not yet identified or regulated. Regulators must balance environmental concerns with the economic implications of risk reduction when determining an acceptable level of risk once hazards have been assessed.<sup>61</sup>

Mechanisms of command and control can also have unfavourable effects when they attempt to govern activities that are vital to a nation's economic development.<sup>62</sup> For example, one of the flagship projects under Vision 2030 is the development and creation of at least five small and medium enterprise industrial parks.<sup>63</sup> How useful will the law be as a regulatory tool, particularly when it is attempting to control activities which may be regarded as central to the economy?<sup>64</sup> It may fail in this quest depending on what the government is seeking to achieve at any particular time.

Last but not least, the lack of self-enforcing nature of command and control methods is one of their main drawbacks. The legislation does not provide the regulated community's members with any incentives to keep an eye on one another and themselves.<sup>65</sup> The regulated community's only duty under the command and control system is to obey orders from the government.<sup>66</sup> An activity is legal to participate in if it is not prohibited by law or regulation. The public is therefore exposed to the danger that environmental risks have evaded regulatory oversight and scientific

---

<sup>58</sup> S. 71, EMCA.

<sup>59</sup> S. 72(1) EMCA.

<sup>60</sup> S. 73 EMCA.

<sup>61</sup> Babich, A., 'Understanding the New Era in Environmental Law,' *op. cit.*, p. 370.

<sup>62</sup> See generally, 'Regulation.' Available at <http://www.treasury.govt.nz/publications/briefings/1990/big90-11.pdf> [Accessed on 6/1/2023]; See also Coglianesi, C., 'Measuring Regulatory Performance: Evaluating the Impact of Regulation and Regulatory Policy,' *OECD Expert Paper No. 1*, August 2012.

Available at [http://www.oecd.org/gov/regulatory-policy/1\\_coglianesi%20web.pdf](http://www.oecd.org/gov/regulatory-policy/1_coglianesi%20web.pdf) [Accessed on 6/01/2023].

<sup>63</sup> Republic of Kenya, *Kenya Vision 2030 Popular Version*, (Government of Kenya, 2007) p.14.

<sup>64</sup> Hutter, B.M., 'Socio-Legal Perspectives on Environmental Law: An Overview,' *op. cit.*, pp. 3 & 6.

<sup>65</sup> Babich, A., 'Understanding the New Era in Environmental Law,' *op. cit.*, p.375; See 'Chapter xv. Regulatory And Economic Instruments For Solid Waste Management,' UNEP Division of Technology, Industry and Economics (DTIE), Available at <http://www.unep.org/ietc/Portals/136/SWM-Vol1-Part4.pdf> [Accessed on 6/01/2023].

<sup>66</sup> *Ibid*; See also Aalders, M.V.C. & Ton Wilthagen, T., 'Moving beyond command-and-control: reflexivity in the regulation of occupational safety and health and the environment,' *UvA-DARE, the institutional repository of the University of Amsterdam (UvA)*, 1997. Available at <http://dare.uva.nl/document/2/27432> [Accessed on 6/01/2023].

### **4.1.3 Application of Command and Control in Kenya**

The command and control method has long been the basis for environmental regulation in Kenya. For instance, Part IX of the Environmental Management and Coordination Act<sup>67</sup> provides for environmental restoration orders, environmental conservation orders and environmental easements.<sup>68</sup> Additionally, the EMCA makes environmental degradation-related actions criminal and lays out consequences for breaking the law as a deterrence. The command and control system in Kenya has, however, often failed owing to the extremely low fines and lack of synchronization between sectoral legislation and the EMCA. Additionally, the EMCA allows for the employment of environmental inspectors to help with the Act's requirements being enforced.<sup>69</sup> Some sectoral laws in Kenya have gone as far as para-militarizing enforcement agencies in an attempt to enhance command and control such as a 'uniformed and disciplined' service under the *Wildlife Conservation and Management Act, 2013*<sup>70</sup> while Kenya Forest Service provides for 'uniformed and disciplined' enforcement officers.<sup>71</sup> Both Services are authorized to use fire arms to ensure compliance with the conservation standards provided for under the law.<sup>72</sup>

For the purpose of regulating access to and use of natural resources, the EMCA and other sectoral legislation employ mechanisms including permits, registrations, and certifications. Such licenses and certifications have requirements that must be satisfied in order to avoid penalties like having the licence revoked.<sup>73</sup>

## **4.2. Market-Based Approaches**

Market-based methods make use of market-based instruments, which are described as laws that encourage environmental behaviour through market signals rather than through explicit orders.<sup>74</sup>

---

<sup>67</sup> No. 8 of 1999, Laws of Kenya.

<sup>68</sup> Ss. 108-115, No. 8 of 1999.

<sup>69</sup> *Ibid*, S. 117.

<sup>70</sup> *Wildlife Conservation and Management Act*, No. 47 of 2013, Laws of Kenya.

<sup>71</sup> Forest Conservation and Management Act, 2016 (No. 34 of 2016), sec. 16.

<sup>72</sup> Forest Conservation and Management Act, 2016 (No. 34 of 2016), sec. 63; *Wildlife Conservation and Management Act*, 2013, sec. 12.

<sup>73</sup> See *Waweru v Republic* (2007) AHRLR 149 (KeHC 2006).

<sup>74</sup> Stavins, R.N., 'Experience with Market-Based Environmental Policy Instruments.' *The Handbook of environmental Economics, 2001*, p 1. Available at [http://www.hks.harvard.edu/fs/rstavins/Papers/Handbook\\_Chapter\\_on\\_MBI.pdf](http://www.hks.harvard.edu/fs/rstavins/Papers/Handbook_Chapter_on_MBI.pdf)[Accessed on 6/1/2023].

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)*

The misuse, depletion, and unsustainable management of environmental assets have all been attributed in large part to the absence of a price on them.<sup>75</sup>

#### **4.2.1. Application of Market-Based Approaches**

By offering suitable legal and financial incentives that may be used to encourage the business community to incorporate environmental requirements into their planning and operational processes, the National Environment Action Plan under EMCA attempts to incorporate market-based approaches in environmental management.<sup>76</sup>

##### **i. Incentives**

Market-based methods seem to advocate for the government to replace command and control systems with one that generates incentives to improve natural resource preservation in a more effective way.<sup>77</sup> Therefore, it is necessary to change natural resources regulations to include incentives.<sup>78</sup> People need strong incentives to reconsider and adjust their behaviour toward the environment if substantial changes are to be made that will stop the ecosystem from being destroyed completely.<sup>79</sup> Cooperative regulation, which prefers persuasion over punishment and rewards (incentives) over punishment, should be changed from coercive regulation in an effort to move away from command and control.<sup>80</sup> It is asserted that environmental responsibility actions adopted by individuals and organisations may benefit companies by minimising negative effects

---

<sup>75</sup> See 'Protecting the Environment and Economic Growth: Trade-Off or Growth-Enhancing Structural Adjustment?' p.2. Available at [http://ec.europa.eu/economy\\_finance/publications/publication7726\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication7726_en.pdf) [Accessed on 6/1/2023]; See also Rosegrant, M.W., *et al*, 'Water policy for efficient agricultural diversification: market-based Approaches,' *Food Policy*, 1995, Vol. 20, No. 3, pp. 203-223.

<sup>76</sup> S. 38(c), No. 8 of 1999.

<sup>77</sup> Babich, A., 'Understanding the New Era in Environmental Law,' *op cit*, p.375; See also Porto, M. & Lobato, F., 'Mechanisms of Water Management: Command & Control and Social Mechanisms,' Parte 1 de 2. Available at <http://socinfo.eclac.org/samtac/noticias/documentosdetrabajo/7/23397/InBr01605.pdf> [Accessed on 6/1/2023].

<sup>78</sup> Mintz, J.A., 'Economic Reform of Environmental Protection: A Brief Comment on a Recent Debate,' *op cit*, p. 345.

<sup>79</sup> Babich, A., 'Understanding the New Era in Environmental Law,' *op cit*, p. 361; See also Bhat, S., *Natural Resources Conservation Law* (SAGE, Publications India, 2010).

<sup>80</sup> Braithwaite, J., "Rewards and Regulation," *Journal of Law and Society*, Vol. 29, No. 1, New Directions in Regulatory Theory (Mar., 2002), pp. 12-26, p. 13.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)*

of industry prior to the implementation of restrictive laws.<sup>81</sup> EMCA provides for tax incentives, fiscal incentives, customs and excise waivers and tax rebates.<sup>82</sup>

Rewards in the form of incentives are given to business participants in an effort to persuade them to embrace environmental stewardship measures while avoiding or rejecting those that contribute to the environment's destruction.<sup>83</sup>

Under EMCA, taxes and other financial incentives, disincentives, or levies can be suggested to the government to encourage or promote effective management of the environment and natural resources or to avoid or stop environmental deterioration.<sup>84</sup> Customs and excise waivers in relation to imported capital goods that avoid or significantly decrease environmental damage caused by an activity may be included in these taxes, fiscal incentives, disincentives, or fees.<sup>85</sup> Tax breaks are also provided to businesses or organisations who put in place machinery and facilities for flood protection, waste recycling, water harvesting and conservation, pollution control, and employing alternative energy sources in place of fossil fuels.<sup>86</sup> Tax disincentives to discourage harmful environmental conduct that results in the depletion of natural resources or that causes pollution are also covered under Section 57 (1).<sup>87</sup> Last but not least, it addresses user fees designed to make sure that individuals use natural resources pay fair value for doing so.<sup>88</sup> Thus, it may be concluded that financial incentives can be a key factor in ensuring that natural resources are utilized, managed, and protected in a way that is consistent with the Constitution.<sup>89</sup>

---

<sup>81</sup> Forsyth, T., "Environmental Responsibility and Business Regulation: The Case of Sustainable Tourism," *The Geographical Journal*, Vol. 163(3), Nov., 1997, pp. 270-280, p. 271.

<sup>82</sup> S. 57 EMCA.

<sup>83</sup> See 'The Cost Effectiveness and Environmental Effects of Incentive Systems: The U. S. Experience with Economic Incentives for Protecting the Environment,' 2001, available at [http://yosemite.epa.gov/ee/epa/erm.nsf/vwAN/EE-0216B-04.pdf/\\$file/EE-0216B-04.pdf](http://yosemite.epa.gov/ee/epa/erm.nsf/vwAN/EE-0216B-04.pdf/$file/EE-0216B-04.pdf) [Accessed on 6/1/2023].

<sup>84</sup> S. 57 (1), EMCA.

<sup>85</sup> *Ibid*, S. 57 (2) (a).

<sup>86</sup> EMCA, S. 57 (2) (b).

<sup>87</sup> *Ibid*, S. 57 (2) (c).

<sup>88</sup> *Ibid*, S. 57 (2) (d).

<sup>89</sup> Art. 69 (1) (a) of the Constitution of Kenya, 2010.

#### **4.2.2. Effectiveness of Incentive Based Mechanisms**

As with every social regulation, the success of natural resources legislation depends more on voluntary compliance.<sup>90</sup> The overall degree of natural resource protection achieved via incentives is the same as that of command and control methods, but the cost of this protection is distributed more effectively among industries.<sup>91</sup> Under EMCA, the National Environment Action Plan should include suitable legal and financial incentives that might be utilised to encourage the business community to include environmental standards in their planning and operating process.<sup>92</sup> This shifts responsibility for environmental protection from the government to business.<sup>93</sup>

The private sector can benefit from incentives in a variety of ways. They inspire enterprises to develop innovative goods or manufacturing techniques to lessen environmental impact and promote flexibility in the usage of pollution control systems.<sup>94</sup> This encourages businesses to pursue cost-efficient solutions as well as increased research and development in an effort to find more effective and affordable damage mitigation methods.<sup>95</sup>

Since incentives may be utilised to give the government additional revenue streams, government agencies also profit from this.<sup>96</sup> Incentives are also far less expensive than command and control expenses.<sup>97</sup> Because costs are absorbed by business, the government is not as financially burdened.<sup>98</sup> Additionally, since fewer law enforcement agents are needed, both the expense of maintaining the law and the government's pay budget are greatly lowered.

---

<sup>90</sup> Clarence, D. J & Mazurek, J., *Pollution Control in the United States: Evaluating the System*, (Resources for the Future, 1998) p.15.

<sup>91</sup> André, F., 'Firms and the Environment: Ethics or Incentives?' in Dăianu, D. & Vranceanu, R. (eds), *Ethical Boundaries of Capitalism: Corporate Social Responsibility Series* (Ashgate Publishing Ltd., 2005), p.209.

<sup>92</sup> S. 38(c).

<sup>93</sup> Clarence D. J & Mazurek, J., *Pollution Control in the United States: Evaluating the System*, *op cit*, p.15.

<sup>94</sup> Mintz, J.A., 'Economic Reform of Environmental Protection: A Brief Commend on a Recent Debate' in Michael C. Blumm (ed), *Environmental Law* (Dartmouth Publishing Company Limited, 1992) p.343-346.

<sup>95</sup> André, F., 'Firms and the Environment: Ethics or Incentives?' *op cit*, p.209; S. 49(b), EMCA.

<sup>96</sup> Mintz, J.A., 'Economic Reform of Environmental Protection: A Brief Commend on a Recent Debate' in Blumm, M.C., (ed), *Environmental Law* (Dartmouth Publishing Company Limited, 1992), p.343, p.346.

<sup>97</sup> André F., 'Firms and the Environment: Ethics or Incentives?' in, Dăianu, D. & Vranceanu, R. (eds), *op. cit*, p.210.

<sup>98</sup> Hutter, B.M., 'Socio-Legal Perspectives on Environmental Law: An Overview' in Hutter, B.M., (ed), *op. cit*, p. 23.



### **4.2.3. Critique of Incentive Based Mechanisms**

Incentives do not work for every issue and thus they are not employed more frequently as a strategy for environmental conservation due to varying levels of pollution and needs.<sup>99</sup> In this case, a conventional command and control approach such as uniform standards may be the preferred policy.<sup>100</sup> In addition, using incentives successfully may be hampered by bureaucratic hurdles, such as the complexity of the necessary economic computations.<sup>101</sup> For instance, it's possible that the emissions involved may not be measured precisely because the measurement cannot be done with a trustworthy method.<sup>102</sup> In order to get around this issue, EMCA mandates that the Cabinet Secretary in charge of finances be the one to provide incentives.<sup>103</sup>

The fact that environmentalists see the pollution issue more as a moral failing of business and governmental leaders than as a social by-product that can be effectively controlled via the application of incentives is another reason why incentives are not commonly employed.<sup>104</sup> Instead of incentives, ethics dominates the discussion. They are concerned that the amount of environmental protection would be reduced by the more flexible approach to pollution management that incentives suggest.<sup>105</sup>

### **4.3. Efficiency of Systems of Environmental Impact Assessment, Environmental Audit and Monitoring of the Environment**

Environmental Impact Assessment (EIA) may offer the chance for public scrutiny and involvement in decision-making, as well as introducing aspects of independence and impartiality. It may also help decision-makers make better-informed decisions when balancing environmental and developmental demands.<sup>106</sup> Public engagement is also promoted under EIA because, when

---

<sup>99</sup> André F., 'Firms and the Environment: Ethics or Incentives?' in Dăianu, D. & Vranceanu, R. (eds), *op. cit.*, p.210.

<sup>100</sup> *Ibid.*, p.210; See also 'Why Regulatory Governance Matters,' *CRC Policy Brief*, No. 2, 2004, p. 3.

<sup>101</sup> Hutter, B.M. 'Socio-Legal Perspectives on Environmental Law: An Overview,' in Hutter, B.M., (ed), *op cit.*, p. 23.

<sup>102</sup> *Ibid.*, p.23.

<sup>103</sup> S. 57(1).

<sup>104</sup> André F., 'Firms and the Environment: Ethics or Incentives?' in Dăianu, D. & Vranceanu, R. (eds), *op cit.* p.210; See also Stavins, R.N. & Whitehead, B.W., "The Greening of America's Taxes: Pollution Charges and Environmental Protection," CSIA Discussion Paper 92-03, (Kennedy School of Government, Harvard University, March, 1992).

<sup>105</sup> *Ibid.*, p.210.

<sup>106</sup> Birnie, P. & Boyle, A., "*International Law and the Environment*", (2<sup>nd</sup> ed. Oxford University Press, 2002), p.131-132; See also Muigua, K., 'Environmental Impact Assessment (EIA) in Kenya,' available at <http://www.kmco.co.ke/attachments/article/109/A%20Paper%20on%20Environmental%20impact%20assessment.pdf> [Accessed on 6/1/2023].

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)*

stakeholders have had a chance to voice their thoughts, they could be more willing to accept the decision made by the regulators since they have had a chance to do so.<sup>107</sup> EMCA also provides for Strategic Environmental Assessments<sup>108</sup>; Environmental Impact Assessment<sup>109</sup>; Environmental Audit<sup>110</sup>; and Environmental Monitoring<sup>111</sup>, all of which are meant to protect the environment from environmentally degrading human activities. Strategic Environmental Assessment (SEA) is defined as a formal and systematic process to analyse and address the environmental effects of policies, plans, programmes and other strategic initiatives before their final adoption.<sup>112</sup> EMCA requires all entities, including corporations, to undertake preparations for SEAs at their own expense and submit them to NEMA for approval.<sup>113</sup> The object of SEA is to enhance environmental protection and promote sustainable development through contributing to the integration of environmental considerations into the preparation and adoption of specified policies, plans and programmes.<sup>114</sup> These exercises should just not only be a question of paperwork and formality.<sup>115</sup> The impacted communities should be given a chance to actively engage and provide

---

<sup>107</sup> Ibid, p. 6.

<sup>108</sup> Ibid, sec. 57A.

<sup>109</sup> Ibid, sec. 58.

<sup>110</sup> Ibid, sec. 68.

<sup>111</sup> Ibid, sec. 69.

<sup>112</sup> EMCA, s. 2.

<sup>113</sup> EMCA, s. 57 A (3).

<sup>114</sup> Environmental protection Agency, 'Strategic Environmental Assessment,' Available at <http://www.epa.ie/monitoringassessment/assessment/sea/#.Vi5tmGuJ2CA> [Accessed on 5/1/2023]; See also Muigua, K, 'Legal Aspects of Strategic Environmental Assessment (SEA) and Environmental Management, available at <http://kmco.co.ke/wp-content/uploads/2018/08/Legal-Aspects-of-SEA-and-Environmental-Management-3RD-December-2016.pdf> [Accessed on 5/1/2023].

<sup>115</sup> See generally, United Nations, *Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach*, (UNEP, 2004). Available at <http://www.unep.ch/etu/publications/textONUbr.pdf> [Accessed on 6/1/2023]; See also The World Bank, 'Strategic Environmental Assessment,' September 10, 2013. Available at <http://www.worldbank.org/en/topic/environment/brief/strategic-environmental-assessment> [Accessed on 6/1/2023]. The World Bank argues that policy makers in are subject to a number of political pressures that originate in vested interests. The weaker the institutional and governance framework in which sector reform is formulated and implemented, the greater the risk of regulatory capture. The World Bank observes that in situations such as these, the recommendations of environmental assessment are often of little relevance unless there are constituencies that support them, and with sufficient political power to make their voices heard in the policy process. While strong constituencies are important during the design of sector reform, they are even more important during implementation. It follows that effective environmental assessment in sector reform requires strong constituencies backing up recommendations, a system to hold policy makers accountable for their decisions, and institutions that can balance competing and, sometimes, conflicting interests. The World Bank thus affirms its recognition of the strategic environmental assessment (SEA) as a key means of integrating environmental and social considerations into policies, plans and programs, particularly in sector decision-making and reform.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)*

input on the expected implications on the community's social, economic, and environmental elements.

The evolution of scientific knowledge, as well as numerous societal and political shifts, have all influenced how natural resource management has changed through time. Arguably, EIA procedures should not be different. They should be adoptive to the changing environmental conditions due to climate change and other factors adversely affecting the environment and biological resources. These processes should be expanded to include Biodiversity Impact Assessment especially where the EIA relates to a parcel of land or environmental resources that are rich in biological resources, such as those contemplated under section 42 of EMCA. The challenge for researchers, it has been suggested, is to shift their focus from discovery to the science of implementation, while managers and policy-makers must give up their socio-political norms and institutional frameworks in order to adopt new thinking and effectively utilise the wealth of potent new scientific tools for learning by doing.<sup>116</sup>

#### **4.4. Effectiveness of Civil and Criminal Liability Regime under EMCA**

EMCA outlines several measures for protection and conservation of the environmental subsectors including rivers, lakes, seas, wetlands, mountain areas, forests, biological resource and the ozone layer.<sup>117</sup> These provisions bind both the state and individuals and their violation could result in commission of environmental offences set out under the Act.

##### **4.4.1. Civil Liability Regime**

Environmental violations by companies are subject to civil responsibility in the form of restitution and damages intended to restore injured property or individuals as closely as possible to their pre-violation state.<sup>118</sup> Civil remedies for environmental protection can be classified according to their intended function which could be preventive, compensatory, reparatory or natural restitution.<sup>119</sup> In addition to these remedies, EMCA provides for environmental restoration

---

<sup>116</sup> Keith, D., Martin, T., McDonald-Madden, E. and Walters, C., "Uncertainty and adaptive management for biodiversity conservation." (2011) <https://www.sciencedirect.com/science/article/abs/pii/S0006320710004933?via%3Dihub> accessed 6 January 2023.

<sup>117</sup> Ibid, Part V.

<sup>118</sup> Krstinić, D., Bingulac, N., & Dragojlović, J., "Criminal and civil liability for environmental damage," *Economics of Agriculture* 64, no. 3 (2017): 1161-1176.

<sup>119</sup> Muigua, K, 'Strengthening the Environmental Liability Regime in Kenya for Sustainable Development' Op Cit.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)*

orders, conservation orders, and easements as part of civil remedies for environmental breaches.<sup>120</sup> Consequently, corporations in Kenya found liable for environmental breaches have been imposed with civil consequences.<sup>121</sup>

#### 4.4.2. Criminal Liability Regime

EMCA stipulates various environmental offences which including offences related to *inspection*, offences *related to Environmental Impact Assessment*, offences related to records and *standards and offences related to hazardous wastes* (emphasis added).<sup>122</sup> The Act also prescribes penalties for these offences.<sup>123</sup> The Act also empowers environmental inspectors appointed under the Act, subject to the Constitution and section 29 of the Office of the Director of Public Prosecution Act, *to institute and undertake criminal proceedings* against any person before a court of competent jurisdiction (other than a court martial) in respect of any *offence alleged to have been committed by that person under EMCA* (emphasis added).<sup>124</sup> Offences under EMCA relate among other things, failing to submit to inspection<sup>125</sup>, offences relating to Environmental Impact Assessment<sup>126</sup>; offences relating to records<sup>127</sup>; offences relating to standards<sup>128</sup>; offences relating to hazardous waste<sup>129</sup>; offences relating to pollution<sup>130</sup>; and offences relating to restoration orders<sup>131</sup>.

While it is easy to deal with civil cases, the challenge comes in with the criminal liability convictions. Since the amendment of the law that gave all power back to the Director of Public Prosecutions (DPP) instead of the delegated specially appointed prosecutors under EMCA and based in NEMA, it is increasingly becoming difficult to convict violators due to the challenge of

---

<sup>120</sup>EMCA, Part IX (Sec. 108-116).

<sup>121</sup> John Mutungu Waititu –vs- China Wuyi (Kenya) Co. Ltd, Environment and Land Court at Nyahururu, ELC Appeal No. 25 of 2017, (2018) eKLR.

<sup>122</sup> EMCA, s. 137-146.

<sup>123</sup> Ibid.

<sup>124</sup> EMCA, s. 118 (b).

<sup>125</sup> Sec. 137, EMCA.

<sup>126</sup> Sec. 138, EMCA.

<sup>127</sup> Sec. 139, EMCA.

<sup>128</sup> Sec. 140, EMCA.

<sup>129</sup> Sec. 141, EMCA.

<sup>130</sup> Sec. 142, EMCA.

<sup>131</sup> Sec. 143, EMCA.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's Environmental Management and Coordination Act (EMCA)*

appreciating the actual offences.<sup>132</sup> There may be a need to either revert this power back to NEMA's special prosecutors or ensure that the DPP's officers undergo special training periodically to ensure that they are well versed with EMCA and the offences therein.

#### **4.5. Adoption of Integrated Approaches to Environmental Governance**

It has been proposed that excellent governance is the key to achieving sustainable development on a global scale in a just and efficient way.<sup>133</sup> Environmental legislation forms the platform for better environmental governance by fusing environmental requirements with the fundamental components of the rule of law. By relating it to basic rights and duties, it draws attention to environmental sustainability. It is a reflection of ethical standards of conduct and universal moral ideals, and it serves as the basis for environmental rights and duties.<sup>134</sup>

Furthermore, it is argued that natural resources may serve as both an engine for Sustainable Development and a foundation for peace and justice if they are managed in a way that is fair, open, and consistent with the law.<sup>135</sup> The realisation of social justice for Kenyans should, in theory, be the goal of environmental governance systems. When individuals have concerns outside their narrowly defined economic prosperity, legitimate environmental choices must take both distributive and procedural justice considerations into account.<sup>136</sup>

When decisions must be made at the expense of someone else's interests or ideals, procedural fairness can help explain such actions. Additionally, it can help the participating actors learn and change their values and motives. Therefore, governance solutions go beyond only defining entitlements; they also encourage involvement and make available dispute resolution to all parties concerned.<sup>137</sup>

---

<sup>132</sup> See Kevin Musau Mulei v Chief Magistrate's Court, Machakos & another; Syokimau Residents Association (Interested Party) [2021] eKLR.

<sup>133</sup> United Nations, *Introduction to Environmental Governance*, 2017. Available at <https://globalpact.informea.org/sites/default/files/documents/International%20Environmental%20Governance.pdf> [Accessed on 6/1/2023].

<sup>134</sup> United Nations, "Environmental Rule of Law", available at <https://www.unenvironment.org/explore-topics/environmental-rights-and-governance/what-we-do/promoting-environmental-rule-law-0> [Accessed on 6/1/2023].

<sup>135</sup> Environment UN, 'Environmental Rule of Law' (*UNEP - UN Environment Programme*, 5 October 2017) <<http://www.unep.org/explore-topics/environmental-rights-and-governance/what-we-do/promoting-environmental-rule-law-0>> accessed 8 January 2023.

<sup>136</sup> Paavola, J., "Institutions and environmental governance: A reconceptualization," *Ecological economics*, vol.63, no. 1 (2007): 93-103 at p.98.

<sup>137</sup> *Ibid.*, p. 97.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)*

Poverty and rising social inequality are caused by environmental factors such as climate change, biodiversity loss, water shortages, air and water pollution, and soil degradation, among others.<sup>138</sup>

Environmental governance must explicitly include a wider range of environmental actors, organisations, and institutions and become more adaptable, responsive, and inventive in order to deal with stresses like climate change, economic instability, and sociopolitical or ideological upheavals.<sup>139</sup> In the processes of environmental decision-making and enforcement, there is a need for more cooperation between governmental and private-sector players.

The Kenyan Constitution offers a chance for communities to be empowered by transferring authority from the state to local institutions of decision-making as a means of enabling local communities to manage natural resources and environmental issues.<sup>140</sup> Additionally, a structure that outlines the functions of different stakeholders must be put in place.

The formulation of laws and institutions must be based on the national values and principles of governance.<sup>141</sup> The active engagement of the people and the people-centered approach to governance issues are the common threads throughout the majority of these values and principles. They serve as a reflection of the goals that should be pursued in the development, application, and interpretation of the law. Any outcome of such legislation that does not represent these ideals should be reconsidered, and the law itself should be examined to ensure that it is consistent with the Constitution.

A system of incentives as well as a framework of rights and information are also necessary for citizens acting as an additional resource for environmental policy.<sup>142</sup> The rights to knowledge, participation, and access to justice for individuals and environmental groups are all included in this.<sup>143</sup> Transparency regarding the environmental certifications of products in the market is also included. The desire to engage also assumes that environmental reporting in the media is at least

---

<sup>138</sup> United Nations, "Environmental Rule of Law", op. cit.

<sup>139</sup> DeCaro, D. A., Chaffin, B. C., Schlager, E., Garmestani, A. S., & Ruhl, J. B., "Legal and Institutional Foundations of Adaptive Environmental Governance," *Ecology and Society: A Journal of Integrative Science For Resilience And Sustainability*, 22, no. 1 (2017): 1.

<sup>140</sup> See Chapter 11 of the Constitution on Devolved Government.

<sup>141</sup> Art. 10(2), Constitution of Kenya 2010.

<sup>142</sup> Wehn U and Almomani A, 'Incentives and Barriers for Participation in Community-Based Environmental Monitoring and Information Systems: A Critical Analysis and Integration of the Literature' (2019) 101 *Environmental Science & Policy* 341.

<sup>143</sup> Ibid.

*Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)*

somewhat truthful and problem-focused. Once again, there is an extensive demand for capacity building.<sup>144</sup>

Environmental customary laws and cultural norms should be incorporated into environmental governance issues in Kenya. A bottom-up approach to lawmaking is also desirable. A significant component of ensuring that these laws benefit communities in their interactions with environmental resources and that their human rights are protected from any possible violations as a result of such laws is to guarantee that those communities have meaningful participation in those laws.

Communities may hold those who violate environmental rules accountable once they are given the capacity to do so, whether they be organisations or individuals. Getting the attention of a population that feels like it belongs is simpler than getting the attention of one that feels ignored by the state actors.<sup>145</sup> Their traditional legal procedures and expertise on environmental problems may greatly improve Kenya's environmental governance, and they should be included into the country's official laws.

## **5. Conclusion**

We must take action in the face of environmental crises and rising inequality, which includes creating laws governing supply chains and extended producer responsibility, ensuring green public procurement, encouraging technical innovation to improve resource circularity, and implementing inclusive and respectful decision-making processes for both and local communities.<sup>146</sup>

Some academics have argued that it is necessary to investigate the normative and institutional responses in international law to such environmental change by concentrating on two key issues: first, whether law can foresee, prevent, and adapt to environmental transformations; and second, whether international legal responses to social, economic, and technological innovation can

---

<sup>144</sup> Jänicke, M., & Jörgens, H., "New approaches to environmental governance," *Environmental Governance in Global Perspective. New Approaches to Ecological and Political Modernisation*, Berlin: Freie Universität Berlin (2006): 167-209, at p.192.

<sup>145</sup> United Nations Department of Economic and Social Affairs. "Creating an Inclusive Society: Practical Strategies to Promote Social Integration." (2008) < <https://www.un.org/esa/socdev/egms/docs/2009/Ghana/inclusive-society.pdf> > accessed 6 January 2023.

<sup>146</sup> Bansard, J. and Schroder, M., 'The Sustainable Use of Natural Resources: The Governance Challenge' (*International Institute for Sustainable Development*) < <https://www.iisd.org/system/files/2021-04/still-one-earth-natural-resources.pdf> > accessed 6 January 2023.

***Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)***

adequately reflect the evolving needs of contemporary societies at national and international scales.<sup>147</sup> These topics require ongoing debate because they have an impact on both the implementation of the sustainable development agenda and the management of related environmental conflicts.

It is, therefore, important for EMCA and other environmental laws to respond to this approach through creating channels for participation of people through local solutions.<sup>148</sup> There is a need to adopt environmental governance approaches that ensure that EMCA and other instruments effectively respond to and address Political, Economic, Social, Technological, Legal and Environmental factors that affect natural resources and environmental management. This thus calls for an integrated approach to governance geared towards achieving sustainable development agenda.

## **References**

‘Chapter xv. Regulatory And Economic Instruments For Solid Waste Management,’ UNEP Division of Technology, Industry and Economics (DTIE), Available at <http://www.unep.org/ietc/Portals/136/SWM-Vol1-Part4.pdf> [Accessed on 6/01/2023].

‘Protecting the Environment and Economic Growth: Trade-Off or Growth-Enhancing Structural Adjustment?’ Available at [http://ec.europa.eu/economy\\_finance/publications/publication7726\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication7726_en.pdf) [Accessed on 6/1/2023].

‘The Cost Effectiveness and Environmental Effects of Incentive Systems: The U. S. Experience with Economic Incentives for Protecting the Environment,’ 2001, available at [http://yosemite.epa.gov/ee/epa/erm.nsf/vwAN/EE-0216B-04.pdf/\\$file/EE-0216B-04.pdf](http://yosemite.epa.gov/ee/epa/erm.nsf/vwAN/EE-0216B-04.pdf/$file/EE-0216B-04.pdf) [Accessed on 6/1/2023].

Aalders, M.V.C. & Ton Wilthagen, T., ‘Moving beyond command-and-control: reflexivity in the regulation of occupational safety and health and the environment,’ *UvA-DARE, the institutional repository of the*

---

<sup>147</sup> Craik, Neil, Cameron Jefferies, Sara Seck, and Timothy Stephens. “Global Environmental Change and Innovation in International Law.” *Articles, Book Chapters, & Popular Press*, January 1, 2018. [https://digitalcommons.schulichlaw.dal.ca/scholarly\\_works/248](https://digitalcommons.schulichlaw.dal.ca/scholarly_works/248). Accessed on 3 September 2022.

<sup>148</sup> Smith, G. and Bastidas, E.P., *Conflict and Sustainability in a Changing Environment: Through the Eyes of Communities*. Anthem Press, 2017<<https://anthempres.com/conflict-and-sustainability-in-a-changing-environment-hb>> accessed 6 January 2023.



***Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)***

University of Amsterdam (UvA), 1997. Available at <http://dare.uva.nl/document/2/27432> [Accessed on 6/01/2023].

Amechi, E.P., "Poverty, Socio-Political Factors and Degradation of the Environment in Sub-Saharan Africa: The Need for a Holistic Approach to the Protection of the Environment and Realisation of the Right to Environment," *5/2 Law, Environment and Development Journal*, 2009.

André, F., 'Firms and the Environment: Ethics or Incentives?' in Dăianu, D. & Vranceanu, R. (eds), *Ethical Boundaries of Capitalism: Corporate Social Responsibility Series* (Ashgate Publishing Ltd., 2005).

Anshu Singh, "Principles and Development of International Environmental Law", Pen Acclaims, Volume 10, May 2020, ISSN 2581-5504 < <http://www.penacclaims.com/wp-content/uploads/2020/06/Anshu-Singh.pdf>> accessed 6 January 2023.

Ashworth, A., 'Conceptions of Over criminalization,' *Ohio State Journal of Criminal Law*, Vol. 5, 2008. pp. 407-425.

Babich, A., "Understanding the New Era in Environmental Law." *South Carolina Law Review* 41, no. 4 (1990): 4.

Bansard, J. and Schroder, M., 'The Sustainable Use of Natural Resources: The Governance Challenge' (*International Institute for Sustainable Development*) < <https://www.iisd.org/system/files/2021-04/still-one-earth-natural-resources.pdf> > accessed 6 January 2023.

Bell, C., "Governance and Law: The Distinctive Context of Transitions from Conflict and its Consequences for Development Interventions," *Briefing Paper 4*, (The Political Settlements Programme Consortium, 2015). Available at [http://www.politicalsettlements.org/wp-content/uploads/2017/09/2015\\_BP\\_4\\_Bell\\_Governance-and-Law.pdf](http://www.politicalsettlements.org/wp-content/uploads/2017/09/2015_BP_4_Bell_Governance-and-Law.pdf) [Accessed on 6/1/2023].

Benson, D. and Jordan, A., "Environmental Governance." In *The International Encyclopedia of Geography*. Wiley, 2017.

Berkes, F., 'Alternatives to Conventional Management: Lessons from Small-Scale Fisheries,' *Environments*, Vol. 31, No.1, 2003.

Bethell, E., 'Environmental Regulation: Effective or Defective? Assessing Whether Criminal Sanctions Provide Adequate Protection of the Environment,' *Plymouth Law Review*, 2009, 1.

Bhat, S., *Natural Resources Conservation Law* (SAGE, Publications India, 2010).

Birnie, P. & Boyle, A., "*International Law and the Environment*", (2<sup>nd</sup> ed. Oxford University Press, 2002).

***Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)***

Black, S.A., Groombridge, J.J. and Jones, C.G., "Using Better Management Thinking to Improve Conservation Effectiveness," *International Scholarly Research Notices* 2013 (2013).

Braithwaite, J., "Rewards and Regulation," *Journal of Law and Society*, Vol. 29, No. 1, New Directions in Regulatory Theory (Mar., 2002), pp. 12-26.

Clarence, D. J & Mazurek, J., *Pollution Control in the United States: Evaluating the System*, (Resources for the Future, 1998).

Coglianesi, C., 'Measuring Regulatory Performance: Evaluating the Impact of Regulation and Regulatory Policy,' *OECD Expert Paper No. 1*, August 2012. Available at [http://www.oecd.org/gov/regulatory-policy/1\\_coglianesi%20web.pdf](http://www.oecd.org/gov/regulatory-policy/1_coglianesi%20web.pdf) [Accessed on 6/01/2023].

Constitution of Kenya 2010.

Craik, Neil, Cameron Jefferies, Sara Seck, and Timothy Stephens. "Global Environmental Change and Innovation in International Law." *Articles, Book Chapters, & Popular Press*, January 1, 2018. [https://digitalcommons.schulichlaw.dal.ca/scholarly\\_works/248](https://digitalcommons.schulichlaw.dal.ca/scholarly_works/248). Accessed on 3 September 2022.

Davies J.C. & Mazurek, J., *Pollution control in United States: Evaluating the system*. Routledge, 2014.

DeCaro, D. A., Chaffin, B. C., Schlager, E., Garmestani, A. S., & Ruhl, J. B., "Legal and Institutional Foundations of Adaptive Environmental Governance," *Ecology and Society: A Journal of Integrative Science for Resilience and Sustainability*, 22, no. 1 (2017): 1.

Environment UN, 'Environmental Rule of Law' (*UNEP - UN Environment Programme*, 5 October 2017) <<http://www.unep.org/explore-topics/environmental-rights-and-governance/what-we-do/promoting-environmental-rule-law-0>> accessed 8 January 2023.

Environment UN, 'Why Does Environmental Rights and Governance Matter?' (*UNEP - UN Environment Programme*, 4 September 2017) <<http://www.unep.org/explore-topics/environmental-governance/why-does-environmental-governance-matter>> accessed 6 January 2023.

*Environmental (Impact Assessment and Audit) Regulations, 2003*, Legal Notice 101 of 2003, Laws of Kenya.

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

Environmental protection Agency, 'Strategic Environmental Assessment,' Available at <http://www.epa.ie/monitoringassessment/assessment/sea/#.Vi5tmGuJ2CA> [Accessed on 5/1/2023].

Eskeland, G. S. & Jimenez, E., "Policy Instruments for Pollution Control in Developing Countries," *The World Bank Research Observer*, vol. 7(2) (July 1992), pp. 145-169.

***Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)***

Forest Conservation and Management Act, 2016 (No. 34 of 2016).

Forsyth, T., "Environmental Responsibility and Business Regulation: The Case of Sustainable Tourism," *The Geographical Journal*, Vol. 163(3), Nov., 1997, pp. 270-280.

Hardin, G. 'The Tragedy of the Commons,' *Science*, New Series, Vol. 162, No. 3859 (Dec. 13, 1968), pp. 1243-1248.

Holling C. S. & Meffe, G.K. "Command and Control and the Pathology of Natural Resource Management," *Conservation Biology*, Vol. 10, No. 2 (Apr., 1996), pp. 328-337.

<https://globalpact.informea.org/sites/default/files/documents/International%20Environmental%20Governance.pdf> [Accessed on 6/1/2023].

Hutter, B.M. "*A Reader in Environmental Law*", (Oxford University Press, 1999).

Hutter, B.M., "Socio-legal perspectives on environmental law: An overview." (1999): 3-50.

Jänicke, M., & Jörgens, H., "New approaches to environmental governance," *Environmental Governance in Global Perspective. New Approaches to Ecological and Political Modernisation*, Berlin: Freie Universität Berlin (2006): 167-209.

John Mutungu Waititu –vs- China Wuyi (Kenya) Co. Ltd, Environment and Land Court at Nyahururu, ELC Appeal No. 25 of 2017, (2018) eKLR.

Keith, D., Martin, T., McDonald-Madden, E. and Walters, C., "Uncertainty and adaptive management for biodiversity conservation." (2011)

<https://www.sciencedirect.com/science/article/abs/pii/S0006320710004933?via%3Dihub> accessed 6 January 2023.

Kevin Musau Mulei v Chief Magistrate's Court, Machakos & another; Syokimau Residents Association (Interested Party) [2021] eKLR.

Koomey, J. & Krause, F., 'Introduction to Environmental Externality Costs,' available at <http://enduse.lbl.gov/Info/Externalities.pdf> [Accessed on 6/01/2023].

Krier, J.E. 'The Pollution Problem and Legal Institutions: A Conceptual Overview' in Michael C. Blumm (ed), *Environmental Law* (Dartmouth Publishing Company Limited, 1992) 181.

Krstinić, D., Bingulac, N., & Dragojlović, J., "Criminal and civil liability for environmental damage," *Economics of Agriculture* 64, no. 3 (2017): 1161-1176.

***Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)***

Laura Tlaiye, L. & Biller, D, 'Successful Environmental Institutions: Lessons from Colombia and Curitiba, Brazil,' *LATEN Dissemination Note*, No.12, December, 1994.

Ma, H., Shen, G. and Zou, J., "Does Excess Capacity Strengthen Firms' Dependence on the Polluting Path? Evidence from Chinese Iron and Steel Firms," *Evidence from Chinese Iron and Steel Firms*.

Martin Osano Rabera & another v Municipal Council of Nakuru & 2 others [2018] eKLR, Petition No. 53 of 2012.

Mbote, P.K. 'The Use of Criminal Law in Enforcing Environmental Law' in Okidi, C.O., *et al*, *Environmental Governance in Kenya: Implementing the Framework Law* (East African Educational Publishers Ltd, 2008) 110.

Mintz, J.A., 'Economic Reform of Environmental Protection: A Brief Commend on a Recent Debate' in Michael C. Blumm (ed), *Environmental Law* (Dartmouth Publishing Company Limited, 1992) 343.

Muigua, K., "Revisiting the Role of Law in Environmental Governance in Kenya." (2019) <<http://kmco.co.ke/wp-content/uploads/2019/06/Revisiting-the-Role-of-Law-in-Environmental-Governance-in-Kenya-Kariuki-Muigua-June-2019.pdf>> accessed 6 January 2023.

Muigua, K, 'Legal Aspects of Strategic Environmental Assessment (SEA) and Environmental Management, available at <http://kmco.co.ke/wp-content/uploads/2018/08/Legal-Aspects-of-SEA-and-Environmental-Management-3RD-December-2016.pdf> [Accessed on 5/1/2023].

Norul Mohamed Rashid, 'Environmental Law' (United Nations and the Rule of Law) <<https://www.un.org/ruleoflaw/thematic-areas/land-property-environment/environmental-law/>> accessed 6 January 2023.

Ochieng', B.O., 'Institutional Arrangements for Environmental Management in Kenya,' in Okidi C.O., *et al*, *Environmental Governance in Kenya: Implementing the Framework Law*, (East African Educational Publishers Ltd, 2008).

Paavola, J., "Institutions and environmental governance: A reconceptualization," *Ecological economics*, vol.63, no. 1 (2007): 93-103.

Penal Code (Cap 63), Laws of Kenya.

Porto, M. & Lobato, F., 'Mechanisms of Water Management: Command & Control and Social Mechanisms,' Parte 1 de 2. Available at <http://socinfo.eclac.org/samta/noticias/documentosdetrabajo/7/23397/InBr01605.pdf> [Accessed on 6/1/2023].

Republic of Kenya, *Kenya Vision 2030 Popular Version*, (Government of Kenya, 2007).

***Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)***

Ribot, J.C., 'Democratic Decentralization of Natural Resources: Institutionalizing Popular Participation,' *World Resources Institute*, 2002.

Rosegrant, M.W., *et al*, 'Water policy for efficient agricultural diversification: market-based Approaches,' *Food Policy*, 1995, Vol. 20, No. 3, pp. 203-223.

Rouillé-Kielo G, 'Natural Resources Management in Kenya (Water and Forest): Centralised Policies, Between Exclusion and Participation of the Local Population' in Marie-Aude Fouéré, Christian Thibon and Marie-Emmanuelle Pommerolle (eds), *Kenya in Motion 2000-2020* (Africae 2021) <<http://books.openedition.org/africae/2515>> accessed 8 January 2023.

Smith, G. and Bastidas, E.P., *Conflict and Sustainability in a Changing Environment: Through the Eyes of Communities*. Anthem Press, 2017 <<https://anthempres.com/conflict-and-sustainability-in-a-changing-environment-hb>> accessed 6 January 2023.

Sposito, V.A & Faggian, R., 'Systemic Regional Development-A Systems Thinking Approach,' *Informationen zur Raumentwicklung Heft*, January, 2013. Available at [http://www.researchgate.net/publication/268180957\\_Systemic\\_Regional\\_Development\\_\\_A\\_Systems\\_Thinking\\_Approach](http://www.researchgate.net/publication/268180957_Systemic_Regional_Development__A_Systems_Thinking_Approach) [Accessed on 6/01/2023].

Stallworthy, M, *Understanding: Environmental Law* (Sweet & Maxwell, 1<sup>st</sup> ed., 2008).

Stavins, R.N. & Whitehead, B.W., "The Greening of America's Taxes: Pollution Charges and Environmental Protection," CSIA Discussion Paper 92-03, (Kennedy School of Government, Harvard University, March, 1992).

Stavins, R.N., 'Experience with Market-Based Environmental Policy Instruments.' *The Handbook of environmental Economics*, 2001. Available at [http://www.hks.harvard.edu/fs/rstavins/Papers/Handbook\\_Chapter\\_on\\_MBI.pdf](http://www.hks.harvard.edu/fs/rstavins/Papers/Handbook_Chapter_on_MBI.pdf) [Accessed on 6/1/2023].

Stewart, K. 'Avoiding the Tragedy of the Commons: Greening Governance through the Market or the Public Domain?' Available at [http://www.yorku.ca/drache/talks/pdf/apd\\_stewartfin.pdf](http://www.yorku.ca/drache/talks/pdf/apd_stewartfin.pdf), [Accessed on 6/01/2023].

Swaney, J.A., "Market versus Command and Control Environmental Policies," *Journal of Economic Issues*, Vol. 26, No. 2, Jun., 1992, pp. 623-633.

The World Bank, 'Strategic Environmental Assessment,' September 10, 2013. Available at <http://www.worldbank.org/en/topic/environment/brief/strategic-environmental-assessment> [Accessed on 6/1/2023].

***Enhancing Environmental Governance through Law and Other Tools: The Efficacy of Kenya's  
Environmental Management and Coordination Act (EMCA)***

Tyler, T.R., "Social justice: Outcome and procedure." *International journal of psychology* 35, no. 2 (2000): 117-125.

United Nations Department of Economic and Social Affairs. "Creating an Inclusive Society: Practical Strategies to Promote Social Integration." (2008) <  
<https://www.un.org/esa/socdev/egms/docs/2009/Ghana/inclusive-society.pdf>> accessed 6 January 2023.

United Nations, *Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach*, (UNEP, 2004). Available at <http://www.unep.ch/etu/publications/textONUbr.pdf> [Accessed on 6/1/2023].

Water Act, No. 43 of 2016, Laws of Kenya.

*Waweru v Republic* (2007) AHRLR 149 (KeHC 2006).

Wehn U and Almomani A, 'Incentives and Barriers for Participation in Community-Based Environmental Monitoring and Information Systems: A Critical Analysis and Integration of the Literature' (2019) 101 *Environmental Science & Policy* 341.

Wildlife Conservation and Management Act, No. 47 of 2013, Laws of Kenya.